Geffen Academy at UCLA

Draft Subsequent Environmental Impact Report

SCH No. 2016021050

Lead Agency

University of California, Los Angeles
1060 Veteran Avenue
Los Angeles, California 90095-1365

Prepared by

BonTerra Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

June 2016

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SECTION 1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that lead agencies consider the environmental consequences of projects over which they have discretionary approval authority prior to taking approval action on such projects. An Environmental Impact Report (EIR) is a public document designed to provide the lead, responsible and interested agencies; special districts; local and State governmental agency decision makers; and the public with an analysis of potential environmental consequences to support informed decision making.

The University of California, Los Angeles (UCLA) is proposing to construct and operate the Geffen Academy at UCLA Project (referred to herein as "the Geffen Academy" or "proposed Project") at the existing Kinross Building in the campus' Southwest zone. The Geffen Academy is envisioned to be an innovative college preparatory school for 6th through 12th grade students. The Academy would advance UCLA's mission of research, teaching, and service; would enable UCLA to recruit and retain top UCLA faculty; and would provide hands-on teaching and educational opportunities for UCLA's undergraduate and graduate students, in support of the Academy's faculty. A summary description of the proposed Project is provided below and a detailed description is provided in Section 3, Project Description.

This EIR has been prepared to address the potential environmental effects associated with implementing the proposed Project and has been prepared pursuant to the requirements of CEQA (*California Public Resources Code,* Section 21000 et seq.), the State CEQA Guidelines (Title 14, *California Code of Regulations,* Chapter 3, Section 15000 et seq.), and the University of California (UC) procedures for implementing CEQA. As discussed in Section 2.2, Type of EIR, and in accordance with CEQA, this Draft EIR is a Subsequent EIR (SEIR) and is "tiered" from the *UCLA 2008 Northwest Housing Infill Project and Long Range Development Plan Amendment Final Environmental Impact Report* (referred to herein as the "March 2009 LRDP Amendment Final EIR" or "Final EIR") (State Clearinghouse [SCH] No. 2008051121) certified by the University of California Board of Regents (The Regents) in March 2009.

UCLA and the UC Office of the President have reviewed and revised, as necessary, all submitted drafts, technical studies, and reports for consistency with UC policies and requirements and have commissioned the preparation of this SEIR to reflect its own independent judgment, including (1) reliance on appropriate UCLA technical personnel and (2) review of all technical subconsultant reports. Data for this SEIR was obtained from on-site field observations; review of adopted plans and policies; review of available studies, reports, and data; and specialized environmental assessments prepared for the project (e.g., air quality, greenhouse gas emissions, noise, and traffic).

This Executive Summary has been prepared in accordance with CEQA Guidelines Section 15123(b), which states that an EIR should contain a brief summary of the proposed actions and its consequences and should identify (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of controversy known to the lead agency; and (3) issues to be resolved, including the choice among alternatives and how to mitigate significant effects.

1.2 PROJECT SUMMARY

1.2.1 PROJECT LOCATION AND SETTING

The UCLA campus is located in the Westwood Community in the City of Los Angeles, approximately 12 miles from Downtown Los Angeles and 6 miles from the Pacific Ocean. The proposed Geffen Academy is located in the Southwest zone, which contains approximately 35.5 acres of the 419-acre UCLA campus. The proposed Project would be developed on the approximate 1.9-acre site of the existing Kinross Building (11000 Kinross Avenue), its associated outdoor spaces, and a portion of Parking Lot 36. The project site is bound by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively. Figure 3-1 in Section 3, Project Description, depicts the regional location of the campus and Figure 3-2 depicts the local vicinity.

As shown in the aerial photograph provided in Figure 3-2, the project site is located in a developed urban area. In addition to the Kinross Buildings (North and South), the Southwest zone is occupied by a variety of uses including, but not limited to, surface and structured parking, graduate student housing, medical research and clinical functions, administrative functions, scientific research, transit facilities, a steam plant, and Los Angeles Fire Station No. 37.

The Kinross Building opened in 2001 and was originally constructed to serve as a multi-use facility for displaced departments on the UCLA campus while their facilities underwent seismic upgrades or renovation. The 3-level building is approximately 75,000 gross square feet (gsf) and was designed with flexible classroom, office, and lab space, providing a versatile arrangement open to adaptation. The Kinross Building currently houses the Kinross Recreation Center (KREC) and Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, and units related to research administration.

1.2.2 PROJECT DESCRIPTION

The proposed Geffen Academy would be operated by UCLA and would provide an innovative college preparatory education for 6th through 12th grade students. The Academy is proposed to open for the 2017–2018 school year with approximately 160 students in grades 6 and 9, followed by an enrollment increase up to a maximum of 620 students in grades 6 through 12 by the 2020–2021 school year. New faculty and staff would be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees (not on campus). Based on preliminary estimates, with 620 students by the 2020–2021 school year, it is expected that the employee population would include approximately 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees [1]. The Geffen Academy would have recreational activities and various competitive athletic teams that would utilize on-site facilities, including a proposed outdoor half-court.

Internal modifications would be made to all 3 levels of the 75,000 gsf Kinross Building to accommodate the proposed uses and programs associated with the Geffen Academy. Additionally, minor exterior site modifications are proposed, including a proposed exit driveway at Kinross Avenue, an outdoor half-court basketball court, and a new main entry to the building along the western building facade. The proposed Project would retain existing connections to campus

[1] Remote employees would not be located on site; they are support for faculty for assignments such as reading and grading.

utilities, including domestic water, sewer, storm drains, and dry utility systems that are currently located in the project area.

Existing uses at the Kinross Building would be relocated prior to occupancy by the Geffen Academy. The Fowler Museum artifacts and personnel would be relocated to the Life Sciences Building, while the Library functions would be relocated to an as yet to be determined on-campus location. Approximately 211 administrative staff in the Kinross Building would move to the Occidental Building, which was purchased by UCLA in November 2015. This building is located at the corner of Westwood and Wilshire Boulevards (at 10889 Wilshire Boulevard), approximately 675 feet east of the project site. UCLA is evaluating existing buildings both on- and off-campus for their potential to be relocation sites for KREC. At this time, no location has been identified as the relocation site. Once a site is identified and the scope of work to renovate that site/space is defined, a separate CEQA evaluation will be prepared for design approval.

The proposed circulation pattern for the Geffen Academy would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building and west of the Gayley Center, following a route around the Kinross Building to the proposed new entrance and pick-up/drop-off location at the northwest portion of the building. Vehicles would then either (1) exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project (right-turns only) or (2) during controlled periods, exit the site from a swing or sliding fence that would allow vehicles to use the existing Parking Lot 36 exit and turn left onto Kinross Avenue. Parking for the Geffen Academy, including parking in compliance with the Americans with Disabilities Act (ADA), would be provided on site for Academy students and visitors. Full-time Academy faculty or staff (which would also be UCLA faculty and staff) would have the opportunity to obtain a campus parking permit for either Parking Lot 36 or Parking Structure 32.

Interior and exterior renovation and construction activities at the Kinross Building are expected to begin in Fall 2016 to accommodate opening of the Geffen Academy by September 2017. Additional interior renovation and construction activities to accommodate the full Academy population (6^{th} through 12^{th} grades) would continue through December 2018.

The proposed Project would not require an amendment to the 2002 LRDP (as amended in March 2009) since the proposed renovations to the Kinross Building would result in no new square footage being added in the Southwest zone.

As identified in Section 3.7, Anticipated Discretionary Approvals, the actions to be considered by The Board of Regents (The Regents) of the University of California or its delegate for the proposed Project include (1) Budget Approval, (2) certification of the Final Tiered Subsequent EIR, and (3) design approval of the Geffen Academy at UCLA Project.

1.2.3 PROJECT ALTERNATIVES

In accordance with Section 15126.6 of the State CEQA Guidelines, Section 5 of this Draft SEIR addresses alternatives to the proposed Project. Section 5 provides descriptions of each alternative; a comparative analysis of the potential environmental effects of each alternative to those associated with the proposed Project; and a discussion of each alternative’s ability to meet the project objectives. Following is a summary description of the alternatives evaluated in this Draft SEIR. In addition to the following alternatives being evaluated, an off-campus alternative, which was considered and eliminated from further evaluation, will also be discussed.

Alternative 1: No Project/No Build

Under Alternative 1, the proposed Geffen Academy would not be implemented at the Kinross Building. The Kinross Building would continue to operate as a multi-use, staging facility, similar to existing conditions. It should be noted that the No Project/No Build Alternative would not preclude development of the remaining development allocation on campus as allowed under the 2002 LRDP, as amended in March 2009 (currently approximately 276,487 gsf).

Alternative 2: Alternative On-Campus Location at Gayley Avenue/LeConte Avenue

Under Alternative 2, the proposed Geffen Academy would be operated on campus, but at the site of the existing Ueberroth Building, northeast of the intersection of Gayley Avenue and LeConte Avenue, in the eastern portion of the Bridge zone. Alternative 2 would involve renovation of the existing approximate 50,000 gsf Ueberroth Building and construction of a new 25,000-gsf building on the adjacent undeveloped site to the west. Existing occupants of the Ueberroth Building would be relocated to other on- or off-campus facilities.

There is currently no remaining development allocation in the Bridge zone; therefore, this alternative would include a proposed amendment to the 2002 LRDP, as amended in March 2009, to transfer 25,000 gsf from the Southwest zone to the Bridge zone to accommodate the proposed Geffen Academy. Vehicular access to this alternative Geffen Academy site would be provided along LeConte Avenue and, similar to the proposed Project, parking, including parking that complies with the ADA, would be provided on site for students and visitors.

This alternative site for the Academy would also accommodate up to 620 students in grades 6 through 12. However, due to the need to renovate the existing Ueberroth Building and construct a new building, it is estimated that the Academy would not open until the 2018–2019 school year with approximately 160 students in grades 6 and 9. Thus, pushing the full enrollment of up to a maximum of 620 students to the 2021–2022 school year. As with the proposed Project, new faculty and staff would be hired to operate the Geffen Academy (approximately 109 faculty/staff and 31 remote employees).

1.3 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the State CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With respect to the proposed Project, the key issues to be resolved include decisions by The Regents as Lead Agency, or its Delegate, as to:

- Whether this environmental document adequately describes the environmental impacts of the proposed Project;
- Whether the recommended mitigation measures and identified campus programs, practices and procedures should be modified and/or adopted;
- Whether the Project benefits override those environmental impacts that cannot be feasibly avoided or mitigated to a level below significance;
- Whether there are other mitigation measures that should be applied to the project besides those identified in the EIR; and
- Whether there are any alternatives to the proposed Project that would substantially lessen any of its significant impacts while achieving most of the basic project objectives.

1.4 AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines indicates that an EIR summary should identify areas of controversy known to the lead agency, including issues raised by agencies and the public. This Draft SEIR has taken into consideration the comments received from the public and various agencies in response to the Notice of Preparation (NOP) and during the public scoping session held on February 25, 2016. Written comments received during the NOP and scoping period are contained in Appendix A of this Draft SEIR. Environmental issues that have been raised during opportunities for public input regarding the project are summarized in Section 2.3, EIR Focus, of this Draft SEIR and are addressed in each relevant issue area analyzed in Section 4 of this Draft SEIR.

Based on input received from the public during the scoping process, there are no areas of controversy known to the University at this time.

1.5 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS

Table 1-1 presents a summary of the environmental impacts resulting from the proposed Geffen Academy. It should be noted that the identified March 2009 LRDP Amendment Final EIR campus programs, practices, and procedures (PPs) and mitigation measures (MMs) carried forward are considered to be part of the proposed Project for purposes of determining the level of significance prior to mitigation. Table 1-1 addresses only those thresholds for which the Initial Study (included in Appendix A) for the Project concludes that additional project-level analysis is required in this Draft SEIR. Thresholds for which it was determined that no further analysis is required are presented in the Initial Study and summarized in the respective topical SEIR sections. Only the PPs and MMs relevant to the thresholds addressed in this Draft SEIR are included in Table 1-1; the Mitigation Monitoring and Reporting Program (MMRP) that will be prepared for the Project (as discussed below) will include all applicable PPs and MMs as identified in the Initial Study and this EIR. Additionally, a project-specific project design feature (PDF) addressing the installation of air filters to address potential emissions from construction of an off-campus project adjacent to the project site is included in the Table 1-1 and will be incorporated in the MMRP for the proposed Project.

As shown in Table 1-1, even with incorporation of the applicable PPs and MMs, the proposed Geffen Academy would result in previously identified and analyzed, potentially significant traffic impacts (Project and cumulative intersection impacts), and construction-related noise impacts, which is consistent with the findings of the March 2009 LRDP Amendment Final EIR. For the other topical issues (Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use and Planning, Noise [operation], Population and Housing, Public Services and Recreation, and Utilities and Service Systems), the proposed Project would have no impact or a less than significant impact.

As concluded in the March 2009 LRDP Amendment Final EIR, there are no feasible mitigation measures to reduce the potentially significant construction-related noise impacts, and project and cumulative traffic impacts to a less than significant level; therefore, significant and unavoidable impacts that would result from implementation of the proposed Project include:

- ***Construction Noise.*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus and off-campus locations, and the Geffen Academy could be exposed to construction noise from off-campus construction activities. There is no additional feasible mitigation for the project's construction-related impacts, and UCLA cannot require mitigation be implemented for the off-campus construction project.

- ***Traffic – Intersection Impacts.*** The proposed Project would result in significant and unavoidable impacts at the following two study intersections:
  - #22 Veteran Avenue and Wilshire Boulevard (PM Peak Hours) under the Existing Plus Project and Future 2020 Plus Project traffic analysis scenarios; and
  - #23 Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour) under the Future 2020 Plus Project traffic analysis scenario.

Impacts under the Existing Plus Project scenario are Project-generated and impacts under the Future 2020 With Project scenario are cumulative.

These construction-related noise and intersection impacts were adequately addressed in the March 2009 LRDP Amendment Final EIR and a Statement of Overriding Considerations was adopted by the UC Board of Regents as part of the Final EIR approval process for these significant and unavoidable that would result from implementation of development allowed by the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part.

It should be noted that, because the proposed Geffen Academy would not result in any new or substantially more severe environmental impacts than that addressed in the March 2009 LRDP Amendment Final EIR, a Mitigated Negative Declaration is the appropriate environmental document for the proposed Project, pursuant to CEQA. However, UCLA has proceeded with preparation of this Draft SEIR, as previously announced to the UCLA community, local stakeholders, and public agencies.

1.6 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that a public agency adopt an MMRP for mitigation measures that have been incorporated into the project to reduce or avoid significant effects on the environment. The MMRP is designed to ensure compliance during project implementation, as required by Section 21081.6 of the *California Public Resources Code*. In conjunction with certification of the March 2009 LRDP Amendment Final EIR and approval of the March 2009 amendment to the UCLA 2002 LRDP, The Regents also adopted an MMRP. The MMRP ensures that campus programs, practices and procedures (PPs) and mitigation measures (MMs) that are the responsibility of the UC are implemented in a timely manner. As individual projects, such as the proposed Project, are designed and constructed, the projects include features necessary to implement relevant PPs and MMs. In accordance with The Regents' March 2009 approval of the LRDP Amendment and certification of the Final EIR, all relevant LRDP EIR PPs and MMs are incorporated into the proposed Project Description to reduce significant environmental impacts.

The MMRP for the proposed Project, which obligates the University to implement MMs and continue to follow PPs, will be prepared and reviewed by The Regents in conjunction with consideration of the proposed Project and certification of the Final EIR. The identified PPs and MMs,and project-specific PDF will be implemented as a part of the Project and monitored through the MMRP approved for the March 2009 LRDP Amendment Final EIR.

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

In this summary table, under the *Summary of Impacts with Applicable PPs and MMs* column, the level of significance is identified with the following abbreviations: **NI**: No Impact; **LS**: Less than Significant Impact; **PS**: Potentially Significant Impact

Summary of Impacts with Applicable PPs and MMs	**Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project**	**Level of Significance After Mitigation**
Air Quality (Section 4.1)		
PP 4.2-2(a)	The campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified in the URBEMIS[b] program as being able to reduce dust generation between 5 and 84 percent depending on the measure or combination of measures used from the list below: • Minimize land disturbance to the extent feasible. • Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days). • Apply water three times daily to all active disturbed areas. • Replace ground cover in disturbed areas as quickly as possible. • Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content. • Water active grading sites at least twice daily. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period. • All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. • Sweep streets at the end of the day if visible soil material is carried over to adjacent roads. • Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip. • Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. • Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.	
PP 4.2-2(b)	The campus shall continue to require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction.	
PP 4.2-2(c)	The campus shall continue to require by contract specifications that construction operations rely on the campus' existing electricity infrastructure rather than electrical generators powered by internal combustion engines to the extent feasible.	

[b] The URBEMIS model has been superseded by the CalEEMod model which has improved methods and an updated data base. The CalEEMod model has been used to quantify emissions from the proposed Project.

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
PP 4.2-2(d) The campus shall purchase and apply architectural coatings in accordance with SCAQMD Rule 1113, thereby ensuring the limitation of VOCs during construction. MM 4.2-2(a) The campus shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. MM 4.2-2(b) The campus shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and low-NOx fuel) to the extent that the equipment is reasonably commercially available and cost effective. MM 4.2-2(c) The campus shall require by contract specifications that construction-related equipment used on site and for on-road export of soil meet USEPA Tier III certification requirements, as feasible.		
Threshold 1.1: Construction and operation of the proposed Project would not conflict with or obstruct implementation of the SCAQMD AQMP. (NI)	No mitigation measures are required.	No Impact
Threshold 1.2: Construction and operation of the proposed Project would result in daily regional emission of criteria pollutants and O_3 precursors. These emissions would not exceed SCAQMD standards. Therefore, the proposed Project would have a less than significant potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation. (LS)	PP 4.2-2(a) through PP 4.2-2(d), and MM 4.2-2(a) through MM 4.2-2(c).	Less than Significant
Threshold 1.3: Construction and operation of the proposed Project would result in less than significant cumulative impacts related to emissions of pollutants for which the Basin is in nonattainment (O_3, PM10, and PM2.5). (LS)	No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Threshold 1.4: Construction and operation of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations due to carbon monoxide hotspots, local emissions of criteria pollutants, or toxic air contaminant emissions (LS)	PP 4.2-2(a) PDF Geffen Air-1 The campus shall install a heating, ventilating and air conditioning (HVAC) system at the Geffen Academy designed to use air filters with a Minimum Efficiency Rating Value (MERV) of 13, or filters with equivalent performance. During concurrent operation of the Geffen Academy and construction of the Wilshire Gayley Project, the campus shall install MERV 13 air filters, or filters with equivalent performance. These filters shall be replaced as needed to maintain rated efficiency, and shall continue to be used until construction of the Wilshire Gayley Project is complete. No mitigation measures are required.	Less than Significant
Greenhouse Gas Emissions (Section 4.2)		
PP 4.15-1 The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; and Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan. In addition, PPs 4.14-2(a), 4.14-2(b), 4.14-2(d), and 4.14-2 (g) from Section 4.9, Utilities and Service Systems, and PPs 4.14-3 and 4.14-9 from the Initial Study (Section 17, Utilities and Service Systems), have been incorporated into the proposed Project and require that the campus continue to implement energy and water conservation measures and reduce solid waste generation which would, in turn, reduce associated GHG emissions.		
Threshold 2.1: The direct and indirect GHG emissions generated by the proposed Project would not exceed the identified thresholds of significance and would result in a less than significant impact. (LS)	PP 4.14-2(a), PP 4.14-2(b), and PP 4.15-1 No mitigation measures are required.	Less than Significant
Threshold 2.2: Implementation of the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. (LS)	PP 4.15-1 No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Hydrology and Water Quality (Section 4.3)		
PP 4.7-1	Construction and operation of projects on campus shall comply with requirements and water quality standards set forth within current NPDES Permit regulations (Phase I and Phase II) at the time of project approval. Pursuant to Phase I permit requirements, UCLA shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related and post-construction pollutants in site runoff.	
PP 4.7-5	Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project. Project design shall include measures to upgrade and expand campus storm drain capacity where necessary, as identified through the project-specific hydrologic evaluation. Design of future projects shall include measures to reduce runoff, including, but not limited to, the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials. ***This PP was completed as part of the analysis conducted for this Draft SEIR.***	
MM 4.7-1	Best Management Practices (BMPs) shall be implemented for individual development projects, to the extent required by State law, to ensure compliance is maintained with all applicable NPDES requirements at the time of project construction. UCLA shall utilize BMPs as appropriate and feasible to comply with and/or exceed the current requirements under the NPDES program. BMPs that may be implemented include, but are not limited to, the following: Non-Structural/Structural • Landscape Maintenance • Catch Basin Stenciling and Clean-out • Efficient Irrigation Practices • Litter Control • Fertilizer Management • Public Education • Efficient Irrigation • Permanent Vegetative Controls • Runoff – Minimizing Landscape Design Treatment Control BMPs (to minimize storm water pollutants of concern for Ballona Creek – Sediment, Bacteria/Viruses, Toxicity, Trash, and Metals): • Vegetated Swale(s) – An open, shallow channel with vegetation covering side slopes and the bottom. • Bioretention – A basin that functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. • Turf Block – A grass area that has a structural component which allows it to be used in drive aisles and parking lots. • Drain Inserts – A manufactured filter placed in a drop inlet to remove sediment and debris.	

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Thresholds 3.1 and 3.2: The proposed Project would reduce the amount of runoff from the project site, and would implement required best management practices (BMPs) during construction and operation. The proposed Project would adhere to applicable water quality regulation and would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. (LS)	PP 4.7-1 and MM 4.7-1 No additional mitigation measures are required.	Less than Significant
Thresholds 3.3 and 3.4: The proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site. Additionally, with the slight reduction in impervious surface, the proposed Project would slightly decrease the rate and amount of surface runoff; no flooding would result on or off site. (LS)	No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Thresholds 3.5 and 3.6: The proposed Project would reduce the amount of impervious surface onsite and would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Additionally, the Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (LS)	MM 4.7-1 No additional mitigation measures are required.	Less than Significant
Land Use and Planning (Section 4.4)		
PP 4.8-1(e) Facilities shall be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources.		
Threshold 4.1: Implementation of the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project adopted for the purpose of avoiding or mitigating an environmental effect. (LS)	PP 4.8-1(e) No mitigation measures are required.	Less than Significant
Threshold 4.2: Implementation of the proposed Project would not alter the character or composition of the campus, and existing Kinross Building occupants would be accommodated in other UCLA facilities. The proposed project would create other land use impacts. (LS)	PP 4.8-1(e) No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Noise and Vibration (Section 4.5)		
PP 4.9-6(a) The campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses. PP 4.9-7(a) To the extent feasible, construction activities shall be limited to 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise. PP 4.9-7(b) The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers. PP 4.9-7(c) The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors. PP 4.9-7(d) The campus shall continue to conduct regular meetings with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.		
Threshold 5.1: The proposed Project would not expose persons to or generate noise levels exceeding applicable standards. (LS)	No mitigation measures are required.	Less than Significant
Threshold 5.2: Construction-related and operational activities for the proposed Project would not expose persons to or generate excessive groundborne vibration levels. (LS)	No mitigation measures are required.	Less than Significant
Threshold 5.3: Operation of the proposed Project would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (LS)	PP 4.9-6(a) No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Threshold 5.4: Construction of the proposed Project would potentially result in a substantial temporary or periodic increases in ambient noise levels at on- and off-campus uses, and the Geffen Academy could be exposed to construction noise from off-campus construction. (PS)	PP 4.9-7(a), PP 4.9-7(b), PP 4.9-7(c), and PP 4.9-7(d) No feasible mitigation measures are available.	Significant and Unavoidable
Population and Housing (Section 4.6)		
Threshold 6.1: The proposed Project would not generate new housing, and would not induce substantial direct or indirect population growth on campus, or in the region. (LS)	No mitigation measures are required.	Less than Significant
Public Services and Recreation (Section 4.7)		
PP 4.12-1(a) The campus shall continue to provide, operate, and maintain recreational facilities for students, faculty, and staff on campus. PP 4.12-1(b) The campus shall continue to integrate landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) with development to encourage use through placement and design.		
Threshold 7.1: The proposed Project would not increase the number of students in the LAUSD and other school districts in the area and would not require the construction of new or expansion of existing schools. The physical impacts from construction of the proposed Geffen Academy are addressed throughout this Draft SEIR and the Initial Study included in Appendix A, and would be less than significant. (LS)	No mitigation measures are required.	Less than Significant

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS)
PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Threshold 7.2: The proposed Project would not increase the demand for on- or off-campus park or recreational facilities such that a physical deterioration of such facilities would occur. (LS)	PP 4.12-1(a) and PP 4.12-1(b) No mitigation measures are required.	Less than Significant
Thresholds 7.3 and 7.4: The proposed Project would include athletic and recreational facilities, landscape and hardscape improvements. The environmental impacts of these proposed Project components are addressed throughout this Draft SEIR and the Initial Study included in Appendix A. There would be a less than significant impact. (LS)	No mitigation measures are required.	Less than Significant
Transportation/Traffic (Section 4.8)		
PP 4.13-1(d)	The campus shall continue to implement a TDM program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.	
PP 4.13-2	UCLA Capital Programs will assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.	
PP 4.13-5	To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.	
PP 4.13-6	For any construction-related closure of pedestrian routes, the campus shall provide appropriate signage indicating alternative route and provide curb cuts and street crossings to assure alternate routes are accessible.	

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Threshold 8.1 (Construction) Construction of the proposed Project would generate heavy truck trips, but would not result in the generation of vehicle trips that would substantially degrade intersection levels of service. (LS)	PP 4.13-2 No mitigation measures are required.	Less than Significant
Threshold 8.1 (Operation): Operation of the proposed Project would result in a significant and unavoidable project impact under the Existing Plus Project scenario at the following intersection: • No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour) The proposed Project would result in significant and unavoidable intersection impacts under the Future Year 2020 With Project scenario at the following two intersections (cumulative impact): • No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour) • No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour) (PS)	PP 4.13-1(d) No feasible mitigation measures are available.	Significant and Unavoidable Project and Cumulative Impacts

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS) PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Threshold 8.2: Operation of the proposed Project would increase traffic at a Congestion Management Program (CMP) arterial monitoring station but would not cause a significant impact based on the CMP significance criteria. The Project would not add a significant amount of project-related trips at a CMP freeway monitoring station. (NI)	No mitigation measures are required.	No Impact
Threshold 8.3: Construction and operation of the proposed Project would not substantially increase vehicular or pedestrian hazards due to design features or incompatible uses. (LS)	PP 4.13-5 and PP 4.13-6 No mitigation measures are required.	Less than Significant
Threshold 8.4: Implementation of the proposed Project would not conflict with applicable policies, plans, or programs supporting alternative transportation. (LS)	PP 4.13-1(d) No mitigation measures are required.	Less than Significant
Utilities and Service Systems (Section 4.9)		
PP 4.14-2(a)	New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals.	
PP 4.14-2(b)	Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate.	
PP 4.14-2(c)	The campus shall promptly detect and repair leaks in water and irrigation pipes.	
PP 4.14-2(d)	The campus shall minimize the use of water to clean sidewalks, walkways, driveways and parking areas.	
PP 4.14-2(g)	The campus shall educate the campus community on the importance of water conservation measures.	
PP 4.14-5	As part of the design process for proposed projects, an evaluation of the on-campus sewer conveyance capacity shall be undertaken, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated flows. ***This PP was completed as part of the analysis conducted for this Draft SEIR.***	

TABLE 1-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS, AND APPLICABLE PROGRAMS, PRACTICES AND PROCEDURES (PPS) AND MITIGATION MEASURES (MMS)
PROPOSED GEFFEN ACADEMY AT UCLA

Summary of Impacts with Applicable PPs and MMs	Applicable Programs, Practices and Procedures (PPs) and Mitigation Measures (MMs) from the March 2009 LRDP Amendment Final EIR Included in the Proposed Project	Level of Significance After Mitigation
Thresholds 9.1 and 9.2: Implementation of the proposed Project would not require the installation of new or expanded water or wastewater facilities. (LS)	PPs 4.14-2(a) through 4.14-2(d), PP 4.14-2(g), and PP 4.14-5 No mitigation measures are required.	Less than Significant
Threshold 9.3: The water demand from the proposed Project at the Kinross Building would continue to be met with existing entitlements and resources and would not result in the need for new or expanded entitlements. (LS)	PPs 4.14-2(a) through 4.14-2(d) and PP 4.11-2(g) No mitigation measures are required.	Less than Significant

1.7 SUPPORTING INFORMATION SOURCES

University of California, Los Angeles (UCLA). 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; prepared by BonTerra Consulting). Los Angeles, CA: UCLA.

SECTION 2.0 INTRODUCTION

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The University of California, Los Angeles (UCLA) is proposing to construct and operate the Geffen Academy at UCLA Project (referred to herein as “the Geffen Academy” or “proposed Project”) at the existing 75,000 gross square foot (gsf) Kinross Building in the campus Southwest zone. The Geffen Academy is envisioned to be an innovative college preparatory school for 6th through 12th grade students. A detailed description is provided in Section 3.0, Project Description, of this Draft Subsequent Environmental Impact Report (SEIR).

This Draft SEIR has been prepared to evaluate the potential environmental impacts associated with implementation of the proposed Project and associated actions. This EIR been prepared in conformance with the California Environmental Quality Act (CEQA, *California Public Resources Code,* Section 21000 et seq.), the State CEQA Guidelines (Title 14, *California Code of Regulations* [CCR]*,* Chapter 3, Section 15000 et seq.), and the University of California (UC) procedures for implementing CEQA. The UC Board of Regents (The Regents) is the Lead Agency under CEQA and is responsible for preparing the SEIR. The determination that The Regents is the “lead agency” is made in accordance with Sections 15051 and 15367 of the State CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. Further, preparation of this Draft SEIR is subject to Section 21080.09(d) of the *California Public Resources Code,* which requires that public higher education institutions consider the environmental impacts of academic and enrollment plans.

UCLA has prepared this Draft SEIR for the following purposes:

- To satisfy the requirements of CEQA (*California Public Resources Code,* Sections 21000–21178), the State CEQA Guidelines (Title 14, CCR, Chapter 14, Sections 15000–15387), and the UC Guidelines for the Implementation of CEQA.
- To inform the general public, the local community, responsible and interested public agencies, and The Regents of the scope of the Geffen Academy and to communicate the potential environmental effects, measures to mitigate those effects, and alternatives to the proposed Project.
- To enable The Regents, or its delegate, to consider environmental consequences when deciding whether to approve the Geffen Academy.
- To serve as a source document for responsible agencies to issue permits and approvals, as required, for development of the Geffen Academy.

As described in CEQA and the State CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, where feasible. In satisfying this duty, a public agency has an obligation to balance the proposed Project’s significant effects on the environment with its benefits, including economic, social, technological, legal, and other benefits. This Draft SEIR is an informational document, the purpose of which is to identify the potentially significant effects of the proposed Project on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated; and to identify reasonable and feasible alternatives to the proposed Project that would eliminate any significant adverse environmental effects or reduce the impacts to a less than significant level.

The lead agency is required to consider the information in the SEIR, along with any other relevant information, in making its decisions on the proposed Project. Although the SEIR does not determine the ultimate decision that will be made regarding approval of the proposed Geffen Academy Project, CEQA requires the University to consider the information in the SEIR and make findings regarding each significant and unavoidable effect identified in the SEIR. The Regents will review and consider certification of the Final SEIR prior to any decision on whether to approve the proposed Project.

2.2 TYPE OF ENVIRONMENTAL IMPACT REPORT

The 2002 Long Range Development Plan (LRDP) Final EIR (State Clearinghouse [SCH] No. 2002031115) was prepared to analyze the environmental impacts resulting from implementation of the 2002 LRDP and was certified by The Regents in February 2003. The March 2009 LRDP Amendment Final EIR (SCH No. 2008051121) was certified by The Regents in March 2009 and addresses the proposed Northwest Housing Infill Project and 2002 LRDP Amendment Project. The March 2009 LRDP Amendment Final EIR updated the impact analysis and conclusions of the 2002 LRDP Final EIR. The 2002 LRDP Final EIR and March 2009 LRDP Amendment Final EIR are Program EIRs prepared in accordance with CEQA (*California Public Resources Code,* Sections 21000, et seq., specifically, Section 21094), the State CEQA Guidelines (Title 14, CCR, Sections 15000 et seq.), and the UC Procedures for the Implementation of CEQA.

It has been determined that an SEIR tiered from the March 2009 LRDP Amendment Final EIR is the appropriate environmental document for the proposed Geffen Academy at UCLA. Section 15162 of the State CEQA Guidelines provides that an SEIR is required if

1. Substantial changes are proposed in the project requiring major revisions to the previous EIR because of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes have occurred with respect to the circumstances under which the project is undertaken, which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete shows any of the following: (a) the project will have one or more significant effects not discussed in the previous EIR; (b) significant effects previously examined will be substantially more severe than shown in the previous EIR; (c) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (d) mitigation measures or alternatives which are considerably different from those analyzed in the Final EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

With respect to tiering from the March 2009 LRDP Amendment Final EIR, Section 15152 of the State CEQA Guidelines states, "'Tiering' refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on issues specific to the later project". CEQA and the State CEQA Guidelines encourage the use of tiered environmental documents to eliminate repetitive discussions of the same issues. Therefore, this Initial Study and the SEIR are hereby tiered from the March 2009 LRDP Amendment Final EIR. The document is available for review at the UCLA Capital Programs

Environmental Planning office, at the address listed above in Section I, and online at http://www.capitalprograms.ucla.edu/Planning/LongRangeDevelopmentPlan.

The March 2009 LRDP Amendment Final EIR analyzes the direct and indirect impacts resulting from implementation of the remaining development allocation (i.e., 1.87 million gsf) on the UCLA campus, as identified in the 2002 LRDP, as amended in March 2009. Measures to mitigate, to the extent feasible, for significant adverse project (direct and indirect) and cumulative impacts identified for that development are identified in the Final EIR.

Section 15152(f) of the State CEQA Guidelines instructs that when tiering, a later EIR or Negative Declaration shall be prepared only when, in the basis of an Initial Study, the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR or Negative Declaration. Significant environmental effects are considered to have been "adequately addressed" if the lead agency determines that:

(A) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report; or

(B) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

A tiered Initial Study was prepared for the proposed Project to identify environmental issues/impacts that have been adequately addressed by the March 2009 LRDP Amendment Final EIR and, therefore, no further evaluation is required, and to identify those issues that have not been fully addressed, requiring additional project-level impact analysis. The tiered Initial Study is included in Appendix A of this Draft SEIR. Following review of the proposed Project and the analysis presented in the LRDP Final EIR, it was determined that although the proposed Geffen Academy would not increase the amount of development (building square footage) on campus, it is a "project" under CEQA that was not fully addressed in the Final EIR. Additionally, it was determined there is a potential for the proposed Project to result in either new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, additional environmental review is required. Additional information regarding issues to be further evaluated in this tiered Draft SEIR is provided in Section 2.3, Environmental Impact Report Focus.

In conjunction with certification of the March 2009 LRDP Amendment Final EIR and approval of the March 2009 amendment to the UCLA 2002 LRDP, The Regents also adopted a Mitigation Monitoring and Reporting Program (MMRP). The MMRP ensures that campus programs, practices, and procedures (PPs) and mitigation measures (MMs) that are the responsibility of the UC are implemented in a timely manner. As individual projects, such as the proposed Project, are designed and constructed, the projects include features necessary to implement relevant PPs and MMs. In accordance with The Regents' March 2009 approval of the LRDP Amendment and certification of the LRDP Final EIR, all relevant LRDP Final EIR PPs and MMs are incorporated into the proposed Project Description and will be implemented as a part of the proposed Project and monitored through the MMRP approved for the March 2009 LRDP Amendment Final EIR. Relevant LRDP Final EIR PPs and MMs are listed in the Initial Study (included in Appendix A of this Draft SEIR) or in the introduction to the analysis for each topical issue in Section 4.0.

In summary, this tiered Draft SEIR provides a project-specific environmental analysis to determine if the proposed Project would result in any significant impacts not adequately addressed in the March 2009 LRDP Amendment Final EIR and/or if additional mitigation measures beyond those adopted in the MMRP for the LRDP Amendment would be required to reduce identified impacts to a less than significant level. The environmental analysis presented in this tiered Draft SEIR examines all phases of the project, including planning, construction, and operation, and feasible alternatives to the project.

2.2.1 REVIEW OF AN ENVIRONMENTAL IMPACT REPORT

The Regents—as Lead Agency for the proposed Project—and other public agencies (i.e., responsible and trustee agencies) that may use this tiered Draft SEIR in their decision-making or permitting processes will consider the information in this tiered Draft SEIR along with other information that may be presented during the CEQA process.

Upon certification of the Final SEIR, The Regents will consider whether to approve the proposed Project. As a part of their consideration for project approval, The Regents must approve Findings of Fact, a Statement of Overriding Considerations, and an MMRP. Where feasible mitigations are not available to reduce significant environmental impacts to a less than significant level, impacts are considered significant and unavoidable. Written findings will be prepared for each significant adverse environmental effect identified in the Final SEIR, as required by Section 15091 of the State CEQA Guidelines. If The Regents certify a Final EIR for a project that has significant and unavoidable impacts, The Regents shall also state, in writing, the specific reasons for approving the project based on the Final EIR and any other information in the public record. This is called a "Statement of Overriding Considerations" and is used to explain the specific reasons that the benefits of a proposed project make its unavoidable environmental effects acceptable. The Statement of Overriding Considerations is adopted after the Final EIR is certified and before action to approve the proposed Project has been taken. Additionally, The Regents must adopt the MMRP to ensure compliance with mitigation measures that have been incorporated into the proposed Project to reduce or avoid significant effects on the environment during construction and/or implementation.

The actions that may be involved in implementing the proposed Project are described in Section 3.7 of this Draft SEIR, Anticipated Discretionary Approvals. Other agencies that may have discretionary approval over the proposed Project, or components thereof, including responsible and trustee agencies, are also listed in Section 3.7.

2.3 ENVIRONMENTAL IMPACT REPORT FOCUS

2.3.1 SCOPING PROCESS

In compliance with Section 15201 of the State CEQA Guidelines, UCLA has taken steps to provide opportunities for public participation in the environmental process. An Initial Study and Notice of Preparation (NOP) were distributed on February 10, 2016, to State, regional, and local government agencies and interested parties for a 30-day public review period to solicit comments and to inform agencies and the public of the proposed Geffen Academy Project. The proposed Project was described; potential environmental effects associated with project implementation were identified; and agencies and the public were invited to review and comment on the NOP/Initial Study. Three agencies responded to the NOP. The NOP and Initial Study and NOP comments received are included in Appendix A of this Draft SEIR. Table 2-1 includes a summary of the NOP comments received. The table also includes a column that identifies which section(s) of this Draft SEIR the individual comments are addressed in.

TABLE 2-1
NOTICE OF PREPARATION COMMENT LETTERS RECEIVED

Agency	Date	Comments	Addressed in Section(s)
Governor's Office of Planning and Research (OPR)	February 10, 2016	Letter from OPR to State agencies transmitting the Notice of Preparation (NOP) and identifying the official 30-day public review period.	Not applicable
California Department of Transportation (Caltrans)	February 23, 2016	• Caltrans does not expect the project to result in direct adverse impacts to existing State transportation facilities. • The project should be designed to discharge clean runoff water and discharge of storm water runoff is not permitted onto the State highway facilities without a storm water management plan. • The use of oversized-transport vehicles on State highways requires a Caltrans transportation permit. • Caltrans recommends the large size truck trips be limited to off-peak commute periods.	Section 4.3 Section 4.8
California Native American Heritage Commission (NAHC)	February 17, 2016	• NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project and provides a summary of the requirements of Assembly Bill (AB) 52 and Senate Bill (SB) 18, which address Native American tribal consultation. • NAHC provides recommendations for cultural resources assessments.	Section V.5 of the Initial Study included in Appendix A
South Coast Air Quality Management District (SCAQMD)	February 19, 2016	• Air quality (construction-related, operational, and indirect sources) and greenhouse gas (GHG) emissions impacts should be addressed and mitigation measures identified. • Sources of information are provided related to the air quality and GHG analyses to be used to meet its requirements and related to mitigation measures to be considered.	Section 4.1 Section 4.2

On February 25, 2016, UCLA held a public scoping meeting at the UCLA Faculty Center to describe the proposed Project; to answer questions; and to seek public input regarding the proposed scope of the Draft SEIR analysis. A notice for the scoping meeting was sent out with the NOP and Initial Study. The meeting was attended by approximately 12 individuals. Other than UCLA, there were no public agency representatives present at the scoping meeting. The comments raised at the scoping meeting were related to the following issues; the section of this Draft SEIR where each issue is addressed is identified in parentheses, as applicable:

- Schedule for the EIR (Section 2.4, Public Review of the Draft EIR).
- Geographic area that students will come from (Section 4.7, Public Services and Recreation).
- Schedule for renovation of the Kinross Building (Section 3.5.8, Construction Activities).
- Schedule for relocation of building occupants and where they will be located (Section 3.5.3, Relocation of Existing Kinross Building Occupants).
- Loss of parking (Section 3.5.4, Vehicular Circulation and Parking).
- Identification of recreation facilities that students would use since there is a lack of space for physical equipment and activity at the project site. If campus facilities are used, the students will need to be transported through the campus (Section 3.5.1, Geffen Academy Operations).
- Traffic that would be generated by 620 students. Students should use public transportation and not be allowed to drive to school (Section 4.8, Transportation and Traffic).
- Traffic should be directed to Veteran Avenue and not Gayley Avenue (Section 3.5.4, Vehicular Circulation and Parking, and Section 4.8, Transportation and Traffic).
- Integration of the project with the proposed metro stop along Wilshire Boulevard (Section 4.4, Land Use and Planning).

The Initial Study, NOP comments, and the comments received from the public at the scoping meeting informed the scope of the issues addressed in this Draft SEIR. In addition to the environmental issues identified above, through preparation of the tiered Initial Study, UCLA identified that additional project-level analysis was required to evaluate potential impacts associated with the implementation of the proposed Project for the following environmental issue areas: Noise (Section 4.5), Population and Housing (Section 4.6), and Utilities and Service Systems (Section 4.9).

2.3.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

The tiered Initial Study included in Appendix A of this Draft SEIR identifies environmental issues for which the proposed Project would result in no impacts, less than significant impacts, or less than significant impacts with the implementation of the campus PPs and MMs and/or it has been determined that the environmental issue is adequately addressed in the March LRDP Amendment Final EIR. For the environmental impact categories identified in Section 2.3.1 where there are environmental checklist questions determined to be adequately addressed in the March 2009 LRDP Amendment Final EIR, these checklist questions are identified in the respective sections of this tiered Draft SEIR.

The proposed Project would not alter the conclusions of the impact analysis in the March 2009 LRDP Amendment Final EIR related to aesthetics, agricultural and forestland resources, biological resources, cultural resources, geology/soils, hazards and hazardous materials, and mineral resources. These environmental issues are not evaluated in further detail in this Draft SEIR, and were addressed in the Initial Study, which is included in Appendix A of this Draft SEIR. The Initial Study provides support for the conclusion that the Geffen Academy would not alter the findings of the previous analysis regarding the impacts of campus development on these environmental topics.

Following is a summary of the impacts that were determined to be adequately addressed in the March 2009 LRDP Amendment Final EIR and Initial Study and no further evaluation in this Draft SEIR is required.

- **Aesthetics.** There would be minor modifications to the exterior of the Kinross Building and immediately surrounding area and potential removal of trees to accommodate modified access to the project site and modifications to the exterior spaces. New hardscape and landscape would be installed. Removed trees would be replaced as required by UCLA policies and the City of Los Angeles Protected Tree Ordinance. While there would be a visual change as a result of the proposed Project, this change would not substantially degrade the visual character or quality of the sites and surrounding areas.

  There are no State scenic highways located near the UCLA campus; however, Sunset Boulevard is identified as a scenic highway in the Los Angeles Citywide General Plan. The project area is located in the Southwest zone of the campus, approximately 0.9 mile south of Sunset Boulevard at the nearest point and is not visible from any portion of Sunset Boulevard due to distance and intervening development.

  The proposed Project is not located within or adjacent to identified focal views of public art spaces or historic buildings and would not have an adverse effect on a panoramic or focal view. In addition, the proposed Project would not result in a substantial new source of light or glare and, therefore, impacts related to daytime or nighttime light and glare would be less than significant.

- **Agricultural and Forestland Resources.** The campus is not located on or near designated agricultural land. No farmland, agricultural activity, forestland, or timberland exist on the campus, and no portion of the campus is zoned for agricultural, forestland, or timberland. Property within the UCLA campus is not under a Williamson Act contract.

- **Biological Resources.** The proposed Project would involve the removal of existing mature and protected trees and ornamental vegetation located within the project area. Construction of the proposed Project could directly and indirectly impact nesting birds, including nesting raptors. However, construction would be prohibited within a specific buffer zone if occupied nests are found, ensuring that potential impacts would be less than significant. The loss of trees and vegetation during construction could also result in a reduction in potential foraging, roosting, and nesting opportunities for birds. However, with implementation of the required tree replacement and installation of additional landscaping, this impact would be less than significant. The implementation of required tree replacement would also ensure the project is consistent with local policies protecting biological resources.

  The project site is developed and does not support special status plant or wildlife species or riparian habitat, wetlands, or other sensitive natural communities.

  The UCLA campus does not contain suitable habitat that would be used as a wildlife corridor and does not facilitate regional connectivity to core wildlife habitat. There are no established wildlife corridors on the campus. The campus does not include any marshes, wetlands, or tidal zones that could function as wildlife nursery sites. In addition, it is not located within an area governed by a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).

- **Cultural Resources.** The proposed Project would involve the renovation and reuse of the existing Kinross Building, which was completed in 2001 and is not a historic resource; there would be no direct or indirect impacts to historic resources.

  Implementation of the proposed Project, including proposed modifications to the Kinross Building and exterior areas, would not involve excavations into native soils. Therefore, there is no potential to encounter previously unidentified archaeological and/or paleontological resources or disturb human remains.

- **Geology/Soils.** The project site and surrounding areas are developed, and the topography is essentially flat with no hillside areas. Development of the proposed Project would not expose people or structures to landslides. Implementation of the proposed Project would involve interior building renovations and exterior modifications to the existing building and adjacent area. The proposed Project would not involve the development of any new habitable structures and would not result in, or exacerbate, seismic risks present on the site. As required by current regulations, the proposed Project would be designed to comply with applicable provisions of the current California Building Code (CBC) requirements, which may require structural upgrades. There would be less than significant impacts related to seismic- or soil-related hazards.

  Soil erosion can occur as a result of and can be accelerated by site preparation, excavation, and grading activities. There would be limited earth-disturbing activities associated with construction of the proposed Project. In addition, the proposed Project would minimize or eliminate soil erosion during construction activities through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Therefore, the proposed Project would result in less than significant impacts related to soil erosion or loss of topsoil. There would also be no impact related to the use of septic tanks or alternative wastewater disposal systems resulting from implementation of the proposed Project because it would utilize the existing wastewater infrastructure.

- **Hazards and Hazardous Materials.** Hazardous materials may be used during operations at the Geffen Academy, including in classrooms and laboratories, for cleaning, and for landscape maintenance. Because the Geffen Academy would involve operations and maintenance activities that already occur on campus, the potential to create a significant hazard involving hazardous materials on campus would not increase. The proposed Project would not result in a significant impact related to hazardous emissions within a ¼ mile of the school. The project site and surrounding area is not included on the list of known hazardous materials sites identified on campus pursuant to Section 65962.5 of the *California Government Code* (i.e., the Cortese List). Additionally, there is no known contaminated soil or groundwater within the project area. There would be no new or more hazardous materials handled, stored at, or transported to the proposed Project, and these materials would not exist in quantities significant enough to pose a risk to occupants of nearby schools or the campus community. Additionally, construction and operation of the proposed Project would comply with applicable federal, State, and local laws and regulations and with the existing UCLA PPs.

  There are no private airstrips in the vicinity of the proposed Project; however, a helistop is located at the Ronald Reagan UCLA Medical Center (RRUCLAMC) approximately

0.2 mile south of the project area. Based on the project site elevations and proposed building heights, the proposed Project would not penetrate the established 8:1 approach/departure surface for the helistop, consistent with the requirements of the California Department of Transportation (Caltrans) Aeronautics Heliport Permit.

Construction and operation of the proposed Project would be designed to ensure that existing emergency response or evacuation plans are maintained and do not impede emergency access on campus, including existing fire lanes near the project area. The proposed Project would not impair implementation of, or physically interfere with, emergency response and evacuation efforts.

The UCLA campus is not located adjacent to a wildland area and there would be no impact related to wildland fires from implementation of the proposed Project.

- **Mineral Resources.** The campus is not in an area classified as having locally important or known mineral resources and would not result in the loss of availability of a known mineral resource.

2.4 PUBLIC REVIEW OF THE DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

This Draft SEIR is being circulated for review and comment to the public and other interested parties, agencies, and organizations for a 45-day period. The comment period will begin on June 6, 2016, and end on July 20, 2016. A public hearing on the Draft SEIR, where oral comments may be presented, will also be held during the public review period. During the review period, the Draft SEIR will be available on the UCLA website at http://www.capitalprograms.ucla.edu/EnvironmentalReview/ProjectsUnderEnvironmentalReview and the Charles E. Young Research Library.

This Draft SEIR will also be available for review at the Capital Programs building located at 1060 Veteran Avenue (third floor) from 8:00 AM to 5:00 PM, Monday through Friday. Written comments on the Draft SEIR should be addressed to:

Ms. Tracy Dudman, Senior Planner
UCLA Capital Programs, Environmental Planning
1060 Veteran Avenue, Box 951365
Los Angeles, California 90095-1365
(310) 206-9255

Following the Draft SEIR's public review period, responses to written comments received will be prepared and published in a Final SEIR. The Final SEIR—which will consist of the Draft SEIR, comments on the Draft SEIR, and written responses to those comments—will be considered for certification by The Regents, or its delegate, consistent with Section 15090 of the State CEQA Guidelines. All responses to agencies' comments submitted for this Draft SEIR will be provided to those agencies at least ten days prior to final action on the proposed Project. The Regents, or its delegate, must consider the Final SEIR prior to any decision to approve or reject the proposed Project; these actions can only be approved if the Final SEIR is certified.

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT BACKGROUND

In early 2013, the University of California, Los Angeles (UCLA) initiated consideration of an innovative, on-campus college preparatory school for 6th through 12th grade students to advance UCLA's mission of research, teaching, and service. The school was envisioned as a facility that would enable UCLA to recruit and retain top UCLA faculty; and provide hands-on teaching and educational opportunities for UCLA's undergraduate and graduate students, in support of the Academy's faculty. Further, the faculty and staff at the school would join in the ongoing collaboration that already occurs between an existing network of partner schools, including the UCLA Lab School, the UCLA Community School, four public schools near campus, and the Graduate School of Education and Information Studies (GSEIS) that expands educational opportunities for students, faculty, and families. The GSEIS is the conduit for the collaboration of ideas, teaching methodologies, and data sharing between the partner schools. As a college preparatory program, it was envisioned that students at this school would have access to learning opportunities and classes provided by UCLA and UCLA facilities, which are beyond those offered by more traditional secondary schools.

UCLA proceeded with a preliminary site selection process that considered various locations on and near the campus that had potential for redevelopment. These sites were then evaluated across various selection criteria (e.g., building size, buildable area, programmatic requirements, open space, and the ability to open in fall 2017). The requirements of the school included a building and site that would be self-contained with independent function and that could provide a sense of place; security control; sufficient on-site circulation; accommodation for between 80 and 100 students per class; and three student admission points: 6th, 7th, and 9th grades.

As further discussed in Section 5.0, Alternatives to the Proposed Project, approximately seven sites were initially considered as potential candidate sites should the concept school move forward; the Kinross Building was one of the original sites considered. Between 2013 and 2015, the program and curriculum model continued to be developed, which further influenced the site selection criteria.

In October 2015, UCLA's purchase of the Occidental Building provided the campus with an immediate increase in office space for staging and new opportunities for relocation of existing Campus Administrative functions. With this acquisition, the renovation and reuse of the Kinross Building, which is located two blocks from the Occidental Building, became the preferred site for the school.

In November 2015, UCLA received a major gift from David Geffen to help construct and endow a 6th through 12th grade school on the UCLA campus, to be named the Geffen Academy at UCLA; hereinafter, Geffen Academy or proposed Project.

3.2 PROJECT OBJECTIVES

Section 15124 of the State California Environmental Quality Act (CEQA) Guidelines establishes the requirement to address project objectives in an Environmental Impact Report (EIR) Project Description. In addition to addressing the underlying project purpose, the objectives are also relevant to the development of alternatives that will be considered in the EIR and in the Preparation of Findings or Statement of Overriding Considerations, if necessary, in support of the decision-making action. The following objectives have been established for the proposed Project:

1. Further the University of California's (UC's) mission of research and public service by offering an alternative 6th through 12th grade education in line with UCLA's founding a "model school" and moving away from the standard agrarian model of education.
2. Locate the Project proximate to campus and campus transit facilities to provide academic and research synergies with UCLA faculty, undergraduate, and graduate students, while facilitating a cross-cultural venue for faculty to develop non-departmental connections.
3. Locate the Academy in an existing facility that can provide the independent use for both a middle and high school experience and provide the physical attributes needed to meet the programmatic requirements of the Academy, including, but not limited to, the following:
    a. Provide a right-sized facility to accommodate both a middle and high school program, with associated staff and faculty;
    b. Provide a program with three entry points for student admission: 6th, 7th, and 9th grades;
    c. Provide proper physical security components and security personnel;
    d. Accommodate on-site circulation and parking demands;
    e. Provide on-site outdoor space for recreation, daily activities, and special events; and
    f. Locate in a facility that enables the Academy to open in fall 2017.
4. Develop a program that has the capacity to enroll both students of UCLA faculty and staff and the greater Los Angeles region, furthering the University's commitment to diversity.
5. Increase UCLA's competitive edge in the immediate recruitment of faculty and staff to address recent UC system-wide student enrollment increase requirements established by the Regents.
6. Locate the Academy proximate to alternative transportation that provides faculty, staff, and students, of both the Academy and UCLA, with a range of transit options.
7. Create work opportunities for UCLA undergraduate and graduate students that expose them to the education profession and generate the next wave of teachers and faculty, consistent with UC's mission and commitment to the State of California.

3.2.1 APPLICABLE LRDP OBJECTIVES

1. Offer teaching, research, and service programs of the highest quality to serve the needs of the Los Angeles region, the State of California, and the nation.
2. Build an academic community of faculty and students in keeping with an institution of UCLA's caliber.
3. Continue to serve the Los Angeles region through provision of cultural, health, educational, and community programs.
4. Provide and promote opportunities for the use of alternative transportation modes.

3.3 PROJECT LOCATION

Located in the community of Westwood in the City of Los Angeles, the 419-acre UCLA campus is approximately 12 miles northwest of downtown Los Angeles and 6 miles from the Pacific Ocean. The main campus is generally bound by Le Conte Avenue to the south, Gayley Avenue and Veteran Avenue to the west, Sunset Boulevard to the north, and Hilgard Avenue to the east.

The proposed Project would be developed on the approximate 1.9-acre site of the existing Kinross Building (11000 Kinross Avenue), associated outdoor spaces, and a portion of Parking Lot 36. The regional location and local vicinity of the proposed Project are depicted on Figure 3-1. Figure 3-2 provides a map of the UCLA campus and specifically shows the location and boundary of the proposed Project.

3.4 ENVIRONMENTAL SETTING

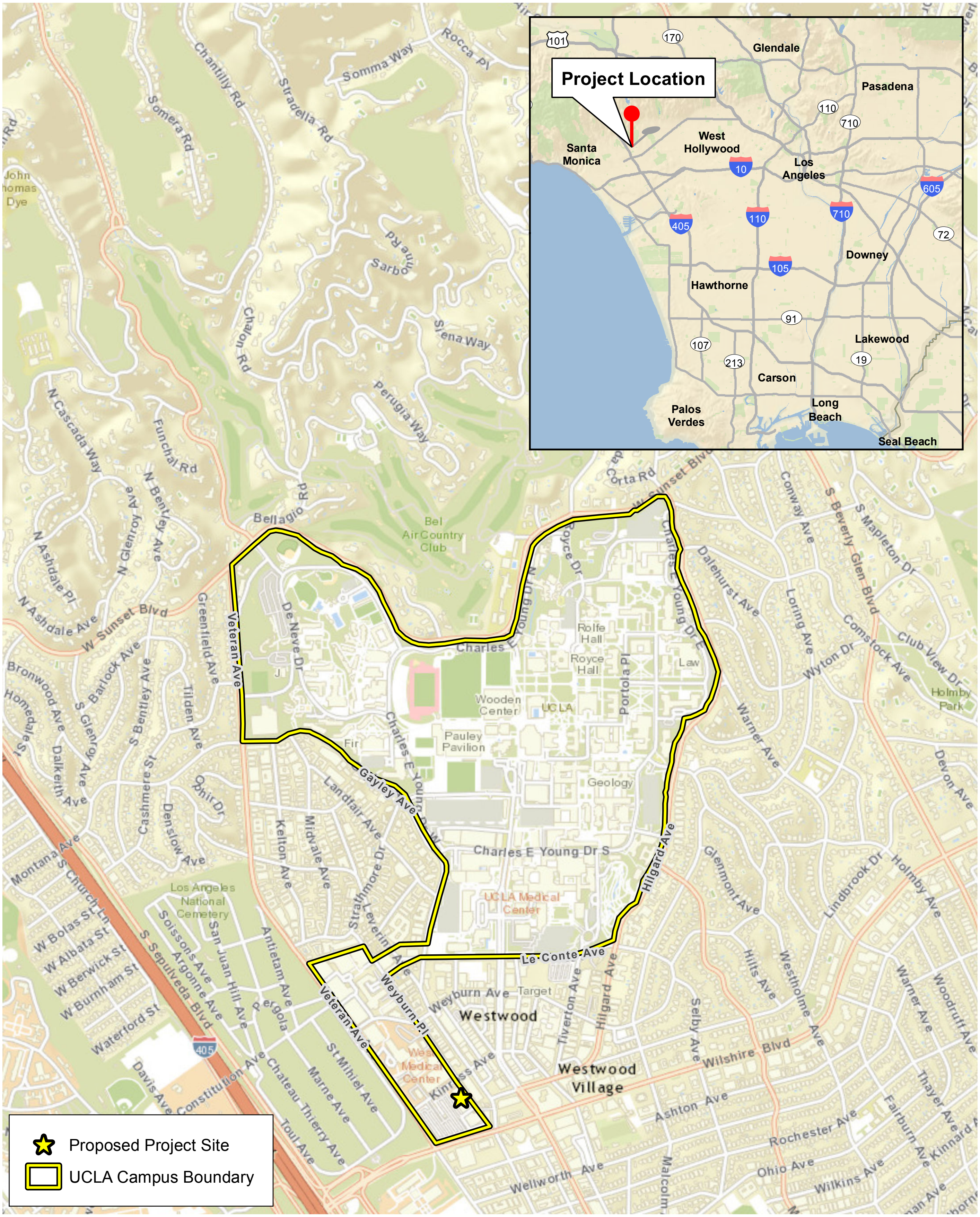
The March 2009 Long Range Development Plan (LRDP) Amendment Final EIR includes descriptions of the regulatory and environmental settings for the region, the UCLA campus, and surrounding areas. With the exception of the regulatory setting related to Air Quality (discussed in Section 4.1), Climate Change (discussed in Section 4.2, Greenhouse Gas Emissions), Hydrology and Water Quality (discussed in Section 4.3), and Land Use and Planning (discussed in Section 4.4), the regulatory and environmental settings of the region, the UCLA campus, and surrounding areas have not changed since certification of the March 2009 LRDP Amendment Final EIR in March 2009. Therefore, they are not repeated in this document. However, a summary of this information is provided for each environmental analysis topic, as applicable. Following is a description of the environmental setting for the project site and surrounding areas.

The proposed Project is located in the Southwest zone of the UCLA campus, which encompasses approximately 35.5 acres of the 419-acre UCLA campus. In addition to the Kinross Buildings (North and South), the Southwest zone is occupied by a variety of uses, including, but not limited to, surface and structured parking, graduate student housing, medical research and clinical functions, administrative functions, scientific research, transit facilities, a steam plant, and Los Angeles Fire Station No. 37.

As shown in the aerial photograph provided in Figure 3-3, the project site is bound by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively. The existing visual character of the site and surrounding area is depicted on the site photographs provided in Figures 3-4a through 3-4d. As shown, the project site is located in a developed urban area.

The Kinross Building opened in 2001 and was originally constructed to serve as a multi-use facility for displaced departments on the UCLA campus while their facilities underwent seismic upgrades or renovation. The 3-level building is approximately 75,000 square feet and was designed with flexible classroom, office, and lab space, providing a versatile arrangement open to adaptation. The Kinross Building currently houses the Kinross Recreation Center (KREC) and Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, and units related to research administration. KREC is open every day and is limited to use by UCLA graduate students and faculty/staff with UCLA Recreation SOUTH ZONE membership. Not including the individuals that use KREC, there are approximately 218 individuals (faculty and staff) that occupy the remaining areas at the Kinross Building.

Currently, the primary entrance to the building is on the north facade. Parking for the occupants of the Kinross Building is primarily provided at Parking Lot 36 and Parking Structure 32, both of which are accessed from Kinross Avenue. Service and delivery vehicle access is provided from Midvale Alley east of the building. There are various transit uses serving the project site; BruinBus and the Campus Express travel along Kinross Avenue, with a stop at Parking Lot 36, adjacent to the project site. Culver City Route No. 6 also travels along Kinross Avenue with a stop at Parking Lot 36. Big Blue Bus Routes No. 2 and No. 3 and Metro Route No. 20 and No. 720 travel along Wilshire Boulevard and stop at Parking Lot 36 at its intersection with Veteran Avenue. A Los



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Regional Location and Local Vicinity

Figure 3-1

Geffen Academy at UCLA

N E S W

1,500 750 0 1,500 Feet

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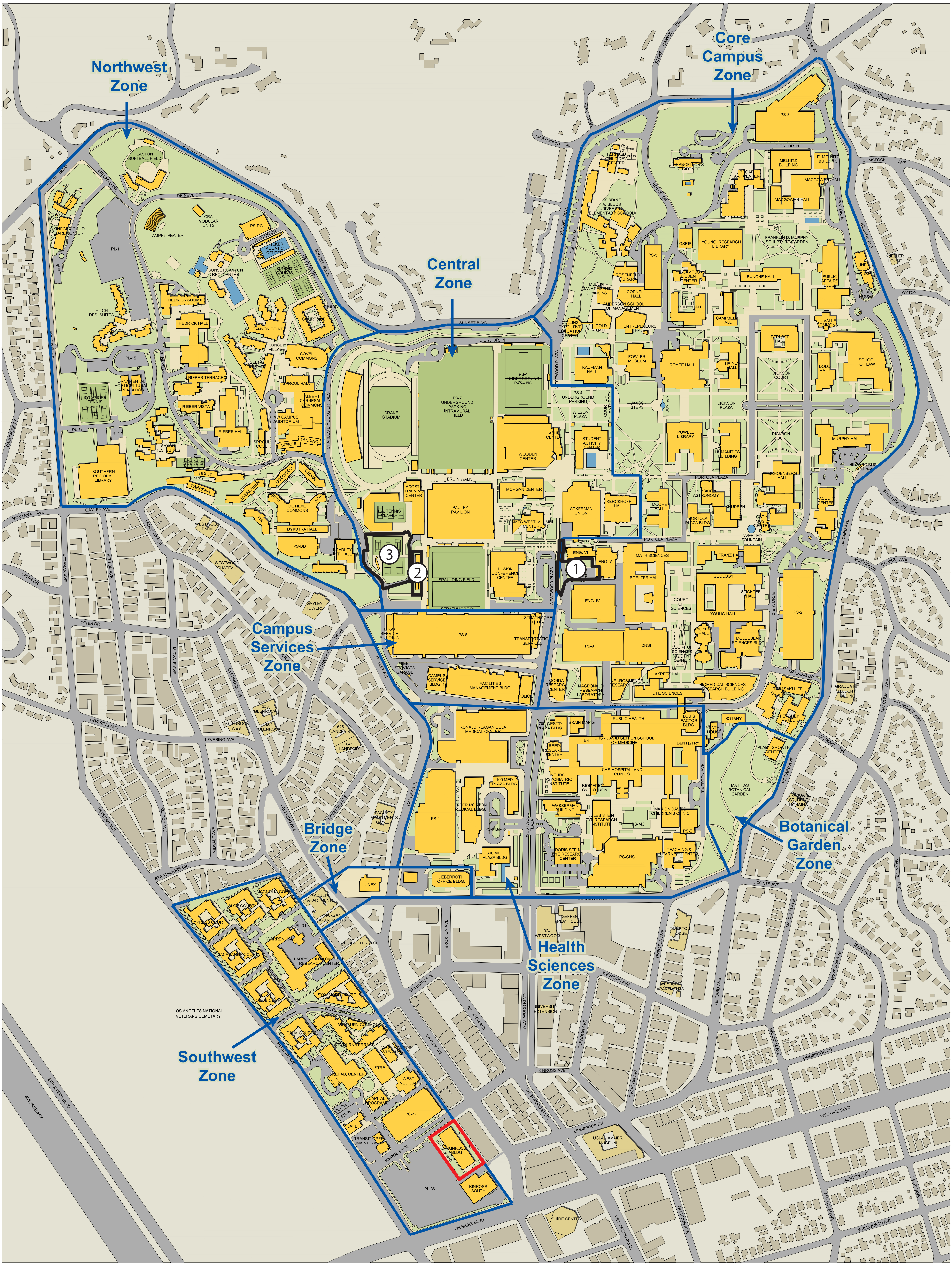

Project Limits

Major Construction Projects

1 Engineering VI - Phase 2 Building Project

2 Wasserman Football Performance Center Project

3 Ostin Basketball Practice Facility

Source: UCLA 2014

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UCLA Campus Map

Figure 3-2

Geffen Academy at UCLA

N W E S

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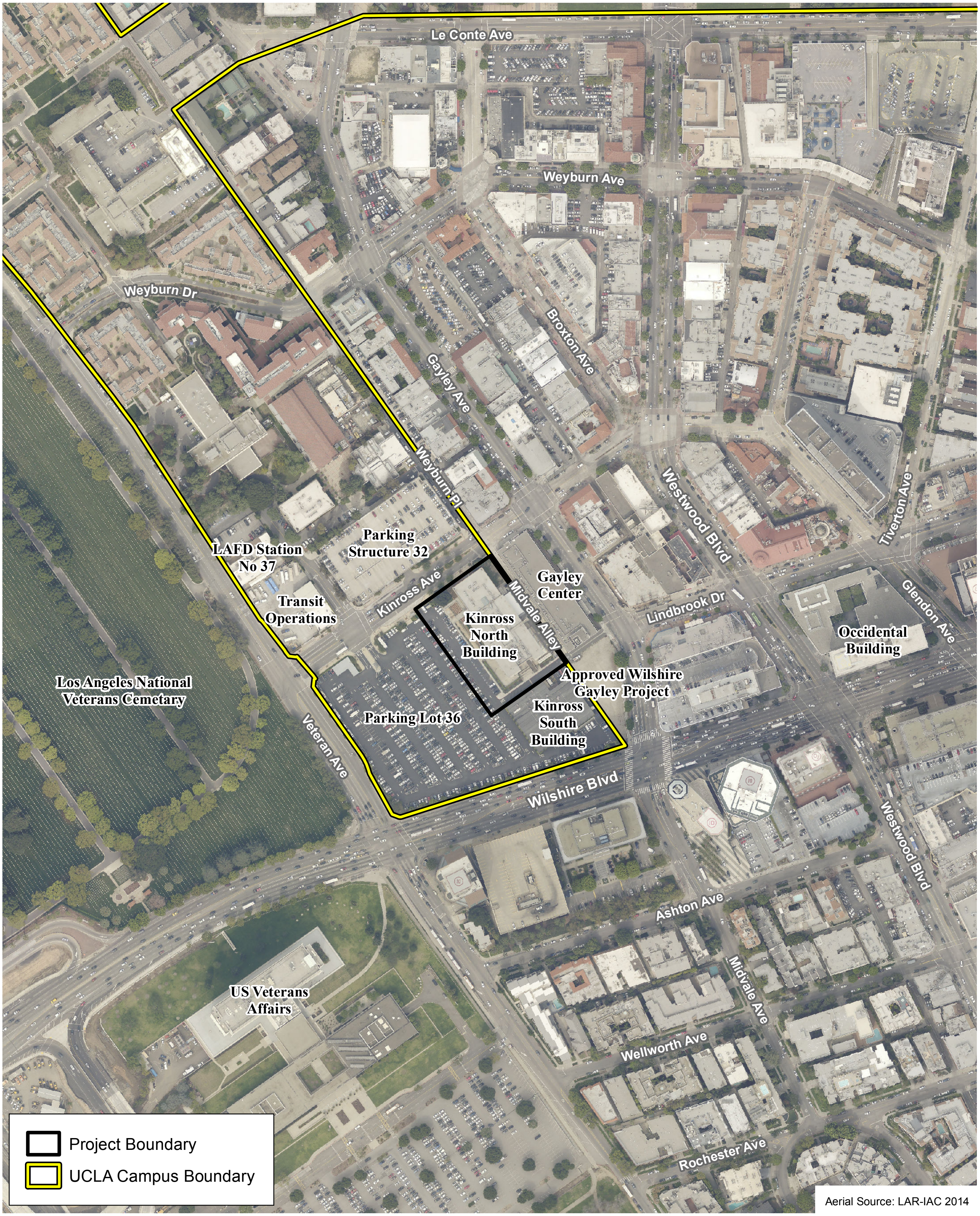

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Aerial Photograph of Project Site

Figure 3-3

Geffen Academy at UCLA

N W E S

350 175 0 350 Feet

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View 1

View 2

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Existing Site Views

Figure 3-4a

Geffen Academy at UCLA

N W E S

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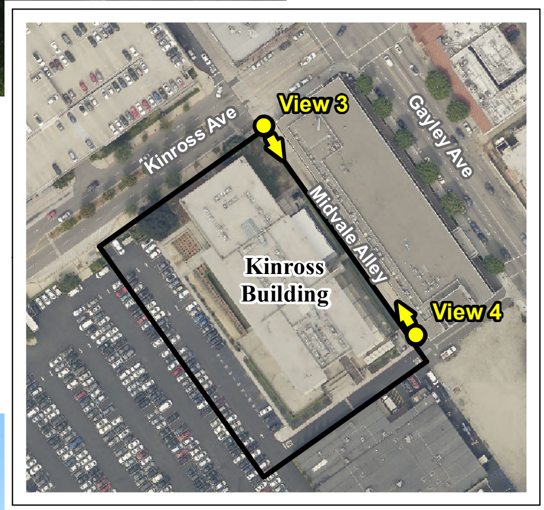
View 3



View 4

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Existing Site Views

Figure 3-4b

Geffen Academy at UCLA

N W E S

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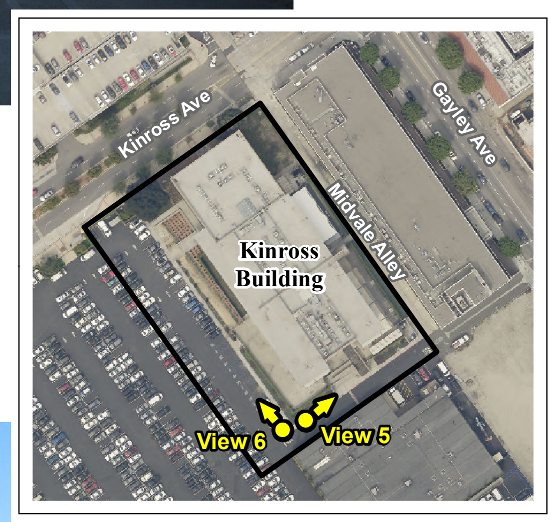
View 5



View 6

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Existing Site Views

Figure 3-4c

Geffen Academy at UCLA

N W E S

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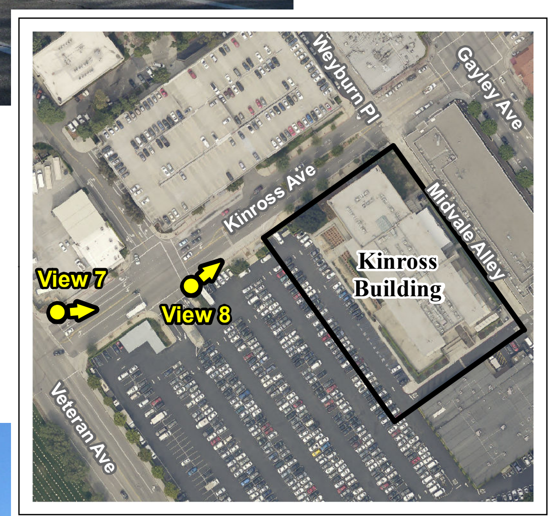
View 7



View 8

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Existing Site Views

Figure 3-4d

Geffen Academy at UCLA

N
W E
S

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Angeles International Airport (LAX) FlyAway stop is on the north side of Kinross Avenue adjacent to Parking Structure 32. There are existing sidewalks on both sides of Kinross Avenue adjacent to the project site; on both sides of Gayley Avenue and Wilshire Boulevard; and on the east side of Veteran Avenue.

Vegetation on the project site consists of various tree species in the northern portion of the site and landscaped areas. There are 16 trees, including 4 coast live oaks (*Quercus agrifolia*), 1 Canary Island pine (*Pinus canariensis*), 10 London planetree (*Platanus x acerifolia*), and 1 southern magnolia (*Magnolia grandiflora*) (refer to Figure 6 in the Initial Study included in Appendix A). The landscaped areas surrounding the Kinross Building encompass approximately 12,000 square feet and are planted with drought-tolerant and well-adapted plant species, reducing potable water requirements for irrigation and storm water runoff from the project site. There are no naturalized areas, stream channels, or otherwise sensitive hydrologic or biological resources within the project site.

The project site and surrounding areas are developed and the topography is relatively flat with no hillside areas. The elevation of the project site and surrounding areas is approximately 313 feet above mean sea level (msl). Currently, storm water drains to landscape and planter areas around the building and overflow discharges at the western curb face, creating sheet flow across Parking Lot 36. There is existing infrastructure (e.g., water, electric, and natural gas) in place, which serves the Kinross Building.

Regionally, the UCLA campus lies within a seismically active area bound by two important faults in the Santa Monica Fault Zone: the active Malibu Coast/Santa Monica/Raymond/Sierra Madre/Cucamonga Fault and the active Newport-Inglewood Fault. However, there are no known active or potentially active faults that underlie the project area or the campus.

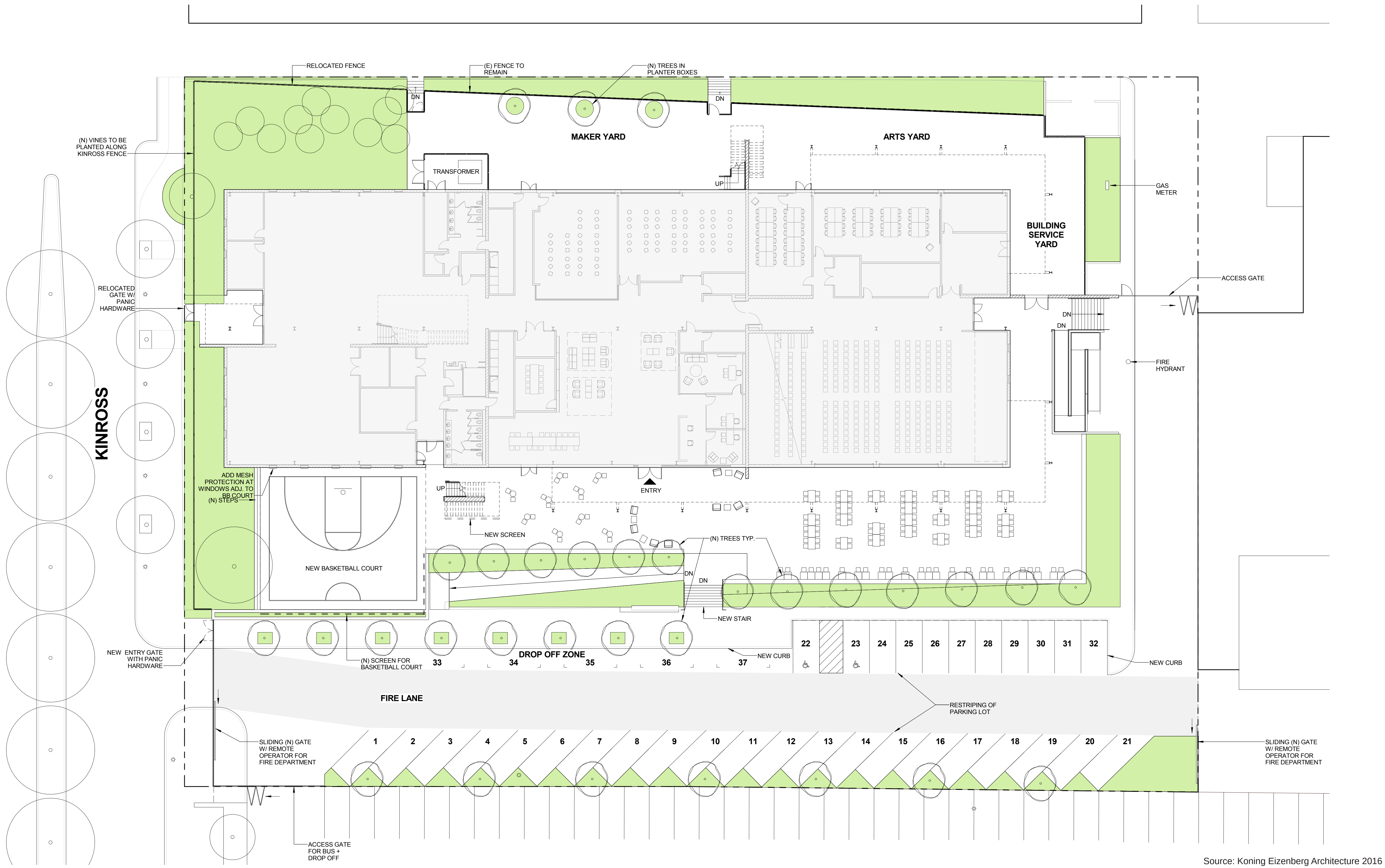
3.5 PROJECT COMPONENTS

The proposed Project involves the renovation of the Kinross Building and modifications to adjacent areas, within the project limit, to accommodate the Geffen Academy at UCLA campus. The conceptual site plan for the proposed Project is provided in Figure 3-5. The proposed Project consists of the following key components, which are described below:

- Geffen Academy Operations
- Renovation of Kinross Building and Exterior Site Modifications
- Relocation of Existing Kinross Building Occupants
- Vehicular Circulation and Parking
- Safety/Security Fencing, Landscaping, and Exterior Lighting
- Sustainable Design Features
- Utility Infrastructure
- Construction Activities

3.5.1 GEFFEN ACADEMY OPERATIONS

The proposed Geffen Academy would be operated by UCLA and would provide an innovative college preparatory education for 6th through 12th grade students. The Academy is proposed to open for the 2017–2018 school year with approximately 160 students in grades 6 and 9; followed by an enrollment increase up to a maximum of 620 students in grades 6 through 12 by



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Source: Koning Eizenberg Architecture 2016

Conceptual Site Plan

Figure 3-5

Geffen Academy at UCLA

32 16 0 32
Feet

BonTerra PSOMAS

(04/14/2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\EIR\ex3-5_ConceptSitePlan_20160414.pdf the 2020–2021 school year. The Geffen Academy would continue UCLA's commitment to diversity by serving a broad population of families from different racial, ethnic, linguistic, religious, and socioeconomic backgrounds. It is currently anticipated that a maximum of 50 percent of the students would come from UCLA staff and faculty families and the remainder would come from the larger Los Angeles community. It is anticipated that the Geffen Academy would be funded through tuition paid for the Academy and philanthropy; no public funds or tuition paid by UCLA students would be used.

New faculty and staff would be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees. Based on preliminary estimates, it is assumed there would be 42 full-time faculty/staff, 7 part-time staff, and 8 remote employees[1] when the Academy opens for the 2017–2018 school year. With the estimated 620 students by the 2020–2021 school year, it expected that the employee population would increase to 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees. The Academy would require janitorial and maintenance support, which is currently provided in the existing facility by UCLA Facilities Management. It is anticipated that those services and the provider would continue to serve the Academy.

The Geffen Academy would generally follow UCLA's academic calendar. For purposes of analysis in this Draft Subsequent EIR (SEIR), certain assumptions regarding operations have been made. It is assumed that the Academy facility would be open and staffed between 7:30 AM to 6:30 PM, Monday through Friday, with school/instructional hours extending from approximately 9:00 AM to 4:30 PM during the academic school year (fall through spring). Classes would be held Monday through Friday and certain school activities could occur in the evening and/or on the weekend.

The Geffen Academy would have recreational activities and various competitive athletic teams that would utilize on-site facilities, including a proposed outdoor half-court. It is expected that this would include, but not be limited to, dance, wrestling, yoga, cardio and resistance training, and basketball and volleyball practice and instruction (using the proposed half court). It is premature to identify the need for or location of other athletic or recreational facilities on the UCLA campus or off campus that may be used by the Academy in the future; identification of such facilities would be speculative at this time. Should the use of any facilities not located at the Geffen Academy site be implemented in the future, that use or construction of new facilities would be addressed as part of separate environmental documentation prepared pursuant to CEQA.

3.5.2 RENOVATION OF KINROSS BUILDING AND EXTERIOR SITE MODIFICATIONS

Internal modifications would be made to all three levels of the 75,000 gross square foot (gsf) Kinross Building to accommodate the proposed uses and programs associated with the Geffen Academy. As noted above, the Kinross Building was originally designed and constructed to be flexible for future uses and to anticipate ongoing staging needs that would require internal modifications to accommodate a revolving group of users. Interior modifications for the Geffen Academy could include, but would not be limited to, demolition of existing non-load-bearing walls and improvements in the way of proposed work and installation of new walls, surfaces, lighting, and fixtures. Specific construction activities are discussed later in this section.

As shown in the conceptual site plan provided on Figure 3-5, some of the existing outdoor area would be retained in its existing condition; however, minor exterior site modifications are

[1] Remote employees would not be located on site; they are support for faculty for assignments such as reading and grading.

proposed, including a proposed exit driveway at Kinross Avenue, the outdoor half-court basketball court, and the new main entry to the building along the western building facade.

The proposed Project would involve upgrades to the existing mechanical systems in the Kinross Building, including the heating, ventilating and air conditioning (HVAC) system. The HVAC system would accommodate the installation of air filters with a Minimum Efficiency Rating Value (MERV) of 13[2]. If the approved Wilshire Gayley project is under construction during operation of the Geffen Academy, air filters with a MERV of 13, or filters with equivalent performance, would be installed during the construction period for this adjacent project.

With respect to interior building modifications, the conceptual floor plans for each level of the Academy are presented in Figure 3-6. As shown, at the first level, a new main entry with a new ramp and stair entry sequence would be constructed along the western facade at the proposed drop-off/pickup location. Figure 3-7 provides a conceptual rendering of the main entry. This entry would connect to the lobby space that has a strong connection to the exterior and is visually connected to the maker[3] and art spaces. Office spaces would surround the lobby.

A large multipurpose space, used for both assembly and dining, would anchor the southwest end of the building and would open to an outdoor dining deck. A nearby catering kitchen would support food service for meals prepared off site and be delivered to the project site. Fitness and athletic spaces, including offices for the Athletic Director and Nurse/Trainer and the proposed exterior half-court basketball court, would be located at the northern end of the building, which is currently occupied by the KREC facility (refer to Figure 3-5).

The second and third floors would be open in the middle of the floor plate with lounge/student study/meeting spaces, with classrooms and staff offices on the perimeter.

The currently proposed Project does not involve the construction of any new buildings. Should an expansion of the Geffen Academy be proposed in the future, beyond the currently proposed Project as described herein, separate environmental review pursuant to CEQA would be required.

3.5.3 RELOCATION OF EXISTING KINROSS BUILDING OCCUPANTS

As previously identified, the Kinross Building currently houses KREC and the Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, and administrative research units. These existing uses would be relocated prior to occupancy by the Geffen Academy. None of the proposed relocations would require construction of new structures; however, internal renovations of existing buildings would be required and separate CEQA review would cover these subsequent projects when the scope of work and final locations/spaces are finalized.

- **Kinross Recreation Center.** UCLA is evaluating existing UCLA-owned buildings, both on- and off-campus, for their potential to be relocation sites for KREC. At this time, no location has been identified as the relocation site. Once a site is identified, and the scope of work to renovate that site/space is defined, a separate CEQA evaluation will be prepared for design approval.

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2 MERV 13 filters are capable of removing approximately 90 percent of the particulate matter emissions, in the particle size range of 1 micron (μm) and larger, from air introduced into the HVAC system.

3 Maker space is a creative "laboratory" that fosters hands-on use of tools and technology to prepare students with critical 21st century skills in the fields of science, technology, engineering, and math (STEM).

Source: Koning Eizenberg Architecture 2016

Conceptual Floor Plans

Figure 3-6

Geffen Academy at UCLA

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Source: Koning Eizenberg Architecture 2016

Conceptual Rendering

Figure 3-7

Geffen Academy at UCLA

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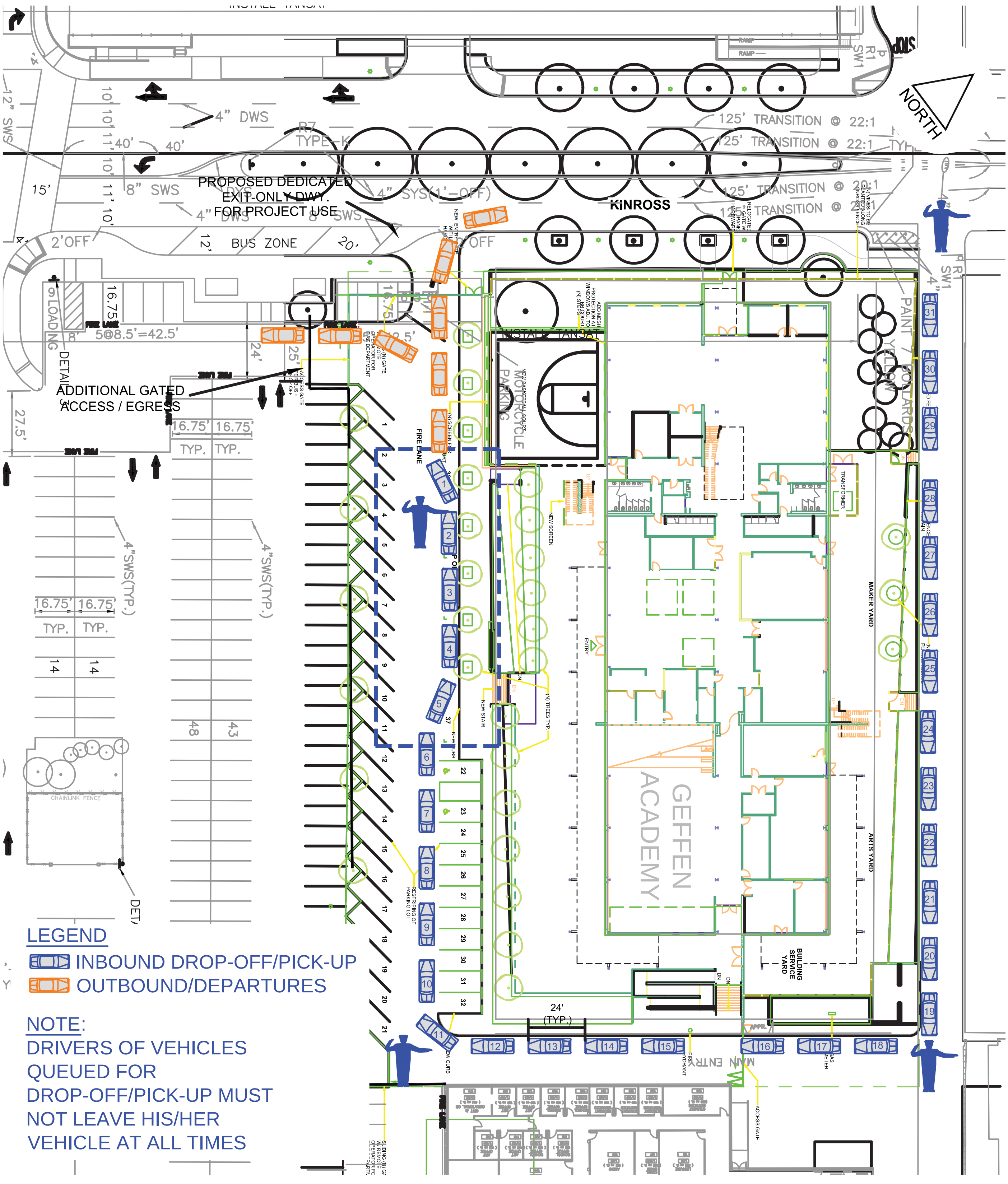
- **Fowler Museum and UCLA Library Conservation Center.** Fowler Museum personnel would be relocated to the Life Sciences Building. The Library personnel would be relocated to an on-campus location.
- **Administrative Uses.** It is estimated that approximately 211 administrative staff members who currently occupy the Kinross Building would move to the Occidental Building, recently purchased by UCLA. This building is located at 10889 Wilshire Boulevard, at the corner of Westwood and Wilshire Boulevards, approximately 675 feet east of the project site. Parking is provided at the Occidental Building, so staff members that currently have parking permits for Parking Lot 36 or Parking Structure 32 would park at the Occidental Building. For relocation of administrative staff members to the Occidental Building, minimal tenant improvements are anticipated.

3.5.4 VEHICULAR CIRCULATION AND PARKING

The proposed circulation pattern for the Geffen Academy is shown on Figure 3-8 and would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building, west of the Gayley Center, following a route around the Kinross Building to the proposed new entrance and drop-off/pickup location at the northwest portion of the building. Vehicles would then either (1) exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project (right turns only) or (2) during controlled periods, exit the site from a swing or sliding fence that would allow vehicles to use the existing Parking Lot 36 exit and turn left on Kinross Avenue. To accommodate this vehicular movement, a drop-off/pickup area would be constructed on UCLA property (refer to Figure 3-8). The proposed Project would not require modifications to Midvale Alley or the existing UCLA bus stop located immediately west of the proposed new driveway along Kinross Avenue.

UCLA's Transportation Demand Management program administered by UCLA Transportation would be made available to Geffen Academy students, faculty and staff. To ensure the effectiveness of the TDM program, the following additional TDM measures would be implemented during operation of the Geffen Academy:

- School buses would be provided for student travel to and from the Geffen Academy and bus arrivals would be scheduled before the parent drop-offs/pick-ups;
- Ridesharing information kiosks would be developed in lobbies or other visible locations at the Geffen Academy;
- Information on ridesharing options and services would be included in Geffen Academy study enrollment packages, and Geffen Academy new hire packages for employees;
- Short-term and long-term bicycle parking would be upgraded at the Geffen Academy to meet City of Los Angeles requirements for a newly constructed building and/or actual demand, whichever is greater;
- All students would be required to, as part of registering for the Geffen Academy each year, indicate agreement of use of an alternative mode for travel to campus. Alternative modes of transportation could include the following:
    - Use of a school bus;
    - Use of public transit;
    - Use of the BruinBus;
    - Carpooling with a parent to their UCLA On-Campus work location;



D:\Projects\UCLA\J028\Graphics\EIR\ex_ConceptCirculationAndParkingPlan_20160414.ai

Source: Crain & Associates 2016

Conceptual Circulation and Parking Plan

Figure 3-8

Geffen Academy at UCLA

BonTerra PSOMAS

(04/14/2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\EIR\ex3-8_ConceptCirculationAndParkingPlan_20160414.pdf

  - o Participation in a student carpool that is driven by a licensed student and includes at least two other students, with these carpools arriving before the parent drop-offs;
  - o Participation in a parent carpool dropping-off/picking-up at least three students;
  - o Participation in a vanpool serving the UCLA Campus; and
  - o Walking or bicycling to school.

- Onsite student parking would be restricted to carpools with 3 or more students;
- Geffen Academy students would be required to pay at least the same rate for a parking permit as is charged to UCLA students. Geffen faculty and staff who park would be required to pay for permits at the same rate as UCLA faculty and staff.

Monitoring and enforcement of applicable UCLA TDM measures and TDM measures specific to the proposed Geffen Academy would be conducted by UCLA Transportation consistent with current practices for existing uses on campus.

As shown on Figure 3-8, parking for the Geffen Academy would be provided on site, adjacent to Parking Lot 36. This parking area would potentially provide parking for Academy students, visitors, and ADA parking. Approximately 54 parking spaces from Parking Lot 36 would be captured behind the proposed fence and used to accommodate the Project's circulation. However, it is anticipated that the Project would require 32 parking spaces for student, visitor, and accessible parking spaces. As discussed above, the demand for Lot 36 parking would be reduced by the relocation administrative staff members to the Occidental Building, which is estimated to be 112 parking spaces. The Project's 109 Full-time Academy faculty and staff (which would also be UCLA faculty and staff) would generate an estimated demand of 58 spaces, would have the opportunity to obtain a campus parking permit for Parking Lot 36.

3.5.5 SAFETY/SECURITY FENCING, LANDSCAPING, AND EXTERIOR LIGHTING

As shown on Figure 3-5, security fencing would be installed around the project site, enclosing outdoor use areas and parking that would be dedicated to the Academy. Gated areas for vehicle entry and exit during the AM/PM drop-off and pickup periods would be provided at Midvale Alley in the southeast portion of the project site, at Parking Lot 36 in the northwest portion of the project site, and at Kinross Avenue at the northern property boundary.

Implementation of the proposed Project would require the removal of up to 16 existing trees on the north, northeast, and western sides of the project site, including four coast live oaks and two mature trees (as further discussed in Section V.4, Biological Resources, of the Initial Study included in Appendix A of this Draft SEIR). The existing outdoor/landscape areas on the west side of the building, where the half basketball court and new entry would be developed, would also be removed. The proposed Project would provide one new tree for every one non-native mature tree removed and two trees for each protected tree removed (consistent with the March 2009 LRDP Amendment Final EIR Mitigation Measure [MM] 4.3-1[c]). Therefore, project tree replacement would include up to ten trees for the removal of mature and protected trees. If feasible, existing mature and protected trees in the identified construction impact area may be protected in place. New landscaping consisting of drought-tolerant vegetation would be integrated into the new ramp and stair entry sequence (refer to Figure 3-5).

There is existing exterior lighting at the Kinross Building and adjacent parking area; it is anticipated that new light-emitting diode (LED) lighting would be installed to illuminate entrances and provide adequate site lighting to enhance both pedestrian and vehicular wayfinding, circulation, and safety. Lighting would be compatible with the existing night lighting of adjacent uses and would incorporate cut-off and shielding features to reduce light trespass.

3.5.6 SUSTAINABLE DESIGN FEATURES

The proposed Project would comply with applicable policies outlined in the University of California Policy on Sustainable Practices and would adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. Leadership in Energy and Environmental Design (LEED™) is a green building rating system that contains prerequisites and credits in five areas: (1) environmentally sensitive site planning, (2) water conservation, (3) energy efficiency, (4) conservation of materials and resources, and (5) indoor air quality. The proposed Geffen Academy has been designed to surpass the minimum standard of a LEED™ "Silver" rating and would attempt to achieve a LEED™ "Gold" rating for Existing Buildings. To achieve this rating, the design, construction, and operation of the proposed Project incorporates a series of green building strategies, including, but not limited to, the following:

- Protect undeveloped land by developing in an urban area with existing infrastructure;
- Develop a Project located near public transportation alternatives (e.g., the adjacent bus stops) and provide bike lockers;
- Reduce building energy consumption through upgrades to the existing mechanical systems and the use of LED lighting;
- Reduce solid waste disposal by diverting 75 percent of construction waste from landfills;
- Provide runoff treatment and collection systems to reduce runoff quantities and improve water quality;
- Utilize recycled materials and regionally sourced materials for building construction;
- Utilize non-volatile organic compound (VOC)-emitting adhesives, sealants, paints, coatings, carpets, flooring systems, wood, or agrifiber; and
- Provide outdoor air delivery monitoring, control indoor chemical and air pollutant sources, and provide lighting and temperature control systems that can be individually controlled.

3.5.7 UTILITY INFRASTRUCTURE

The proposed Project would retain existing connections to campus utilities, including domestic water, sewer, storm drains, and dry utility systems that are currently located within the project area, as described below. There is sufficient capacity in the existing utility infrastructure to serve the proposed Project and no off-site upgrades (outside the proposed Project's construction limits) would be required.

- **Domestic Water.** There is an existing 4-inch water main in Kinross Avenue that serves the Kinross Building via 4- to 10-inch water lines extending along the west side of the building. No new or upgraded water lines are required to serve the proposed Project.
- **Sewer.** Wastewater generated at the Kinross Building flows via a 6-inch lateral sewer line at the south end of the building to the existing 6-inch sewer line in Parking Lot 36, which flows to Midvale Alley. There is sufficient capacity in these sewer lines to accommodate the flows resulting from the proposed Project. Therefore, no new or expanded sewer laterals or main lines are necessary to serve the proposed Project.

- **Storm Drain and Water Quality.** There are existing 6- and 8-inch storm drain lines that capture storm water runoff from the overflow drains and connect to 3-inch by 12 ½-inch rectangular cast iron pipe that spill to the curb. This overflow water then sheet flows across Parking Lot 36. Consistent with existing conditions, storm water from the project site after construction would remain unchanged. The existing storm drainage system would be retained to capture both the surface drainage and roof drainage. As further discussed in Section 4.8, Hydrology and Water Quality, of this Draft SEIR, storm water detention is not required; however, water quality treatment features would be retained, in compliance with applicable regulations. Roof drains would continue to discharge a portion of flow to ground-level landscaped areas and planter boxes for treatment prior to discharge. The discharge points would be consistent with the drainage patterns such that storm water diversion does not occur. No new or expanded storm drain lines would be required to serve the proposed Project.
- **Dry Utilities and Telecommunications.** There are existing electric, natural gas, and telecommunications facilities that serve the Kinross Building. Electricity is provided to the building from a pad-mounted transformer on the northeast side of the building that connect to a 12.47 kilovolt (kV) line that extends to a UCLA-owned and operated manhole. Natural gas is provided to the building from an existing 1-inch line located at the southwest corner of the building, which connects to a 1 ½-inch gas line that extends out via the east/west alley to Gayley Avenue. No new or expanded dry utility lines would be required to serve the proposed Project.

3.5.8 CONSTRUCTION ACTIVITIES

Interior and exterior renovation and construction activities at the Kinross Building are expected to begin in Fall 2016 to accommodate the opening of Geffen Academy by September 2017. Additional interior renovation/construction to accommodate the full Academy population (6^{th} through 12^{th} grades) would continue through December 2018. The following outlines the major proposed Project construction components, some of which would occur concurrently:

- Site preparation and demolition,
- Grading,
- Building renovations, and
- Paving and architectural coatings.

Exterior site preparation and demolition activities would disturb approximately 11,456 square feet (sf, approximately 0.26 acre), and would occur over an approximately 8-week period and would generate up to approximately 28 tons of construction and demolition debris. This would involve removal of existing trees and landscaping and demolition of existing concrete and other features in the construction impact area, as well as demolition of portions of the western building facade, as necessary to accommodate the new building entry. Interior demolition activities would generate up to 120 tons of construction debris, which would be reduced to 30 tons based on the required diversion of 75 percent of construction debris. Disposal of this construction debris would occur over an approximate 4-week period, likely during February 2017. Interior demolition debris would be collected in 30-yard waste bins that would be removed and replaced approximately 8 times during the 4-week period. The transport of construction debris would represent approximately 2 round-trip truck trips every three days.

Minor grading activities (e.g., excavation) would be required for the proposed Project and are primarily associated with installation of the exit driveway to Kinross Avenue, the half-court basketball court, and the new main entry. The grading phase would occur over an approximate

8-week period, including mobilization, grading, and demobilization. Only surficial excavation would be necessary and would not extend into native sediments. It is estimated that the grading activities would require excavation and export of approximately 50 cubic yards (cy) of soil; import of materials is not required. This would result in the generation of approximately 12 total truck trips (24 round-trip truck trips), which would not occur in one day.

Exterior building renovations would last approximately 6 months and paving would last approximately 3 months. Paving would consist of concrete and asphalt. The proposed Project would involve painting of the exterior stairs (approximately 1 week) and interior walls with low or no VOC paint; painting would take place off and on over approximately 8 weeks.

Construction of the proposed Project would require common equipment such as jackhammers, backhoes, bobcats, loaders, mobile cranes, and concrete mixers.

In addition to the identified construction areas, a staging area is needed to receive, lay down, and prepare materials for use during construction. Construction staging would occur within the project site limits.

Vehicular and Pedestrian Circulation during Construction

Construction-Related Vehicular Traffic and Parking

A construction traffic route has been designated to efficiently move construction vehicles to avoid traffic from other on-campus projects under construction at the same time, to the extent feasible. Pursuant to campus Programs, Practice and Procedures (PP) 4.13-2 from the March 2009 LRDP Amendment Final EIR, the construction of these major projects would be coordinated to adjust construction schedules, work hours, and access routes to the extent feasible to reduce construction-related traffic congestion. Following is the planned route for construction traffic for the proposed Project:

- **Approach:** Construction vehicles would exit Interstate (I) 405 at Wilshire Boulevard, head northbound on Veteran Avenue, and eastbound on Kinross Avenue. Smaller construction vehicles could access the site via Midvale Alley, if necessary.
- **Departure:** Construction vehicles would exit the project site, head westbound on Kinross Avenue, then southbound on Veteran Avenue to Wilshire Boulevard to access I-405.

Construction workers would park on campus within walking distance of the project site.

Non-Construction-Related Pedestrian and Vehicular Traffic

During construction, commuter/passenger vehicles, public transit buses, and emergency vehicles would continue to use existing roadways in the vicinity of the project site, including Kinross Avenue and Midvale Alley. Existing access to Parking Lot 36, Parking Structure 32, and existing bus stops on the north and south sides of Kinross Avenue would be maintained. Delivery vehicle access to the Kinross South Building would be maintained via the existing entrance to Parking Lot 36 and Midvale Alley. Pedestrians would be able to access the Kinross South Building from either Midvale Alley or the south side of the building from Parking Lot 36.

Pedestrian movement would be accommodated along Kinross Avenue; however, during construction of the new exit driveway for the Geffen Academy and other construction activities in the northern portion of the project area, pedestrians would be rerouted to the north side of the street.

3.6 RELATIONSHIP TO LONG RANGE DEVELOPMENT PLAN

The proposed Project would not require an amendment to the 2002 LRDP (as amended in 2009) since the proposed renovations to the Kinross Building would result in no new square footage being added in the Southwest zone.

Projected on-campus daily population numbers are discussed and analyzed in the March 2009 LRDP Amendment Final EIR (pages 4.10-1 through 4.10-11). The LRDP Final EIR population projections were based on a three-quarter average and an on-campus weekday average for students, academic employees, staff employees, and other individuals (visitors). Using this data, the on-campus population figures in the LRDP Final EIR were adjusted to reflect that all students, faculty, and staff are not on campus, simultaneously, on any given day, as explained by the following:

> This accounts for variations in weekday attendance patterns for students and employees due to class and teaching schedules, vacations, sick leave, and absences from campus for travel, among other reasons, and other less than full-time work or study schedules. Due to these variations, the number of enrolled students and employed individuals on campus on any given weekday is less than the total number of people enrolled and employed. The average weekday population adjusts the total on-campus population to represent the average number of people (student and employees) physically on campus on any given weekday.

Population growth, in and of itself, is not an environmental impact. However, population growth may contribute to an increase in impacts in other topical areas. For example, in 1990, the UCLA campus entered into a Transportation Mitigation Monitoring Agreement with the City of Los Angeles to limit the total number of vehicle trips (a trip cap) set at 139,500 average daily vehicle trips. To date, the campus has never exceeded the trip cap even though population has grown since 1990 (the 2015 daily vehicle count was 100,490 trips; 28 percent below the established trip cap) (UCLA 2016). The proposed Project would not involve any modifications to the previously adopted campus-wide vehicle trip generation or parking cap.

The March 2009 LRDP Amendment Final EIR (Table 4.10-4) projected population for students, employees, and visitors out to 2013–2014. The projections were solely for the purpose of conducting impact analyses in the LRDP Final EIR. As identified above, this Draft SEIR assumes that the proposed Geffen Academy would add up to 620 new students and 109 new faculty/staff members. In addition, UC system-wide enrollment increases were approved by the UC President and The Regents in November 2015. Increases in population on campus as a result of the proposed Project and The Regents' action are addressed in Section 4.6, Population and Housing, of this Draft SEIR.

3.7 ANTICIPATED DISCRETIONARY APPROVALS

The Regents, or its delegate for budget and design approval and CEQA determination, will consider the proposed Geffen Academy at UCLA and the SEIR for project approval. Delegates of The Regents include, but are not limited to, the UCLA Chancellor. The Regents, or its delegate, and the responsible agencies identified below are expected to use the information contained in the Initial Study and the SEIR for consideration of approvals related to and involved in the implementation of the proposed Geffen Academy. The Initial Study and the SEIR inform State, regional, and local government approvals needed for construction and/or operation of the proposed Project, whether or not such actions are known or are explicitly listed. Anticipated approvals required from the UC and the responsible agencies to implement the proposed Project include, but are not limited to, those listed below.

University of California Board of Regents or Delegate

- Budget approval
- Certification of the Final SEIR
- Design approval of the Geffen Academy at UCLA Project

Responsible Agencies

- **City of Los Angeles.** The proposed Project may require street improvement and/or construction easements for Kinross Avenue and Midvale Alley.
- **State of California Regional Water Quality Control Board**. UCLA, or its designee, will comply with requirements of the applicable National Pollution Discharge Elimination System (NPDES) Permit.

3.8 REFERENCES

University of California, Los Angeles (UCLA). 2016 (March 28). Personal Communication. Email from T. Dudman (Campus and Environmental Planning, UCLA) to T. Andersen (BonTerra Psomas) entitled “2015 Cordon Counts”.

_____. 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121). Los Angeles, CA: UCLA Campus Capital Programs.

University of California Office of the President (UCOP). 2015. University of California – Policy: Sustainable Practices. Oakland, CA: UCOP.

SECTION 4.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

4.0.1 INTRODUCTION

Sections 4.1 through 4.9 of this Draft Subsequent Environmental Impact Report (SEIR) present the analysis of potential environmental effects that could result from implementation of the Geffen Academy. The environmental topical issues addressed in this EIR are outlined in Section 3.3.5 of the University of California (UC) California Environmental Quality Act (CEQA) Handbook, which are based on Appendix G of the State CEQA Guidelines. The State CEQA Guidelines have been updated since publication of the UC CEQA Handbook, and updates have been incorporated into this Draft EIR.

As discussed in Section 2.0, Introduction, of this Draft SEIR, this Draft SEIR is tiered from the March 2009 Long Range Development Plan (LRDP) Amendment Final EIR. CEQA and the State CEQA Guidelines encourage the use of tiered environmental documents to eliminate repetitive discussions of the same issues. The March 2009 LRDP Amendment Final EIR provides a broad analysis of the environmental effects of implementing the remaining development allocation on campus. Based on the Initial Study included in Appendix A of this Draft SEIR and circulated with the Notice of Preparation (NOP), the University of California, Los Angeles (UCLA) determined that the proposed Project required a project-level tiered SEIR to evaluate the Geffen Academy in the context of the impact analysis in the March 2009 LRDP Amendment Final EIR. The Initial Study concludes that, while some impacts of the proposed Project (which incorporates applicable campus programs, practices, and procedures [PPs] and mitigation measures [MMs] required by the Final EIR) were covered by the analysis, other project-specific impacts were not covered in the Final EIR and additional project-specific analysis is required.

4.0.2 FORMAT OF THE ENVIRONMENTAL ANALYSIS

Sections 4.1 through 4.9 are formatted to include the subheadings listed below.

<u>Environmental Setting</u>

According to Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the proposed Project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for this Draft SEIR was published in February 2016. However, the State CEQA Guidelines recognize that the date for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time periods, the use of environmental baselines that differ from the NOP date is reasonable and appropriate when doing so results in a more accurate or conservative environmental analysis. Where the baseline differs from when the NOP was published is explained in the respective technical sections in Section 4.0 of this Draft SEIR.

The March 2009 LRDP Amendment Final EIR includes descriptions of the environmental settings for the region, the UCLA campus, and surrounding areas. This Draft SEIR summarizes relevant setting information from the LRDP Final EIR and includes a description of the environmental setting for the proposed Project and surrounding areas.

<u>Regulatory Framework</u>

The March 2009 LRDP Amendment Final EIR includes descriptions of the regulatory framework for the region, the UCLA campus, and surrounding areas. The regulatory framework provides a summary of federal, State, and/or local regulations, plans, policies, and laws that are relevant to the proposed Project and each issue area. It should be noted that UCLA is part of the University of California, a constitutionally created entity of the State of California. As a constitutional entity, the University of California is not subject to municipal regulations, such as the County and City General Plans, zoning, or other land use controls. However, for some technical issues, UCLA has elected to use municipal regulations to promote harmony and consistencies with the neighboring community. These instances are specifically identified in the respective technical sections. Particularly applicable and/or updated regulatory framework information since the LRDP Final EIR was prepared is provided in each section.

Project Impacts and Mitigation

Each analysis section is further divided into the following subsections.

Methods

This subsection identifies the methods used to analyze potential environmental impacts and is consistent with the methods used for the March 2009 LRDP Amendment Final EIR.

Thresholds of Significance

Thresholds of significance are criteria used to determine whether potential environmental effects are significant. The thresholds of significance used in this analysis were primarily based upon Appendix G of the State CEQA Guidelines; however, in some cases, standards were developed specifically for this analysis or reflect those used by the University in other environmental analyses. For each topical issue, a summary of thresholds identified in the Initial Study as adequately addressed in the March 2009 LRDP Amendment Final EIR is provided, and thresholds requiring additional project-specific analysis are identified.

The threshold of significance defines the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. Some thresholds (e.g., air quality, traffic, and noise) are quantitative, while others (e.g., land use and planning) are qualitative. The thresholds are intended to assist the reader in understanding how and why the EIR reaches a conclusion that an impact is significant or less than significant.

Impact Analysis

This section contains the detailed analysis of potential environmental impacts based on the established thresholds of significance. The following information is provided for each topical issue:

- **Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR.** Ongoing established PPs that the campus follows and MMs that were adopted as part of the March 2009 LRDP Amendment Final EIR are identified and incorporated as part of the proposed Project. These PPs and MMs that are relevant to the proposed Project are identified and are assumed in the analysis presented in each topical section and their implementation will be monitored as part of the LRDP MMRP.

- **Impact Analysis for Each Threshold of Significance.** The Initial Study identifies thresholds of significance that require additional project-specific analysis of impacts resulting from the proposed Project; this section addresses those impacts. Following the identification of each threshold, the analysis of the Geffen Academy is provided. As required by Section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term (construction-related), and long-term (operational) impacts are addressed, as appropriate, for the environmental issue area being analyzed. Impacts on campus and off campus are addressed as appropriate. A determination regarding the consistency of the impact conclusion for the proposed Project with the conclusion presented in the March 2009 LRDP Amendment Final EIR is provided. Project-specific mitigation measures are identified, if needed, and the level of significance after mitigation (no impact, less than significant, or significant and unavoidable) is presented.

- **Additional Project-Level Mitigation Measures.** Where project impacts have been identified, project-specific mitigation measures that reduce impacts to a less than significant level are identified.
- **Level of Significance after Mitigation.** This section identifies the level of significance of each impact after implementation of identified mitigation measures.
- **Conclusion.** This section identifies whether there are substantial changes proposed with the project or the circumstances under which the project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects. Additionally, it is identified whether new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe.

Cumulative Impacts

CEQA requires that EIRs discuss cumulative impacts in addition to project-specific impacts. In accordance with Section 15130(b) of the State CEQA Guidelines, “the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone”. Further, the discussion is guided by the standards of practicality and reasonableness. According to Section 15355 of the State CEQA Guidelines,

> “Cumulative impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the State CEQA Guidelines also requires that EIRs discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, it does not need to consider the effect significant but shall briefly describe the basis for its conclusion. As further clarified by Section 15065 of the State CEQA Guidelines, “cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. If the combined cumulative impact associated with the project's incremental effects and the effects of other projects is not significant, Section 15130(a)(2) of the State CEQA Guidelines requires a brief discussion in the EIR about why the cumulative impact is not significant and is not discussed in further detail. Section 15130(a)(3) of the State CEQA Guidelines requires supporting analysis in the EIR if a determination is made that a project's contribution to a significant cumulative impact is rendered less than cumulatively considerable and, therefore, is not significant. To support each significance conclusion, this EIR provides a cumulative impact analysis and, where proposed Project-specific impacts have been identified that, together with the effects of other pending projects, could result in cumulatively significant impacts, these potential impacts are documented.

The State CEQA Guidelines (Section 15130[b][1]) state that the information used in an analysis of cumulative impacts should come from one of two sources, either

1. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency, or
2. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or areawide conditions.

The cumulative impacts analyses contained in this Draft SEIR use both methods. As appropriate, the cumulative impact analyses provided in this Draft SEIR use the *City of Los Angeles General Plan Framework* study area. These cumulative impact analyses take into consideration the demographic projections and land use buildout assumptions outlined in the 2002 LRDP, as amended in March 2009, and the *General Plan Framework Final EIR* that was approved by the City of Los Angeles in 1996 (re-adopted in August 2001).

In addition to the *City of Los Angeles General Plan Framework* study area, the cumulative analysis for individual topical issues may consider specific cumulative study areas designated by respective agencies for regional or areawide conditions. For instance, topic-specific cumulative study areas have been developed for traffic and air quality (e.g., South Coast Air Basin). Also, this Draft SEIR considers regional programs directed at mitigating cumulative impacts of development such as those instituted for urban runoff. A description of the basis for the cumulative impact analysis for individual topical issues is provided within each cumulative analysis discussion in Sections 4.1 through 4.9 of this Draft SEIR.

Finally, and where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of off-campus "related projects", as described by Section 15130(b) of the State CEQA Guidelines. A variety of off-campus, related projects within a 1.5-mile radius of the campus, as identified by the Los Angeles Department of Transportation (LADOT), are reflected in Table 4.8-4, List of Related/Cumulative Projects and shown in Figure 4.8-5, Related Projects Locations Map, in Section 4.8, Transportation/Traffic, of this Draft SEIR.

Since certification of the March 2009 LRDP Amendment Final EIR and in addition to the Northwest Housing Infill Project which was approved with the March 2009 LRDP Amendment, a number of projects have been approved for UCLA and are also considered in the cumulative impacts analysis for the proposed Project. The major on-campus construction projects are within the remaining development allocation assumed for the campus in the March 2009 LRDP Amendment Final EIR; are shown on the campus map presented in Exhibit 3-2; and include the following on-campus projects listed below, which were subject to project-specific environmental documentation pursuant to CEQA:

- **Meyer and Renee Luskin Conference Center Project.** The approximately 255,000 gross square foot (gsf), 8-level (7-levels above grade) Meyer and Renee Luskin

Conference Center is nearing completion of construction and is scheduled to open in August 2016. The Conference Center is located in the center of the UCLA campus at the northwest corner of Westwood Plaza and Strathmore Drive in the Central Campus zone and will provide 260 guest rooms, approximately 25,000 gsf of meeting and event space, a multipurpose conference hall, and various amenities. The UCLA Meyer and Renee Luskin Conference Center is designed to serve the needs of individuals and groups attending campus meetings or events; those doing business with UCLA entities; and UC faculty, students, staff, and other University affiliates. Construction activities involving heavy equipment and heavy truck trips have been completed.

- **Engineering VI-Phase 2 Project.** This project is in the Core zone across from Westwood Plaza, adjacent to and east of the Conference Center area, and involves construction and operation of a new 6-level (including 1 partial basement level), 94,000-gsf research laboratory facility. The new building will accommodate multidisciplinary information science and computation research programs for the Henry Samueli School of Engineering and Applied Science (HSSEAS). This building is under construction and is expected to be completed by November 2017. Construction activities involving heavy equipment and heavy truck trips have been completed.

- **Wasserman Football Performance Center.** This project involves construction and operation of a new 4-level (including 1 basement level), 75,000-gsf Football Performance Center to accommodate football training programs of the Department of Intercollegiate Athletics. The proposed facility is under construction on the west side of the existing football practice field (Spaulding Field) in the Central zone. The grading phase of the project has been completed, which would generate the highest number of truck trips. Construction is expected to be complete by February 2018.

- **Mo Ostin Basketball Center.** This project involves construction and operation of a new Basketball Practice Facility (up to 37,000 gsf) to accommodate both men’s and women’s basketball training programs of the Department of Intercollegiate Athletics. The project is located west of the Football Performance Center and south of the Los Angeles Tennis Center in the Central zone. Constructed began in April 2016 and is anticipated to be complete by November 2017. Construction activities involving heavy equipment and heavy truck trips, including grading, began in April 2016 and will extend through August 2016, prior to initiation of construction activities for the Geffen Academy.

In addition, UCLA is proposing redevelopment of the Margan Apartments located at 885 Levering Avenue in the Bridge zone. This project involves demolition of the existing, UCLA-owned, student-occupied apartment building comprising 44,200 gsf and construction of a new apartment building comprising 61,170 gsf on the same site. The proposed Project would provide a total of 42 apartment units accommodating 216 beds for undergraduate and transfer students. The Draft Initial Study/Mitigated Negative Declaration for this project was released on April 26, 2016. If approved, construction of the Margan Apartments is expected to be initiated in July 2017 and completed in July 2019. Construction activities involving heavy equipment and heavy trucks would occur near the end of construction activities for the Geffen Academy, which need to be completed before September 2017.

4.0.3 REFERENCES

This section identifies sources relied upon for each environmental topic area analyzed in this document (Sections 4.1 through 4.9).

University of California Office of the President (UCOP). 2002. *UC CEQA Handbook.* Oakland, CA: UCOP.

4.1 AIR QUALITY

Air quality issues are addressed in Section 4.2 of the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR). This section evaluates the potential impacts on air quality resulting from implementation of the proposed Project. Resources used to prepare this section include, but are not limited to, analysis of campus-wide air quality presented in Section 4.2 of the March 2009 LRDP Amendment Final EIR; the South Coast Air Quality Management District's (SCAQMD's) *CEQA [California Environmental Quality Act] Air Quality Handbook* and website; and the Traffic Impact Study for the Proposed University of California, Los Angeles (UCLA) Geffen Academy Project in Westwood Village, (included as Appendix D). Supporting air quality data and calculations are included in Appendix B. Additionally, a Health Risk Assessment (HRA) was prepared by PlaceWorks (May 2016) to evaluate emissions sources in proximity to the proposed Geffen Academy; the HRA is also included in Appendix B.

Relevant elements of the proposed Project related to air quality include the use of diesel-powered and other construction equipment that would contribute to regional and local pollutant emissions (refer to discussion of "Construction Activities" in Section 3.5.8 of this Draft Subsequent EIR [SEIR]) and the export of approximately 148 tons of demolition and construction materials from the project site. The proposed Project would also bring new students, faculty, staff, and visitors to the campus and generate approximately 1,040 average daily vehicle trips[1] that would contribute to long-term regional emissions.

One Notice of Preparation (NOP) comment letter was received addressing air quality issues and is included in Appendix A of this Draft SEIR. The SCAQMD recommended that the Lead Agency identify potential adverse air quality impacts that could occur from all phases of the proposed Project, including calculating impacts from construction and operations. The SCAQMD requests that results be compared to SCAQMD's regional and localized significance thresholds. The SCAQMD recommends performing a health risk assessment if the proposed Project generates or attracts heavy-duty diesel-fueled vehicles and recommends using the California Air Resources Board's (CARB's) *Air Quality and Land Use Handbook* as guidance in citing potentially incompatible land uses. The SCAQMD also identifies that mitigation measures would be identified for significant impacts.

4.1.1 ENVIRONMENTAL SETTING

Section 4.2.1, Environmental Setting, of the March 2009 LRDP Amendment Final EIR, includes a detailed discussion of the existing conditions at the time the LRDP Final EIR was prepared for the following: climate, air quality background, air quality, local pollutant sources, campus emissions, sensitive receptors, toxic air contaminants emissions, lifetime cancer risk, cancer burden, and non-cancer health effects. Following is a summary of this information that is either relevant to the proposed Project or that has been updated since the LRDP Final EIR was certified in March 2009.

Regional Context

As discussed in Section 4.2, Air Quality, of the March 2009 LRDP Amendment Final EIR, the campus and project area are located within the South Coast Air Basin (SoCAB), which was named as such since its geographical formation is that of a basin with the surrounding mountains trapping the air and its pollutants in the valleys (or basins) below. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The

[1] This is the number of average weekday daily trips generated by the proposed Geffen Academy and does not take into consideration the trip reductions associated with relocation of administrative staff to the Occidental Building.

SCAQMD is responsible for ensuring that the SoCAB meets the national and State ambient air quality standards.

Criteria Pollutants

Both the federal and State governments have established ambient air quality standards for outdoor concentrations of specific pollutants (referred to as "criteria pollutants") in order to protect public health. The national and State ambient air quality standards have been set at concentration levels to protect the most sensitive persons from illness or discomfort; these levels are given with a margin of safety. The criteria pollutants for which federal standards have been promulgated and that are most relevant to this air quality impact analysis are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), and particulate matter (PM10 and PM2.5). Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM10. Fine particulate matter (PM2.5) is a subgroup of PM10 that consists of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. O_3 is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Thus, VOCs and NOx are O_3 precursors.

Lead and sulfur dioxide (SO_2) are criteria pollutants identified by the U.S. Environmental Protection Agency (USEPA) but are not analyzed for the proposed Project because emissions of these pollutants would be negligible. Lead emissions are of concern for industrial projects, such as battery manufacturing and recycling, or lead smelters. SO_2 emissions are of concern in fossil-fueled power plants and industrial facilities. Similarly, the State of California has identified visibility reducing particles, vinyl chloride, sulfates, and hydrogen sulfide as criteria pollutants. These pollutants are also of concern for specific applications and are not relevant to the proposed Project.

In 2007, the U.S. Supreme Court held that greenhouse gases (GHGs) fall within the Clean Air Act's (CAA's) definition of an "air pollutant" and directed the USEPA to consider whether GHGs are causing climate change and thus harm to humans. GHG emissions and impacts are addressed in Section 4.2 of this Draft SEIR.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths, that may cause serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and testing facilities. TACs are different from the "criteria" pollutants in that ambient air quality standards have not been established for TACs.[2]

As identified in the March 2009 LRDP Amendment Final EIR, the UCLA campus conducts routine operations that generate air pollutant emissions. The emissions sources include cogeneration gas turbines, gasoline dispensing operations, boilers, standby generators driven by internal combustion engines, painting operations, and laboratory chemical usage. TAC generators in proximity to the project site are primarily the diesel trucks and other vehicles on Wilshire Boulevard and other roads near the project site. Additionally, construction of the proposed Wilshire Gayley

[2] An exception is that there are ambient standards for lead and vinyl chloride because CARB classified these pollutants as TACs after they were identified as criteria pollutants.

apartment building adjacent to the project site would generate TACs from construction equipment diesel exhaust.

Existing Air Quality

Attainment Designations

Subsequent to the publication of the March 2009 LRDP Amendment Final EIR, there have been changes in the attainment status in the SoCAB. Table 4.1-1 summarizes the current attainment status in the SoCAB for the criteria pollutants. As shown, the SoCAB is a nonattainment area for PM10 (State), PM2.5 (federal and State), and O_3 (federal and State).

TABLE 4.1-1
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Nonattainment	No Standard
O_3 (8 hour)		Extreme Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Moderate Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All Others	Attainment/Unclassified	No Standards

O_3: ozone; PM10: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide.

* The Los Angeles County portion of the SoCAB is designated nonattainment for lead; the remainder of the SoCAB is designated attainment.

Source: CARB 2015a.

Monitored Ambient Air Quality

The SCAQMD has divided the region into 38 source receptor areas (SRAs) in which 36 air monitoring stations operate. The UCLA campus is located within SRA 2, which covers the northwest coastal Los Angeles County area. Ambient air pollutant concentrations within SRA 2 are monitored at the Veterans Administration building in West Los Angeles, approximately 0.5 mile southwest of the project site. Of the criteria air pollutants, ambient concentrations of O_3, CO, and NO_2 are monitored in SRA 2. Table 4.1-2, Summary of Ambient Air Quality in the Project Vicinity, identifies the national and State ambient air quality standards for these air pollutants along with the ambient pollutant concentrations that have been measured within SRA 2 between 2013 and 2015. As shown in Table 4.1-2, O_3 concentrations exceeded the State standard in 2014 and 2015 for 1-hour O_3, the federal 8-hour O_3 standard in 2014, and the State 8-hour standards from 2013 to 2015.

The closest station for PM10 monitoring is near the Los Angeles International Airport, approximately 8.5 miles south of UCLA. As shown in Table 4.1-2, the national 24-hour standard was not exceeded from 2013 to 2015. The annual standard was not exceeded in all three years. The State 24-hour standard of 50 micrograms per cubic meter ($\mu g/m^3$) was not exceeded. The State annual standard of 20 $\mu g/m^3$ was exceeded in 2014; there was insufficient data to determine the annual average in 2013 and 2015.

The closest station for PM2.5 monitoring is in downtown Los Angeles, approximately 12.5 miles east of UCLA. As shown in Table 4.1-2, in 2013, 2014, and 2015, the national 24-hour standard was exceeded 1, 6, and 7 days, respectively. The national annual standard of 15 $\mu g/m^3$ was not exceeded in any of the three years. The State annual standard of 12 $\mu g/m^3$ was exceeded in 2013 and 2015; there was insufficient data to determine the annual average in 2014.

Motor vehicles are the primary source of pollutants in the campus vicinity and within the project area (e.g., from Parking Lot 36, Wilshire Boulevard, Veteran Avenue). Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO “hotspots”. The SCAQMD recommends analysis of CO emissions at both a local and a regional level. Analysis of the proposed Project’s contribution to localized CO concentrations is included in Section 4.1.3, below.

TABLE 4.1-2
SUMMARY OF AMBIENT AIR QUALITY IN THE PROJECT VICINITY

Air Pollutants Monitored Within SRA 2—Northwest Coastal Los Angeles County[a]	Year		
	2013	2014	2015
O_3			
Maximum 1-hour concentration measured	0.088 ppm[b]	0.116 ppm	0.102 ppm
Number of days exceeding State 0.090 ppm 1-hour standard	0	1	2
Maximum 8-hour concentration measured	0.076 ppm	0.095 ppm	0.072 ppm
Number of days exceeding national 0.075 ppm 8-hour standard[c]	0	4	0
Number of days exceeding State 0.070 ppm 8-hour standard	1	6	2
CO			
Maximum 8-hour concentration measured	1.3 ppm	1.3 ppm	–
Number of days exceeding national 9.0 ppm 8-hour standard	0	0	–
Number of days exceeding State 9.0 ppm 8-hour standard	0	0	–
NO_2			
Maximum 1-hour concentration measured	0.051 ppm	0.064 ppm	0.052 ppm
Number of days exceeding State 0.180 ppm 1-hour standard	0	0	0
Annual average concentration	*	0.013 ppm	
Exceed State 0.030 ppm or national 0.053 ppm annual standard?	–	No	–
PM10			
Maximum 24-hour concentration measured	37.0$\mu g/m^3$	45.0 $\mu g/m^3$	31.0 $\mu g/m^3$
Number of days exceeding national 150.0 $\mu g/m^3$ 24-hour standard	0	0	0
Annual average concentration (State)	*	21.9 $\mu g/m^3$	*
Number of days exceeding State 50.0 $\mu g/m^3$ 24-hour standard	0	0	0

TABLE 4.1-2
SUMMARY OF AMBIENT AIR QUALITY IN THE PROJECT VICINITY

Air Pollutants Monitored Within SRA 2—Northwest Coastal Los Angeles County[a]	Year		
	2013	2014	2015
PM2.5			
Maximum 24-hour concentration measured	43.1μg/m^3	59.9 μg/m^3	56.4
Number of days exceeding national 35.0 μg/m^3 24-hour standard	1	6	7
Annual average concentration (national)	12.0 μg/m^3	12.3 μg/m^3	12.3 μg/m^3
Annual average concentration (State)	18.9 μg/m^3	*	12.5 μg/m^3

SRA: source receptor area; O_3: ozone; ppm: parts per million; CO: carbon monoxide; NO_2: nitrogen dioxide; PM10: respirable particulate matter less than 10 micrometers in diameter; μg/m^3: micrograms per cubic meter; PM2.5: fine particulate matter less than 2.5 micrometers in diameter.

a Ambient concentrations of PM10, and PM2.5, are not monitored in SRA 2.
b ppm: parts per million (by volume) of air.
c On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- data not available
* There was insufficient data available to determine the value.

Source: CARB 2016, SCAQMD 2016a.

Existing Emissions

The project area is currently occupied by the existing three-level Kinross Building, which would be reused and renovated as part of the proposed Project. The existing uses on the project site generate area, energy, and mobile source pollutants but are not a source of TACs.

Sensitive Receptors

The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive receptors nearest the project site are the Weyburn Terrace Apartments located on Weyburn Avenue, approximately 700 feet northwest of the project site.

4.1.2 REGULATORY FRAMEWORK

Section 4.2 of the March 2009 LRDP Amendment Final EIR provides a complete discussion of the regulatory framework for the analysis of air quality. The following discussion summarizes the roles of the regulatory agencies relative to the proposed Project's air quality and notes regulatory information presented in the LRDP Final EIR that has been updated since March 2009 and/or is particularly relevant to the proposed Project.

Federal

The USEPA is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The standards are shown in Table 4.1-3. In January 2010, the USEPA established a 1-hour standard for NO_2. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. As part of its enforcement responsibilities, the USEPA requires that each state with federal nonattainment areas prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain and maintain federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution by using a combination of performance standards and market-based programs within the SIP-identified time frame.

TABLE 4.1-3
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	Secondary[b]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM10	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
SO_2	24 Hour	0.04 ppm (105 µg/m^3)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
Lead	30-Day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-Month Avg.	–	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

O_3: ozone; ppm: parts per million; µg/m^3: micrograms per cubic meter; PM10: respirable particulate matter less than 10 micrometers in diameter; AAM: Annual Arithmetic Mean; –: no standard; PM2.5: fine particulate matter less than 2.5 micrometers in diameter; CO: carbon monoxide; mg/m^3: milligrams per cubic meter; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer.

[a] *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[b] *National Secondary Standards:* The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2015b.

State

CARB, a part of the California Environmental Protection Agency (Cal-EPA), is responsible for the coordination and administration of both federal and State air pollution control programs in California. In this capacity, CARB conducts research; sets the California Ambient Air Quality Standards (CAAQS) shown in Table 4.1-3; compiles emission inventories; develops suggested control measures; provides oversight of local programs; and prepares the SIP. For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to reduce vehicular emissions of harmful pollutants.

Regional

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the SoCAB, which includes all of Orange County and the urbanized portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

In response to federal and State requirements to implement measures to achieve the NAAQS and CAAQS, the SCAQMD is responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of air quality management plans (AQMPs). An AQMP establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS. The current regional plan applicable to the proposed Project is the SCAQMD's 2012 AQMP. However, CARB and the USEPA also consider elements of the 2007 AQMP in review of the Statewide 2007 SIP. The AQMP control measures and related emission reduction estimates are based on emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The AQMP and SIP processes generally occur concurrently: The SIP is required under the CAA to provide the framework for nonattainment areas to come into attainment, and the AQMP is prepared by the SCAQMD, in part, to satisfy the requirement for the SIP. The AQMP traditionally evaluates all nonattainment and maintenance criteria pollutants; portions of the AQMP represent the required SIP elements, which are then transmitted to CARB for review and approval before being transmitted to the USEPA for inclusion in the overall California SIP.

As previously identified, the SoCAB is currently designated as nonattainment for the federal and State O_3 standards, the State PM10 standards, and the federal and State PM2.5 standards. The Los Angeles County portion of the SoCAB is a nonattainment area for lead. Currently, PM10, CO, and NO_2 are designated "Attainment/Maintenance areas" for federal standards. The current status of the SIPs for these nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted an SIP revision to the USEPA for O_3, PM2.5 (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal PM2.5 standard in the SoCAB by 2014 and attainment of the federal eight-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010.

The "extreme" designation requires the attainment of the eight-hour O_3 standard in the SoCAB by June 2024. CARB approved PM2.5 SIP revisions in April 2011 and the O_3 SIP revisions in July 2011. The USEPA approved the PM2.5 SIP on September 25, 2013, and has approved 47 of the 62 1997 8-hour O_3 SIP requirements (USEPA 2015). On November 30, 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM2.5 standards (USEPA 2014a).[3] The comment period closed on January 22, 2015; no subsequent action has been taken.

- On December 7, 2012, the SCAQMD adopted the 2012 AQMP, which is a regional and multiagency effort (the SCAQMD, CARB, the Southern California Association of Governments [SCAG], and the USEPA). The 2012 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methods for various source categories, and SCAG's latest growth forecasts. The primary purposes of the 2012 AQMP are to demonstrate attainment of the federal 24-hour PM2.5 standard by 2014 and to update the USEPA-approved 8-hour Ozone Control Plan. On December 20, 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013. The USEPA has not approved the 2012 AQMP portion of the SIP (CARB 2015c). However, the 2012 AQMP is still considered by the SCAQMD as the current and approved AQMP.
- SCAQMD is currently developing the 2016 AQMP. Adoption by the SCAQMD Governing Board is scheduled for Spring 2016. The 2016 AQMP will develop integrated strategies and measures to meet the following NAAQS (SCAQMD 2016b):
  - 8-hour ozone (75 parts per billion [ppb]) by 2032[4]
  - Annual PM2.5 (12 $\mu g/m^3$) by 2021–2025
  - 8-hour ozone (80 ppb) by 2024 (updated from the 2007 and 2012 AQMPs)
  - 1-hour ozone (120 ppb) by 2023 (updated from the 2012 AQMP)
  - 24-hour PM2.5 (35 $\mu g/m^3$) by 2019 (updated from the 2012 AQMP)

4.1.3 PROJECT IMPACTS AND MITIGATION

Methods

The SCAQMD recommends that projects be evaluated in terms of their quantitative thresholds, which have been established to assess both the regional and localized impacts of project-related air pollutant emissions. The significance thresholds are updated, as needed, to appropriately represent current ambient air quality standards and attainment status. UCLA utilizes the SCAQMD-recommended thresholds that are in place at the time development projects are proposed in order to assess the significance of quantifiable emissions. The current SCAQMD thresholds are identified below under "Thresholds of Significance", and are applied to the proposed Project. Determinations of significance for construction-related and operational emissions were based on the comparison of proposed Project-generated emissions to applicable SCAQMD thresholds.

[3] The SoCAB remains a nonattainment area for the 2006 PM2.5 standard (CARB 2014).
[4] On October 1, 2015, the USEPA lowered the 8-hour O_3 standard to 0.070 ppm (70 ppb); attainment of the new standard will not be addressed in the 2016 AQMP.

Construction and Operations Mass Daily Emissions

Construction and operational emissions for the proposed Project were calculated by using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod is a computer program prepared under the direction of the SCAQMD and is used to estimate anticipated emissions associated with land development projects in California. CalEEMod calculates emission rates for criteria pollutants utilizing the EMission FACtor model (EMFAC 2011) for on-road vehicles, OFFROAD 2011 for off-road vehicles, and USEPA formulas for non-vehicular emissions (SCAQMD 2013b). CalEEMod has separate databases for specific counties and air districts. The Los Angeles County database was used for the proposed Project. The model calculates emissions of CO, PM10, and PM2.5 and the O_3 precursors VOC and NOx.[5] For this analysis, the results are expressed in pounds per day (lbs/day) and are compared with the SCAQMD mass daily thresholds to determine impact significance. Specific inputs to CalEEMod for both construction and operations include land uses and building areas. Construction input data include, but are not limited to, (1) the anticipated start and finish dates of each proposed Project construction activity, such as demolition, grading, building, and paving; (2) inventories of construction equipment to be used during each activity; (3) areas to be excavated and graded; (4) volumes of materials to be exported from the project site; (5) areas to be paved; and (6) areas to be painted. The input data and assumptions are discussed below and in Appendix B. The CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, low-emission paints, and other selected measures.

Operationally, the most substantial change from the existing use of the building as an office to the proposed use as a school are the increased vehicle trips. Operational inputs to CalEEMod include (1) the specific year for project operations, (2) vehicle trip generation rates, (3) project-specific estimate of natural gas use, and (4) project estimates for energy reduction attributable to energy efficient design. Output operational emissions data are separated into energy use, area sources, and mobile sources. The area sources are landscape maintenance equipment, consumer products, and architectural coatings used for routine maintenance. Also, some consumer products (e.g., household cleaners, air fresheners, automotive products, and personal care products) emit VOCs. Mobile sources are the vehicles used by teachers, student drivers, or students being dropped off at the school, staff, and vendors.

In August 2010, the California Air Pollution Control Officers Association (CAPCOA) published *Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures.* This document provides guidance on the quantification of project-level vehicle miles traveled (VMT) reductions associated with land use factors. The concepts in the CAPCOA document were incorporated into CalEEMod.

Local Concentrations of Criteria Pollutants from On-Site Sources

As part of the SCAQMD's environmental justice program, attention has focused on local air quality impacts from nearby sources. The SCAQMD developed the localized significance threshold (LST) look-up tables to allow the evaluation of localized impacts for many projects and scenarios without the complex task of dispersion modeling. The tables show the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard. The LST methodology is recommended for project sites that are five acres or less (SCAQMD 2008).

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5 CalEEMod also calculates emissions of SO_2, carbon dioxide (CO_2), and other pollutants. As previously described, SO_2 emissions data are not used for the proposed Project because emissions of these pollutants would be negligible.

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. An initial screening procedure is provided in the procedures and guidelines contained in the Transportation Project-Level Carbon Monoxide Protocol (the CO Protocol) to determine whether a project poses the potential for a CO hotspot (UCD ITS 1997). The key criterion is whether the project would worsen traffic congestion at signalized intersections operating at Level of Service (LOS) E or F. If, according to the CO Protocol, a project poses a potential for a CO hotspot, quantitative screening is required.

Various air quality agencies in California, but not the SCAQMD, have developed conservative screening methods to avoid the need for dispersion modeling for most congestion scenarios. Therefore, the screening methods of the Sacramento Metropolitan Air Quality Management District (SMAQMD) are used (SMAQMD 2014). The use of the SMAQMD methodology is appropriate for the proposed Project because background CO concentrations in the project area (Table 4.1-2) are similar to or less than those in Sacramento.

Health Risk Assessment

An HRA is a process used to estimate the increased risk of health problems in people who are exposed to TACs. An HRA was performed for the proposed project to examine the short- and long-term potential health effects to future students, faculty and staff at the Geffen Academy from potential stationary and mobile sources in proximity to the proposed school. To be conservative, a quarter-mile (1,320-foot) radius was assumed for the evaluation of emission sources. A detailed discussion of the methods used to prepare the HRA is provided in the technical report included in Appendix B. In summary, The HRA included the following:

- Facilities that might reasonably emit hazardous or acutely hazardous air emissions were identified and evaluated.
- Emissions associated with vehicles and trucks traveling on highly trafficked roadways were evaluated, including Wilshire Boulevard, Veteran Avenue, Gayley Avenue, Kinross Avenue, and Westwood Boulevard. Because the site is within 500 feet of the edge of a freeway traffic lane or busy traffic corridor, criteria air pollutants as well as TACs were also evaluated to determine if air quality at the proposed site poses an exposure risk to students and staff. The long-term exposure risk analysis assumed a maximum exposure scenario, i.e., students and staff are exposed to outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff).
- Construction and operational emissions associated with the City of Los Angeles-approved Wilshire Gayley high-rise building were evaluated. The short-term exposure risk analysis assumed a maximum exposure scenario, i.e., students and staff are exposed to 2-hours per day of outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff) and the remaining hours per day indoors with the benefit of the air filtration with the planned MERV of 13 or greater, as discussed in Section 3.0, Project Description, of this Draft SEIR.
- Air dispersion modeling, using the AERMOD computer model, was conducted to quantify maximum ground-level concentrations for students and staff at the project site. Meteorological data from the nearest SCAQMD monitoring station with similar meteorological conditions were used to represent local weather conditions and prevailing winds.
- Cancer and non-cancer risks to students and staff attending and working at the project site were determined, based on the results of the AERMOD modeling. The assessment

considered exposure through the inhalation pathway. Unit Risk Factors (URFs) and Cancer Potency Factors (CPFs) were used to determine carcinogenic risk and Recommended Exposure Limits (RELs) were used to determine non-carcinogenic risk.

- Calculated risks were compared to thresholds established by the SCAQMD and Office of Environmental Health Hazard Assessment (OEHHA).

The assessment and dispersion modeling methodologies used in the preparation of this report included all relevant and appropriate procedures developed by the USEPA and the latest guidance on conducting health risk assessments from OEHHA (2015). These methodologies and assumptions were used to ensure that the assessment effectively quantified school-based impacts associated with emission sources.

It should be noted that these health impacts were based on conservative (i.e., health protective) assumptions, further described in the HRA included in Appendix B. The USEPA and OEHHA note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks do not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of risk and usually overestimate exposure and thus risk.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A) and circulated with the NOP concludes that implementation of the proposed Project, which is a component of the LRDP, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project create objectionable odors affecting a substantial number of people?

Based on the Initial Study prepared for the March 2009 LRDP Amendment Final EIR, implementation of the remaining development allocation on campus would have no impact related to objectionable odors. Construction activities may generate some odors, such as diesel exhaust associated with operations of construction vehicles. The odors would not be objectionable because of their relatively small magnitude and short duration, and they would quickly disperse into the atmosphere. Additionally, there would not be a substantial number of people exposed. Consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be a less than significant impact related to construction-related odors.

The proposed Project does not propose any odor-generating use identified by the SCAQMD and would not create an odor nuisance pursuant to Rule 402. Furthermore, none of these odor-generating land uses are located in the vicinity of the site. Potential odor-generating activities associated with the proposed Project primarily include landscape maintenance equipment exhaust, which occurs under existing conditions. Potential odors, if any, associated with instructional laboratory facilities are localized and do not permeate to off-campus locations and would be consistent with similar existing uses on campus. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not generate objectionable odors affecting a substantial number of people, and no mitigation is required.

Thresholds Addressed in the Draft EIR

The Initial Study concludes that additional project-level analysis of the following thresholds of significance was required in this Draft SEIR. According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact related to air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.

South Coast Air Quality Management District Significance Thresholds

As the agency principally responsible for comprehensive air pollution control in the SoCAB, the SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions. The significance thresholds are updated as needed to appropriately represent current ambient air quality standards and attainment status. The campus utilizes the SCAQMD-recommended thresholds that are in place at the time development projects are proposed in order to assess the significance of quantifiable impacts. Table 4.1-4 presents the current significance thresholds (SCAQMD 2015), including regional daily thresholds for short-term construction and long-term operational emissions, maximum incremental cancer risk and hazard index for TACs, and maximum ambient concentrations for evaluating local exposures. A project with daily emission rates, risk values, or concentrations below these thresholds is considered to have a less than significant effect.

TABLE 4.1-4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
THRESHOLDS OF SIGNIFICANCE

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3
Toxic Air Contaminants, Odor, and Greenhouse Gas Thresholds		
TACs[a]	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to Rule 402	
GHG	10,000 MT/yr CO_2e for industrial facilities	
Ambient Air Quality for Criteria Pollutants[b]		
NO_2	1-hour average ≥ 0.18 ppm Annual average ≥ 0.03 ppm	
CO	1-hour average ≥ 20.0 ppm (State) 8-hour average ≥ 9.0 ppm (State/federal)	
PM10	24-hour average ≥ 10.4 μg/m^3 (construction) 24-hour average ≥ 2.5 μg/m^3 (operation) Annual average ≥ 1.0 μg/m^3	
PM2.5	24-hour average ≥ 10.4 μg/m^3 (construction) 24-hour average ≥ 2.5 μg/m^3 (operation)	
Sulfate	24-hour average ≥ 1.0 μg/m^3	
Lead 30-day average Rolling 3-month average	1.5 μg/m^3 (State) 0.15 μg/m^3 (federal)	

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SOx: sulfur oxides; TACs: toxic air contaminants; GHG: greenhouse gas; MT/yr CO_2e: metric tons per year of carbon dioxide equivalents; NO_2: nitrogen dioxide; ppm: parts per million; μg/m^3: micrograms per cubic meter.

[a] TACs (carcinogenic and noncarcinogenic).
[b] Ambient air quality threshold based on SCAQMD Rule 403.

Source: SCAQMD 2015.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following Programs, Practices, and Procedures (PPs) and Mitigation Measures (MMs) were adopted as part of the March 2009 LRDP Amendment Final EIR and are incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.2-2(a) *The campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule*

403 and have been quantified in the URBEMIS[6] program as being able to reduce dust generation between 5 and 84 percent depending on the measure or combination of measures used from the list below:

- *Minimize land disturbance to the extent feasible.*
- *Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days).*
- *Apply water three times daily to all active disturbed areas.*
- *Replace ground cover in disturbed areas as quickly as possible.*
- *Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content.*
- *Water active grading sites at least twice daily.*
- *Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period.*
- *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.*
- *Sweep streets at the end of the day if visible soil material is carried over to adjacent roads.*
- *Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.*
- *Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.*
- *Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads.*

PP 4.2-2(b) *The campus shall continue to require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction.*

PP 4.2-2(c) *The campus shall continue to require by contract specifications that construction operations rely on the campus' existing electricity infrastructure rather than electrical generators powered by internal combustion engines to the extent feasible.*

PP 4.2-2(d) *The campus shall purchase and apply architectural coatings in accordance with SCAQMD Rule 1113, thereby ensuring the limitation of VOCs during construction.*

6 The URBEMIS model has been superseded by the CalEEMod model which has improved methods and an updated data base. The CalEEMod model has been used to quantify emissions from the proposed Project.

MM 4.2-2(a) *The campus shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.*

MM 4.2-2(b) *The campus shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and low-NOx fuel) to the extent that the equipment is reasonably commercially available and cost effective.*

MM 4.2-2(c) *The campus shall require by contract specifications that construction-related equipment used on site and for on-road export of soil meet USEPA Tier III certification requirements, as feasible.*

Project Design Feature

The following project design feature (PDF) is incorporated in the proposed Project and assumed in the analysis presented in this section. This PDF will be included in the Mitigation Monitoring and Reporting Program for the proposed Project.

PDF Geffen Air-1 The campus shall install a heating, ventilating and air conditioning (HVAC) system at the Geffen Academy designed to use air filters with a Minimum Efficiency Rating Value (MERV) of 13, or filters with equivalent performance. During concurrent operation of the Geffen Academy and construction of the Wilshire Gayley Project, the campus shall install MERV 13 air filters, or filters with equivalent performance. These filters shall be replaced as needed to maintain rated efficiency, and shall continue to be used until construction of the Wilshire Gayley Project is complete.

Threshold 1.1	Would the project conflict with or obstruct implementation of the applicable air quality plan?

The analysis of Impact 4.2-1 in Section 4.2, Air Quality, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009, would not obstruct implementation of any SCAQMD AQMPs and there would be a less than significant impact.

The purpose of the AQMP consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and to discuss whether the proposed Project would interfere with the region's ability to comply with federal and State air quality standards. The SCAQMD's *CEQA Air Quality Handbook* states, "New or amended General Plan Chapters (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP" (SCAQMD 1993). Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. As identified in the Handbook, the two principal criteria for conformance to an AQMP are (1) whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards and (2) whether the project would exceed the assumptions in the AQMP (SCAQMD 1993).

As discussed in the March 2009 LRDP Amendment Final EIR, the SCAQMD's 1997, 2003, and 2007 AQMPs were relevant to the implementation of the remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009. The campus trip cap of 139,500 average daily trips, established in the 1990 LRDP and retained in the 2002 LRDP and the March 2009 LRDP Amendment, and the campus buildout limit of 1.89 million gross square feet (gsf), as established in the March 2009 LRDP Amendment, provide input to SCAG and SCAQMD trip generation and emissions forecasts. Currently, projects that are consistent with the 2012 SCAG RTP/SCS are considered consistent with the 2012 AQMP since the 2012 RTP/SCS forms the basis of the AQMP's land use and transportation control portions.[7] Projects that are considered to be consistent with the AQMP would not interfere with attainment of air quality goals because this growth is presumed in the projections utilized in the formulation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP.

As further discussed in Section 4.4, Land Use and Planning, of this Draft SEIR, the proposed Project would involve the renovation and reuse of the existing 75,000 gsf Kinross Building in the Southwest zone, which was operational when the 2002 LRDP was amended in March 2009. No additional square footage would be added to the Southwest zone to accommodate the proposed Project. Therefore, there would be no change in the total remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009 (approximately 1.87 million gsf with approximately 267,888 gsf remaining). Further, the proposed Project would not alter the trip cap of 139,500 average daily trips, which was established with the 1990 LRDP and maintained through the 2002 LRDP, as amended in March 2009. Based on the 2015 Cordon counts, UCLA currently generates approximately 100,961 average daily trips. Therefore, the proposed Project does not involve any actions that would exceed the SCAG forecasts and implementation of the proposed Project would be consistent with the 2012 and 2016 AQMP attainment forecasts.

As shown under Threshold 1.2, proposed Project emissions would not exceed SCAQMD CEQA significance thresholds and would not result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards.

Consistent with the findings of the March 2009 LRDP Amendment Final EIR, the proposed Project would have a less than significant impact related to AQMP implementation.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Would not conflict with or obstruct implementation of the applicable air quality plan; no impact would result.

Threshold 1.2	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The analysis of Impacts 4.2-2 and 4.2-3 in the March 2009 LRDP Amendment Final EIR determined that, even with application of the identified PPs, implementation of the remaining development allocation on campus could result in significant and unavoidable impacts related to:

7 Similarly, the forecasts in the 2016 SCAG RTP/SCS, approved on April 7, 2016, will provide the basis for the SCAQMD 2016 AQMP.

- Construction emissions of NOx and
- Operational emissions of NOx and VOC.

As identified in the March 2009 LRDP Amendment Final EIR, individual proposed development projects on campus are subject to project-specific air quality impact analyses. Following is an analysis of the short-term construction-related and long-term operational emissions resulting from implementation of the proposed Project.

Construction-Related Impacts

Construction Emissions

Construction-related emissions are described as short-term, or temporary, in duration. Construction activities associated with the proposed Project would result in emissions of criteria air pollutants (i.e., PM10 and PM2.5, CO, and the O_3 precursors VOC and NOx) from (1) construction equipment that performs excavation, grading, and erection of building materials; (2) on-road hauling of excavated soil and demolished materials; (3) material handling and transport; and (4) other miscellaneous activities, including worker commute vehicles and application of architectural coatings.

As described in Section 3.5.8, Construction Activities, of this Draft SEIR, the total construction period is anticipated to extend from September 2016 through August 2018, for a total period of approximately 24 months. Interior and exterior renovation and construction activities at the Kinross Building are expected to begin in September 2016 to accommodate the opening of Geffen Academy by September 2017. Additional interior renovation/construction to accommodate the full Academy population (6^{th} through 12^{th} grades) would continue through December 2018.

For purposes of analysis in this Draft SEIR, it is estimated that exterior site preparation and demolition activities would occur over an approximate 8-week period and would generate up to approximately 28 tons of construction and demolition debris. This would involve removal of existing trees and landscaping and demolition of existing concrete and other features in the construction impact area and demolition of portions of the western building facade, as necessary to accommodate the new building entry. Interior demolition activities would generate up to 120 tons of construction debris. Disposal of this construction debris and would occur over an approximate 4 week period generally during February 2017. Interior demolition debris would be collected in 30-cubic-yard (cy) waste bins that would be removed and replaced approximately 8 times during the 4-week period. The transport of construction debris would represent approximately 2 round-trip truck trips every three days.

Minor grading activities (e.g., excavation) would be required for the proposed Project and are primarily associated with installation of the exit driveway to Kinross Avenue, the half-court basketball court, and the new main entry. The grading phase would occur over an approximate 8-week period, including mobilization, grading, and demobilization. It is estimated that the grading activities would require excavation and export of approximately 50 cy of soil; import of materials is not required. This would result in the generation of approximately 5 total truck trips. If all of this soil is transported in one day, it would generate approximately 10 one-way truck trips.

Exterior building renovations would last approximately 6 months and paving would last approximately 3 months. Paving would consist of concrete and asphalt. The proposed Project would involve painting of the exterior stairs (approximately 1 week) and interior walls with low or zero VOC paint; painting would take place periodically over approximately 8 weeks.

The quantitative emissions analysis covers the construction through August 2017, prior to the initial opening of the Geffen Academy. Construction during 2018 would be limited to interior renovation and emissions would be substantially less than in 2017 and would be negligible relative to significance thresholds.

Construction of the proposed Project would require common equipment such as jackhammers, backhoes, bobcats, loaders, mobile cranes, and concrete mixers. Project-generated construction emissions were modeled with CalEEMod, described in the Methods section above. The CalEEMod input was based on the proposed Project's construction assumptions (described above and in Section 3.0, Project Description, of this Draft SEIR). Where specific information was not known, engineering judgment and default CalEEMod settings and parameters were used. Compliance with SCAQMD Rules is required; it is therefore assumed that construction would be performed in accordance with Rule 403, Fugitive Dust (SCAQMD 2005) (PP 4.2-2[a]), and Rule 1113, Architectural Coatings (SCAQMD 2007b) (PP 4.2-2[d]). In CalEEMod, Rule 403 dust control measures are "mitigation" and Rule 1113 VOC concentrations are included in the "unmitigated" defaults. Table 4.1-5 summarizes the estimated emissions for proposed Project construction. Construction-related regional air quality impacts were determined by comparing these modeling results with applicable SCAQMD significance thresholds, as shown.

**TABLE 4.1-5
MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS FOR
THE PROPOSED GEFFEN ACADEMY**

Year	Emissions in Pounds per Day				
	VOC	NOx	CO	PM10	PM2.5
2016	<0.5	4	5	<0.5	<0.5
2017	8	7	9	1	<0.5
Maximum Daily Emissions	***8***	***7***	***9***	***1***	***1***
SCAQMD Significance Thresholds (Construction) (Table 4.1-4)	75	100	550	150	55
Significant Impact?	**NO**	**NO**	**NO**	**NO**	**NO**

VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter less than 10 micrometers in diameter; PM2.5: fine particulate matter less than 2.5 micrometers in diameter; SCAQMD: South Coast Air Quality Management District.

Note: Calculations assume compliance with SCAQMD Rules 403 and 1113 (see PP 4.2-2[a] and PP 4.2-2[d]).

Emissions are shown for winter season; summer emissions would be slightly less; see Appendix B.

Estimated regional construction emissions would be substantially less than the SCAQMD CEQA significance thresholds; therefore, the proposed Project-specific construction emissions impact would be less than significant, and no mitigation would be required. Although not quantified, incorporation of PP 4.2-2(b) (maintain construction equipment in good condition), PP 4.2-2(c) (use of the campus' existing electricity infrastructure), MM 4.2-2(a) (turn off equipment not in use for more than five minutes), MM 4.2-2(b) (use of alternative fuel construction equipment), and MM 4.2-2(c) (meeting USEPA Tier III certification requirements for construction equipment) into the proposed Project would provide further emissions reductions, principally to NOx and CO.

Operational Emissions

Operational emissions are composed of energy, area, and mobile source emissions. Energy emissions result from the use of natural gas for heating and hot water. The increase in energy emissions compared to existing emissions is assumed to be zero because the building renovation would include improvements in building energy efficiency. Area source emissions would result from landscape maintenance, periodic repainting, and use of consumer products, which also occur under existing conditions. With respect to mobile source emissions, the proposed Project would result in a forecasted increase of 1,040 vehicle trips per day, as discussed further in Section 4.8, Transportation and Traffic, of this Draft SEIR. No mobile source trip generation or VMT reduction measures are included in the emissions model because factors such as access to public transportation and UCLA's transportation management programs are included in the trip generation forecasts. The operational emissions attributable to the proposed Project were calculated using CalEEMod and are shown in Table 4.1-6.

TABLE 4.1-6
MAXIMUM DAILY OPERATIONAL EMISSIONS FOR THE PROPOSED GEFFEN ACADEMY

Source	Emissions in Pounds per Day				
	VOC	NOx	CO	PM10	PM2.5
Area sources	2	<0.5	<0.5	<0.5	<0.5
Mobile sources	4	14	54	10	3
Total Operational Emissions	***6***	***14***	***54***	***10***	***3***
SCAQMD Significance Thresholds (Operation)	55	55	550	150	55
Significant Impact?	**NO**	**NO**	**NO**	**NO**	**NO**

VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter less than 10 micrometers in diameter; PM2.5: fine particulate matter less than 2.5 micrometers in diameter; SCAQMD: South Coast Air Quality Management District.

Emissions are higher in winter and summer seasons.

Note: CalEEMod data sheets are included in Appendix B.

As shown in Table 4.1-6, the operational emissions for the proposed Project would be substantially less than the SCAQMD CEQA significance thresholds. The operational impact of the proposed Project on regional emissions would be less than significant, and no mitigation is required.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Threshold 1.3	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The analysis of Impact 4.2-4 in the March 2009 LRDP Amendment Final EIR determined that, even with application of the identified PPs, implementation of the remaining development allocation on campus would result in significant and unavoidable impacts related to a cumulatively considerable net increase of pollutants (i.e., O_3, PM10, and PM2.5) for which the project region is in nonattainment.

As identified in the March 2009 LRDP Amendment Final EIR, individual proposed development projects on campus are subject to project-specific air quality impact analyses. The SoCAB is a nonattainment area for O_3, PM10, and PM2.5. Therefore, cumulative regional emissions of VOCs and NOx (which are O_3 precursors) as well as PM10 and PM2.5 are addressed in the following analysis of cumulative criteria pollutant emissions (during construction and operation). Although Los Angeles County is also a nonattainment area for lead, non-negligible lead emissions occur only at industrial facilities that process lead, such as lead smelters and lead-acid battery manufacturers and recycling plants. Since the proposed Project does not include lead processing activities, this analysis does not address lead emissions.

Cumulative Emissions

Construction Emissions

Implementation of the remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009, could include individual projects that would have cumulative construction emissions that would exceed the SCAQMD mass emissions thresholds. The March 2009 LRDP Amendment Final EIR concluded that potential concurrent construction projects within and near the campus could result in cumulatively considerable emissions of O_3 precursors, PM10, and PM2.5. The proposed Project's projected construction VOC and NOx emissions would be less than 11 percent of the CEQA significance thresholds. Construction emissions of other nonattainment pollutants would not exceed three percent of the applicable thresholds. Exterior construction activities and initial interior construction activities for the proposed Project are expected to be completed in August 2017, with remaining interior construction activities to be completed by August 2018. These construction activities would occur at the same time as other UCLA construction projects, including the Engineering VI-Phase 2 Building, which is located approximately 0.7 mile north-northeast of the project site in the Core zone, and the Wasserman Football Performance Center and Ostin Basketball Practice Facility, which are located approximately 0.7 mile north of the project site in the Central zone (refer to the Campus Map presented in Figure 3-2, which identifies the location of these projects). Additionally, the proposed Margan Apartments Redevelopment Project, located 0.25 mile northwest of the project site, would also be under construction during this time frame, should it be approved. The anticipated completion dates for the construction of these facilities are November 2017 for the Engineering VI-Phase 2 Building and the Ostin Basketball Practice Facility, February 2018 for the Wasserman Football Performance Center, and July 2019 for the proposed Margan Apartments. Construction of the proposed Project may also be concurrent with construction of the Wilshire Gayley apartment building adjacent to the southeast corner of the project site. The 2014 Addendum to the Wilshire Gayley EIR states construction would begin in 2016 with a duration of about 30 months, with the construction phases generating the most heavy-duty diesel vehicle usage, such as grading and excavation, lasting no more than a year (City of Los Angeles 2014). Although proposed Project emissions could be added to the emissions of concurrent construction projects, based on consideration of the magnitude and duration of the proposed Project construction emissions, the proposed Project emissions would not be cumulatively considerable and the impact would be less than significant.

Operational Emissions

The March 2009 LRDP Amendment Final EIR states:

> Operational activities associated with remaining buildout of the 2002 LRDP, as amended, would result in project-generated emissions of VOC and NOx that exceed SCAQMD's applicable threshold. As a result, long-term operational emissions would be significant. The exceedance of the VOC threshold would be

principally due to (1) additional vehicle trips resulting from increased students, staff, and visitors and (2) increased on-campus residents using consumer products containing VOC. The NOx exceedance is almost entirely due to the additional vehicle trips (UCLA 2009).

As discussed above, there would be an increase in daily vehicle trips (approximately 1,040 trips per day) associated with implementation of the proposed Project. There would be a small increase in mobile and area source emissions of PM2.5, PM10, VOC, and NOx, as shown in Table 4.1-6. While the proposed Project emissions of particulates and O_3 precursors would contribute to the SoCAB inventory of nonattainment pollutants, the emissions from the proposed Project would be small compared to the SCAQMD CEQA significance thresholds and the magnitude would not be cumulatively considerable. The cumulative impact would be less than significant.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Construction and operation of the proposed Project would result in less than significant cumulative impacts related to emissions of pollutants for which the Basin is in nonattainment (O_3, PM10, and PM2.5). These impacts are less than the significant and unavoidable findings of the March 2009 LRDP Amendment Final EIR (Impact 4.2-4c).

Threshold 1.4	Would the project expose sensitive receptors to substantial pollutant concentrations?

The March 2009 LRDP Amendment Final EIR evaluated exposure of local sensitive receptors to CO hotspots and substantial criteria pollutant concentrations based on the SCAQMD's LST or pollutant emissions from campus-generated toxic air emissions. Potential impacts were determined to be less than significant. The proposed Project-specific analysis presented below indicates that the proposed Project would have a less than significant impact, consistent with the conclusion presented in the LRDP Final EIR.

Construction Emissions

The SCAQMD has promulgated exposure standards and a conservative, simple LST screening methodology for construction sites less than five acres in area (SCAQMD 2008). The LST methodology provides tables of emissions limits based on the location of the project area, size of the project area, and distance to the sensitive receptor. The emissions limits are then compared to the on-site project emissions.

For LST analysis, receptors who may be exposed to NOx and CO emissions for one hour are considered. Receptors who may be exposed to PM10 and PM2.5 for 24 hours (i.e., residents) are also considered. Persons in the Gayley Center east of the project site, on Gayley Avenue, would be the closest sensitive receptors for NOx and CO emissions. Persons residing in the Weyburn Terrace Apartments on Weyburn Avenue would be the closest sensitive receptors for PM10 and PM 2.5 to the project site; emissions at other sensitive receptors would be less than at these areas. For the proposed Project, the distance to the sensitive receptor used for analysis is 25 meters,[8] which is the minimum distance prescribed for the LST methodology for all source-to-

8 The methodology for LST analysis uses the metric system for distance factors.

receptor distances of 25 meters or less. The LST thresholds used for the approximate 1.9-acre project site are the most conservative 1.0-acre thresholds. Thresholds are specific for SRA 2, Northwest Coastal Los Angeles County. Based on these parameters, LST emissions and thresholds for the proposed Project are shown in Table 4.1-7. The maximum daily on-site emissions would occur during the demolition phases. The emissions values in Table 4.1-7 are less than the values in Table 4.1-6 because the LST analysis considers only emissions generated from the project area.

TABLE 4.1-7
LOCAL CONSTRUCTION EMISSIONS TO NEAREST SENSITIVE RECEPTORS

Pollutant	Maximum Daily On-Site Emissions[a] (lbs/day)	LST Threshold[b] (lbs/day)	Exceed Threshold?
NOx	3	103	No
CO	5	562	No
PM10	<0.5	4	No
PM2.5	<0.5	3	No

lbs/day: pounds per day; LST: localized significance threshold; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter less than 10 microns in diameter; PM2.5: respirable particulate less than 2.5 microns in diameter.

a CalEEMod data sheets are included in Appendix B.
b LST thresholds from SCAQMD 2009.

The proposed Project includes PP 4.2-2(a) for fugitive dust control, and, as shown in the table, the proposed Project's estimated maximum daily on-site construction emissions would not exceed the SCAQMD LSTs and the impact from exposure to construction emissions near the closest sensitive receptor would be less than significant, consistent with the findings of the March 2009 LRDP Amendment Final EIR.

Operational Emissions

Criteria Pollutants

With respect to operational vehicular emissions, exposure of sensitive receptors to proposed Project-related pollutants that are generated off site is of concern if the project contributes substantial traffic to severely congested, high-volume, signalized intersections with an associated potential increase in local CO concentrations (i.e., CO hotspots).

As indicated above and further discussed in Section 4.8, Transportation and Traffic, of this Draft SEIR, the proposed Project would generate 1,040 new daily vehicle trips, with 291 AM peak hour trips and 183 PM peak hour trips. Although this is a small number of trips relative to the traffic volumes on the major roadways in the area, the proposed Project traffic impact analysis indicates that the addition of proposed Project traffic to existing (2016) and future (2020) traffic would increase delay at six intersections operating at LOS E or F (Crain 2016). These findings indicate that a quantitative screening is required. For the 2020 scenario, when volumes would be greater than for the 2016 scenario, the affected six intersections are:

- Sepulveda Boulevard/Wilshire Boulevard – AM and PM peak hours
- Veteran Avenue/Wilshire Boulevard – PM peak hour
- Gayley Avenue-Midvale Avenue/Wilshire Boulevard – AM peak hour

- Westwood Boulevard/Wilshire Boulevard – AM and PM peak hours
- Glendon Avenue/Wilshire Boulevard – AM and PM peak hours
- Westwood Boulevard/Santa Monica Boulevard – AM and PM peak hours

The Sacramento Metropolitan Air Quality Management District (SMAQMD) has developed simple conservative screening criteria for local CO impacts. The SMAQMD states that a project would result in a less than significant impact to air quality for local CO if (1) the project would not result in an affected intersection experiencing more than 31,600 vehicles per hour; (2) the project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other locations where horizontal or vertical mixing of air would be substantially limited; and (3) the mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (SMAQMD 2014).

Of the six LOS E or F intersections where Future (2020) With Project traffic conditions would be made worse with the proposed Project, the greatest peak hour traffic volume is the PM peak hour traffic volume of 8,614 vehicles at the intersection of Wilshire Boulevard and Sepulveda Boulevard, which is substantially less than the 31,600 vehicle per hour screening threshold. The intersections are at-grade at locations where vertical mixing would not be limited, and the mix of vehicle types at the intersections is not anticipated to be substantially different from the City average. Therefore, there would be no potential for a CO hotspot.

Consistent with the conclusion of the March 2009 LRDP Amendment Final EIR, implementation of the proposed Project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants, and there would be no impact. No mitigation is required.

Toxic Air Contaminant Emissions

A health risk assessment (HRA) was prepared as part of the March 2009 LRDP Amendment Final EIR to estimate the potential health risks (cancer burden and non-cancer health effects) associated with TACs generated by current and projected campus-wide operations. TACs are airborne substances that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

The HRA concluded that implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009, would not generate toxic air emissions that would result in excess human cancer risk from stationary sources or that would result in a cumulative acute or chronic noncarcinogenic Hazard Index (HI) that exceeds the established standards. The theoretical incremental cancer risk as a result of a lifetime exposure to emissions from the routine campus-wide operation of all sources under the 2002 LRDP, as amended in March 2009, was estimated in the HRA to be 6.4 in 1 million (6.4×10^{-6}) for the off-campus maximally exposed individual (MEI) (calculated to be east of the campus along Hilgard Avenue) and 0.9 in 1 million (0.9×10^{-6}) for the on-campus MEI (calculated to be in the southern portion of the campus, near Franz Hall). The maximum chronic HI was 0.09 for the off-campus MEI (also located on Hilgard Avenue, south of the cancer-risk MEI) and 0.10 at the on-campus MEI (at the same location as the cancer-risk MEI). The maximum chronic HI at all other locations on campus and in surrounding vicinity would be lower. The maximum acute HI for an organ system was 0.08 at the off-campus MEI (calculated to be north of the campus on Sunset Boulevard near the Spieker Aquatic Center) and 0.11 at the on-campus MEI (located at Rieber Hall). The maximum acute HI at all other locations within the campus and surrounding vicinity would be lower.

The proposed Project would not include new sources of TACs. Therefore, sensitive receptors on and off campus would not be exposed to substantial pollutant concentrations due to proposed Project-generated TACs.

As noted above, the LRDP HRA identified two MEI locations on campus, dependent on the type of health risk. Health risks at those locations would be less than significant and health risks at all other locations on campus would be less than at the MEI locations. The proposed Project would not be at either MEI location. Therefore students, faculty, staff, and other persons visiting or working at the proposed school would not be exposed to substantial concentrations of TACs, and the impact would be less than significant.

Geffen Academy Health Risk Assessment

Health Risks - Operation of Surrounding Sources

As previously identified, an HRA was performed for the proposed Project to examine the short- and long-term potential health effects to future students, faculty and staff at the Geffen Academy from potential stationary and mobile sources in proximity to the proposed school. To be conservative, a quarter-mile (1,320-foot) radius was assumed for the evaluation of emission sources. The results of the HRA for operation of all surrounding emission sources (primarily diesel-engine vehicle traffic) are provided in Table 4.1-8. The incremental cancer risk was calculated to be 1.3 per million for adult school staff and 0.9 per million for students. In comparison to the threshold level of 10 in a million, carcinogenic risks from operation of the various sources within a quarter-mile of the project site are well below the significance threshold value for both school staff and students.

TABLE 4.1-8
HEALTH RISK ASSESSMENT RESULTS – OPERATION OF SURROUNDING SOURCES

Source	Cancer Risk (per million)		Chronic Hazard Index	Acute Hazard Index
	Staff Exposure	Student Exposure		
All Emission Sources[a]	1.3	0.9	0.009	0.041
SCAQMD Threshold	10	10	1.0	1.0
Exceeds Threshold	**No**	**No**	**No**	**No**

[a] The determined health risks are for the scenario where The Wilshire-Gayley project is in operation.
Source: PlaceWorks 2016

For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for both school staff and students. Therefore, chronic non-carcinogenic hazards are below the significance threshold of 1.0. Additionally, the acute non-carcinogenic hazards (1-hour) were below the significance threshold of 1.0.

The results of the air dispersion modeling for criteria air pollutants are provided in Table 4.1-9. The long-term (annual) particulate matter concentrations would not exceed the SCAQMD significance threshold for PM_{10}. Additionally, the annual average nitrogen dioxide concentration, when added to existing background levels, would not exceed the CAAQS. Lastly, for short-term (1-hour and 8-hour) criteria air pollutant concentrations, when added to existing background levels, would not exceed the CAAQS's for CO and NO_2.

TABLE 4.1-9
CRITERIA AIR POLLUTANTS RESULTS – OPERATION OF SURROUNDING SOURCES

	PM_{10} (Annual)			
Maximum Exposed Receptor Concentration (µg/m^3)	0.75			
SCAQMD Threshold	1.0			
Exceeds Threshold?	**No**			
	Carbon Monoxide (1-Hour)	**Carbon Monoxide (8-Hour)**	**Nitrogen Dioxide (1-Hour)**	**Nitrogen Dioxide (Annual)**
Maximum Exposed Receptor Concentration (ppm)	0.2	0.1	0.002	<0.001
Background Level (ppm)	2.0	1.4	0.064	0.013
Total (ppm)	2.2	1.5	0.066	0.013
CAAQS	20.0	9.0	0.18	0.03
Exceeds CAAQS?	**No**	**No**	**No**	**No**
Source: PlaceWorks 2016				

Based on a comparison to the carcinogenic and non-carcinogenic thresholds established by OEHHA and SCAQMD, hazardous air emissions generated from the stationary and mobile sources within a quarter-mile radius are not anticipated to pose an actual or potential endangerment to students and staff occupying the project site and no mitigation measures are required. Additionally, criteria air pollutant concentrations generated from surrounding roadways are not anticipated to exceed the CAAQS or the established SCAQMD localized significance thresholds.

Health Risks – Including Off-site Construction

The results of the HRA including construction of the adjacent, approved Wilshire Gayley Project and operation of all remaining surrounding emission sources are provided in Table 4.1-10. It should be noted that this condition would only occur during that period of time when the Wilshire Gayley Project is under construction (assumed to be 25 months for the HRA analysis), and the proposed Geffen Academy is in operation at the same time. For any period to time when the Wilshire Gayley Project is not under construction, the HRA results presented above under "Health Risks - Operation of Surrounding Sources" would be applicable.

This scenario assumed a maximum exposure scenario, i.e., students and staff are exposed to 2-hours per day of outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff) and the remaining hours per day indoors with the benefit of the air filtration with a planned MERV of 13 or greater. The use of air filtration with a planned MERV of 13 or greater if the Wilshire Gayley Project were to be under construction when the Geffen Academy is operation is incorporated into the proposed project (refer to PDF Geffen Air-1).

As shown in Table 4.1-10, with installation of MERV 13 air filters during the construction of the Wilshire Gayley Project, the incremental cancer risk was calculated to be 2.7 per million for adult school staff and 9.2 per million for students. In comparison to the threshold level of 10 in a million, carcinogenic risks are below the significance threshold value for both school staff and students.

The use of MERV 13 air filters ensures that a potentially significant impact does not occur; without these air filters, the carcinogenic risks would exceed the threshold for students, resulting in a potentially significant impact.

TABLE 4.1-10
HEALTH RISK ASSESSMENT RESULTS – INCLUDING OFF-SITE CONSTRUCTION

Source	Cancer Risk (per million)		Chronic Hazard Index	Acute Hazard Index
	Staff Exposure	Student Exposure		
Construction Emissions[a]	2.2	8.9	0.24	n/a
All Operational Sources[b]	0.5	0.3	0.007	0.041
Total	2.7	9.2	0.24	0.041
SCAQMD Threshold	10	10	1.0	1.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

[a] The determined health risks from the construction of The Wilshire-Gayley project.
[b] The determined health risks are for the remaining mobile and stationary sources in operation.
Source: PlaceWorks 2016

The results of the air dispersion modeling for criteria air pollutants are provided in Table 4.1-11. As shown, with installation of MERV 13 air filters during the construction of the Wilshire Gayley Project, the long-term (annual) particulate matter concentrations would not exceed the SCAQMD significance threshold for PM_{10}. The annual average nitrogen dioxide concentration, when added to existing background levels, would not exceed the CAAQS. Lastly, for short-term (1-hour and 8-hour) criteria air pollutant concentrations, when added to existing background levels, would not exceed the CAAQS's for carbon monoxide and nitrogen dioxide. The use of MERV 13 air filters ensures that a potentially significant impact does not occur; without these air filters, the long-term (annual) particulate matter concentrations would exceed the SCAQMD significance threshold for PM_{10}, resulting in a potentially significant impact.

TABLE 4.1-11
CRITERIA AIR POLLUTANTS RESULTS – INCLUDING OFF-SITE CONSTRUCTION

	PM_{10} (Annual)			
Maximum Exposed Receptor Concentration (μg/m^3)[a]	0.93			
SCAQMD Threshold	1.0			
Exceeds Threshold?	**No**			
	Carbon Monoxide (1-Hour)	**Carbon Monoxide (8-Hour)**	**Nitrogen Dioxide (1-Hour)**	**Nitrogen Dioxide (Annual)**
Maximum Exposed Receptor Concentration (ppm)[1]	0.8	0.3	0.042	0.001
Background Level (ppm)	2.0	1.4	0.064	0.013
Total (ppm)	2.8	1.7	0.11	0.014
CAAQS	20.0	9.0	0.18	0.03
Exceeds CAAQS?	**No**	**No**	**No**	**No**

[a] MER concentration includes construction emissions from The Wilshire-Gayley and mobile source emissions.
Source: PlaceWorks 2016

Based on a comparison to the carcinogenic and non-carcinogenic thresholds established by OEHHA and SCAQMD, hazardous air emissions generated from the stationary sources, mobile sources, and construction emissions within a quarter-mile radius are not anticipated to pose an actual or potential endangerment to students and staff occupying the project site and no mitigation measures are required. Additionally, with the use of air filtration with a planned MERV of 13 or greater, criteria air pollutant concentrations generated from surrounding roadways and construction of the approved Wilshire-Gayley Development are not anticipated to exceed the CAAQS or the established SCAQMD localized significance thresholds. Impacts would be less than significant and no mitigation is required.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to exposure of sensitive receptors to substantial pollutant concentrations during construction and operations.

4.1.4 CUMULATIVE IMPACTS

With regard to determining the significance of a project's contribution, the SCAQMD neither recommends quantified analyses of cumulative construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction impacts. Individual construction projects that exceed the SCAQMD-recommended daily mass emission thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in regional emissions. As discussed previously under Thresholds 1.2 and 1.3, the proposed Project's construction emissions would be substantially less than the SCAQMD significance thresholds. Based on consideration of the magnitude and duration of the proposed Project construction emissions, the proposed Project emissions of pollutants or precursors for which the Basin is in nonattainment (O_3, PM10, and PM2.5) would not be cumulatively considerable and the cumulative impact would be less than significant. Similarly, proposed Project construction emissions of CO would be less than two percent of the CEQA significance threshold, would not be cumulatively considerable, and would be cumulatively less than significant. Project impacts would be less than the significant unavoidable impact identified in the March 2009 LRDP Amendment Final EIR (Impact 4.2-4c) for the remaining buildout of development under the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part.

As discussed in Impact 4.2-4c of the March 2009 LRDP Amendment Final EIR, the buildout of the 2002 LRDP, as amended in March 2009, would result in direct significant and unavoidable long-term regional air quality impacts, because the forecasted daily emissions of NOx, an O_3 precursor, would exceed the SCAQMD significance threshold. Emissions attributable to the proposed Project, along with emissions from other reasonably foreseeable future projects in the SoCAB as a whole, would continue to contribute to long-term increases in emissions. However, as discussed under Threshold 1.3, proposed Project emissions would be small compared to the SCAQMD CEQA significance thresholds and the magnitude would not be cumulatively considerable. Thus, the proposed Project would not contribute to a significant and unavoidable cumulative long-term regional air quality impact. This is less than the significant unavoidable impact identified in the March 2009 LRDP Amendment Final EIR (Impact 4.2-4c) for the remaining buildout of development under the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part.

Cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations. Threshold 1.4 analyzes future exposure of sensitive receptors to substantial CO concentrations at congested intersections in the project area. The CO analysis is based upon the cumulative traffic analysis described in Section 4.8 of this Draft SEIR and demonstrates that the impact would be less than significant. Therefore, the cumulative impact would be less than significant.

Threshold 1.4 also addresses direct impacts from the proposed Project's on-site construction emissions to nearby sensitive receptors. Construction from the proposed Project and the Wilshire Gayley project could occur concurrently. The closest receptor to both projects is the Gayley Center on Gayley Avenue. However, the on-site proposed Project emissions of NOx, CO, PM10, and PM2.5 would be substantially less than the LSTs [Table 4.1-7] and would not be cumulatively considerable.

With regard to long-term exposure of sensitive receptors to substantial TAC concentrations, there would not be a cumulatively significant impact. The HRA included in the March 2009 LRDP Amendment Final EIR was a cumulative analysis for on-campus sources. Cumulative development expected in the Westwood area is expected to mainly consist of office, commercial, and residential uses, which do not result in toxic emissions at levels that can be considered substantial. Regulations and laws relating to toxic air pollutants would also protect sensitive receptors from substantial concentrations. The proposed Project would not include any uses which would generate toxic emissions not already assumed on campus. Consequently, future operations assumed with the remaining development allocation on campus under the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part, would result in a less than significant cumulative impact, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR.

Further, although the proposed Project would not contribute to a potential cumulative impacts related to toxic air emissions, an HRA was prepared for the proposed Project to determine if the exposure to toxic air emissions generated from various stationary sources, mobile sources, and construction emissions within a quarter-mile radius of the project site would pose an actual or potential endangerment to students and staff occupying the project site. The HRA, which considers the cumulative emissions of these sources (not the emissions from individual sources) determined that students and staff occupying the project site would not be exposed to a potential endangerment.

4.1.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to air quality. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to air quality.

4.1.6 REFERENCES

California Air Resources Board (CARB). 2016 (April 18, access date). Top 4 Summary. Sacramento, CA: CARB. http://www.arb.ca.gov/adam/topfour/topfour1.php.

———. 2015a (January 9, last reviewed). Air Quality Standards and Area Designations. Sacramento, CA: CARB. http://www.arb.ca.gov/desig/desig.htm.

———. 2015b (October 1). Ambient Air Quality Standards. Sacramento, CA: CARB. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

———. 2014 (February 12, last reviewed). Area Designations for the Federal PM2.5 Standards.

Crain & Associates (Crain). 2016 (April 21). *Traffic Impact Study for the Proposed UCLA Geffen Academy Project in Westwood Village, City of Los Angeles*. Culver City, CA: Crain.

Los Angeles, City of. 2014 (October). *Addendum to the Certified EIR, Westwood Community Plan Area, Council District 5, The Wilshire Gayley, 10951–10955 Wilshire Boulevard and 1151–1157 Gayley Avenue, Los Angeles 90024.* Los Angeles, CA: the City.

PlaceWorks. 2016 (May 2016). *Health Risk Assessment, Geffen Academy at UCLA.* Los Angeles, CA: Placeworks.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2014 (revised June). *Guide to Air Quality Assessment in Sacramento County.* Sacramento, CA: SMAQMD. http://www.airquality.org/ceqa/cequguideupdate/Ch4COModelingGuidance.pdf.

South Coast Air Quality Management District (SCAQMD). 2016a (April 20, accessed). Historical Data by Year. http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year.

———. 2016b (January 28). *2016 Air Quality Management Plan*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/factsheet-2016-aqmp.pdf?sfvrsn=4.

———. 2015 (March). *SCAQMD Air Quality Significance Thresholds*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

———. 2013b. California Emission Estimator Model (CalEEMod)™ Version 2013.2.2 Developed by Environ International Corporation in Collaboration with SCAQMD and other California Air Districts. Diamond Bar, CA: SCAQMD.

———. 2009. *Mass Rate Localized Significance Thresholds Look-up Tables*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

———. 2008 (July, as revised). *Final Localized Significance Threshold Methodology*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.

———. 2007a (June 1, adopted). *Final 2007 Air Quality Management Plan*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/2007-air-quality-management-plan.

———. 2007b (July 13, last amended). Rule 1113: Architectural Coatings. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf.

———. 2005 (June, as amended). Rule 403: Fugitive Dust. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.

———. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA: SCAQMD (updates found at http://www.aqmd.gov/ceqa/oldhdbk.html).

U.S. Environmental Protection Agency (USEPA). 2015 (June 26, last updated). Status of SIP Requirements for Designated Areas. Washington D.C.: USEPA. https://www3.epa.gov/airquality/urbanair/sipstatus/reports/vt_areabypoll.html.

University of California Davis (UCD), Institute of Traffic Studies (ITS) 1997 (December, as revised). Transportation Project-Level Carbon Monoxide Protocol (Prepared for Environmental Program California Department of Transportation by V.J. Garza, P. Graney, and D. Sperling with revisions by D. Niemeier, D. Eisinger, T. Kear, D. Chang, and Y. Meng). Davis, CA: UCD ITS. http://www.dot.ca.gov/dist11/news/163/appendix/co_protcl.pdf.

———. 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121). Los Angeles, CA: UCLA Campus Capital Programs.

4.2 GREENHOUSE GAS EMISSIONS

This section discusses the existing conditions for greenhouse gases (GHGs) and global climate change and evaluates the potential impacts on the global climate from the implementation of the proposed Project. Sources used to prepare this section include analysis of campus-wide GHG emissions presented in Section 4.15, Climate Change, in the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR); the University of California, Los Angeles (UCLA) Climate Action Plan; and project details as described in Section 3.0, Project Description, of this Draft Subsequent EIR (SEIR). Supporting GHG data and calculations are included in Appendix B of this Draft SEIR.

Relevant elements of the proposed Project related to GHG emissions include renovation and reuse of the existing approximately 75,000 gross square foot (gsf) Kinross Building for the 6th through 12th grade Geffen Academy at UCLA and an associated increase in vehicle trips. The proposed Project has been designed to surpass the minimum standard Leadership in Energy and Environmental Design (LEED™) "Silver" rating, and would attempt to achieve a LEED "Gold" rating for Existing Buildings.

There were no Notice of Preparation (NOP) comment letters received that were specifically related to GHG emissions.

4.2.1 ENVIRONMENTAL SETTING

A detailed description of the environmental setting for GHGs and global climate change is provided in Section 4.15 of the March 2009 LRDP Amendment Final EIR. Background data relative to GHGs; global, national, and State emissions; and the general environmental effects of global climate change are also provided. Following is a summary of this discussion, updated, as appropriate, with current information.

Global Climate Change and Greenhouse Gases

The following statements are from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) Summary for Policymakers (IPCC 2013).

- Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased.
- Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.
- Human influence has been detected in warming of the atmosphere and the ocean, in changes in the global water cycle, in reductions in snow and ice, in global mean sea level rise, and in changes in some climate extremes. This evidence for human influence has grown since the Fourth Assessment Report. It is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century.[1]

[1] In the Summary for Policymakers, in assessing the likelihood of an outcome or a result, extremely likely is used to indicate a 95 to 100 percent probability.

GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. This increasing temperature phenomenon is known as “global warming”, and the climatic effect is known as “climate change” or “global climate change”.

Climate change is a recorded change in the Earth’s average weather measured by variables such as wind patterns, storms, precipitation, and temperature. Historical records show that global temperature changes have occurred naturally in the past, such as during previous ice ages. The year 2014 ranks as Earth’s warmest year since 1880, and the ten warmest years in the instrumental record, with the exception of 1998, have now occurred since 2000. The average global temperature has risen about 1.4 degrees Fahrenheit (°F) (0.8 degrees Celsius [°C]) since 1880 (NASA 2015).

GHGs are atmospheric gases and clouds within the atmosphere that influence the Earth’s temperature by absorbing most of the infrared radiation that rises from the sun-warmed surface and that would otherwise escape into space. This process is commonly known as the “Greenhouse Effect”. GHGs are emitted by natural processes and human activities. The Earth’s surface temperature averages about 58°F because of the Greenhouse Effect. Without it, the average surface temperature would be somewhere around an uninhabitable 0°F. Anthropogenic GHG emissions enhance the Greenhouse Effect by absorbing radiation from other atmospheric GHGs that would otherwise escape into space, thereby trapping more radiation in the atmosphere and causing temperatures to increase.

GHGs, as defined under California’s Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). CO_2 is the most important anthropogenic GHG. The global atmospheric concentration of CO_2, the most abundant GHG, has increased from a pre-industrial (roughly 1750) value of about 280.00 parts per million (ppm) to a peak of 404.83 ppm and a seasonally adjusted 403.28 ppm in March 2016, primarily due to fossil fuel use, with land use change providing a significant but smaller contribution. The annual CO_2 concentration growth rate during the ten-year period between 1995 and 2005 was larger than the growth rate from the beginning of continuous direct measurements in 1960 to 2005 (ESRL 2016).

GHGs are global pollutants and are therefore unlike air pollutants such as ozone, particulate matter, and toxic air contaminants (TACs), which are pollutants of regional and local concern. While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. In addition, the GHG impacts are global, as opposed to the localized air quality effects of criteria air pollutants and TACs.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called a global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, since CH_4 and N_2O are approximately 21 and 310 times more powerful than CO_2 (respectively) in their ability to trap heat in the atmosphere, they have GWPs of 21 and 310, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

Global warming in California is anticipated to impact resources, including, but not limited to, the following: public health, energy, water resources, sea level and flooding, agriculture, forestry, and ecosystems.

Baseline Level of Greenhouse Gas Emissions – UCLA Campus

The principal GHG emissions sources associated with the existing campus operations include electricity produced by the on-campus Cogeneration Plant using purchased natural and landfill gas; purchased grid-based electricity; natural gas used for space and water heating; operation of the campus vehicle fleet; air travel paid for by the University; use of emergency generators; private vehicle trips by faculty, staff, and students; the electricity use embodied in water consumed at the campus; and other sources. Overall, UCLA campus GHG emissions were estimated at 302,824 metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2014 (UCLA 2016a). This value can be compared with the 2007 Baseline of 343,401 $MTCO_2e$, identified in the March 2009 LRDP Amendment Final EIR. UCLA reduced GHG emissions to below 1990 levels in 2014, achieving the 2020 goal six years ahead of schedule (UCLA 2016b).

Existing Greenhouse Gas Emissions in the Project Area

The principal GHG emissions sources associated with the existing campus operations include electricity produced by the on-campus cogeneration plant using purchased natural and landfill gas; purchased grid-based electricity; natural gas used for space and water heating; operation of the campus vehicle fleet; air travel paid for by the University; use of emergency generators; private vehicle trips by faculty, staff, and students; the electricity use embodied in water consumed at the campus; and other sources.

The existing Kinross Building is currently occupied, as previously described in Section 3.0, Project Description, of this Draft SEIR. Operational GHG emissions attributed to the existing use include purchased electricity,[2] natural gas use for space and water heating, solid waste disposal, the electricity embodied in water consumption, landscape maintenance equipment, and mobile sources such as vehicle trips by users of the building.

4.2.2 REGULATORY FRAMEWORK

Section 4.15 of the March 2009 LRDP Amendment Final EIR provides a discussion of the regulatory framework for the analysis of GHG emissions applicable at that time. There have been a number of regulatory actions and activities over recent years, especially at the State level, pertaining to GHG emissions and climate change. Therefore, the following discussion focuses on regulatory information related to GHG emissions, which has been updated since March 2009 and/or is particularly relevant to the proposed Project.

Federal

On December 7, 2009, the U.S. Environmental Protection Agency (USEPA) Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs),

[2] Although much of UCLA's electricity is generated at the campus Cogeneration Plant, additional electricity is purchased from the Los Angeles Department of Water and Power.

perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations.

- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the USEPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by the USEPA and the Department of Transportation's National Highway Safety Administration (NHTSA) on September 15, 2009 (USEPA 2009).

On April 1, 2010, the USEPA and the NHTSA announced a joint final rule to reduce GHG emissions and to improve fuel economy for new cars and trucks sold in the United States. The rule applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 295 grams of CO_2 per mile by 2012, decreasing to 250 grams per mile by 2016, and finally to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg), and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency.

The agencies expect, however, that a portion of these improvements will be made through improvements in air conditioning leakage and the use of alternative refrigerants, which would not contribute to fuel economy. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA Corporate Average Fuel Economy (CAFE) standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2010; USEPA and NHTSA 2012).

State

Assembly Bill 32, the California Global Warming Solutions Act of 2006

As described in the March 2009 LRDP Amendment EIR, AB 32, the California Global Warming Solutions Act of 2006—signed by Governor Arnold Schwarzenegger in September 2006 and codified as Sections 38500–38599 of the *California Health and Safety Code*—is the primary State regulation relative to GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020.

The California Air Resources Board Scoping Plan

The California Air Resources Board (CARB) approved a *Climate Change Scoping Plan* as required by AB 32 in 2008; this plan is required to be updated every five years. The *Climate Change Scoping Plan* proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The *Climate Change Scoping Plan* has a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation regulation to fund the program.

The *Climate Change Scoping Plan* calls for a “coordinated set of solutions” to address all major categories of GHG emissions. Transportation emissions will be addressed through a combination of higher standards for vehicle fuel economy; implementation of the Low Carbon Fuel Standard; and greater consideration for reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations will be encouraged and, sometimes, required to use energy more efficiently. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the *Climate Change Scoping Plan* emphasizes opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicates that substantial savings of electricity and natural gas will be accomplished through “improving energy efficiency by 25 percent” (CARB 2008).

The *Climate Change Scoping Plan* identifies a number of specific issues. Most relevant to the project, it identifies the potential of using the green building framework as a mechanism that could enable GHG emissions reductions in other sectors (e.g., electricity, natural gas), noting that green buildings “exceed minimum energy efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. Combined, these measures can also contribute to healthy indoor air quality, protect human health, and minimize impacts to the environment”.

The board approved the final “First Update to the Climate Change Scoping Plan” on May 22, 2014. The first update describes California’s progress toward AB 32 goals, stating that “California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32”. Specifically, “if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050”. This first update retains from the October 2013 draft the recalculated 1990 GHG emissions level of 431 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), as well as the 509 $MMTCO_2e$ 2020 "business as usual" or No Action Take (NAT) condition (CARB 2014). Thus, under CARB's most current document, reducing the "business as usual" or NAT condition of 509 $MMTCO_2e$ to the 1990 emissions level of 431 $MMTCO_2e$ will require a reduction of 78 $MMTCO_2e$, or approximately a 15.3 percent reduction (compared to a 28.5 percent reduction as set forth in the original Scoping Plan but not directly comparable because of the change in methodology).

CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in Executive Order (EO) B-30-15 (CARB 2015).

Senate Bill 375

Signed September 30, 2008, Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans (RTPs) and funding priorities to help California meet the GHG reduction goals established in AB 32. SB 375 requires Metropolitan Planning Organizations (MPOs), including the Southern California Association of Governments (SCAG), to incorporate a Sustainable Communities Strategy (SCS) in their RTPs that will achieve GHG emission reduction targets set by CARB. There are two mutually important facets to SB 375: reducing vehicle miles traveled (VMT) and encouraging more compact, complete, and efficient communities for the future. SB 375 also includes provisions for exemptions from or streamlined

California Environmental Quality Act (CEQA) review for projects classified as transit priority projects (SCAG 2012).

CEQA Guidelines for Greenhouse Gas Emissions

At the direction of the State Legislature in SB 97, the California Natural Resources Agency (CNRA) adopted amendments to the State CEQA Guidelines that require evaluation of GHG emissions or the effects of GHG emissions. The amendments, in new Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions, and effective March 18, 2010, provide that:

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project…
>
> (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
>
> (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
>
> (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
>
> (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions.

The amendments also add a new Section 15126.4(c), Mitigation Measures Related to Greenhouse Gas Emissions. Generally, this State CEQA Guidelines section requires lead agencies to consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of GHG emissions. Potential measures to mitigate the significant effects of GHG emissions are identified, including those outlined in Appendix F, Energy Conservation, of the State CEQA Guidelines.

Executive Order B-30-15

On April 29, 2015, Governor Edmund Brown signed EO B-30-15, which orders "A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050" (COOG 2015). Five key goals for reducing GHG emissions through 2030 include (1) increasing renewable electricity to 50 percent; (2) doubling the energy efficiency savings achieved in existing buildings and making heating fuels cleaner; (3) reducing petroleum use in cars and trucks by up to 50 percent; (4) reducing emissions of short-lived climate pollutants; and (5) managing farms, rangelands, forests, and wetlands to increasingly store carbon. EO B-30-15 also directs CARB to update the *Climate Change Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$.

Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 implements some of the goals of EO B-30-15. The objectives of SB 350 are:

(1) To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.

(2) To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation (California Legislative Information 2015).

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources.

Title 24 Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (*California Code of Regulations* [CCR], Title 24, Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Commission (CEC) adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020" (CEC 2008). Title 24, Part 6 of the 2013 California Building Standards Code (known as the 2013 California Energy Code) went into effect on July 1, 2014, and includes updates to the energy efficiency standards. The 2016 Code will be published on or before July 1, 2016, and will go into effect on January 1, 2017 (CBSC 2016). The 2016 Code will be at least 28 percent more efficient than the 2013 Code (CEC 2016) for residential uses and a similar increase is anticipated for nonresidential uses. The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption. Both natural gas use and electricity generation result in GHG emissions.

Title 24 Green Building Standards

The 2013 California Green Building Standards Code (CCR, Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools, and hospitals) throughout California and became effective on July 1, 2014. The code is Part 11 of the California Building Standards Code in Title 24 of the *California Code of Regulations* and is also known as the CALGreen Code (CBSC 2014).

The development of the CALGreen Code is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options, allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

University of California

The March 2009 LRDP Amendment Final EIR identifies various University of California (UC) programs to ensure sustainable development and also identifies programs and actions taken by UCLA. These include, but are not limited to:

- UC Policy on Sustainable Practices,
- UCLA Climate Action Plan,
- UCLA Application of Green Building Design Standards and Sustainable Operations,
- UCLA Programs to Implement Clean Energy Targets,
- UCLA Membership in the California Climate Action Registry (CCAR) and Climate Change Working Group,
- UCLA Sustainable Transportation Practices,
- UCLA Program to Minimize University-Generated Waste Sent to Landfills,
- UCLA Programs Related to Environmentally Preferable Purchasing Practices,
- UCLA HFCs Reduction Program, and
- UCLA Compliance with Future Regulations Required to be Promulgated under AB 32.

Following is an updated discussion of the UC Policy on Sustainable Practices and the UCLA Climate Action Plan. The remaining programs are still in effect as described in the March 2009 LRDP Amendment Final EIR.

<u>University of California Sustainable Practices Policy and the University of California, Los Angeles Climate Action Plan</u>

In June 2004, the UC developed detailed guidelines for the Policy on Green Building Design and Clean Energy Standards. This comprehensive policy established the university as a leader in promoting environmental stewardship among institutions of higher education. Subsequently renamed the Policy on Sustainable Practices, it has been revised several times, most recently in June 2015, and covers the areas of sustainable transportation, climate protection practices, building renovations, sustainable operations and maintenance, waste reduction, environmentally preferable purchasing, clean energy, and sustainable food service (UCOP 2015). The UC Policy includes climate change goals for the ten UC campuses that are in parallel with AB 32.

The UC policy also calls for each UC campus to draft a Climate Action Plan (CAP) that examines the feasibility of meeting these goals. The UCLA CAP was completed in December 2008 (UCLA 2008). The CAP was reviewed and endorsed by the UCLA Campus Sustainability Committee and presented to the UCLA Administration and Chancellor prior to submittal to the University of California Office of the President (UCOP). The CAP concludes the following:

> Based on analysis of the impact of the proposed initiatives, UCLA determined that it is possible to set more aggressive targets for GHG reductions than those outlined in the UC Policy. As a result of early actions and through implementation of the proposed GHG reduction initiatives analyzed in this CAP, it is anticipated that

UCLA will be able to reduce campus GHG emissions below 1990 and 2000 levels by 2012 without use of purchased energy offsets or credits.

UCLA is in the process of updating the CAP (UCLA 2016c). The proposed Project's incremental contribution to cumulative GHG emissions and compliance with the requirements of UCLA's CAP are discussed in the analysis presented below.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is the association of Air Pollution Control Officers representing all 35 local air quality agencies throughout California. CAPCOA is not a regulatory body but has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues.

The August 2010 CAPCOA publication *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* provides guidance on the quantification of project-level mitigation of GHGs associated with land use, transportation, energy use, and other related project areas. The mitigation measures quantified in the report generally correspond to measures previously discussed in CAPCOA's earlier reports: *CEQA and Climate Change* (2008) and *Model Policies for Greenhouse Gases in General Plans* (2009) (CAPCOA 2010). The guidance includes detailed procedures on the definition of "business as usual" emissions and the approaches to assessing and calculating the GHG emission reductions associated with project design features and mitigation measures. The methodologies of this publication are used in the California Emissions Estimator Model (CalEEMod) that is used to calculate the GHG emissions in this analysis.

Regional

Southern California Association of Governments

As previously discussed, SB 375 specifically required MPOs, including SCAG, to incorporate an SCS in their RTPs that will achieve GHG emission reduction targets set by CARB. In June 2012, CARB accepted SCAG's determination that the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) would meet the region's GHG reduction target. SCAG's SCS is now included in its 2016–2040 RTP/SCS that was adopted by SCAG on April 7, 2016. The goals and policies of the RTP/SCS that reduce VMT focus on transportation and land use planning that include building infill projects; locating residents closer to where they work and play; and designing communities so there is access to high-quality transit service. The 2016–2040 RTP/SCS is expected to reduce per capital transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016).

South Coast Air Quality Management District

As previously discussed in Section 4.1, Air Quality, of this Draft SEIR, air quality in Los Angeles County is regulated by the South Coast Air Quality Management District (SCAQMD), the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB), which includes Los Angeles County. To that end, the SCAQMD, a regional agency, works directly with SCAG, County transportation commissions, and local governments and cooperates actively with all federal and State government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group was scheduled to meet once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 $MTCO_2e$ per year ($MTCO_2e/yr$)[3] for industrial projects where the SCAQMD is the lead agency.

In September 2010, the Working Group presented a revised tiered approach to determining GHG significance for residential and commercial projects (SCAQMD 2010). These proposals have not yet been considered by the SCAQMD Board.

At Tier 1, GHG emissions impacts would be less than significant if the project qualifies under a categorical or statutory CEQA exemption. At Tier 2, for projects that do not meet the Tier 1 criteria, the GHG emissions impact would be less than significant if the project is consistent with a previously adopted GHG reduction plan that meets specific requirements.[4] At Tier 3, the Working Group proposes extending the 10,000 $MTCO_2e/yr$ screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. For residential and commercial projects (that is, non-industrial projects), the Working Group proposes the following Tier 3 screening values: either (1) a single 3,000 $MTCO_2e/yr$ threshold for all land use types or (2) separate thresholds of 3,500 $MTCO_2e/yr$ for residential projects, 1,400 $MTCO_2e/yr$ for commercial projects, and 3,000 $MTCO_2e/yr$ for mixed-use projects. These screening values were developed from a survey of CEQA projects. It is estimated that projects with emissions above these values would produce 90 percent of the anticipated GHG emissions from residential/commercial projects and projects below the screening level would contribute 10 percent or less of the regional GHG emissions from land development. Therefore, a project with emissions less than the applicable screening value would be considered to have less than significant GHG emissions. Projects with emissions greater than the Tier 3 screening values would be analyzed at Tier 4 by one of three methods:

1. **A Percent Emission Reduction Target.** This method is used by the Sacramento Metropolitan and San Joaquin Valley Air Districts and the City of San Diego. The SCAQMD Working Group made no recommendation relative to this method.
2. **Early Implementation of Applicable AB 32 Scoping Plan Measures.** The Working Group assumes implementation of AB 32 measures would be incorporated in method 3 below.
3. **Efficiency Targets.** On the project level, 2020 GHG emissions should not exceed 4.8 $MTCO_2e$/year per service population (SP) where SP is project residents plus employees. Further, 2035 GHG emissions should not exceed 3.0 $MTCO_2e$/year per SP. This efficiency methodology is used by the Bay Area Air District.

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[3] GHG emissions are commonly expressed as $MTCO_2e$. Larger quantities of emissions, such as on the world or State scale, are expressed in $MMTCO_2e$.

[4] The plan must (a) quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; (b) establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; (c) identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area; (d) specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; (e) establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; (f) be adopted in a public process following environmental review (State CEQA Guidelines, Section 15183.5).

Projects with GHG emissions not meeting the Tier 4 targets would be required to provide mitigation in the form of real, quantifiable, and verifiable offsets to achieve the target thresholds. The offsets may be achieved through project design features, other on-site methods, or by off-site actions, such as energy efficiency upgrade of existing buildings.

As identified in the analysis presented in this section, the proposed Project would not have GHG emissions greater than the Tier 3 screening values; therefore, Tier 4 methods are not applicable.

In summary, to date, the SCAQMD Board has adopted an interim CEQA significance threshold for GHGs for industrial projects where the SCAQMD is the lead agency and continues to consider screening levels under CEQA for residential, commercial, and mixed-use projects. This proposed screening and mitigation proposal from SCAQMD remains a work in progress; the Working Group has not convened since the fall of 2010. As of spring 2016, the proposal has not been considered or approved for use by the SCAQMD Board. Thus, no GHG significance thresholds are approved for use in the SoCAB for non-industrial projects.

4.2.3 PROJECT IMPACTS AND MITIGATION

Methods

Construction and operational emissions of CO_2e were calculated by using CalEEMod Version 2013.2.2 (SCAQMD 2013), as described in Section 4.1, Air Quality, of this Draft SEIR. Construction assumptions are described in Section 4.1 and in Appendix B. The results are output in $MTCO_2e$ per year. Construction emissions would be associated with vehicle engine exhaust from construction equipment, vendor trips, and worker commuting trips.

Sources of the operational GHG emissions attributed to the proposed Project include the area, energy, and mobile sources described in Section 4.1, Air Quality, of this Draft SEIR. Additional sources of GHG emissions not included in the air quality analysis include purchased electricity,[5] the electricity embodied in water supply and treatment, the electricity embodied in wastewater treatment, and the energy associated with solid waste disposal. However, because this proposed Project is the renovation and reuse of an existing operating facility, it is assumed that increases or, more likely, decreases in future GHG emissions attributed to electrical use, natural gas use, water use, and solid waste generation compared to the existing GHG emissions would be minimal. The proposed Project would be designed to surpass the minimum standard of a LEED™ "Silver" rating and would attempt to achieve a LEED™ "Gold" rating for Existing Buildings. The proposed Project would also implement energy- and water-efficiency measures that would result in reduced GHG emissions; these measures are included as mitigation in the CalEEMod and are described in Programs, Practices, and Procedures (PPs) 4.14-2(a), low-flow plumbing fixtures, and 4.14-2(b), water-efficient irrigation under the Utilities and Service Systems analysis (Section 4.9, Utilities and Service Systems, of this Draft SEIR) and in Appendix B. CalEEMod incorporates local energy emission factors and mitigation measures based on the California Air Pollution Control Officers Association's (CAPCOA's) publication *Quantifying Greenhouse Gas Mitigation* Measures (CAPCOA 2010). As noted in Section 4.1 of this Draft SEIR, no mobile source trip generation reduction measures are included in the emissions model because factors such as access to public transportation and UCLA's transportation management programs are included in the trip generation forecasts.

5 Although much of UCLA's electricity is generated at the campus Cogeneration Plant, additional electricity is purchased from the Los Angeles Department of Water and Power. It is assumed that the proposed Project would require additional purchased electricity.

Because construction emissions are temporary and there are few measures for mitigation of construction GHG emissions, the SCAQMD has recommended amortizing construction emissions over the life of a project and adding the value to operational emissions. A common value for project life is 30 years (SCAQMD 2008). The SCAQMD-recommended practice is included in the proposed Project's GHG calculations.

As described in the March 2009 LRDP Amendment EIR, the methods for assessing GHG emissions differ for UCLA's annual reports per the UC Sustainability Policy and for this Draft SEIR. UC and UCLA methods support reporting of direct emissions from University-owned and operated functions and some indirect emissions, whereas the Draft SEIR analysis includes both direct and indirect emissions associated with the proposed Project. As an example, UCLA does not report the emissions embodied in water supply and wastewater treatment or emissions from construction equipment used on new development projects, whereas these emissions are estimated in this Draft SEIR.

Thresholds of Significance

The Initial Study prepared for the proposed Project (included in Appendix A) and circulated with the NOP concludes that additional project-level analysis of the following thresholds of significance is required in this Draft SEIR. According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact on biological resources if it will:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Method Used to Determine Significance

Under CEQA, the choice of method or threshold to determine the significance of a climate change impact is left to the "judgment and discretion of the lead agency". Accordingly, the UC as lead agency for the proposed Project has, using its best judgment and information available at this time, determined an analytical framework and determined the significance of potential climate change impacts associated with the proposed Project in this Draft SEIR.

With respect to Threshold 2.1, neither the SCAQMD nor CARB has established a CEQA significance threshold for GHG emissions generated by a proposed Project, with one exception; as noted above, SCAQMD has established a threshold for industrial projects where SCAQMD is the lead agency.

Because of the global nature of the climate change problem, most projects will not result in GHG emissions that are individually significant (CAPCOA 2008). This concept is supported in the various California Attorney General, California Governor's Office of Planning and Research, and SCAQMD publications described in the March 2009 LRDP Amendment EIR, which almost exclusively address cumulative impacts. Therefore, it is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change, and the impact of the proposed Project is considered on a cumulative basis.

For purposes of this Draft SEIR, the quantitative emissions of the proposed Project are compared with the SCAQMD-recommended screening threshold of 3,000 $MTCO_2e$ per year for non-industrial land use projects. As described above, projects with emissions less than this threshold are anticipated to contribute 10 percent or less of the regional GHG emissions from land development. The project contributions to global GHG emissions would not be cumulatively considerable, and the impact would be less than significant. If emissions exceed this threshold, then additional mitigation measures would be required.

With respect to Threshold 2.2, the impact of the proposed Project is evaluated in this Draft SEIR by determining whether the project would impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32, including, but not limited to, the UC Sustainable Practices Policy (SPP), the UCLA CAP, and the SCAG 2016–2040 RTP/SCS.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following campus PPs were adopted as part of the March 2009 LRDP Amendment Final EIR and are incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.15-1 *The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan.*

In addition, PPs 4.14-2(a), low-flow plumbing fixtures; 4.14-2(b), water-efficient irrigation; 4.14-2(d), minimize exterior water use; and 4.14-2(g), water conservation education, which are included under the Utilities and Service Systems analysis (Section 4.9 of this Draft SEIR), and PPs 4.14-3, waste reduction and recycling, and 4.14-9, energy conservation, which are included in the Initial Study (Section 17, Utilities and Service Systems, in Appendix A), have been incorporated into the proposed Project and require that the campus continue to implement energy and water conservation measures and reduce solid waste generation which would, in turn, reduce associated GHG emissions.

Threshold 2.1	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Construction GHG emissions are primarily generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. Construction emissions of CO_2e were calculated by using CalEEMod Version 2013.2.2. The estimated construction emissions for the proposed Project are shown in Table 4.2-1. Table 4.2-1 includes the 30-year amortization of construction emissions.

TABLE 4.2-1
ESTIMATED CONSTRUCTION GREENHOUSE GAS EMISSIONS FOR THE PROPOSED PROJECT

Year	Emissions ($MTCO_2e$)
2016	8
2017	36
Total	**44**
Annual emissions for 30-year amortization	***1***

$MTCO_2e$: metric tons carbon dioxide equivalent.
Note: CalEEMod model data sheets are included in Appendix B.

Operational Emissions

As described above, operational GHG emissions anticipated for the proposed Project are estimated by including purchased electricity, natural gas use, the electricity embodied in water consumption, the energy associated with solid waste disposal, and mobile source emissions. The change in energy, water use, and solid waste GHG emissions compared to existing emissions is assumed to be negligible because the building renovation would include improvements in building energy and water use efficiency. Area source GHG emissions would result from landscape maintenance, which also occur under existing conditions. With respect to mobile source emissions, the proposed Project would result in a forecasted increase of 1,040 vehicle trips per day, as discussed further in Section 4.8, Transportation and Traffic, of this Draft SEIR. No mobile source trip generation or VMT reduction measures are included in the emissions model because factors such as access to public transportation and UCLA’s transportation management programs are included in the trip generation forecasts. Estimated GHG emissions for the proposed Project were calculated using CalEEMod and are shown in Table 4.2-2.

TABLE 4.2-2
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR THE PROPOSED PROJECT

Source	Emissions $MTCO_2e/yr$
Mobile	1,532
Amortized construction emissions (Table 4.2-2)	1
Total – proposed Project	**1,533**

$MTCO_2e/yr$: Metric tons of carbon dioxide per year.
Total does not add due to rounding.
Note: Detailed calculations in Appendix B.

As shown in Table 4.2-2, the estimated annual operational GHG emissions for the proposed Project, including amortized construction emissions, is 1,533 $MTCO_2e/yr$. This value may be compared with the proposed SCAQMD Tier 3 screening threshold of 3,000 $MTCO_2e/yr$ for non-industrial projects. The proposed Project’s estimated annual GHG emissions would be less than the 3,000 $MTCO_2e/yr$ screening threshold, thus indicating that the proposed Project contributes a less than significant volume of GHG emissions based on SCAQMD guidelines. Therefore, the direct and indirect GHG emissions of the proposed Project would not be cumulatively considerable and would result in a less than significant impact; no mitigation is required.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact would occur, as estimated annual GHG emissions would be below the SCAQMD screening threshold.

Threshold 2.2	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Federal Plans, Policies, and Regulations

As described above, a federal regulation requires improved fuel economy of cars and light-duty trucks. This regulation is not directly applicable to the proposed Project; however, it should be noted that electric vehicle charging stations are available in Parking Structure 32. The proposed Project would not conflict with the federal policy.

State and Regional Plans, Policies, and Regulations

Assembly Bill 32

The primary State policy document is AB 32. While many of the AB 32 policies are statewide actions and are not applicable to the proposed Project (e.g., the low carbon fuel standard, goods movement, and high speed rail), the proposed Project supports the following AB 32 policies:

- **Alternative Fuel Vehicles.** Electric vehicle charging stations would be available on the project site or in the adjacent parking structure.
- **Energy Efficiency.** The proposed Project would reduce building energy consumption by approximately 20 percent below Title 24 requirements.
- **Green Buildings.** The proposed Project has been designed to surpass the minimum standard LEED™ “Silver” rating, and would attempt to achieve a LEED “Gold” rating for Existing Buildings. To achieve this rating, the design, construction, and operation of the proposed Project incorporates a series of green building strategies described in Section 3.0 of this Draft SEIR.

Senate Bill 375 and SCAG 2016–2040 RTP/SCS

A primary goal of SB 375 and the SCAG 2016–2040 RTP/SCS is to reduce GHG emissions by reducing VMT. Methods to reduce VMT include locating residents closer to where they work and play; designing walkable environments; and providing access to high-quality transit service. The proposed Project achieves these VMT reduction goals by providing the following benefits:

- The project site is served by UCLA’s bus service and is located adjacent to many public bus lines, as described in Section 4.8, Transportation and Traffic, of this Draft SEIR.
- The proposed Project would provide bicycle storage, encouraging bicycle commuting for students and staff.
- Pursuant to PP 4.13-1(d), which is incorporated into the proposed Project, UCLA actively provides and promotes vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of

other modes of transit, including bicycles, motorcycles, and scooters; alternative work schedules and telecommuting; a car share program; annual distribution of the UCLA Commuter's Guide; parking control management; and access restriction to main campus parking facilities for on-campus housing residents.

- Students would be required to form a carpool of three of more students to park on site.
- School buses would be part of the Academy's transportation options to transport students to and from the Geffen Academy.

University of California Sustainable Practices Policy and UCLA Climate Action Plan

The proposed Project incorporates PP 4.15-1, which ensures implementation of applicable provisions of the UC SPP (UC 2015) and the UCLA CAP. The majority of the SPPs and CAP initiatives are applicable at the UC-wide or campus-wide level and are not applicable to specific projects. Examples are green power purchasing, efficient vehicles and tires for campus fleets, transportation demand programs, and campus outreach programs. Additional policies are applicable to certain types of projects, but not the proposed Project, such as policies for new buildings.

SPP policies particularly relevant to the proposed Project are those associated with Building Renovations (e.g., Policy III.A, Green Building Design, Building Renovations). The final design of the proposed Project would be in compliance with applicable provisions of this Policy. The proposed Project has been designed to surpass the minimum standard Leadership in Energy and Environmental Design (LEED™) "Silver" rating, and would attempt to achieve a LEED "Gold" rating for Existing Buildings. Achieving a minimum Silver rating is also consistent with UCLA in CAP Initiative 11.3.

The SPP for Sustainable Transportation Practices includes mechanisms for reducing commute emissions, which is also discussed in the UCLA CAP Initiative 8.2. As discussed above, the proposed Project incorporates various features to reduce vehicular travel and promote alternate modes of transportation. This includes the proposed Project's location near existing and future public transit. The Geffen Academy would also be able to participate in the established UCLA TDM program.

The SPP for Recycling and Waste Management includes a waste diversion goal of 75 percent by June 30, 2012, increasing to zero waste by 2020. As discussed in the Initial Study, included in Appendix A of this Draft SEIR, UCLA surpasses the established 75 percent diversion goal. This is accomplished through various practices including, but not limited to, recycling, use as green waste, and conversion from waste to energy. The proposed Geffen Academy would be required to comply with UCLA's programs in place to reduce the amount of solid waste diverted to landfills during construction and operation.

The campus trip generation cap of 139,500 average daily trips, established in the 1990 LRDP and retained in the 2002 LRDP and the March 2009 LRDP Amendment, provides input to SCAG trip generation forecasts. As further discussed in Section 4.4, Land Use and Planning, of this Draft SEIR, the proposed Project would not alter the trip cap of 139,500 average daily trips. Based on the 2015 Cordon counts, UCLA currently generates approximately 100,961 average daily trips (Dudman 2016). Therefore, the proposed Project does not involve any actions that would exceed the SCAG forecasts, and implementation of the proposed Project would be consistent with the 2016–2040 RTP/SCS.

The above analysis demonstrates the proposed Project's consistency with federal, State, regional, UC, and UCLA plans, policies, and regulations relative to reducing GHG emissions. Therefore, the proposed Project would result in a less than significant impact related to conflicts with plans, policies, or regulations pertaining to reducing GHG emissions.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

4.2.4 CUMULATIVE IMPACTS

When considering the impact of the proposed Project, and virtually all development projects, their contribution to Greenhouse Gas Emissions are considered on a cumulative basis. As described previously, it is accepted as very unlikely that any individual development project, including the Geffen Academy, would have GHG emissions of a magnitude to directly impact global climate change. Impacts for Thresholds 2.1 and 2.2 were found to be less than significant, therefore, the proposed Project's cumulative impacts would be less than significant.

4.2.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to GHG emissions. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to GHG emissions.

4.2.6 REFERENCES

California Air Pollution Control Officers Association (CAPCOA). 2010 (August). Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. Sacramento, CA: CAPCOA. http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

———. 2008 (January). CEQA and Climate Change. Sacramento, CA: CAPCOA.

California Air Resources Board (CARB) 2015a (October 5, last reviewed). AB 32 Scoping Plan. Sacramento, CA: CARB. http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

———. 2014 (July 17, last reviewed). Lev III and ZEV Regulation Amendments for Federal Compliance Option, December 31. Sacramento, CA: CARB. http://www.arb.ca.gov/regact/2012/leviiidtc12/leviiidtc12.htm.

———. 2011. Status of Scoping Plan Recommended Measures. Sacramento, CA: CARB. http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf.

———. 2008 (December). Climate Change Scoping Plan. Sacramento, CA: CARB. http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

California Building Standards Commission (CBSC). 2016 (accessed April 16). California Building Standards Code (Title 24, California Code of Regulations) (2013 Triennial Edition (current code). Sacramento, CA: CBSC. http://www.bsc.ca.gov/Codes.aspx.

California Building Standards Commission (CBSC). 2010 (November) Guide to the (Non-Residential) California Green Building Standards Code. Sacramento, CA: CBSC. http://www.documents.dgs.ca.gov/bsc/CALGreen/MasterCALGreenNon-ResGuide2010_2012Suppl-3rdEd_1-12.pdf.

California Energy Commission (CEC) 2016 (Accessed April 16). 2016 Building Energy Efficiency Standards, Frequently Asked Questions. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf.

California Energy Commission (CEC). 2008. Statement of Reasons for Adopting 2008 Building Energy Efficiency Standards. Sacramento, CA: CEC. http://www.energy.ca.gov/title24/2008standards/.

California Legislative Information. 2015 (October, access date). SB-350: Clean Energy and Pollution Reduction Act of 2015. https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201520160SB350.

California Office of Governor Edmund G. Brown Jr. (COOG). 2015 (April 29). Top Story – Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America. Sacramento CA: COOG. https://www.gov.ca.gov/news.php?id=18938.

Dudman, T. 2016 (March 28). Personal communication. Email from T. Dudman (University of California, Los Angeles) to T. Andersen (BonTerra Psomas) entitled “2015 Cordon Counts”.

Intergovernmental Panel on Climate Change (IPCC). 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

National Aeronautics and Space Administration (NASA). 2015 (January 16, Posted). NASA, NOAA Find 2014 Warmest Year in Modern Record. New York, NY: NASA, the Goddard Institute for Space Studies. http://www.giss.nasa.gov/research/news/20150116/.

South Coast Air Quality Management District (SCAQMD). 2013. California Emissions Estimator Model (version 2013.2.2). Diamond Bar, CA: SCAQMD.

———. 2010 (September 28). Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #15 (slide presentation). Diamond Bar, CA. SCAQMD.

———. 2008 (October). Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds. Diamond Bar, CA: SCAQMD.

Southern California Association of Governments (SCAG). 2016 (April). The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy. A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life. Los Angeles, CA: SCAG.

———. 2012 (April, adopted). 2012–2035 Regional Transportation Plan (RTP), Sustainable Communities Strategy Towards a Sustainable Future. Los Angeles, CA: SCAG. http://rtpscs.scag.ca.gov/Pages/2012-2035-RTP-SCS.aspx.

University of California (UC). 2015 (June 22) Sustainable Practices. Berkeley, CA: UC. http://policy.ucop.edu/doc/3100155/SustainablePractices.

University of California Office of the President (UCOP). 2015. Annual Report on Sustainable Practices. Oakland, CA: UCOP. http://ucop.edu/sustainability/_files/annual-sustainability-report2015.pdf.

University of California, Los Angeles (UCLA). 2016a (February 24). Personal communication. Email from Nurit Katz (UCLA Chief Sustainability Officer) to Tracy Dudman (UCLA Capital Programs, Senior Planner) entitled "GHG Emissions from Campus Operations".

———. 2016b (March, access date). UCLA Sustainability: Climate & Energy. Los Angeles, CA: UCLA. http://www.sustain.ucla.edu/our-initiatives/climate-and-energy/.

———. 2016c. (February 1). Personal communication. Telephone conversation between N. Katz (UCLA Chief Sustainability Officer) and Tracy Dudman (UCLA Capital Programs, Senior Planner).

———. 2009 (March). University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I (SCH No. 2008051121; Prepared by BonTerra Consulting).

———. 2008a (December). UCLA Climate Action Plan. Los Angeles, CA: UCLA.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Earth System Research Laboratory, Global Monitoring Division (ESRL). 2016 (April 5, last updated). Trends in Atmospheric Carbon Dioxide. http://www.esrl.noaa.gov/gmd/ccgg/trends/.

United States Environmental Protection Agency (USEPA). 2010 (April). Regulatory Announcement: EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks. Washington, D.C.: USEPA. http://www.epa.gov/otaq/climate/regulations/4 20f10014.pdf.

———. 2009 (December 7). Climate Change – Regulatory Initiatives: Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act. Washington, D.C.: USEPA. https://www3.epa.gov/climatechange/endangerment/index.html.

U.S. Environmental Protection Agency and U.S. Department of Transportation, National Highway Traffic Safety Administration (USEPA and NHTSA). 2012 (October 15). 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. Federal Register (Volume 77, No. 199, pp. 62623–63200). Washington, D.C.: USEPA and NHTSA.

4.3 HYDROLOGY AND WATER QUALITY

Hydrology and water quality are addressed in Section 4.7 of the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR). This section describes the existing hydrology in the project area and evaluates the potential impacts to surface water drainage and water quality resulting from the proposed Project.

As described in Section 3.0, Project Description, relevant elements of the proposed Project related to hydrology and water quality include a minor increase in landscaped (i.e., pervious) area compared to the existing condition and the capture of roof and surface drainage with discharge points consistent with the existing drainage pattern.

One comment related to hydrology and water quality was received in response to the Notice of Preparation (NOP) circulated for the Project. The California Department of Transportation (Caltrans) commented that “projects should be designed to discharge clean run-off water” and that “discharge of storm water run-off is not permitted onto State Highway facilities without a storm water management plan”. The proposed Project would not discharge runoff onto any State Highway facility.

4.3.1 ENVIRONMENTAL SETTING

Section 4.7.1 of the March 2009 LRDP Amendment Final EIR discusses the environmental setting of the University of California, Los Angeles (UCLA) campus, including the project area, related to rainfall, surface water drainage, storm water quality, flood hazards, and groundwater. Based on the issues to be addressed in this section of the Draft Subsequent EIR (SEIR), following is a discussion of the existing surface water drainage and storm water quality conditions on the UCLA campus and the project site.

Surface Water Drainage

The major upstream drainage course from north of the campus is the Stone Canyon Watershed that conveys flows through a combination of below grade and surface storm drain channels to an underground box culvert that is located at the Sunset Boulevard boundary of the campus. Drainage within the campus generally flows from the northeast and northwest sections of the campus to the south toward Le Conte Avenue. Runoff is collected by an extensive campus storm water drain system that the University maintains, which flows into the Los Angeles County storm drainage system (UCLA 2009).

As discussed in the March 2009 LRDP Amendment Final EIR, approximately 64 percent of the 419-acre UCLA campus consists of impervious surfaces (e.g., buildings, parking lots, roadways, and other paved areas) (UCLA 2009). Although there have been a number of redevelopment projects constructed on campus under the March 2009 LRDP Amendment, the coverage of impervious and pervious surfaces is similar to that present in 2008. In addition, new development on campus since 2009 has been required to comply with applicable regulations regarding storm water management and water quality (as further discussed below in Section 4.3.2, Regulatory Framework, below). As the majority of the runoff passing through the campus originates upstream of the campus in the Stone Canyon Watershed (a subwatershed of the Ballona Creek Watershed), storm water runoff in campus storm drains is not substantially affected by slight increases in the impermeable surface area on the campus (UCLA 2009).

All campus storm water enters the Los Angeles City system via concrete structures at three locations: Gayley Avenue, Westwood Boulevard, and Hilgard Avenue. In the northwest and southwest portions of campus, including the project site, some flows are also received by the City system on Veteran Avenue. The campus storm drains adequately handle runoff for the majority of rainfall events; however, at times, some locations on campus (e.g., Westwood Plaza and Stone Canyon Creek) experience temporary, limited shallow ponding and surface flow during major storm events, though this is primarily due to localized topography and drainage (UCLA 2009). The City storm drain system, after carrying runoff from the campus and contributing upland areas, connects to the Los Angeles County system near Wilshire Boulevard. These flows are ultimately released into Ballona Creek in the vicinity of Culver Boulevard (LADPW 2016).

The approximate 1.9-acre (83,484-square foot [sf]) project site consists of the existing Kinross Building and associated outdoor spaces and a portion of Parking Lot 36. The existing site is composed of approximately 72,044 sf of impervious surfaces (approximately 86.3 percent), including the Kinross Building (24,884-sf surface area) and approximately 11,440 sf of pervious surfaces (13.7 percent) (refer to Figure 4.3-1). Storm drainage infrastructure, including area drains and pipelines, is located on the east, south, and west sides of the building. Overflow drains (on the east side only) and downspouts discharge storm water runoff from the Kinross Building to the adjacent storm drain infrastructure. The collected runoff then flows via 6- and 8-inch diameter storm drain pipelines to 3-inch by 12 ½-inch rectangular cast iron pipes that spill to the curb and onto Parking Lot 36 on the west side of the building. The runoff sheet flows across Parking Lot 36 and is collected in the storm drainage system in Kinross Avenue and Veteran Avenue.

Storm Water Quality

As discussed in the March 2009 LRDP Amendment Final EIR, constituents found in typical urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, the land use of a site, vehicle traffic, and percentage of impervious surface. The U.S. Environmental Protection Agency (USEPA) estimates that, without adequate erosion- and runoff-control measures, short-term runoff from construction sites can add more sediment to receiving waters than that deposited by natural processes over a period of several decades.

Campus storm water quality is typical of most urban areas in that it includes a variety of common contaminants. These pollutants consist primarily of suspended sediments, limited fertilizers and pesticides used in grounds maintenance, and contaminants that are commonly associated with automobiles (e.g., oil, grease, and hydrocarbons) (UCLA 2009). Storm water runoff from the Kinross Building and adjacent Parking Lot 36 is also typical of urban areas.

4.3.2 REGULATORY FRAMEWORK

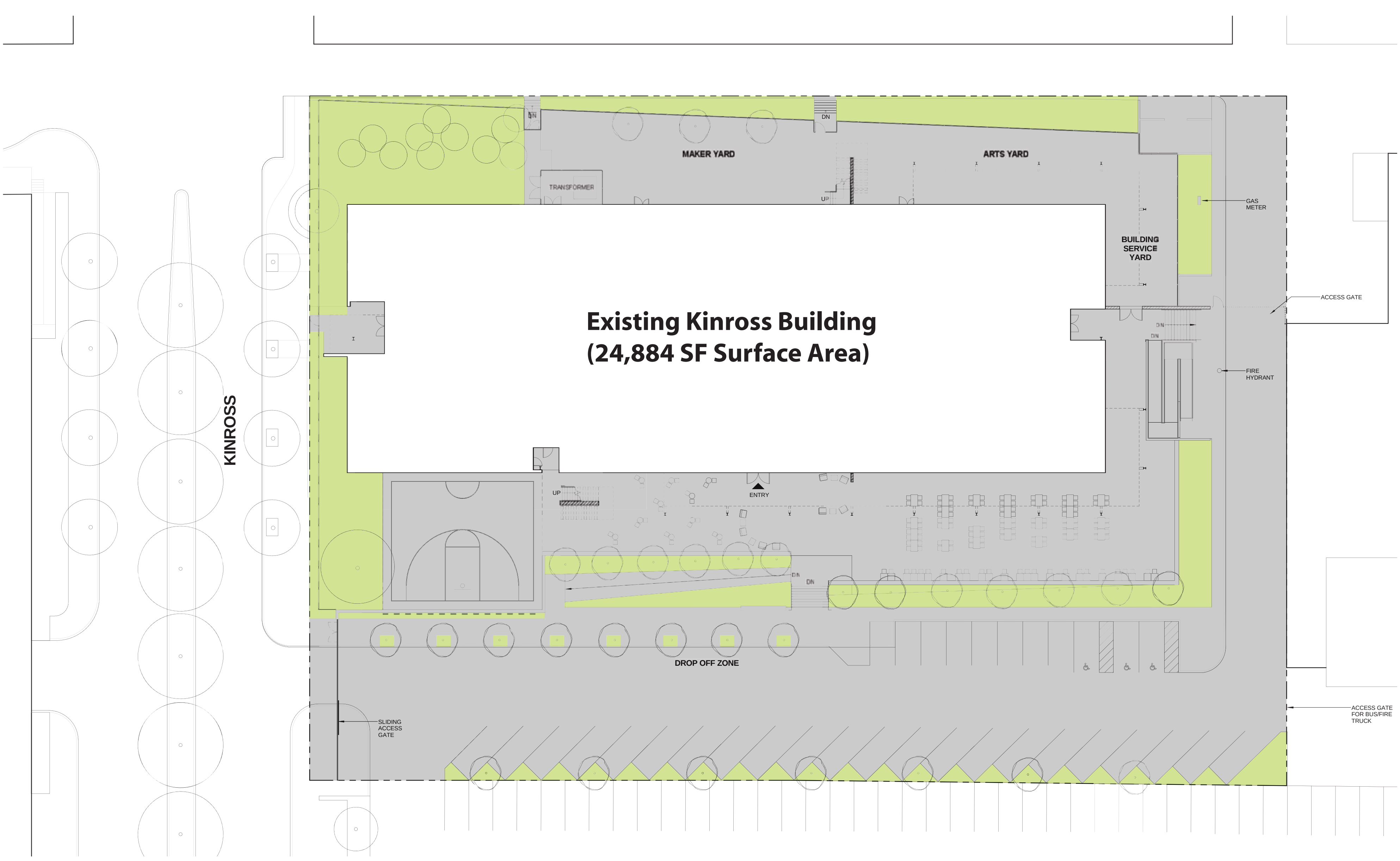
Section 4.7 of the March 2009 LRDP Amendment Final EIR provides a complete discussion of the regulatory framework for the analysis of hydrology and water quality. Since certification of the March 2009 LRDP Amendment Final EIR, the State Water Resources Control Board (SWRCB) has issued the new statewide “Construction General Permit” pursuant to the National Pollutant Discharge Elimination System (NPDES) permit program. The SWRCB also adopted a General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s). The current regulatory setting for management of surface water is described below.

Federal

Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of U.S. waters. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. In 1972, the CWA was amended to prohibit discharges of pollutants to waters of

Existing Impervious Area: 47,160 sf
Existing Pervious Area: 11,440 sf



Proposed Impervious Area: 46,940 sf
Proposed Pervious Area: 11,660 sf (220 sf add'l)

Source: KPFF 2016

Pervious and Impervious Areas

Figure 4.3-1

Geffen Academy at UCLA

BonTerra PSOMAS

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D:\Projects\UCLA\J0028\Graphics\EIR\ex_PerviousAndImperviousAreas_20160414.ai the United States from any point source, unless the discharge is in compliance with an NPDES permit. In 1987, the CWA was again amended to require that the USEPA establish regulations for permitting of storm water discharges (as a point source) by municipal facilities, industrial facilities, and construction activities under the NPDES permit program. The regulations require that MS4 discharges to surface waters must be regulated by an NPDES permit. The USEPA has delegated responsibility for implementation of portions of the CWA to the SWRCB and the Regional Water Quality Control Boards (RWQCBs), including water quality control planning and control programs such as the NPDES Program. As such, this is discussed below under “State”.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the *California Water Code* and are required to obtain approval of Waste Discharge Requirements (WDRs) by the RWQCBs. Land- and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits, which are further described below. The campus is not considered a point source for regulatory purposes and, therefore, is not subject to non-NPDES WDRs.

State

Responsibility for the protection of water quality in California rests with the SWRCB and the nine RWQCBs; the campus is within the Los Angeles RWQCB (LARWQCB). The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement Water Quality Control Plans (Basin Plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) is discussed below and implements a number of federal and State laws for the proposed project area, the most important of which are the State Porter-Cologne Water Quality Control Act and the Federal CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (*California Water Code*) was enacted by the State of California in 1969 and became effective on January 1, 1970. The legislation has served as a model for subsequent water quality legislation by the federal government and other State governments. The *California Water Code* authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface waters and groundwaters) and directs the nine RWQCBs to develop regional Basin Plans. Section 13170 of the *California Water Code* also authorizes the SWRCB to adopt water quality control plans on its own initiative. In the event of inconsistencies among various SWRCB and Regional Board plans, the more stringent provisions apply (UCLA 2009).

Basin Plan for Coastal Watersheds of Los Angeles and Ventura Counties

The LARWQCB Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties covers the UCLA campus and is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and to conform to the State’s anti-degradation policy; and (3) describes implementation programs to protect all waters in the region. It incorporates by reference all applicable State and Regional Board plans and policies along with other pertinent water quality policies and regulations. The Basin Plan is a resource for the RWQCB and others who use water and/or discharge wastewater in the Los Angeles Region, as well as for other agencies and organizations involved in environmental permitting and resource management activities. Finally, it provides valuable information to the public about local water quality issues. The Basin Plan is reviewed and updated as necessary. Following adoption by the RWQCB, the Basin Plan and subsequent amendments are subject to approval by the SWRCB, the State Office of Administrative Law (OAL), and the USEPA. Subsequent to the June 13, 1994, adoption of the Basin Plan, multiple amendments have been adopted. Of note is Resolution R14-007, approved by the Office of Administrative Law on November 9, 2015, which incorporates statewide water quality control policy for siting, design, operation, and maintenance of on-site wastewater treatment systems (LARWQCB 2016).

National Pollutant Discharge Elimination System Permits

Following is a discussion of the existing NPDES permits currently in effect for the UCLA campus.

Phase I

Phase I of the NPDES Program requires NPDES permits for storm water discharge from a large number of priority sources, including MS4 permits serving populations of over 100,000 (i.e., large MS4s), several categories of industrial activity, and construction activity that disturbs 1 acre or more.

As noted above, since certification of the March 2009 LRDP Amendment Final EIR, the SWRCB has issued the new statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), which is known as the “Construction General Permit”. The Construction General Permit was adopted by the SWRCB on September 2, 2009 (effective for all project sites on July 1, 2010), and was subsequently amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. Order No. 2012-0006-DWQ became effective on July 17, 2012. Under the Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of storm water from construction sites with a disturbed area of one or more acres. The proposed Project would involve a disturbed area of approximately 0.26 acre; as this is less than 1.0 acre, the proposed Project would not be required to comply with requirements and water quality standards set forth in the current NPDES permit regulations (i.e., processing through the SWRCB is not required). Additionally, because the UCLA campus is not a large MS4, the Phase I NPDES requirements would not apply to the proposed Project.

Phase II

Phase II of the NPDES Program regulates storm water discharges from small MS4s (such as schools and universities). As part of Phase II, the SWRCB adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities, including non-traditional small MS4s, which include public campuses. The Phase II Small MS4 General Permit covers Phase II permittees statewide. On February 5, 2013, the Phase II Small MS4 General Permit was adopted and became effective on July 1, 2013 (WQ Order No. 2013-0001-DWQ). UCLA was approved for coverage under the Phase II MS4 permit program on July 12, 2013, and was assigned a Water Discharge Identification (ID) number (WDID 4 19M2000037). UCLA is required to comply with the requirements of the MS4 permit and the campus’ Stormwater Management Program.

4.3.3 PROJECT IMPACTS AND MITIGATION

Methods

The analysis of surface water drainage and storm water quality focuses on any changes in the amount of impervious and pervious surfaces and the existing storm drainage infrastructure that may affect the quantity or quality of runoff being discharged from the project site.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A of this Draft SEIR) and circulated with the NOP concluded that implementation of the proposed Project, which is a component of the LRDP, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this EIR is not required:

- Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?
- Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?
- Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Would the project cause inundation by seiche, tsunami, or mudflow?

No groundwater recharge currently occurs on the project site as it is almost completely developed with the Kinross Building and other impervious surfaces, including Parking Lot 36. Because implementation of the proposed Project would involve redevelopment on an already largely impervious site that is not a groundwater recharge area, no impact to groundwater recharge would occur. Currently, the UCLA campus utilizes water from the Los Angeles Department of Water and Power (LADWP), and the proposed Project would not involve direct withdrawal of groundwater. The Kinross Building is currently occupied, as it was when the March 2009 LRDP Amendment Final EIR was prepared. As previously analyzed and concluded in the LRDP Final EIR, while water sources for the LADWP include groundwater supplies, the LADWP has adequate water supplies to serve the existing and future development on campus as identified in the 2002 LRDP, as amended in March 2009. Therefore, the proposed Project, which involves the renovation and reuse of the existing Kinross Building, would not substantially deplete groundwater supplies and there would be a less than significant impact.

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation on campus was determined to have no impacts related to development within a 100-year flood hazard area; flooding as a result of failure of a levee or dam; or inundation by seiche, tsunami, or mudflow. These issues were not carried forward for further discussion in the March 2009 LRDP Amendment Draft EIR. Additionally, based on a current review of the City's Zoning Information and Map Access Site (ZIMAS), the project site is not within a tsunami inundation zone or a 100-year flood hazard area designated by the Federal Emergency Management Agency (FEMA) (City of Los Angeles 2016), consistent with the findings of the March 2009 LRDP Amendment Final EIR. As documented in the LRDP Final EIR, the campus is not susceptible to up-gradient reservoirs (i.e., dams and other enclosed bodies of water) that can be a source of failure and/or seiche. Therefore, there would be no impact related to flooding.

Thresholds Addressed in this Draft Subsequent Environmental Impact Report

The Initial Study concluded that additional project-level analysis of the following threshold of significance is required in this Draft SEIR. According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact on hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements.
- Otherwise substantially degrade water quality.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site.
- Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.[1]

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following Programs, Practices, and Procedures (PPs) and Mitigation Measure (MM) were adopted as part of the March 2009 LRDP Amendment Final EIR; they are incorporated as part of the proposed Project and are relevant to the analysis presented in this section.

PP 4.7-1 *Construction and operation of projects on campus shall comply with requirements and water quality standards set forth within current NPDES Permit regulations (Phase I and Phase II) at the time of project approval. Pursuant to Phase I permit requirements, UCLA shall develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related and post-construction pollutants in site runoff.*

[1] While this threshold of significance appears in Section 17, Utilities and Service Systems, of the Initial Study (Appendix A of this Draft SEIR), all analysis of storm water runoff, including storm drain capacity, is presented in this EIR section.

PP 4.7-5 *Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project. Project design shall include measures to upgrade and expand campus storm drain capacity where necessary, as identified through the project-specific hydrologic evaluation. Design of future projects shall include measures to reduce runoff, including, but not limited to, the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials.*

MM 4.7-1 *Best Management Practices (BMPs) shall be implemented for individual development projects, to the extent required by State law, to ensure compliance is maintained with all applicable NPDES requirements at the time of project construction. UCLA shall utilize BMPs as appropriate and feasible to comply with and/or exceed the current requirements under the NPDES program. BMPs that may be implemented include, but are not limited to, the following:*

Non-Structural/Structural

- *Landscape Maintenance*
- *Catch Basin Stenciling and Clean-out*
- *Efficient Irrigation Practices*
- *Litter Control*
- *Fertilizer Management*
- *Public Education*
- *Efficient Irrigation*
- *Permanent Vegetative Controls*
- *Runoff – Minimizing Landscape Design*

Treatment Control BMPs (to minimize storm water pollutants of concern for Ballona Creek – Sediment, Bacteria/Viruses, Toxicity, Trash, and Metals):

- *Vegetated Swale(s) – An open, shallow channel with vegetation covering side slopes and the bottom.*
- *Bioretention – A basin that functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes.*
- *Turf Block – A grass area that has a structural component which allows it to be used in drive aisles and parking lots.*
- *Drain Inserts – A manufactured filter placed in a drop inlet to remove sediment and debris.*

Threshold 3.1	Would the project violate any water quality standards or waste discharge requirements?
Threshold 3.2	Would the project otherwise substantially degrade water quality?

The analysis of Impact 4.7-1 in Section 4.7, Hydrology and Water Quality, of the March 2009 LRDP Amendment Final EIR determined that with implementation of PP 4.7-1 and MM 4.7-1, there would be a less than significant impact related to violation of existing water quality standards or waste discharge requirements and degradation of water quality.

Construction

Consistent with the analysis presented in the March 2009 LRDP Amendment Final EIR for the implementation of the remaining development allocation on campus, implementation of the proposed Project would result in runoff exiting the project site during construction. Storm water runoff during construction could contain pollutants such as soils and sediments released during grading and excavation activities as well as petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that may result from construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

The CWA establishes a framework for regulating potential water quality impacts from construction activities through the NPDES Program; the regulatory framework for water quality is described in Section 4.7.2 of the March 2009 LRDP Amendment Final EIR, and Section 4.3.2, Regulatory Framework, above reflects changes in NPDES requirements subsequent to certification of the LRDP Final EIR.

The proposed Project would not involve disturbance of more than 1.00 acre (the disturbance area is approximately 0.26 acre) and therefore would not be required to comply with requirements and water quality standards set forth in the current NPDES permit regulations (i.e., processing through the SWRCB is not required). However, it would comply with the campus' MS4 permit, which requires the contractor to prepare a Storm Water Pollution Prevention Plan (SWPPP), which is required by PP 4.7-1, which incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related pollutants in runoff from the site. The MS4 permit also requires incorporation of Low Impact Development (LID) standards for post-construction design. The SWPPP would include both source-control and treatment-control BMPs to reduce water quality impacts. The BMPs that are most often used during construction and would be implemented for the proposed Project include watering exposed soils; installing sandbags to minimize off-site runoff; and timing grading to avoid the rainy season (i.e., November through April). Compliance with these requirements would reduce short-term construction-related water quality impacts to a less than significant level.

Consistent with the finding for construction-related water quality impacts presented in the March 2009 LRDP Amendment Final EIR, there would be less than significant water quality impacts with implementation of PP 4.7-1 and no mitigation would be required.

Operations

As discussed in the March 2009 LRDP Amendment Final EIR, the UCLA campus is not considered a point source for regulatory purposes and is not subject to WDRs. While the campus has an industrial wastewater permit for wastewater discharge associated with the food service, laboratory, and medical land uses on campus, no hazardous waste is discharged into the sewer or storm drain systems on campus. Under the 2002 LRDP, as amended in March 2009, the campus may develop additional academic, residential, and support uses that are substantially similar to existing campus uses and that would not contribute different types of pollutants than those now generated. Operation of the Geffen Academy would include, but not be limited to, science classes, associated teaching laboratories, fine arts classes, and food service facilities, consistent with the planned uses addressed in the LRDP Final EIR. The constituent pollutants entering the City and campus storm drain systems would not change in character as a result of implementation of the proposed Project and would primarily be composed of fuels, oils, lubricants and hydraulic fluids, and radiator or battery fluids from automobile use; pesticides, herbicides, and fertilizers; and floatable wastes and trash.

In accordance with PP 4.7-5, a hydrologic evaluation has been conducted for the proposed Project. As discussed above, the existing pervious surface area within the site is approximately 11,440 sf (13.7 percent of the 1.9-acre site). With proposed Project implementation, the pervious surface area would slightly increase to approximately 11,660 sf (14.0 percent of the 1.9-acre site). There would be some existing landscaped areas converted to impervious areas with the exterior site modifications and there would be new landscaping installed in currently impervious areas (refer to Figure 4.3-1). The new landscape areas would include trees planted within the new sidewalk along the drop-off/pickup zone and along the safety/security fence along the western boundary of the project site. These changes in site coverage are expected to result in an approximate net increase of 220 sf of pervious surface area, which contributes to a slight increase in runoff infiltration and associated water quality treatment. Additionally, MM 4.7-1 is incorporated into the proposed Project and requires implementation of BMPs to ensure compliance with all applicable NPDES requirements at the time of proposed Project construction. The existing storm drainage system would be retained to capture and treat (via percolation into pervious soils) both the surface and roof drainage, where the roof drains would continue to discharge flow to ground level landscaped areas and planter boxes. As with existing conditions, overflow stormwater would discharge via 3-inch by 12 ½-inch rectangular cast iron pipes that spill to the curb and then sheet flow across Parking Lot 36 With implementation of the proposed project, this runoff would be collected and treated by the new pervious landscape (grass and trees) that would be installed along the west side of the perimeter fence.

Consistent with the finding for operation-related water quality impacts presented in the March 2009 LRDP Amendment Final EIR, there would be less than significant water quality impacts with implementation of the proposed Project and no additional mitigation would be required.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to water quality standards or WDRs or degradation of water quality.

Threshold 3.3	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?
Threshold 3.4	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

The analysis of Impacts 4.7-3 and 4.7-4 in the March 2009 LRDP Amendment Final EIR regarding existing drainage patterns concluded there would be less than significant impacts with implementation of PP 4.7-5.

There are no major streams or rivers that traverse the project site. Stone Canyon Creek is the only regional drainage feature that traverses the campus and is not located within or near the project area. Implementation of the proposed Project would not alter regional drainage features.

As discussed above, proposed Project implementation would slightly increase the pervious surface area at the project site to approximately 11,660 sf, an increase of 220 sf (approximately 0.3 percent) compared to existing conditions. This would result in a slight decrease in storm water flow rates and volumes. Roof drains would continue to discharge a portion of flow to ground-level landscaped areas and planter boxes; the discharge points would be consistent with the drainage patterns such that storm water diversion does not occur. Further, runoff from the project site would follow the same flow paths as the existing condition once flows leave the site. Specifically, runoff from the building and surrounding use areas would discharge from on-site storm drain infrastructure at points along the west side of the building. The project would decrease the volume and rate of the overflow that currently sheet flows across the drop-off/pick-up zone and then Parking Lot 36. Installation of new grass and trees along the western edge of the perimeter fence would capture and treat some portion of this existing sheet flow before discharging to the municipal (City and campus) storm drainage system.

Because the overall drainage pattern and the rate and volume of storm water runoff at the project site would remain essentially the same, the proposed Project would not contribute to erosion, siltation, or flooding on or off site and no mitigation is required.

Consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be less than significant impacts related to drainage patterns.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to existing drainage patterns.

Threshold 3.5	Would the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
Threshold 3.6	Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The analysis of Impact 4.7-5 in the March 2009 LRDP Amendment Final EIR regarding storm drain system capacity concluded there would be less than significant impacts with implementation of PP 4.7-5 and MM 4.7-1.

Potential water quality impacts resulting from additional sources of polluted runoff are discussed under Impacts 3.1 and 3.2.

There are existing 6- and 8-inch storm drain lines that capture storm water runoff from the overflow drains and connect to 3-inch by 12 ½-inch rectangular cast iron pipes that spill to the curb. This overflow water then sheet flows across Parking Lot 36. As discussed above, proposed Project implementation would slightly increase the pervious surface area by approximately 220 sf (0.3 percent) through installation of new grass and trees along the western edge of the perimeter fence. Therefore, there would a slight reduction in storm water flow rates and volumes, and no storm water detention or new or expanded storm drain facilities are required.

Consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be less than significant impacts related to the storm drainage system and no additional mitigation is required.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact regarding storm water drainage systems.

4.3.4 CUMULATIVE IMPACTS

As identified in the March 2009 LRDP Amendment Final EIR, the geographic context for the hydrology and water quality cumulative impact analysis is the Ballona Creek Watershed. This watershed consists of 130 square miles between the Santa Monica Mountains, the Harbor Freeway (State Route 110), and the Baldwin Hills. The geographic context also includes the Santa Monica Groundwater Basin, which underlies the campus and its vicinity. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the remaining development allocation on campus (of which the Project is a part) and the *City of Los Angeles General Plan Framework*, and development of the related projects provided in Table 4-1, Related Projects, in Section 4.0, Introduction to the Environmental Analysis of this Draft SEIR.

Cumulative development would not violate water quality standards or waste discharge requirements and thereby would not result in a significant cumulative impact. The area that composes the geographic context for this analysis consisted of only 17 percent open space, with the remainder being used for urban land uses (UCLA 2009). In addition, much of the open space area is composed of parks, golf courses, and natural areas in the Santa Monica Mountains. Consequently, it is not expected that full implementation of the General Plan Framework would result in the conversion of large amounts of open space to urban uses, and it is therefore not expected that there would be a significant increase in runoff. Implementation of NPDES Phase I and II requirements, or, for projects disturbing less than one acre, CALGreen requirements would ensure that cumulative development does not result in higher than allowed concentrations of pollutants in storm water discharges. Additionally, future development would be required to comply with sewage discharge laws and to obtain the proper permits. The proposed Project would not contribute to cumulative water quality impacts since the permeable surface area of the project site would be slightly increased by 220 sf, the type of pollutants contained in campus and project site runoff would not change, and the campus would implement applicable requirements related to water quality.

It is not expected that cumulative development would substantially alter the existing drainage pattern of the area (including through the alteration of the course of a stream or river) in such a manner that would result in substantial erosion or siltation, flooding, or the exceedance of existing or planned storm water drainage systems. As mentioned previously, the Ballona Creek Watershed is composed mainly of urban uses, with remaining open spaces being devoted to uses not likely to be developed. As a result, most of the drainage system in the watershed consists of engineered storm channels and is therefore expected to experience little change. Additionally, as extensive development is not expected in the remaining open spaces, it is unlikely that there would be substantial alteration of drainage systems and watercourses in those areas. This indicates that the amount of runoff would not substantially increase, thereby avoiding substantial increases in erosion, siltation, flooding, and preventing the exceedance of the storm water drainage system. New development would also be required to comply with NPDES Phases I and II (or CALGreen) and to adopt BMPs to reduce the occurrence of erosion and siltation. The proposed Project would not contribute to cumulative drainage impacts because the on-site drainage pattern, amount of runoff, and storm drain infrastructure would essentially be the same as the existing condition.

4.3.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to hydrology and water quality. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to hydrology and water quality.

4.3.6 REFERENCES

Los Angeles, City of (City of Los Angeles). 2016 (January 12, last accessed). Zoning Information and Map Access System (ZIMAS); Assessor Parcel Number 4363-026-905. Los Angeles, CA: the City. http://zimas.lacity.org/.

Los Angeles, County of, Department of Public Works (LADPW). 2016 (February 2, access date). Ballona Creek Watershed. Alhambra, CA: LADPW. http://ladpw.org/wmd/watershed/bc/.

Los Angeles Regional Water Quality Control Board (LARWQCB). 2016 (April 14). TMDL List. Los Angeles, CA: LARWQCB. http://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/wqs_list.shtml.

———. 1994 (June 13). Water Quality Control Plan Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Monterey Park, CA: LARWQCB.

University of California, Los Angeles (UCLA). 2016 (February). *Initial Study/Notice of Preparation of a Draft Environmental Impact Report and Notice of Scoping Meeting for the Geffen Academy at UCLA.* Los Angeles, CA: UCLA Campus Capital Programs (Appendix A).

———. 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; Prepared by BonTerra Consulting). Costa Mesa, CA: BonTerra Consulting.

4.4 LAND USE AND PLANNING

Land use and planning issues are addressed in Section 4.8 of the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR) (UCLA 2009a). This section describes existing land uses within and surrounding the project site and evaluates the potential for land use impacts associated with implementation of the proposed Project. Data used in preparing this section was primarily obtained from previous environmental documentation prepared by the University of California, Los Angeles (UCLA); review of relevant planning programs; and site reconnaissance.

There were no Notice of Preparation (NOP) comment letters received that addressed land use or planning issues. At the EIR scoping meeting, several questions were raised regarding the status of the existing Kinross Building occupants (e.g., the timing of relocations and identification of where the occupants would be moved to).

4.4.1 ENVIRONMENTAL SETTING

Project Site and UCLA Campus

The proposed Project involves renovation and reuse of the existing Kinross North Building located at 11000 Kinross Avenue in the Southwest zone of the UCLA campus. The existing Kinross Building opened in 2001 and was originally constructed to serve as a multi-use facility for displaced departments on the UCLA campus while their facilities underwent seismic upgrades or renovation. The 3-level building is approximately 75,000 gross square feet (gsf) and was designed with flexible classroom, office, and lab space, providing a versatile arrangement open to adaptation. The Kinross Building currently houses the Kinross Recreation Center (KREC) and Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, and units related to research administration. KREC is open every day and is limited to use by UCLA graduate students and faculty/staff with UCLA Recreation SOUTH ZONE membership. Not including the individuals that use KREC, there are approximately 218 individuals (faculty and staff) who occupy the remaining areas at the Kinross Building.

The Southwest zone encompasses approximately 35.5 acres of the 419.0-acre UCLA campus. In addition to the Kinross Buildings (North and South), the Southwest zone is occupied by a variety of uses, including, but not limited to, surface and structured parking, graduate student housing, medical research and clinical functions, administrative functions, scientific research, transit facilities, a steam plant, and Los Angeles Fire Station No. 37. There is currently approximately 91,300 gsf of development allocation remaining in the Southwest zone[1].

As shown on Figures 3-2 (campus map) and 3-3 (aerial photograph) in Section 3.0, Project Description, of this Draft Subsequent EIR (SEIR), the project site is bound by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively.

With respect to existing on-campus land uses surrounding the project site, the Kinross South Building houses the Preservation Program for the UCLA Library, which encompasses conservation, collections care and bindery, audiovisual preservation, and preservation administration. Parking Structure 32 provides 919 parking spaces, and Parking Lot 36 provides

[1] Unrelated to the proposed Project, the proposed Margan Apartments Redevelopment Project involves a proposed transfer of 30,000 gsf of remaining development allocation in the Southwest zone to the Bridge zone, which, if approved, would result in a remaining development allocation in the Southwest zone of 61,300 gsf.

672 parking spaces. Over 90 percent of the parking spaces provided in these facilities are for faculty and staff.

Surrounding Off-Campus Uses

As shown in the aerial photograph provided in Figure 3-3, the project site is surrounded by off-campus urban development to the east (across Midvale Alley) and south (across Wilshire Boulevard). The Gayley Center immediately to the east of the Kinross Building and west of Gayley Avenue is a two-story building with two levels of underground parking and is occupied by various restaurants and businesses. Access to the underground parking is provided from Kinross Avenue, and service vehicle access is provided from Midvale Alley on the west side of the building. The U.S. Federal Building is located on the southwest corner of Wilshire and Veteran Avenues and the Los Angeles National Cemetery is located on the west side of Veteran Avenue.

There is a vacant lot (approximately 0.57-acre) located south of the Gayley Center and east of the Kinross South Building. This lot is currently planned for development with the previously approved Wilshire Gayley Project located at 10951–10955 Wilshire Boulevard and 1151–1157 Gayley Avenue. In July 2010, the City of Los Angeles approved two development options for this project: (1) a 250-room luxury business hotel and (2) a 144-unit condominium building. Both options included approximately 6,510 square feet of ground floor retail space. In November 2013, the City approved a request to vacate the alley westerly of Gayley Avenue adjoining the Wilshire Gayley project site for driveway access. In October 2014, the City approved a third development option for this site, which included 250 apartment units with associated amenities and ground floor retail space.

As further discussed in Section 4.8, Transportation and Traffic, of this Draft SEIR, there are numerous public transit lines serving the project site and surrounding uses. These lines include those operated by Metro (Los Angeles County Metropolitan Transportation Authority), City of Los Angeles Department of Transportation (LADOT), Big Blue Bus (Santa Monica), Culver City Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and Los Angeles International Airport (LAX) FlyAway. UCLA provides campus shuttles and an evening van service to connect the UCLA Main Campus with the Southwest Campus and Westwood Village; a BruinBus Campus Express stop is within 200 feet of the Kinross Building entrance on the south side of Kinross Avenue. Additionally, Metro has plans to extend the Metro Purple Line subway to the west approximately nine miles from its current terminus at Wilshire Boulevard/Western Avenue to Westwood, with a proposed subway station along Wilshire Boulevard near the project site. The subway extension would be built in 3 phases; the 2.48 mile segment that would extend through Westwood is in Phase 3, which is not expected to be under construction until 2027, with operations estimated to begin in 2035 (Metro 2016).

4.4.2 REGULATORY FRAMEWORK

Section 4.8 of the March 2009 LRDP Amendment Final EIR provides a complete discussion of the regulatory framework for the analysis of land use and planning for campus projects. The following discussion focuses on regulatory information presented in the LRDP Final EIR that has been updated since March 2009 and/or is particularly relevant to the proposed Project.

University of California, Los Angeles

Following is a description of UCLA land use-related planning programs relevant to development on campus. University of California (UC) policies/programs relevant to other topical issues (e.g., greenhouse gas emissions) are discussed in the respective sections of this Draft SEIR.

UCLA 2002 Long Range Development Plan, as amended in March 2009

Campus Land Uses and Development

The current UCLA LRDP—defined by statute (*California Public Resources Code,* Section 21080.09[2]) as a "physical development and land use plan to meet the academic and institutional objectives for a particular campus or medical center of public higher education"—is the 2002 LRDP, as amended in March 2009. The amendment to the 2002 LRDP was adopted by the UC Board of Regents (The Regents) in March 2009, following certification of an accompanying Final EIR in accordance with the California Environmental Quality Act (CEQA).

The LRDP guides the physical development of the campus to serve its teaching, research, and public service mission. In general, the 2002 LRDP, as amended in March 2009 (1) provides a land use map to guide the siting of future campus facilities; (2) estimates the net building space required to achieve the campus academic and research goals; and (3) articulates planning principles (or LRDP objectives) to guide the physical planning process.

The primary objective of the existing LRDP is to establish a land use plan that represents the best possible relationship among UCLA academic goals, faculty and student needs, site characteristics, and integration with the surrounding community. It remains the same as in the previous LRDPs approved by The Regents in 1963, 1983, 1990, and 2002. The 2002 LRDP, as amended in March 2009, retains the basic land use designations of the 1990 LRDP (including academic, recreational, residential, health sciences, and other land uses) contained in the same eight land use zones envisioned in the 1990 LRDP. Campus land use zones are shown on Figure 3-2 in Section 3.0, Project Description, of this Draft SEIR. Space allocations in the campus land use zones serve as "capacity envelopes" and are sized to accommodate projected needs within the planning horizon of the current LRDP. The use of these capacity envelopes is intended to provide future flexibility; to accommodate changes in program space requirements; and to respond to needs and circumstances that are not anticipated in the current LRDP.

The 2002 LRDP, as amended in March 2009, allocated approximately 1.87 million gsf of remaining development allocation on campus between the eight campus zones (UCLA 2009b). Since adoption of the March 2009 Amendment to the 2002 LRDP, approval and construction of various projects has reduced the original 1.87 million gsf allocation to a remaining approximately 276,487 gsf. As previously identified, the proposed Project, which involves renovation and reuse of the existing 75,000 gsf Kinross Building, is in the Southwest zone; there is currently 91,300 gsf of development allocation remaining in the Southwest zone[2].

Average Daily Trips and Parking

The 2002 LRDP, as amended in March 2009, identifies the average daily vehicle trip and parking space limits for the campus (139,500 trips and 25,169 parking spaces, respectively). The vehicle trip and parking space limits have not changed since adoption of the 1990 LRDP. Based on Cordon counts taken in 2015, UCLA currently generates approximately 100,961 average daily trips, and there are currently 22,758 parking spaces on campus (Dudman 2016).

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[2] It should be noted that UCLA's currently proposed Margan Apartments Redevelopment Project involves a minor LRDP Amendment to transfer 30,000 gsf from the Southwest zone to the Bridge zone. Should that project be approved, there would be 61,300 gsf of development allocation remaining in the Southwest zone and 246,487 gsf of development allocation remaining for the campus.

Campus Population

Unlike vehicle trips, parking, and development allocation, the 2002 LRDP, as amended in March 2009, does not establish a population or enrollment cap for the campus. As identified in Section 3.6.4, Population Estimates, of the March 2009 LRDP Amendment Final EIR, for analytical purposes, the LRDP Final EIR provided campus population estimates/projections for students, employees, and visitors out to the 2013–2014 academic year. As shown in Table 4.10-4 of the March 2009 LRDP Amendment Final EIR, the average weekday on-campus population was estimated to increase to approximately 62,490 in 2013, an estimated growth of approximately 2,780 individuals, including approximately 1,638 students and academic/staff employees and 1,142 other individuals (e.g., visitors, medical center patients, volunteers, vendors, and contractors).

Because the 2002 LRDP, as amended in March 2009 was projected to horizon in 2013-14, and has yet to construct all of the entitled new development approved thereunder, a current population baseline (for UCLA students, employees [academic and staff], and Other Individuals [visitors]) has been established for the 2014-15 academic year. Section 4.6, Population and Housing, Table 4.6-2, describes the baseline conditions and provides projections through the full enrollment and staffing of the Geffen Academy in 2020-21. The relationship of Land Use and the population growth as described in Section 4.6 is addressed below in section 4.4.3.

Additionally, in November 2015, the UC President and The Regents, approved a UC system-wide enrollment increase of 10,000 in-state students. Of that system-wide increase, UCLA will take a total of 1,500 freshman and transfer students over three years; beginning with 750 students in the Fall of 2016 and 375 for each of the subsequent years. In UCLA’s acceptance of this allocation, existing on-campus housing was reviewed for capacity and availability of rooms and beds to accommodate the increased freshman and transfer students. Currently, Housing and Hospitality Services has accommodated all Freshman and Sophomores who wanted on-campus housing for the 2015-16 academic year within the existing housing stock. This was accomplished despite having two residence halls off-line for renovation: Delta Terrace and Sproul Hall. Combined, these two halls have a capacity to provide over 1,500 beds and both will be back on-line for Fall 2016. Therefore, by bringing these two halls back on-line, Housing would be able to provide on-campus housing to all of the new freshman and transfer students; conservatively assuming that 100 percent of them want on-campus housing. Therefore, no new housing is necessary to accommodate the pending enrollment increase. As new on-campus residents, these students would not generate new vehicle trips or construction of new parking. This is consistent with three of the LRDP’s objectives: 1) maintain the campus vehicle trip cap of 139,500 average daily trips; 2) maintain the campus parking cap of 25,169 spaces; and 3) continuing the campus’ evolution from a commuter to a residential campus.

This enrollment growth is also captured in Table 4.6-2 of Section 4.6, Population and Housing, of this Draft SEIR.

UCLA Physical Design Framework

The UCLA Physical Design Framework (Framework) prepared in July 2009 (UCLA 2009c) describes the approach for development of buildings, infrastructure, and landscape on the campus within the context of the physical planning objectives contained in the 2002 LRDP, as amended in March 2009. It also describes the physical design standards that guide new development to enhance the unique campus aesthetic within the constraints of a fully developed urban environment. The Framework describes the design review process that ensures that the LRDP objectives and Physical Design Standards are embodied in all new projects. The Framework is used to ensure compatibility of new development with the existing built environment while continuing to strengthen the vibrant identity and design vernacular of the UCLA campus. It should be noted that the existing Kinross Building was constructed in 2002, prior to preparation of the Physical Design Framework.

Local Planning Programs

UCLA is part of the UC, a constitutionally created entity of the State of California. As a constitutional entity, the UC is not subject to municipal regulations, such as the City General Plan. Westwood and other surrounding communities are part of the City of Los Angeles and, although this jurisdictional separation provides no formal mechanism for joint planning or the exchange of ideas, UCLA may consider for coordination purposes aspects of local plans and policies for the communities surrounding the campus but is not bound by those plans and policies in its planning efforts.

The *City of Los Angeles General Plan Framework*, adopted December 1996 (re-adopted August 2001) provides general guidance on land use issues for the entire City. The General Plan consists of the Framework Element, a Land Use Element, and ten citywide elements. For purposes of developing, maintaining, and implementing the land use portion of the General Plan, the City has been divided among 35 community plan areas, which collectively comprise the Land Use Element of the General Plan. The community plans are intended to implement the policies of the General Plan Framework. The UCLA campus is included in the *Westwood Community Plan,* and is identified as “Public Facility”. There are approximately 495 acres of land designated as Public Facility in the community. Included within this category are public schools, public facilities, freeway rights-of-way, and other government or publicly-owned lands. The City of Los Angeles Generalized Zoning Map also identifies the UCLA campus as “Public Facility”. Nonetheless, the UC is not subject to the provisions of the *Westwood Community Plan.*

The campus seeks to maintain an ongoing exchange of ideas and information and to pursue mutually acceptable solutions for issues that confront both the campus and the community. To foster this process, UCLA participates in, and communicates with, City and community organizations and sponsors various meetings and briefings to keep local organizations, associations, and elected representatives apprised of ongoing planning efforts. UCLA participated in the development of the *Westwood Community Plan* and the *Westwood Village Specific Plan* in an effort to coordinate planning efforts between the surrounding City of Los Angeles communities and the campus.

Regional Planning Programs

With respect to regional planning, the Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, the federal government mandates SCAG to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. SCAG’s responsibilities are outlined in Section 4.8, Land Use and Planning, of the March 2009 LRDP Amendment Final EIR. Notably, SCAG reviews EIRs for projects of regional significance for consistency with approved regional plans (SCAG 2016a).

The proposed Project would not be considered regionally significant by SCAG based on the established criteria in Section 15206 of the State CEQA Guidelines, which is applied by SCAG to determine regional significance (SCAG 2016b). However, the 2002 LRDP, as amended in March 2009, was considered regionally significant and regional plans for which a consistency analysis is provided in the March 2009 LRDP Amendment Final EIR include the *Regional Comprehensive Plan and Guide* (RCPG), the *Regional Transportation Plan* (RTP), and the *Compass Growth*

Vision Report (CGV). It should be noted that SCAG prepared the 2012 RTP/Sustainable Communities Strategy (SCS) to supersede the 2008 RTP; the 2012 RTP/SCS was adopted in April 2012. In addition to meeting federal and State transportation planning requirements, the 2012 RTP/SCS included a chapter to comply with California's Senate Bill (SB) 375 mandate for a regional SCS. Per SB 375, the RTP/SCS must coordinate transportation and land use planning in a manner that results in greenhouse gas (GHG) emission reductions sufficient to meet 2020 and 2035 targets set by the California Air Resources Board (CARB). The goals and policies of the 2012 RTP/SCS focused on transportation and land use planning that includes building compact infill projects; locating residents closer to where they work and play; designing walkable environments; and designing communities so there is access to high-quality transit service (SCAG 2012).

The SCAG 2016–2040 RTP/SCS, which updates the 2012 RTP/SCS, was approved on April 7, 2016. The 2016 RTP/SCS highlights regional changes that have affected the development of the plan since the 2012 RTP/SCS, including the region's fluid and dynamic demographic and housing market; the passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21); state legislation on transportation funding; the rapid advancement of new technologies such as real-time traveler information, on-demand shared mobility services enabled by smartphone applications, or ride-sourcing, car share, and bike share; and the state's continued emphasis on reducing GHG emissions. The 2016 RTP/SCS was also developed with recognition of the progress the region has made since preparation of the 2012 RTP/SCS. The goals of the 2016 RTP/SCS have remained unchanged since the 2012 RTP/SCS. The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016c).

4.4.3 PROJECT IMPACTS AND MITIGATION

Methods

The analysis in this section focuses on (1) the consistency of the proposed Project with any applicable land use plans, policies, or regulations and (2) the compatibility of the proposed land use with existing and planned land uses within and adjacent to the project area. The analysis is based on previous environmental documentation prepared by UCLA, review of relevant planning programs, and site reconnaissance.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A) and circulated with the NOP concludes that implementation of the proposed Project, which is a component of the 2002 LRDP, as amended in March 2009, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project physically divide an established community?
- Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, it was concluded that implementation of the remaining development allocation on campus would have no impact related to division of an established community. This issue was not carried forward for further analysis in the Draft EIR. The 2002 LRDP, as amended in March 2009, guides development within the campus boundaries, such as the proposed Project, and does not therefore affect the established community outside the UCLA campus. The proposed Project would involve the renovation and reuse of the existing Kinross Building and would not involve new construction that would physically divide an established community. As previously analyzed and concluded in the LRDP Final EIR, no impact would result.

As identified in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, the UCLA campus is not located within an area governed by a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). Therefore, there would be no impact resulting from implementation of the proposed Project.

Thresholds Addressed in This Draft SEIR

The Initial Study concludes that additional project-level analysis of the following threshold of significance is required in this Draft SEIR. According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact related to land use and planning if it will:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Create other land use impacts.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following Program, Practice, and Procedure (PP) was adopted as part of the March 2009 LRDP Amendment Final EIR; is included as part of the proposed Project; and is assumed in the analysis presented in this section.

PP 4.8-1(e) *Facilities shall be sited and designed to enhance spatial development of the campus while maximizing use of limited land resources.*

Threshold 4.1	Would the proposed project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The analysis of Impact 4.8-2 in the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to conflicts with applicable land use plans, policies, and regulations.

University of California, Los Angeles

As required by Section 15125(d) of the State CEQA Guidelines, this document discusses any inconsistencies between the proposed Project and applicable general plans and regional plans.

Following is a discussion of the project's consistency with relevant components of the 2002 LRDP, as amended in March 2009.

LRDP square footage. The proposed Project would involve the renovation and reuse of the existing 75,000 gsf Kinross Building in the Southwest zone. No additional square footage would be added to the Southwest zone to accommodate the proposed Project. Therefore, there would be no change in the total remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009 (approximately 1.87 million gsf with approximately 276,487 gsf remaining) and the development allocation remaining when considering other projects that have been approved since adoption of the 2002 LRDP amendment in March 2009 or that are currently proposed by UCLA. As previously identified, should the Margan Apartments Redevelopment Project be approved, there would be 61,300 gsf of development allocation remaining in the Southwest zone and 246,487 gsf of development allocation remaining for the campus.

LRDP Land Use Designations. The proposed Project is located in the 35.5-acre Southwest zone, which is southwest of the main campus (refer to Figure 3-2, UCLA Campus Map, in Section 3.0, Project Description, of this Draft SEIR). The proposed Project retains the land use designations (academic, recreational, residential, health sciences, and other land uses) contained in the same eight land use zones envisioned in the 2002 LRDP, as amended in March 2009, which were developed as part of the 1990 LRDP.

The UCLA campus is located within a developed urban area and has grown in a manner consistent with the region's general urbanization. Development on the UCLA campus has used limited land resources wisely through the provision of conjunctive uses, such as the provision of underground parking structures with recreational fields above and by the provision of denser development and creative use of open areas to limit the overall development footprint. Land use intensification on campus is fully consistent with the planning policies established by the campus and by other local and regional planning agencies to discourage or curtail further urban sprawl. Renovation and reuse of the existing 75,000 gsf Kinross Building, which was designed with flexible classroom, office, and lab space, providing a versatile arrangement open to adaptation, would maximize use of limited land resources on campus (as required by PP 4.8-1[e]).

LRDP Population. As described in Section 3.5.1, Geffen Academy Operations, of this Draft SEIR, the Geffen Academy is proposed to open for the 2017–2018 school year with approximately 160 students in grades 6 and 9; followed by an enrollment increase up to a maximum of 620 students in grades 6 through 12 by the 2020–2021 school year. New faculty and staff would be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees[3]. Based on preliminary estimates, it is assumed there would be 42 full-time faculty/staff, 7 part-time staff, and 8 remote employees when the Academy opens for the 2017–2018 school year. With the estimated 620 students by the 2020–2021 school year, it is expected that the employee population would increase to 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees.

The new Project population would be accommodated in the existing Kinross Building, with no construction or use of entitled development. In addition, the current occupants of the building would be relocated to existing buildings, on- and off-campus, to make way for the Geffen Academy. In addition, the overall campus population growth that has led to establishment of a new 2014-2015 baseline, has not resulted in the need to construct new or expanded facilities beyond the entitlement allotted under the LRDP EIR. This growth has been accommodated within existing facilities or those that were constructed under the current LRDP. Further, as described

[3] Remote employees would not be located on site; they are support for faculty for assignments such as reading and grading.

above, the new UCLA student enrollment can also be accommodated within existing on-campus housing and academic buildings without construction of new facilities. Therefore, there are no new facilities to be sited or designed as a result of this increase in the campus population, thus, the campus' limited land resources would be maintained.

LRDP Development Objectives. As identified in the 2002 LRDP, as amended in March 2009, future development on campus "will be guided by the institutional objectives that fall into three major categories: academic, physical and operational". Due to the nature of the proposed Project (renovation and reuse of an existing building on campus to accommodate the Geffen Academy, which would provide an innovative college preparatory education for 6th through 12th grade students), the LRDP academic objectives are the most relevant to the proposed Project. However, the proposed Project's consistency with applicable LRDP academic, physical, and operational objectives is addressed in Table 4.4-1. As identified, the proposed Project would be consistent with the 2002 LRDP, as amended in March 2009, including relevant academic, physical, and operational development objectives.

TABLE 4.4-1
LONG RANGE DEVELOPMENT PLAN OBJECTIVES
CONSISTENCY ANALYSIS

Relevant Objective	Consistency with Objective
Academic Objectives	
Offer teaching, research, and service programs of the highest quality to serve the needs of the Los Angeles region, the State of California, and the nation. Develop an academic, administrative, and physical environment that supports outstanding research and creative activity.	**Consistent.** As further discussed in Section 4.7, Public Services and Recreation, of this Draft Subsequent Environmental Impact Report (SEIR), in furtherance of this objective, the University of California, Los Angeles (UCLA) currently operates the UCLA Lab School (Lab School, also known as the Corinne A. Seeds University Elementary School) on campus. The faculty and staff at the Geffen Academy would join in the ongoing collaboration that already occurs between the Lab School, other partner schools off campus, and the Graduate School of Education and Information Studies (GSEIS) to expand educational opportunities for students, faculty, and families. The GSEIS is the conduit for the collaboration of ideas, teaching methodologies, and data sharing between the partner schools. In addition to its partner schools, the GSEIS houses 16 nationally renowned research centers and some of the world's education and information experts (UCLA 2016). The existing Kinross Building is at the southern edge of the campus, in the Southwest zone, and accomplishes the need for the Geffen Academy to be located at a site that provides independent use for both a middle and high school experience but also provides the physical attributes needed to accommodate the Academy. Additionally, with its location on campus, the Geffen Academy would provide academic and research synergies, notably by accommodating efficient access for GSEIS faculty, staff, and students. Additionally, the Geffen Academy would offer work opportunities for UCLA undergraduate and graduate students that expose them to the education profession and generate the next wave of teachers and faculty, consistent with the University of California's (UC's) mission and commitment to the State of California. Additionally, as a college preparatory program, students at the Geffen Academy would have access to learning opportunities and classes provided by UCLA, which are beyond those offered by more traditional secondary schools.

TABLE 4.4-1
LONG RANGE DEVELOPMENT PLAN OBJECTIVES
CONSISTENCY ANALYSIS

Relevant Objective	Consistency with Objective
Build an academic community of faculty and students in keeping with an institution of UCLA's caliber.	**Consistent.** Up to 50 percent of the students at the Academy would come from UCLA staff and faculty families. Therefore, the implementation of the proposed Geffen Academy on campus would assist in recruiting and retaining the highest level of faculty in keeping with an institution of UCLA's caliber. Additionally, the existing Kinross Building can be renovated for reuse by the 2017–2018 academic year, which would support immediate recruiting opportunities.
Foster diversity among students, faculty, and staff through curriculum, academic programs, and public service. Continue to serve the Los Angeles region through provision of cultural, health and educational, and other community programs.	**Consistent.** The proposed Geffen Academy would provide an innovative college preparatory education for 6^{th} through 12^{th} grade students. The Geffen Academy would continue UCLA's commitment to diversity by serving a broad population of families from different racial, ethnic, linguistic, religious, and socioeconomic backgrounds. It is currently anticipated that a maximum of 50 percent of the students would come from UCLA staff and faculty families and the remainder would come from the larger Los Angeles community.
Create an intellectual milieu and shared ethic that fosters excellence and a sense of community on campus.	**Consistent.** The proposed Geffen Academy would offer an alternative 6^{th} through 12^{th} grade education in line with UCLA establishing a "model school" and moving away from the standard agrarian model of education. As discussed above, the implementation of the Geffen Academy at UCLA would support academic and research synergies, including the ongoing research conducted by the GSEIS related to education. The addition of the Geffen Academy would also expand the collaboration that currently occurs between UCLA's network of partner schools and the GSEIS.
Physical Objectives	
Maintain the 1990 Long Range Development Plan (LRDP) campus parking cap of 25,169 spaces.	**Consistent.** The proposed Project would not alter the parking cap of 25,169 parking spaces, which was established with the 1990 LRDP and maintained through the 2002 LRDP, as amended in March 2009. Based on the 2015 Cordon Count Report there are currently 22,758 parking spaces on campus. Implementation of the proposed Geffen Academy, which would include installation of a perimeter security fence, circulation adjustments, and on-site Americans with Disabilities Act (ADA) parking and parking for students and visitors, would result in a parking supply of 22,736 spaces, which remains below the parking cap.
Maintain the 1990 LRDP campus vehicle trip cap of 139,500 average daily trips.	**Consistent.** The proposed Project would not alter the trip cap of 139,500 average daily trips, which was established with the 1990 LRDP and maintained through the 2002 LRDP, as amended in March 2009. Based on the 2015 Cordon Count Report, UCLA currently generates approximately 100,961 average daily trips. As discussed in Section 4.8, Transportation and Traffic, of this Draft SEIR, the proposed Project would result in a net increase of 824 average daily trips. This increase would be well within the established trip cap of 139,500 average daily trips for the campus.
Develop a maximum of 1.87 million gross square feet (gsf) of additional building space, which represents the remaining approved 2002 LRDP, as amended in March 2009, development allocation.	**Consistent.** The proposed Project would involve the renovation and reuse of the existing 75,000 gsf Kinross Building in the Southwest zone. No additional square footage would be added to the Southwest zone or elsewhere on campus to accommodate the proposed Project.

TABLE 4.4-1
LONG RANGE DEVELOPMENT PLAN OBJECTIVES
CONSISTENCY ANALYSIS

Relevant Objective	Consistency with Objective
Operational Objectives	
Provide and promote opportunities for the use of alternative transportation modes.	**Consistent.** As discussed previously and further discussed in Section 4.8, Transportation and Traffic, of this Draft SEIR, there are numerous public transit lines that serve the project site and would be accessible to faculty, staff, students, and visitors of the Geffen Academy. Many of these lines have stops within a quarter- mile of the project site. A BruinBus Campus Express stop is within 200 feet of the Kinross Building, on the south side of Kinross Avenue. Additionally, Metro has future plans to extend the Metro Purple Line subway to Westwood, with a proposed subway station along Wilshire Boulevard. Thus, future students, faculty, staff, and visitors of the project would have access to the subway as a means of transportation to the Academy. To reduce vehicular trips, the existing UCLA Transportation Demand Management (TDM) program would also serve the proposed Geffen Academy. Further, as further discussed in Section 3.0, Project Description, additional TDM measures would be implemented by the Geffen Academy. For example, bike lockers would be provided on site to encourage bicycle transportation, students would be required to form a carpool of three of more students to park on site, and school buses would be used to transport students to and from the Geffen Academy.
Plan, design, and implement the proposed Project within the practical constraints of available funding sources.	**Consistent.** It is anticipated that the Geffen Academy would be funded through tuition paid for the Academy and philanthropy; no public funds or tuition paid by UCLA students would be used.

Physical Design Framework

As identified previously, the UCLA Physical Design Framework is used to ensure compatibility of new development on campus with the existing built environment while continuing to strengthen the vibrant identity and design vernacular of the UCLA campus. The proposed Project involves renovation and reuse of the existing Kinross Building, which was constructed in 2002, prior to the development of the Physical Design Framework in 2009. While the provisions of the Physical Design Framework are not applicable to the proposed Project, the proposed Project, which involves exterior modifications to the Kinross Building and surrounding area, would not conflict with any of the established design principles, including, but not limited to, Sustainability and Green Building Design, Building Materials and Architectural Implementation, Pedestrian Circulation and Pedestrian Hardscape, Open Space and Landscape, Campus Furniture and Signage, Site Character and Context, and Integrated Larger Scale and Imagery.

As a renovation project, conversion of the Kinross Building to the Geffen Academy would require minimal exterior modifications to the structure and the landscaping. The design of the building would remain essentially unchanged; thus, the aesthetic of the Southwest zone, as described in the Physical Design Framework would be maintained. Therefore, the Project would be consistent with this campus plan.

Local Planning Programs

As previously noted, as a constitutional entity, the UC is not subject to municipal regulations, such as the *City of Los Angeles General Plan.* The *Westwood Community Plan,* which includes the campus, has identified UCLA as a Public Facility. The proposed Geffen Academy would be owned and operated by UCLA, and although UCLA is not subject to the *Westwood Community Plan,* the proposed Project is consistent with the Public Facility land use designation for the campus.

Regional Programs

Although the proposed Project would not be considered regionally significant for SCAG's purposes, regional plans for which a consistency analysis is provided in the March 2009 LRDP Amendment Final EIR include the following SCAG documents: the RCPG, the RTP, and the CGV. The 2002 LRDP, as amended in March 2009, was determined to be consistent with all applicable SCAG documents (the RCPG, the RTP, and the CGV). Because the proposed Project would be consistent with the 2002 LRDP, as amended in 2009, it would also be consistent with applicable SCAG land use planning documents, including the 2016–2040 RTP/SCS approved on April 7, 2016. The goals and policies of the recently adopted RTP/SCS focus on coordinating transportation and land use planning in a manner that results in GHG emission reductions sufficient to meet 2020 and 2035 targets set by CARB. The proposed Project would not conflict with these regional goals.

In summary, consistent with the finding under Impact 4.8-2 of the March 2009 LRDP Amendment Final EIR, there would be a less than significant impact related to conflicts with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project adopted for the purpose of avoiding or mitigating an environmental effect.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project.

Threshold 4.2	Would the project create other land use impacts?

The analysis of Impact 4.8-1 in Section 4.8, Land Use and Planning, of the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to land use incompatibilities with implementation of PP 4.1-1(a) as well as PPs 4.8-1(a) through 4.8-1(e).

The proposed Project involves the implementation of a 6th through 12th grade school in the existing 75,000 gsf Kinross Building at the southern edge of the campus Southwest zone. The Kinross Building was selected as the site for the proposed Geffen Academy due to its ability to provide the independent use needed for both a middle and high school experience and provide the physical attributes needed to meet the programmatic requirements of the Academy. These physical attributes include, but are not limited to, the following:

- A right-sized facility to accommodate both a middle and high school program with associated staff and faculty;
- A program with three entry points for student admission: sixth, seventh, and ninth grades;
- Proper physical security components and security personnel;
- Accommodation of on-site circulation and parking demands;
- On-site outdoor space for recreation, daily activities, and special events; and

- A facility that enables the Academy to open in fall 2017.

The project site is also located near existing and future transit facilities to accommodate non-vehicular transportation, including travel by students and faculty to and from other UCLA, on-campus locations.

As described in Section 3.0, Project Description, of this Draft SEIR, internal modifications would be made to all three levels of the Kinross Building to accommodate the proposed uses and programs associated with the Geffen Academy. The Kinross Building was originally designed and constructed to be flexible for future uses and to anticipate ongoing staging needs that would require internal modifications to accommodate a revolving group of users. Some of the existing outdoor area would be retained in its existing condition; however, minor exterior site modifications are proposed, including an exit driveway at Kinross Avenue, the outdoor half-court basketball court, and the new main building entry along the western building facade. Renovation and reuse of the existing 75,000 gsf Kinross Building—which was designed with flexible classroom, office, and lab space— would provide a versatile arrangement open to adaptation, would maximize use of limited land resources on campus (as required by PP 4.8-1[e]).

Implementation of the proposed Project at the existing Kinross Building would not alter the character or composition of the campus. The provision of a 6th through 12th grade school on campus in support of UCLA's teaching, research, and community service mission is complementary to the existing education centers and Lab School that are currently located on campus, as further discussed in Section 4.8, Public Services and Recreation, of this Draft SEIR.

Implementation of the Geffen Academy would require relocation of the existing uses that currently occupy the Kinross Building. As previously discussed, the Kinross Building currently houses KREC and the Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, and administrative research units. It is estimated that approximately 211 administrative staff members who currently occupy the Kinross Building would move to the Occidental Building, recently purchased by UCLA. This building is located at 10889 Wilshire Boulevard, at the corner of Westwood and Wilshire Boulevards, approximately 675 feet east of the project site. Parking is provided at the Occidental Building, so staff members that currently have parking permits would park at the Occidental Building. For relocation of the administrative staff members to the Occidental Building, minimal tenant improvements are anticipated. The Fowler Museum personnel would be relocated to the Life Sciences Building and Library personnel would be relocated to a yet to be determined on-campus location.

A relocation site for KREC has not yet been identified; however, the facility would be relocated and remain operational. UCLA is evaluating existing buildings on and off campus for their potential as relocation sites. Once a site is identified and the scope of work to renovate that site/space is defined, a separate CEQA evaluation will be prepared for design approval, as appropriate.

As previously described, the existing Kinross Building occupants would be relocated, with the accommodation of these UCLA departments elsewhere on or near campus. There would be no land use impacts associated with the proposed relocations. The relocation of academic and staff employees is common practice at UCLA. The academic program is constantly evolving and benefits from locational synergies of like or varied faculty. Programs that start as intellectual Centers or Institutes, often times become full departments that are then affiliated with the College of Letters & Science or another School (e.g., School of Engineering).

As shown in the aerial photograph provided in Figure 3-3 in Section 3.0, Project Description, of this Draft SEIR, the project site is surrounded by existing parking, commercial/retail, and office uses, including the Kinross South Building immediately south of and adjacent to the project site.

Additionally, the approved Wilshire Gayley Project site is located at the northwest corner of Gayley Avenue and Wilshire Boulevard. This off-campus, private development has been approved and entitled to develop three possible options: a hotel, condominium building, and apartment units. Based on the analysis presented in the Initial Study included in Appendix A, and in the respective sections of this Draft SEIR, the proposed Project would not create other land use impacts, consistent with the findings of the March 2009 LRDP Amendment Final EIR.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to other land use impacts.

4.4.4 CUMULATIVE IMPACTS

This section evaluates the potential for the proposed Project to result in a significant contribution to cumulative land use impacts associated with the approval of future development that is inconsistent with applicable land use plans or policies adopted for the protection of the environment. As outlined in the March 2009 LRDP Amendment Final EIR, the geographic context for the analysis of cumulative land use and planning impacts includes that portion of the City of Los Angeles that is located west of downtown Los Angeles, south of the Santa Monica Mountains, and north of the Interstate 10 freeway, which acts as a natural boundary for land use considerations. This area encompasses the *Westwood Community Plan* area and parts of adjacent community plan areas and contains a mix of land uses, including commercial, residential, industrial, and institutional. The analysis accounts for anticipated cumulative growth within this geographic area, including implementation of the remaining development allocation on campus, the above-mentioned areas of Los Angeles, and development of the related projects (see Table 4.8-4, List of Related/Cumulative Projects, in Section 4.8, Transportation and Traffic, of this Draft SEIR).

It is anticipated that development of the identified off campus related projects, and regional growth in general, will be reviewed for consistency with adopted land use plans and policies by the City of Los Angeles. The City would do this in accordance with the requirements of CEQA, the State Zoning and Planning Law, and the State Subdivision Map Act; all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, cumulative impacts associated with inconsistency of future development with adopted plans and policies would be less than significant. In addition, the proposed Project's contribution to such cumulative impacts is less than significant because, as noted above, the proposed Project is compatible with surrounding on- and off-campus land uses and is also consistent with applicable plans, policies, and regulations. On-campus cumulative projects under construction (i.e., Engineering VI-Phase 2 Building, Wasserman Football Performance Center, and Ostin Basketball Practice Facility) and proposed projects (Margan Apartments Redevelopment Project) are not in immediate proximity to the project site and have been designed in conformance with applicable plans and policies for development on the UCLA campus. As a result, development of the proposed Project and other on campus development under the 2002 LRDP, as amended in March 2009, would not contribute to any cumulative impacts associated with plan or policy inconsistency.

Consistent with the findings in Section 4.8.4, Cumulative Impacts, in the Land Use and Planning Section of the March 2009 LRDP Amendment Final EIR, cumulative land use impacts are considered to be a less than significant impact.

4.4.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, the proposed Project would not result in substantial changes or circumstances that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to land use and planning. Additionally, analysis of the proposed Project revealed that no new information of substantial importance would change the evaluation of significant effects previously examined in the LRDP Final EIR. Further, significant effects previously examined would not be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to land use and planning.

4.4.6 REFERENCES

Dudman, T. 2016 (March 28). Personal communication. Email from T. Dudman (University of California, Los Angeles) to T. Andersen (BonTerra Psomas) entitled "2015 Cordon Counts".

Los Angeles, City of. 2001 (re-adopted). *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan.* Los Angeles, CA: the City. http://cityplanning.lacity.org/cwd/framwk/fwhome0.htm.

———. 1999 (September). *Westwood Community Plan Update.* Los Angeles, CA: the City. http://cityplanning.lacity.org/complan/pdf/wwdcptxt.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2016 (April 10, access date). Purple Line Extension. Los Angeles, CA: Metro. https://www.metro.net/projects/westside/.

Southern California Association of Governments (SCAG). 2016a (April 21, access date). About SCAG, Organizational Responsibilities. Los Angeles, CA: SCAG. http://www.scag.ca.gov/about/Pages/Home.aspx.

———. 2016b (April 21, access date). Intergovernmental Review. Los Angeles, CA: SCAG. https://scag.ca.gov/programs/Pages/IGR.aspx.

———. 2016c (April). *The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life*. Los Angeles, CA: SCAG.

———. 2012 (April). *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy.* Los Angeles, CA: SCAG.

University of California, Los Angeles (UCLA). 2016. Overview (UCLA Graduate School of Education & Information Studies). Los Angeles, CA: UCLA. https://gseis.ucla.edu/about/.

———. 2009a (March).*University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121).

———. 2009b (March). *University of California, Los Angeles 2002 Long Range Development Plan.* Los Angeles, CA: UCLA.

———. 2009c (July).*University of California, Los Angeles, Physical Design Framework.* Los Angeles, CA: UCLA.

4.5 NOISE AND VIBRATION

Noise and vibration issues are addressed in Section 4.9 of the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR). This section evaluates the potential noise and vibration impacts resulting from implementation of the proposed Geffen Academy. This includes the potential to cause a substantial temporary or permanent increase in ambient noise levels within or around the Geffen Academy site or to expose surrounding noise-sensitive receptors to excessive noise levels or vibration levels. The purpose of this analysis is to ensure that the proposed Project is compatible with the environment from a noise perspective and to evaluate the noise impacts of the proposed Project on the surrounding community. Sources used in the preparation of this section include the Project Description presented in Section 3.0 of this Draft Subsequent EIR (SEIR), project plans, and the proposed Project's Traffic Impact Analysis included in Appendix D of this Draft SEIR (Crain 2016).

Relevant elements of the proposed Project related to construction noise and vibration include the use of diesel-powered heavy equipment during construction; use of heavy trucks for export of soil and demolition material; and transport of construction equipment/materials.

With respect to operational noise, the proposed Project would convert the existing approximately 75,000-square-foot (sf) Kinross Building from a multi-use facility to a school for 6th through 12th grade students. Renovation would primarily consist of internal modifications, including, but not limited to, demolition of existing walls and installation of new walls, surfaces, lighting, and upgrading of mechanical, electrical, and plumbing systems. The most notable external modifications would be the construction of a new main entry along the western facade and the construction of a new driveway off Kinross Avenue. The proposed Project would generate an estimated 1,040 gross vehicle trips per weekday (Crain 2016).

No comments were submitted in response to the Notice of Preparation (NOP) regarding noise or vibration.

4.5.1 ENVIRONMENTAL SETTING

Fundamentals of Sound and Environmental Noise

Sound is a vibratory disturbance that is created by a moving or vibrating source and is capable of being detected by the ear. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. Frequencies are heard as the pitch or tone of sound. High-pitched sounds produce high frequencies; low-pitched sounds produce low frequencies. Sound pressure levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is approximately 60 dBA, while loud jet engine noises at 1,000 feet equate to 100 dBA, which can cause serious discomfort. Table 4.5-1 shows the relationship of various noise levels in dBA to commonly experienced noise events.

TABLE 4.5-1
NOISE LEVELS FOR COMMON EVENTS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 300 m (1,000 ft)	100	
Gas Lawn Mower at 1 m (3 ft)	90	
Diesel Truck at 15 m (50 ft) at 80 km/hr (50 mph)	80	Food Blender at 1 m (3 ft), Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower at 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area, Heavy Traffic at 90 m (300 ft)	60	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	50	Large Business Office, Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

dBA: A-weighted decibels; m: meter; ft: feet; km/hr: kilometers per hour; mph: miles per hour
Source: Caltrans 2013

The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two noise sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (Caltrans 2013).

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider the fact that the effect noise has upon people is largely dependent upon the total acoustical energy content of the noise and the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- **L_{eq}:** the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time.
- **CNEL:** the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA “weighting” added to the hours between 10:00 PM and 7:00 AM and an additional 5 dBA weighting added to hours between 7:00 PM and 10:00 PM to account for noise sensitivity in the nighttime and evening, respectively.
- **L_{max}:** the maximum instantaneous noise level experienced during a given period of time.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding also help intensify or reduce the noise level at any given location. Sound from a small localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. For point sources, such as heating, ventilation, and air conditioning (HVAC) units or construction equipment, the sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of the distance (i.e., if the noise level is 70 dBA at 25 feet, it is 64 dBA at 50 feet). Vehicle movement on a road makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The sound level attenuates or drops off at a rate of 3 dBA per doubling of distance for line sources. Noise levels may also be reduced by intervening structures—generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA.

Fundamentals of Environmental Vibration

Vibration is sound radiated through the ground. The ground motion caused by vibration is measured as peak particle velocity (ppv) in inches per second or as vibration decibels (VdB). The general human response to different levels of groundborne vibration velocity levels is described in Table 4.5-2, Human Response to Different Levels of Groundborne Vibration.

TABLE 4.5-2
HUMAN RESPONSE TO DIFFERENT LEVELS OF GROUNDBORNE VIBRATION

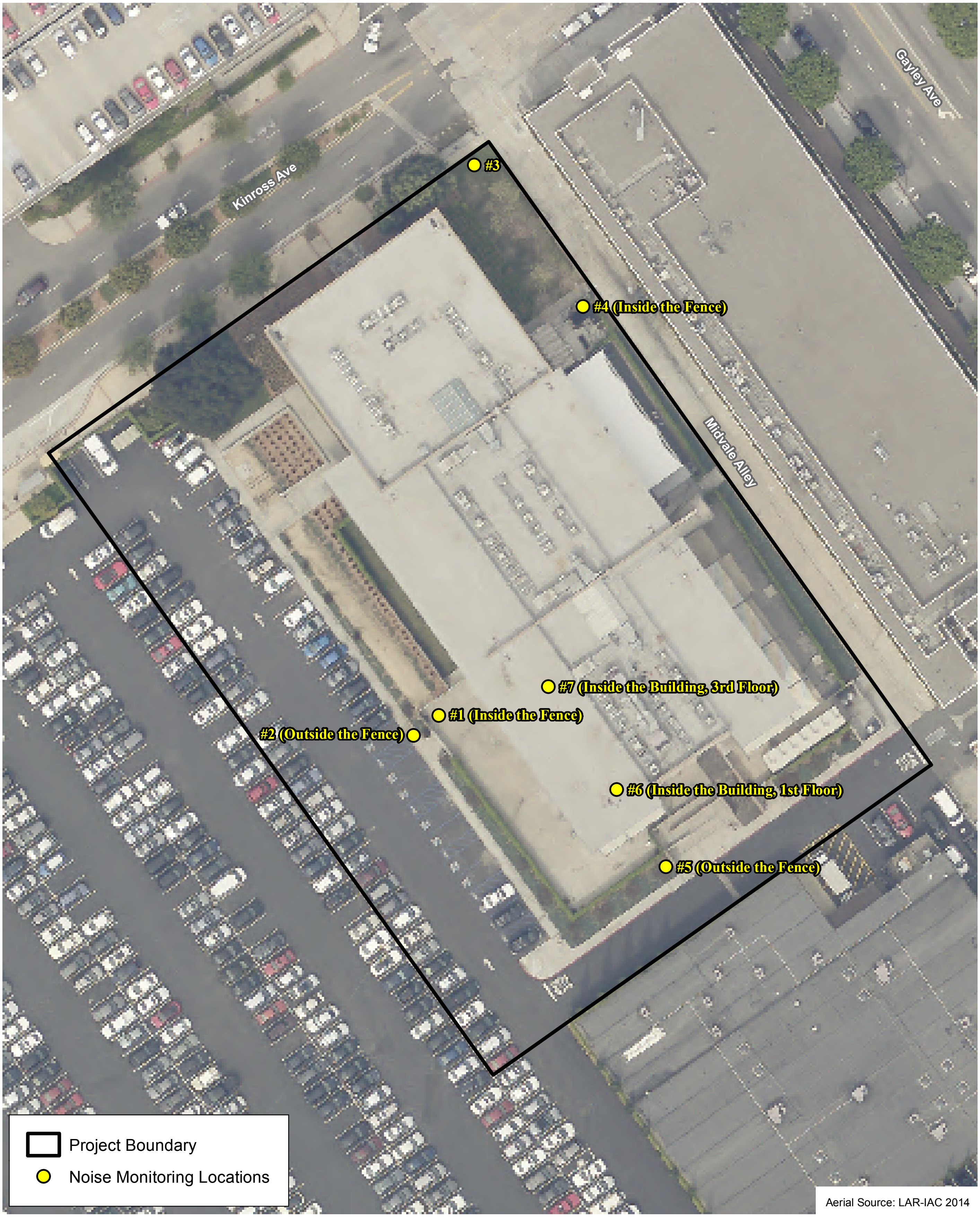
Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.
VdB: vibration decibels	
Source: FTA 2006.	

Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Typically, groundborne noise is a concern that occurs with railroad and similar transit sources. As there are no railroad or transit noise and vibration sources within the campus area, the impact of groundborne noise is not addressed in this Draft SEIR.

Existing Noise Levels

Existing ambient daytime noise levels were measured at seven locations at the project site on Thursday, January 14, 2016, between 1:26 PM and 3:48 PM by Psomas in order to identify representative existing noise levels. The noise measurement locations are identified in Figure 4.5-1 and the noise survey data is provided in Appendix C. The noise levels were measured using a Larson-Davis Laboratories Model 831 and Model LXT integrating sound level meters, both of which satisfy the American National Standards Institute for general environmental noise measurement instrumentation. The sound level meters and microphones were mounted on tripods five feet above the ground and equipped with during all measurements. The sound level meters were programmed in “slow” mode to record noise levels in “A” weighted form. Meteorological conditions during the measurement periods were favorable and representative of the typical conditions, with daytime temperatures of approximately 51–52 degrees Fahrenheit (°F) and minimal wind.

The average (L_{eq}), maximum (L_{max}), and minimum (L_{min}) noise levels measured at each location are identified in Table 4.5-3. Noise sources included traffic on Wilshire Boulevard, aircraft, emergency vehicle sirens, and the loud noise from a motorcycle and a car that appeared to have no mufflers.



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Noise Monitoring Locations

Figure 4.5-1

Geffen Academy at UCLA

N W E S

60 30 0 60 Feet

BonTerra PSOMAS

(Rev: 05-02-2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\EIR\ex4.5-1_NoiseMonitoringLocations_20160502.pdf

TABLE 4.5-3
MEASURED NOISE LEVELS

Monitoring Location	Location	Time/Duration	Noise Levels (dBA)			Notes
			L_{eq}	L_{max}	L_{min}	
1	Inside the fence on west side of Kinross Building	1:36 PM/20 minutes	63.1	76.9	58.3	Two nearby sirens, aircraft overhead
2	Outside the fence on west side of Kinross Building	3:28 PM/20 minutes	63.7	85.0	55.4	One nearby siren, aircraft overhead
3	Northeast corner of project area	3:05 PM/20 minutes	67.3	88.6	56.9	Bus acceleration noise, backhoe intermittently on Kinross Avenue, loud car with no mufflers
4	Inside the fence on east side of Kinross Building	2:44 PM/20 minutes	62.9	73.0	58.8	Backhoe working on Kinross Ave, pedestrians talking, noise from recreation center, noise from electrical room
5	Outside the fence on south side of Kinross Building	2:09 PM/20 minutes	57.5	71.6	54.1	Motorcycle noise
6	Inside Kinross Building, southwest corner of first floor	2:07 PM/27 minutes	55.5	77.5	37.2	People walking and talking, doors closing, L_{90} is 39 dBA
7	Inside Kinross Building, west side of third floor	1:26 PM/36 minutes	37.9	51.2	32.8	Room close to window on third floor

dBA: A-weighted decibel(s); L_{eq}: equivalent energy noise level; L_{max}: maximum noise level; L_{min}: minimum noise level.
Note: Noise survey data is provided in Appendix C.

Monitoring locations 1 through 5, on the perimeter of the building, had average noise levels ranging from approximately 58 to 67 dBA L_{eq}. Monitoring locations 6 and 7 were taken inside the building to evaluate the noise reduction characteristics of the building. The average noise level at location 6 was approximately 56 dBA L_{eq}, with the noise level primarily from sources inside the building. As shown in Table 4.5-3, the L_{90} noise level, which is used as a measurement of background noise or, in this case, noise inside the building from outside sources, was 39 dBA. The noise level inside the building at location 7 was approximately 38 dBA L_{eq}.

Helicopter Noise

Noise is generated by helicopter operations serving the Ronald Reagan University of California, Los Angeles (UCLA) Medical Center (RRUCLAMC). The helistop is located on the roof of the RRUCLAMC (located southwest of the Charles E. Young Drive South and Westwood Boulevard intersection). Current helicopter operations are limited to emergency patient transport and to support the medical center's organ transplant program. Non-emergency flights are not allowed. As shown in Figure 4.9-4 of the March 2009 LRDP Amendment EIR, the estimated annual 65 dBA CNEL noise level contour for the helicopter operations is approximately 0.4 mile north of the project site.

Construction Noise Controls

The campus generally limits the hours of exterior construction activities from 7:00 AM to 9:00 PM Monday through Friday and 8:00 AM to 6:00 PM on Saturday, consistent with the City of Los Angeles Construction Noise Ordinance (City of Los Angeles 2008). Transportation routes are prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.

Sensitive Noise Receptors

Noise-sensitive receptors are generally considered to be those people engaged in activities or utilizing land uses that may be subject to the stress of significant interference from noise. Activities usually associated with sensitive receptors include, but are not limited to, talking, reading, and sleeping. Designated on-campus sensitive noise receptors include hospital, residential, library, day care, and elementary school uses; these uses are identified in Figure 4.9-2 of the March 2009 LRDP Amendment Final EIR. As shown, the nearest sensitive receptor to the project is the playground at the Rehabilitation Center for the Chile Development and Intervention Program, which is 600 feet northwest of the project site. The Weyburn Terrace Apartment Building is located approximately 700 feet northwest of the project area. Additionally, the noise analysis of the March 2009 LRDP Amendment Final EIR considers classrooms and office buildings as sensitive noise receptors.

4.5.2 REGULATORY FRAMEWORK

City of Los Angeles

UCLA is part of the University of California, a constitutionally created entity of the State of California. As a constitutional entity, the University of California is not subject to municipal regulations, such as the County and City General Plans. Nevertheless, UCLA has considered local plans and policies for the communities surrounding the campus. The City of Los Angeles, through the Noise Element of the General Plan, classifies land uses for noise compatibility as acceptable, conditionally acceptable, normally unacceptable, and unacceptable depending on the noise level and land use. Noise levels of less than 60 dBA CNEL are classified as acceptable for land uses that are sensitive to noise, such as multi-family residences, schools, libraries, churches, hospitals, nursing homes, and transient lodging (City of Los Angeles 1999). Noise levels from 60 to 70 dBA CNEL are “conditionally acceptable” for noise-sensitive uses, meaning a detailed analysis of noise mitigation is required and needed noise insulation features should be included in the project design. Noise levels above 70 dBA CNEL are considered by the City to be “normally unacceptable” or “unacceptable” for noise-sensitive land uses (City of Los Angeles 1999).

4.5.3 PROJECT IMPACTS AND MITIGATION

Methods

Noise Attenuation over Distance

The distance from the noise source to a receptor is a primary consideration in determining the actual noise level experienced at the receptor. As described above, the rate of noise attenuation depends on whether noise comes from a point or line source and whether the site is hard or soft. The calculation of noise at distances other than the reference distance, as defined below, uses the equation:

$L_D = L_{REF} - K \log(D/D_{REF})$, where

L_D is the noise level at a distance D from the noise source,

L_{REF} is the noise level at a known, or "reference" distance D_{REF} from the source, and

K is a constant that depends on the source type and site conditions. For a point source and a hard site, K=20 and the equation is the mathematical expression for a noise level being reduced by 6 dBA for each doubling of distance from the source. For a point source and a soft site, K=25. For a line source and a hard site, K=10. For a line source and a soft site, K=15.

Construction Equipment Noise

Construction noise is related primarily to the use of heavy equipment. Noise impacts for the concurrent operation of a number of pieces of mobile construction equipment are assessed as emanating from the center of the equipment activity or construction site. The analysis of construction noise considers both maximum and average noise levels. Average equipment noise levels are less than maximum levels because equipment is operated at full power for only part of an operating period. The fraction of operating time at full power is defined as the duty cycle or acoustic usage factor. The average noise level, L_{eq}, is related to the maximum noise level, L_{max}, by the following equation:

$L_{eq} = L_{max} + 10 \log(UF)$, where,

L_{eq} is the average noise level from a piece of construction equipment at 50 feet,

L_{max} is the maximum noise level from a piece of construction equipment at 50 feet, and

UF is the acoustic usage factor.

L_{max} and UF (duty cycle) data are specified in the construction noise analysis under Threshold 5.3.

Vibration

Vibration impacts are estimated using the following equation:

$L_v(D) = L_v(25) - 30 \log(D/25)$ where

$L_v(D)$ is the vibration level in VdB of a piece of equipment at a distance D, and

$L_v(25)$ is the vibration level of the piece of equipment at a distance at the reference distance of 25 feet.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A) (UCLA 2016) and circulated with the NOP concludes that implementation of the proposed Project, which is a component of the LRDP, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The Initial Study noted that the project site is neither within an airport land use plan nor within two miles of a public airport or public use airport. As discussed above, the estimated annual 65 dBA CNEL noise level contour for the RRUCLAMC helicopter operations is approximately 0.4 mile north of the project area.

Thresholds Addressed in the Draft SEIR

The Initial Study concludes that additional project-level analysis of the following thresholds of significance is required in this Draft SEIR. According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact on the noise environment if it will:

- Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.
- Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction).

The State CEQA Guidelines do not define the levels at which permanent and temporary increases in ambient noise are considered “substantial”. For the purposes of this analysis, noise impacts would be considered significant if the project results in the following:

- A permanent (i.e., long-term operational) increase of 3 dBA in CNEL to or within the “normally unacceptable” or “clearly unacceptable” category or any 5 dBA or greater noise increase. The “normally unacceptable” or “clearly unacceptable” categories are residential and school areas where the ambient noise level exceeds 70 dBA CNEL. This threshold is consistent with the *Los Angeles CEQA Thresholds Guide* for operational noise (City of Los Angeles 2006).
- Construction activities lasting more than one day that increase the ambient noise levels by 10 dBA or more at any on-campus or off-campus noise-sensitive location within 500 feet of the construction site. This is consistent with the *Los Angeles CEQA Thresholds Guide* threshold for construction noise impacts (City of Los Angeles 2006). As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following Programs, Practices, and Procedures (PPs) and Mitigation Measures (MMs) were adopted as part of the March 2009 LRDP Amendment Final EIR and are incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.9-6(a) *The campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.*

PP 4.9-7(a) *To the extent feasible, construction activities shall be limited to 7:00 AM to 9:00 PM Monday through Friday, 8:00 AM to 6:00 PM on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.*

PP 4.9-7(b) *The campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.*

PP 4.9-7(c) *The campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.*

PP 4.9-7(d) *The campus shall continue to conduct regular meetings with on-campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.*

Threshold 5.1	Would the project result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

As discussed in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR, the University of California is not subject to municipal regulations, such as the County and City General Plans. Nevertheless, UCLA has considered local plans and policies for the communities surrounding the campus. The City of Los Angeles, through the General Plan Noise Element, classifies land uses for noise compatibility as Normally Acceptable, Conditionally Acceptable, Normally Unacceptable, and Clearly Unacceptable depending on the noise level and land use. For schools, exterior noise levels ranging from 50 to 60 dBA CNEL are classified as Normally Acceptable and noise levels ranging from 60 to 70 dBA CNEL are classified as Conditionally Acceptable. As shown in Table 4.5-3, average daytime exterior noise levels at the Kinross North Building range from approximately 58 to 67 dBA L_{eq}. CNEL noise levels in urban settings are typically 2 dBA higher than average daytime noise levels; thus, CNEL noise levels at the Kinross North Building are estimated at 60 to 69 dBA, which is in the Conditionally Acceptable range of the City of Los Angeles standards.

Conditionally Acceptable requires “New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.” The Kinross Building has a fresh air supply system that allows operation with closed windows. Further, as shown in Table 4.5-3 and the accompanying discussion, the interior noise levels due to outside noise sources are less than 40 dBA L_{eq}. Therefore, the proposed Project would be consistent with the City of Los Angeles noise-land use compatibility standards.

Consistent with the findings of the March 2009 LRDP Amendment Final EIR, the proposed Project would not exceed established noise regulations or standards. The impact would be less than significant.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to exposure of persons to noise levels exceeding applicable standards.

Threshold 5.2	Would the project result in the exposure of persons to or generation of excessive groundborne vibration levels?

The analysis of Impacts 4.9-3 and 4.9-4 in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR concluded that buildout of development included in the 2002 LRDP, as amended in March 2009, would result in less than significant impacts related to:

- off-campus vibration during construction from heavy trucks and on- and off-campus vibration during long-term campus operations.

The analysis of Impact 4.9-2 in the March 2009 LRDP Amendment Final EIR determined that buildout of development included in the 2002 LRDP as amended (2009) would result in significant and unavoidable impacts related to:

- on-campus vibration during construction, even with implementation of MM 4.9-2, PP 4.9-2, PP 4.9-7(a), and PP 4.9-7(d).

Following is the analysis of potential vibration impacts from the proposed Project during construction and operation.

Short-Term (Construction) Vibration

As described under the analysis of Impact 4.9-2 in the March 2009 LRDP Amendment Final EIR, construction activities associated with heavy, loaded trucks and similar equipment could generate and expose users or residents of adjacent on-campus buildings to excessive groundborne vibration levels. This impact could be reduced with implementation of MM 4.9-2; however, this mitigation requires the use of medium-sized or smaller equipment, which may not always be feasible. Therefore, the potential impact was determined to be significant and unavoidable. Specifically, construction activities within 43 feet of occupied residence halls, within 34 feet of non-residential/non-sensitive buildings, and within 135 feet of buildings that house sensitive instrumentation or similar vibration-sensitive equipment or activities could result in significant vibration impacts.

The proposed Project would involve the conversion of the existing Kinross Building from a multipurpose use to an educational use. The proposed Project would use diesel-powered and other equipment during construction activities. However, the majority of the work would be interior renovation with minor exterior site modifications, including a proposed exit driveway at Kinross Avenue, an outdoor half-court basketball court, and the new main entry to the building along the western building facade. Exterior demolition and construction would occur primarily on the west side of the Kinross Building. The nearest buildings are the Gayley Center commercial building located east of the project site and the Kinross South Building located south of the project site; neither of these buildings are vibration-sensitive land uses. Jackhammers, backhoes, and paving rollers may be used within 30 feet of the Kinross South Building but these would not be large, heavy equipment. Light equipment may be used near the Gayley Center for exterior modifications but would not result in vibrations notably different from vehicle use of Midvale Alley. Vibration from proposed Project construction activities would neither pose potential structural damage nor annoyance at adjacent buildings. Therefore, based on the analysis conclusions from the March 2009 LRDP Amendment Final EIR, activities in nearby buildings would not be adversely impacted by construction-related vibration and vibration impacts to on-campus and off-campus uses from construction of the proposed Project would be less than significant.

As discussed under the analysis of Impact 4.9-3 in the March 2009 LRDP Amendment Final EIR, heavy trucks would transport materials to and from the campus when construction activities occur. It is anticipated that up to two round-trip truck trips every three days would occur over a period of four weeks to remove demolition debris and up to five round-trip truck trips to remove excavated soil. Additional truck trips would bring material to the site. The primary access route for construction vehicles would be Veteran Avenue from Wilshire Boulevard. These roads routinely carry truck traffic and the additional trucks during project construction would result in a negligible change in vibration levels at adjacent receptors. Trucks would also travel on Kinross Avenue west of the project site; however, there are no sensitive uses along this segment of the roadway. Additionally, smaller construction vehicles could access the project site from Midvale Alley; however, no heavy trucks would use the alley. Therefore, truck activity during construction of the proposed Project would not expose occupants of off-campus buildings to excessive groundborne vibration levels, and this impact would be less than significant, consistent with the finding in the March 2009 LRDP Amendment Final EIR.

Operational Vibration Levels

The proposed Project would not be a source of vibration, nor would it be located near existing sources of vibration, such as rail lines. Therefore, operational activities during implementation of the proposed Project would not expose on- or off-campus persons to excessive groundborne vibration levels, and this impact would be less than significant.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to exposure of persons to or generation of excessive groundborne vibration levels.

Threshold 5.3	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The analysis of Impacts 4.9-5 and 4.9-6 in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR concluded that buildout of development included in the 2002 LRDP, as amended in March 2009, would result in less than significant impacts related to:

- on- or off-campus ambient roadway noise levels with implementation of PP 4.13-1(c) and PP 4.13-1(d) that relate to limits on trip generation and maintenance of trip reduction programs and
- on- or off-campus ambient stationary source noise levels with implementation of PP 4.9-6(a).

Following is the analysis of potential noise impacts from the proposed Project related to operational noise impacts.

Long-Term (Operational) Noise

Traffic Noise

As shown in Section 4.8, Transportation and Traffic, and the Traffic Impact Study provided in Appendix D of this Draft SEIR, the proposed Project would result in an increase of approximately 1,024 new daily trips and an increase of approximately 291 AM peak hour trips and 183 PM peak hour trips in the study area. As shown in Figures 4.8-6 and 4.8-7 in Section 4.8, Transportation and Traffic, of this Draft SEIR, the peak hour traffic would be distributed among various streets in the vicinity. The peak hour traffic volumes would be very low compared to the Without Project traffic peak hour volumes on Veteran Avenue and residential streets near the project site. On Veteran Avenue, north of Wilshire Boulevard, the addition of AM and PM peak hour project traffic to the existing traffic would increase traffic levels by 3 to 7 percent, increasing noise levels by less than 0.3 dBA. Project-generated traffic noise increases on other streets in the area would be similar or less. Thus, there would be no discernible change in noise levels from traffic on off-campus or on-campus roadways. There would be no long-term traffic-related noise impacts resulting from implementation of the proposed Project.

Stationary Sources

New heating, ventilation and air conditioning (HVAC) equipment would be installed at the Kinross Building to replace existing equipment; however; noise generated by the new equipment would be similar to that generated by the existing equipment. Further, in order to provide a relatively quiet environment on the campus that is conducive to the educational process, PP 4.9-6(a) requires that all new stationary sources of noise be shielded from nearby noise-sensitive uses as part of the new building design. Therefore, new HVAC units or similar stationary sources of mechanical noise associated with the proposed Project would not substantially change the existing noise levels in the vicinity of the proposed Project.

Outdoor Noise Sources

The Geffen Academy would include an outdoor half-court basketball court on the west side of the building and other outdoor areas where students would congregate and generate noise typical of outdoor recreational activities. Recreational noise levels may be audible nearby above the background traffic noise because of the difference in types of noise. However, the increase in overall average daytime noise levels would not be substantial. The nearest sensitive receptors, at a distance of 600 feet or more, would not hear the noise from outdoor recreation at the school. The impact would be less than significant. Outdoor noise sources also include landscape maintenance equipment such as lawn mowers and leaf blowers. Landscape maintenance activities currently occur on the project site and nearby area. Noise from landscape maintenance at the Geffen Academy would not be perceptibly different than existing conditions.

In summary, the proposed Project would not result in a substantial permanent increase in noise levels on or off campus, consistent with the findings of the March 2009 LRDP Amendment Final EIR (Impacts 4.9-5 and 4.9-6).

Additional Project-Level Mitigation Measures

No additional mitigation measures are required.

Level of Significance after Mitigation

Less than significant related to a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Threshold 5.4	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The analysis of Impacts 4.9-7 and 4.9-8 in the March 2009 LRDP Amendment Final EIR determined that buildout of the remaining development allocation on campus included in the 2002 LRDP, as amended in March 2009, would result in significant and unavoidable impacts related to:

- on- and off-campus ambient noise levels during construction even with implementation of MM 4.9-7, PPs 4.9-7(a) through 4.9-7(d), and PP 4.9-8.

Following is the analysis of potential construction-related noise impacts from the proposed Project.

Short-Term (Construction) Noise

As described further in Section 3.0, Project Description, under “Construction Activities,” the total construction period for the proposed Project is anticipated to occur for a period of approximately 12 months from September 2016 to September 2017 for the initial school opening, with additional interior renovation occurring through August 2018. Demolition, outdoor construction, and paving within the project area would occur, primarily on the west side of the building. As previously described, there would be occasional truck trips for removal of demolition debris, removal of excavated soils, and delivery of materials to the site.

The primary noise sources during construction are the diesel engines of construction equipment and the impact noise from operations such as pile driving, blasting, and jackhammering. Variation in power is an element in characterizing the noise source level from construction equipment and is accounted for by describing the full power or maximum noise level and the duty cycle. Typical maximum noise levels and duty cycles of representative types of equipment are listed in Table 4.5-4, Typical Maximum Noise Levels and Duty Cycles for Construction Equipment.

During construction, nearby receptors would be exposed to occasional typical noise levels associated with the operation of heavy equipment, including backhoes, forklifts, cranes, and concrete pumps. The Project would not require pile driving or blasting during construction. It is expected that the noisiest construction within the project area would be the operation of jackhammers, loaders, and trucks that would occur in the initial phases of the project, associated with the demolition of pavement and excavation for the basketball court and utilities. Subsequently, there would be less use of noisier equipment and noise levels would be lower.

TABLE 4.5-4
TYPICAL MAXIMUM NOISE LEVELS AND DUTY CYCLES FOR CONSTRUCTION EQUIPMENT

Equipment	Noise Level (dBA) at 50 ft	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Chain Saw	85	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 KVA or less)	70	50%
Generator (more than 25 KVA)	82	50%
Grader	85	40%
Jackhammer	85	20%
Mounted Jackhammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%

dBA: A-weighted decibels; ft: feet; KVA: kilovolt amps
Note: Machinery equipped with noise-control devices or other noise-reducing design features do not generate the same level of noise emissions as that shown in this table.
Source: Thalheimer 2000.

Construction equipment noise would not be constant because of the variations of power, cycles, and equipment location. A jackhammer operating at a distance of 30 feet from the Kinross South Building would generate intermittent noise levels of 89 dBA L_{max}. A backhoe and dump truck operating at an average distance of 50 feet from a nearby building would generate an average noise level of 81 dBA L_{eq} with occasional maximum noise levels of 85 dBA. Thus, construction equipment noise would be audible at the nearby buildings. Although construction activities in proximity to nearby buildings would be minimal, these construction activities would temporarily increase ambient noise levels, which range from 58 to 67 dBA L_{eq} (Table 4.5-3), by more than 10 dBA. This would be a potentially significant impact.

Continued compliance with PP 4.9-7(a) (construction hour limits); PP 4.9-7(b) (muffling or shielding of construction equipment); PP 4.9-7(c) (stationary construction equipment located to direct noise away from sensitive receptors; PP 4.9-7(d) (conduct meetings with on-campus constituents); and PP 4.9-8 (conduct meetings with off-campus constituents), would minimize construction noise impacts from the proposed Project to the existing on-campus and off-campus uses. However, these actions would not ensure that the construction noise level increase would be less than 10 dBA at all sensitive areas. Therefore, this temporary impact would be significant and unavoidable, consistent with the findings of the March 2009 LRDP Amendment Final EIR.

It should also be noted that the project site is adjacent to the location for the approved Wilshire Gayley Project. The 2014 Addendum to the Wilshire Gayley EIR states construction would have a duration of about 30 months, with the construction phases generating the most heavy-duty diesel vehicle usage, such as grading and excavation, lasting no more than a year (City of Los Angeles 2014). The Wilshire-Gayley EIR estimated that the maximum construction noise at a receptor approximately 500 feet south of the Wilshire-Gayley site would be 62 dBA L_{eq}. Based on this data, construction noise from the Wilshire Gayley Project could reach levels of approximately 82 dBA L_{eq} at the Kinross Building (proposed Geffen Academy). This would represent a potential temporary increase in the ambient noise levels of more than 10 dBA at the Kinross Building and future Geffen Academy, should construction of the Wilshire Gayley Project occur. The potential for this on-campus use to be exposed to construction-related noise levels is a potentially significant impact for which there is no feasible mitigation; UCLA cannot require mitigation be implemented for this off-campus project. Therefore, this temporary impact would be significant and unavoidable, consistent with the findings of the March 2009 LRDP Amendment Final EIR, which identified the potential for construction-noise related impacts to on-campus uses.

Additional Project-Level Mitigation Measures

No additional mitigation measures are available to reduce significant and unavoidable construction-related noise impacts.

Level of Significance after Mitigation

The proposed Project would result in a significant and unavoidable impact related to a substantial temporary or periodic increases in ambient noise levels at on- and off-campus uses above existing levels. This impact was adequately addressed in the March 2009 LRDP Amendment Final EIR and Statements of Overriding Considerations were adopted by the Board of Regents of the University of California as part of the approval of the Final EIR for the significant and unavoidable construction-related noise impacts resulting from construction anticipated in the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part.

4.5.4 CUMULATIVE IMPACTS

Noise, by definition, is a localized phenomenon and diminishes in magnitude as distance from the source increases. Consequently, only projects and growth expected to occur in the immediate area of a project site would likely contribute to cumulative noise impacts (construction and operation).

With respect to construction noise, proposed Project construction activities combined with future potentially concurrent construction in the area, including construction of the approved Wilshire

Gayley Project, could result in a cumulatively significant impact in terms of substantial temporary or periodic increases in ambient noise levels. It is not known when construction of the Wilshire Gayley Project will actually occur; however, the 2014 Addendum to the Wilshire Gayley EIR states construction would begin in 2016 with a duration of about 30 months, with the construction phases generating the most heavy-duty diesel vehicle usage, such as grading and excavation, lasting no more than a year (City of Los Angeles 2014). Therefore, it is possible that construction of the proposed Project, which is expected to begin in the Fall 2016, could overlap with construction for the Wilshire Gayley Project. The threshold for construction noise impacts is whether an increase in 10 dBA or more would occur. As described above under the analysis for Threshold 5.4, construction of the proposed Project and the Wilshire Gayley Project could result in short-term increases of construction noise that exceed 10 dBA. Therefore, if there was concurrent construction of these projects, the combined noise increase would also exceed 10 dBA. The impact would be temporary and cumulatively significant.

The cumulative impacts analysis in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR concluded that buildout of development analyzed in the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part, would result in less than significant impacts related to cumulative operational noise impacts. As described in Threshold 5.3 of this Draft SEIR, traffic generated by the proposed Project would increase traffic noise levels by less than 0.3 dBA, which would be less than cumulatively considerable.

With regard to stationary sources, as described in Threshold 5.3, new Geffen Academy HVAC would replace existing units and PP 4.9-6(a) requires that all new stationary sources of noise be shielded from nearby noise-sensitive uses. The Wilshire Gayley EIR states that major mechanical and electrical equipment would be located within the building on the third level, which would provide noise shielding to the exterior. Therefore, stationary source noise resulting from the proposed Project would not be cumulatively considerable. Consistent with the March 2009 LRDP Amendment Final EIR, cumulative operational noise impacts would be less than significant.

4.5.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR. The Project would not result in new or substantially more severe significant effects related to noise or vibration. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to noise or vibration.

4.5.6 REFERENCES

California Department of Education (CDE). 2015 (last reviewed, October 2). *California Code of Regulations,* Division 1, Chapter 13, Subchapter 1, Section 14010. Sacramento, CA: CDE. http://www.cde.ca.gov/ls/fa/sf/title5regs.asp/.

California Department of Transportation (Caltrans). 2013 (September). *Technical Noise Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA: Caltrans.

Crain & Associates (Crain). 2016 (April 21). *Draft Traffic Impact Study for the Proposed UCLA Geffen Academy Project in Westwood Village, City of Los Angeles.* Culver City, CA: Crain.

Los Angeles, City of. 2014 (October). *Addendum to the Certified EIR, Westwood Community Plan Area, Council District 5, The Wilshire Gayley, 10951–10955 Wilshire Boulevard and 1151–1157 Gayley Avenue, Los Angeles 90024.* Los Angeles, CA: the City.

———. 2008 (October, as amended). *City of Los Angeles Municipal Code* (Chapter IX). Building Regulations. Cincinnati, OH: American Legal Publishing Corporation. http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid= amlegal:lamc_ca.

———. 2006. *Los Angeles CEQA Thresholds Guide*. Los Angeles, CA: the City.

Thalheimer, E. 2000. Construction Noise Control Program and Mitigation Strategy as the Central Artery/Tunnel Project. *Noise Control Engineering Journal* 48(5): Sep–Oct. Indianapolis, IN: Institute of Noise Control Engineering.

United States Department of Transportation, Federal Transit Administration (FTA). 2006 (May). *Transit Noise and Vibration Impact Assessment, FTA-VA-90-1003-06* (prepared by Harris Miller & Hanson, Inc.). Vienna, VA: HMMH. http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf.

University of California, Los Angeles (UCLA). 2016 (February). *Initial Study/Notice of Preparation of a Draft Environmental Impact Report for the Geffen Academy at UCLA.* Los Angeles, CA: UCLA Campus Capital Programs (Appendix A).

———. 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; Prepared by BonTerra Consulting). Los Angeles, CA: UCLA.

4.6 POPULATION AND HOUSING

This section summarizes existing and forecasted population and housing in the City and County of Los Angeles. This section also presents the existing and projected campus population information.

Data used in preparing this section was derived primarily from the Southern California Association of Governments' (SCAG's) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and associated Regional Growth Forecasts (SCAG 2016) and information compiled by the University of California, Los Angeles (UCLA). Full bibliographic entries for all reference materials are provided in Section 4.6.6 (References) of this section.

Relevant elements of the proposed Project include an increase in the on-campus population. It is estimated that the proposed Geffen Academy would accommodate up to 620 new students in grades 6 through 12 by the 2020–2021 academic year and approximately 109 new faculty and staff (i.e., new employees) located at the project site. In addition to the new students and staff that could be generated by the proposed Project, the campus has established a new 3-Quarter Average Weekday (regular session) Population Baseline for academic year 2014–2015. This includes population projections through 2020–2021, which is in line with the full buildout/enrollment of the proposed Project. This is further discussed in Section 4.6.1, below.

The proposed Project does not involve the development of new housing or removal of existing housing; therefore, housing is not further discussed in this section. There were no comments received on the Notice of Preparation (NOP) or during the scoping process regarding population and housing.

4.6.1 ENVIRONMENTAL SETTING

Section 4.10, Population and Housing, of the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR) provides information regarding population and housing at UCLA and in the City of Los Angeles as applicable at the time the LRDP Final EIR was prepared. Updated campus, local, and regional population information is provided below.

Existing and Projected Population and Employment

City of Los Angeles Subregion and City of Los Angeles

Regional and local demographic data provided in the March 2009 LRDP Amendment Final EIR (i.e., population and housing) was based on the SCAG data used as the basis of the 2008 RTP, as it was the most recent and relevant data set available at that time. It should be noted that SCAG prepared the 2012 RTP/ SCS to supersede the 2008 RTP; the 2012 RTP/SCS was adopted in April 2012. In addition to meeting federal and State transportation planning requirements, the 2012 RTP/SCS includes a chapter that complies with California's Senate Bill (SB) 375 mandate for a regional SCS. Per SB 375, the RTP/SCS must coordinate transportation and land use planning in a manner that results in greenhouse gas (GHG) emission reductions sufficient to meet 2020 and 2035 targets set by the California Air Resources Board (CARB). Further, the SCAG 2016–2040 RTP/SCS and accompanying Program EIR (PEIR) were adopted by SCAG on April 7, 2016.

The SCAG RTP/SCS depends on an accurate and credible forecast for future growth in population, housing, and employment. The integrated growth forecast at the regional and small geographic area level is the basis for developing the RTP/SCS. In developing regional growth forecasts, SCAG coordinates extensively with Counties and Cities to gain local input on the integrated population, household, and employment growth forecast. The demographic and growth forecasts provided in the 2016 RTC/SCS are the currently adopted population, housing, and employment forecasts for the six-county region, including Los Angeles County. SCAG's 2016–2040 regional growth forecasts for the City of Los Angeles and Los Angeles County for population and employment are shown in Table 4.6-1; the proposed Project does not involve the development of new housing.

TABLE 4.6-1
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS 2016 REGIONAL GROWTH FORECASTS FOR THE CITY OF LOS ANGELES AND LOS ANGELES COUNTY

	Year			Change 2015–2040	
	2012	**2015**	**2040**	**Growth**	**Percent**
Population					
City of Los Angeles	3,845,500	3,980,423[a]	4,609,400	628,977	15.8
Los Angeles County	9,923,000	10,159,000	11,514,000	1,355,000	13.3
Employment					
City of Los Angeles	1,696,400	1,867,900[b]	2,169,100	301,200	16.1
Los Angeles County	4,246,000	4,463,000	5,226,000	763,000	17.1

[a] DOF 2016.
[b] EDD 2016c.

Source (all information, unless stated otherwise): SCAG 2016.

As shown in Table 4.6-1, the SCAG growth forecasts indicate that Los Angeles County had a total population of approximately 10,159,000 individuals in 2015. By 2040, SCAG forecasts that the County's total population will reach about 11,514,000 individuals, a growth of approximately 13.3 percent. The City of Los Angeles had a total population of approximately 3,980,423 individuals in 2015, and SCAG forecasts that the City's total population will reach approximately 4,609,400 by 2040, a growth of approximately 15.8 percent. The employment growth in the County and the City is also expected to increase by 16.1 and 17.1 percent, respectively, during the same time frame.

UCLA Campus

The on-campus population, or the number of individuals either enrolled, employed, or visiting the campus (represented by head count), consists of students, academic employees, staff employees, and other individuals (e.g., visitors). Students make up the largest head count group, followed by staff and academic employees. The on-campus student population includes total general campus and health science enrollment and excludes off-campus health science students, students studying abroad, and students in self-supporting evening programs. Staff and academic employees who work at off-campus locations or outside normal business hours are also excluded from the on-campus population.

On-campus population figures are adjusted to reflect the fact that all students, faculty, and staff who may be on campus at some time will not be on campus simultaneously on any given day. This is because weekday attendance patterns for students and employees vary due to class and teaching schedules, vacations, sick leave, and absences from campus for travel, among other reasons, and other less than full-time work or study schedules. Due to these variations, the number of enrolled students and employed individuals on campus on any given weekday is less than the total number of people enrolled and employed. The average three-quarter weekday population adjusts the total on-campus population to represent the average number of people (students and employees) physically on campus on any given weekday.

While the campus operates 365 days a year, the academic calendar consists of the regular session (fall, winter, and spring 3-quarter average) and summer session (12 weeks). The average weekday population during the 12-week summer session is typically between 60 and 65 percent of the average weekday population during the regular session. Therefore, for purposes of analysis in this EIR, the regular session population is used as the basis for the impact analysis.

Table 4.6-2 presents the current campus population baseline data for 2014–2015, showing a total 3-quarter weekday population of 67,233. Because the March 2009 LRDP Amendment Final EIR had an estimated baseline population year of 2007–2008, with estimated projections through 2013–2014, this information has become outdated.

Therefore, a new baseline is being established for 2014-2015, as well as new future projections for Fall 2016, Fall 2017 and 2020-2021[1]. Following the projected population for year 2013-2014, the campus has experienced growth in the three categories of student, employees, and other individuals. Despite this growth, which has led to the new population baseline, the analysis in this SEIR shows that the campus is still operating within the envelope of capacities and demands for resources such as housing, water, electricity, etcetera, that were analyzed in the March 2009 LRDP Amendment Final EIR. This Population and Housing section describes the baseline and projected future populations of the campus. Further, as analyzed within this Draft SEIR, Sections 4.4 (Land Use and Planning), 4.7 (Public Services and Recreation), 4.8 (Transportation/Traffic), and 4.9 (Utilities and Service Systems), describe the existing conditions (with the current 2014-2015 population) of the campus and the consistencies of the current conditions with the capacities and demands projected in the March 2009 LRDP Amendment Final EIR.

Also included in Table 4.6-2 are the staff and guest (Other Individuals) populations for the previously certified Meyer and Renee Luskin Conference and Guest Center EIR ("Luskin Center"); the Luskin Center is scheduled to open in summer 2016. The Luskin Center's overnight guests of the facility and the conferees are shown as a stand-alone line item under Other Individuals, whereas the 171 full-time and 40 non-student part-time employees, who will also be UCLA staff, are included in the total staff population numbers. For the proposed Geffen Academy, the students are considered "Other Individuals" because they are not subject to the variations in day-to-day academic attendance that is typical of University-level students. As stated above, the UCLA students are adjusted for class and teaching schedules, vacations, sick leave, and absences from campus for travel, among other reasons, and other less than full-time work or study schedules. However, the Geffen Academy employees would also be UCLA employees, thus they are included in the staff population numbers and adjusted accordingly.

As shown in Table 4.6-2, for purposes of this Draft SEIR, the campus 3-quarter weekday (regular session) population for fall 2020, with the proposed Geffen Academy, is conservatively projected to be 74,132 individuals. It is to be noted that the UCLA campus does not have a population cap and one has never been initiated for the campus over its 97-year history.

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[1] The academic school year of 2020-2021 is used because it is the final buildout/enrollment year of the proposed Geffen Academy project that includes 620 students and 109 faculty and staff on campus

TABLE 4.6-2
UCLA ON-CAMPUS POPULATION 2014–2020
3-QUARTER REGULAR SESSION AVERAGE WEEKDAY

	Current Baseline 2014–2015	Fall 2016	Fall 2017	Fall 2020
Students:				
Undergraduate and Graduate[a]	32,944	33,563	33,872	34,181
Employees:				
Academic[b]	5,306	5,452	5,528	5,759
Staff[c]	17,162	18,018	18,469	19,890
Other Individuals:				
Visitors[d]	11,820	12,146	12,313	12,826
Luskin Conference Center Overnight Guests and Conferees[e]	–	856	856	856
Geffen Academy Students[f]	–	–	160	620
Total	**67,232**	**70,035**	**71,198**	**74,132**

[a] Starting in fall 2016, the UCLA campus will increase the undergraduate population by 750 students. In fall 2017 and 2018, an additional 375 undergraduate students will be enrolled, per year, for a total increase of 1,500 undergraduate students. This enrollment increase is imbedded in the Student numbers. Students are adjusted for varied class and teaching schedules, vacations, sick leave, absences from campus, and other less than full-time work or study schedules. Also excluded are students in Self-Supporting, Study Abroad, and UCDC programs.

[b] Academic Employees exclude student assistants, sabbatical and other leaves, remote academic, and University Extension.

[c] The Luskin Conference and Guest Center will open in fall 2016 and will increase the staff population by 195 employees. The Geffen Academy Project would potentially open in fall 2017 with 49 new staff, increasing to 109 staff by 2020. These project-related staff increases are included in the Staff population numbers. Staff numbers exclude student staff, remote staff, and evening employees.

[d] Other Individuals (a.k.a., Visitors) include, but are not limited to, Medical Center clinical and affiliated faculty, patients, visitors, volunteers, pre-school (Krieger) and elementary school (UES) children, vendors, contractors, and construction workers.

[e] As stated in the Meyer and Renee Luskin Conference and Guest Center Project Final EIR, the Center's overnight accommodations will generate an estimated 182 daily overnight guests. Additionally, the Center's conference facilities will generate 595 off-campus conferees, for a total visitor population increase of 856 per day.

[f] The Geffen Academy is proposed to add 160 students in fall 2017, in grades 6 and 9. By 2020, the Academy would have a full enrollment of grades 6 through 12 and a total student population of 620 students.

Source: UCLA 2016.

4.6.2 REGULATORY FRAMEWORK

Section 4.10 of the March 2009 LRDP Amendment Final EIR provides a complete discussion of the regulatory framework for population and housing relevant to development on campus. The following discussion focuses on the regulatory information that was presented in the LRDP Final EIR and which is particularly relevant to the proposed Project. This information is updated, as appropriate.

State of California

California Education Code

The University of California Master Plan for Higher Education provides enrollment goals for new and transfer students. The *California Education Code* contains several provisions mandating enrollment access levels. Section 66202.5 of the Education Code states:

> The State of California reaffirms its historic commitment to ensure adequate resources to support enrollment growth, within the systemwide academic and individual campus plans to accommodate eligible California freshmen applicants and eligible California Community College transfer students, as specified in Sections 66202 and 66730.
>
> The University of California and the California State University are expected to plan that adequate spaces are available to accommodate all California resident students who are eligible and likely to apply to attend an appropriate place within the system. The State of California likewise reaffirms its historic commitment to ensure that resources are provided to make this expansion possible, and shall commit resources to ensure that students from enrollment categories designated in subdivision (a) of Section 66202 are accommodated in a place within the system.

Similarly, Section 66011(a) of the *California Education Code* provides that all resident applicants to California institutions of public higher education, who are determined to be qualified by law or by admission standards established by the respective governing boards, should be admitted to either (1) a district of the California Community Colleges, in accordance with Section 76000; (2) the California State University; or (3) the University of California.

Section 66741 of the *California Education Code* requires acceptance of qualified transfer students at the advanced standing level.

California Public Resources Code

Under Section 21080.9(b) of the *California Public Resources Code*, the environmental effects relating to changes in enrollment are to be considered for each campus or medical center of public higher education in the EIR prepared for the LRDP.

California Public Resources Code Section 21080.09(d) states:

> Compliance with this section satisfies the obligations of public higher education pursuant to this division to consider the environmental impact of academic and enrollment plans as they affect campuses or medical centers, provided that any such plans shall become effective for a campus or medical center only after the environmental effects of those plans have been analyzed as required by this

division in a long range development plan environmental impact report or tiered analysis based upon that environmental impact report for that campus or medical center, and addressed as required by this division.

University of California 2016–17 Operating Budget/Enrollment Plan

On November 19, 2015, the University of California (UC) Board of Regents approved a Budget Plan to enroll an additional 10,000 California undergraduates over the next 3 years, including 5,000 freshman and transfer students in the 2016–17 academic year. Under this plan, all nine UC campuses that educate undergraduates will enroll more California students. The increase in enrollment reflects an agreement made with State lawmakers that provides the UC with the fiscal stability it needs to expand access and also to make needed investments in academic excellence. As part of that financial plan, tuition will remain at current levels in 2017 (McMillan 2015).

4.6.3 PROJECT IMPACTS AND MITIGATION

Methods

The following analysis addresses (1) population and employment growth that could occur with implementation of the proposed Project and (2) whether this growth is considered substantial in relation to campus, local, and regional forecasts.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A) and circulated with the NOP concludes that implementation of the proposed Project would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

- Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The existing Kinross Building does not accommodate housing or other overnight accommodations. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not result in any displacement of housing that would necessitate the construction of replacement housing elsewhere.

Thresholds Addressed in this Draft SEIR

The Initial Study concludes that additional project-level analysis of the following threshold of significance is required in this Draft SEIR. According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact related to population and housing if it will:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact Analysis

Threshold 6.1	Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The analysis of Impact 4.10-1 in Section 4.10, Population and Housing, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009, would not result in substantial population growth, either directly or indirectly (i.e., through job creation).

The Geffen Academy is proposed to open for the 2017–2018 school year with approximately 160 students in grades 6 and 9, followed by an enrollment increase up to a maximum of 620 students in grades 6 through 12 by the 2020–2021 school year. The Geffen Academy would continue UCLA's commitment to diversity by serving a broad population of families from different racial, ethnic, linguistic, religious, and socioeconomic backgrounds. It is currently anticipated that a maximum of 50 percent of the students would come from UCLA staff and faculty families and the remainder would come from the larger Los Angeles community. While there would be an increase in the on-campus population from the Geffen Academy, the increase in student population would not represent new population growth in the County or the City. Further, implementation of the proposed Project would not involve the development of any housing units that could generate a direct increase in population in the local area or region.

However, there could be an indirect increase in population resulting from the introduction of new jobs on campus. New faculty and staff would be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees. Remote employees would not be located on site; they are support for faculty for assignments such as reading and grading. Therefore, this analysis takes into consideration full- and part-time staff. Based on preliminary estimates, it is assumed there would be 42 full-time faculty/staff and 7 part-time staff when the Geffen Academy opens for the 2017–2018 school year. With the estimated 620 students by the 2020–2021 school year, it is expected that the employee population would increase to 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees.

Based on the direct-to-indirect employment impact ratio of 0.68 in the March 2009 LRDP Amendment Final EIR, the 109 new full- and part-time employees associated with the proposed Geffen Academy would be expected to generate 74 indirect jobs distributed throughout the County of Los Angeles, for a total employment generation of up to 183 jobs through the year 2020. This is a negligible increase in new jobs when compared to the total existing and projected jobs in the County or even the City of Los Angeles, as shown in Table 4.6-1. It should also be noted that most of the Geffen Academy staff positions involve teaching, educational, and administrative opportunities and the indirect jobs typically involve vocational opportunities that are generally found in most communities and may not offer a unique enough opportunity to induce job seekers to relocate to the area for the sole purpose of filling these positions.

The existing unemployment rate in Los Angeles County is 4.7 percent (EDD 2016a). The unemployment rate for the Los Angeles, Long Beach, Glendale Metropolitan Division (civilian labor force) in 2015 was 6.7 percent and has averaged 8.9 percent over the last 10 years (EDD 2016b). Therefore, it is expected that qualified area residents would fill the vast majority of additional staff positions. Accordingly, it is anticipated that most new staff positions would be filled by persons already residing in the area and would not result in population growth locally or regionally. This impact is less than significant.

As shown in Table 4.6-2, the on-campus 3-quarter weekday (regular session) population is conservatively estimated to increase by 6,900 individuals by fall 2020 (from 67,232 individuals during the 2014–2015 academic year to 74,132 individuals by fall 2020); this represents an increase of approximately 9.5 percent. With the addition of 729 individuals (109 faculty/staff and 620 students) at full buildout, the Geffen Academy would increase the existing regular session weekday on-campus population and the projected population in fall 2020 without the project by approximately 1 percent. Therefore, the proposed Geffen Academy would not induce substantial population growth on campus.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to population and housing.

4.6.4 CUMULATIVE IMPACTS

SCAG's six-county region is the geographic context for the analysis of cumulative population and housing impacts and is based on the use of the regional growth forecasts provided by SCAG in the SCAG 2016–2040 RTP/SCS, which includes growth anticipated to occur under the implementation of the *Los Angeles Citywide General Plan Framework* and development of the related projects provided in Table 4.8-4, Section 4.8, Transportation/Traffic, of this Draft SEIR.

Implementation of the proposed Geffen Academy and other projects in the City of Los Angeles and Los Angeles County would lead to increases in population, housing, and employment. Projected growth (population and employment) in the City of Los Angeles and the County of Los Angeles is shown in Table 4.6-1, and projected growth at the UCLA campus is shown in Table 4.6-2. As shown in Table 4.6-2, UCLA would experience growth on campus with and without the Geffen Academy. By fall 2020, it is projected that there would be an increase in the 3-quarter weekday (regular session) on-campus population of approximately 6,900 individuals compared to existing conditions. This increase includes 1,237 students, 3,181 employees (academic and staff), and 2,482 other individuals.

As discussed above, the proposed Geffen Academy does not involve housing and would not directly induce population growth in the area. Additionally, the projected increases in student enrollment on campus, as shown in Table 4.6-2, can be accommodated in on-campus housing; therefore, no new housing would need to be developed on campus to accommodate the projected increase in student population. The proposed project would not contribute to significant cumulative impacts related to population growth in the region associated with increased housing.

The category of Other Individuals for the campus population includes campus visitors, Luskin Center overnight guests and conferees, and Geffen Academy students. These individuals do not represent a population group that would involve a permanent increase in residents/population in the SCAG region, County, or City. These individuals would already live in the region or would be visiting the region for a limited period of time to engage in activities at the campus. Therefore, the increase in on-campus population associated with the Other Individuals category, including the Geffen Academy, would not contribute to significant cumulative impacts related to population growth in the region.

However, as shown in Table 4.6-2, approximately 3,181 new academic and staff employment opportunities would be generated on campus through the year 2020 (109 associated with the

Geffen Academy and 3,072 elsewhere on campus). With associated indirect growth, there would be potential employment opportunities for 5,344 individuals.[2] As previously identified, the potential increase in population from the Geffen Academy represents a negligible amount of the project growth in the County of Los Angeles and the City of Los Angeles between 2015 and 2040. Further, the cumulative growth anticipated on campus, including the proposed Geffen Academy, represents a nominal increment of the projected increase in population in the County and City between 2015 and 2040 (0.8 percent and 0.4 percent, respectively) and increase in employment (1.8 percent and 0.7 percent, respectively). Moreover, as discussed previously, many of the new employment positions on campus, including at the Geffen Academy, would be drawn from current residents of the City of Los Angeles and, to a lesser degree, the six-county SCAG region. As a result, the proposed Project's contribution to regional cumulative population growth would not be cumulatively considerable and less than significant.

4.6.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project, or the circumstances under which the proposed Project is being implemented, that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to population and housing. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to population and housing.

4.6.6 REFERENCES

California Employment Development Department (EDD). 2016a (May 20). Los Angeles Long Beach Glendale MD (Los Angeles County) Industry Employment & Labor Force – by Annual Average. Sacramento, CA: EDD.

———. 2016b (May 20). Report 400C: Monthly Labor Force Data for Counties, April 2016 – Preliminary. Sacramento, CA: EDD. http://www.labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf.

———. 2016c (May, access date). California Labor Market Info, Data Library, Unemployment Rates (2015, Los Angeles city). Sacramento, CA: EDD.

California Department of Finance (DOF) 2016 (May). New State Population Report: California Grew by 348,000 Residents in 2015. Sacramento, CA: DOF. http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/documents/E-1_2016PressRelease.pdf.

McMillan, C. 2015 (November 19). UC to dramatically boost California student enrollment. http://universityofcalifornia.edu/news/uc-dramatically-boost-california-student-enrollment.

Southern California Association of Governments (SCAG). 2016 (April). *The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy.* Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

2 Assumes approximately 3,181 new employees on campus and direct-to-indirect employment impact ratio of 0.68 (3,181 + 2,163 employees).

4.7 PUBLIC SERVICES AND RECREATION

This section evaluates the potential effects on public services (schools), parks, and recreational facilities related to implementation of the proposed Project.

Data used to prepare this section was taken from various sources, including previous environmental documentation prepared for the campus. Full bibliographic entries for all reference materials are provided in Section 4.7.6, References.

There were no Notice of Preparation (NOP) comments received regarding public services or recreation; however, at the Environmental Impact Report (EIR) public scoping meeting, the need for the proposed Project to provide space on site for recreational uses to serve Geffen Academy students was raised as an issue to be addressed.

4.7.1 ENVIRONMENTAL SETTING

University of California, Los Angeles Early Education and Elementary Schools

The University of California, Los Angeles (UCLA) currently operates two early care and education centers and the UCLA Lab School (Lab School, also known as the Corinne A. Seeds University Elementary School) on campus. In support of the teaching, research, and community service mission of the University, the UCLA Early Care and Education (ECE) programs provide full-time, year-round child care to children ages 2 months to 6 years for UCLA students, staff, and faculty. ECE operates an accredited, nationally recognized program that is highly effective in supporting the recruitment and retention of faculty, students, and staff who are key to the mission of the University. Many of the ECE teachers are working on advanced degrees and UCLA students provide additional staffing. The ECE emphasizes the importance of early education experiences in light of knowledge gained from current brain development research (ECE 2016).

The on-campus ECE centers include the Krieger Center located in the Northwest zone, south of Sunset Boulevard and east of Veteran Avenue, and the Fernald Child Development Center located in the northern portion of the Core zone, south of Sunset Boulevard. The Krieger Center accommodates approximately 165 children of faculty, staff, and students in 9 classrooms (3 infant, 2 toddler, and 4 preschool). The Fernald Center is used primarily for faculty recruitment and retention with an average of 95 percent faculty families and 5 percent staff families; there are currently no student families at the Fernald Center. Families currently unaffiliated with UCLA and members of the community at large may enroll at the University Village Center, which is located off campus (ECE 2016).

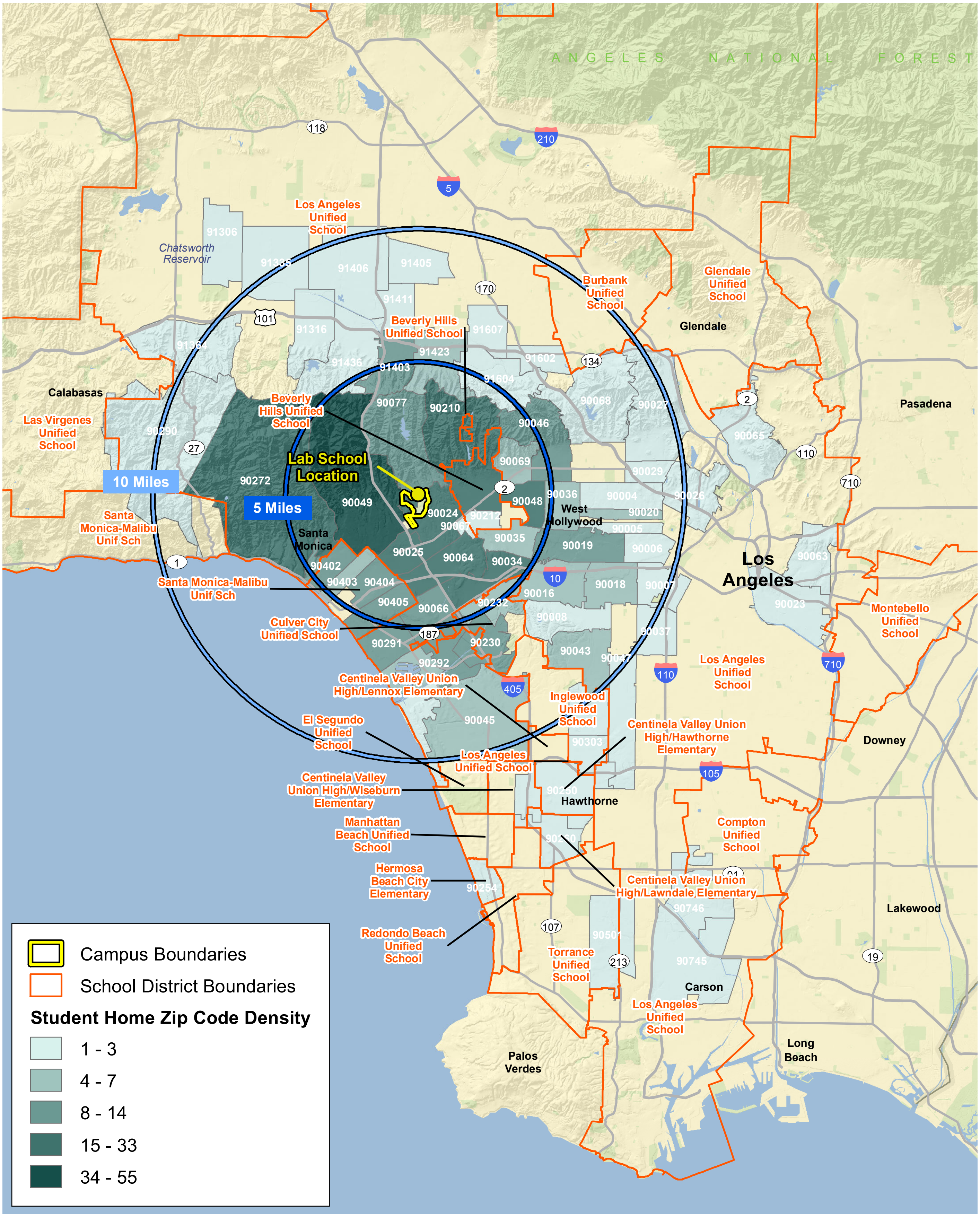
The Lab School is located at 330 Charles E. Young Drive, south of the Fernald Child Development Center in the Core zone. The Lab School enrolls approximately 450 students, ages 4 through 12, and is part of UCLA's Graduate School of Education and Information Studies (GSEIS); approximately 25 percent of the students have a parent affiliated with UCLA. Its mission is to promote innovation and excellence in education through research, outreach, and teaching and learning. The classrooms and meeting spaces at the Lab School serve as a laboratory for exploring innovative ideas about teaching, learning, and child development. GSEIS shares the results of its studies through collaborations with educators from other schools; through conferences, workshops, and site visits; and in print publications and other media. Diversity is an integral part of the Lab School. The diversity of the families, teachers, and staff enhances and enriches the learning environment; provides opportunities for children's growth; and helps GSEIS conduct research and develop curricula that are relevant for a wide variety of schools. In recent years, GSEIS has worked in partnership with educators from a number of school districts in the Los Angeles Region (Lab School 2016).

Based on the zip codes for the residences of students attending the Lab School, the geographic distribution of where students live and the public school district boundaries they live in was determined. The results of this analysis are presented in Figure 4.7-1. Figure 4.7-1 demonstrates that the majority of students attending the Lab School generally live within five to seven miles of the Lab School.

Public School Districts

For purposes of analysis in this Draft Subsequent EIR (SEIR), it is assumed that students at the Geffen Academy, of which up to approximately 50 percent would include children of UCLA faculty and staff, would generally live in geographic areas similar to those of students at the Lab School. Table 4.7-1 identifies the school districts within this geographic area, the school districts where Lab School students live, and the current enrollment in these school districts.

As shown, there are multiple school districts in the geographic area in which Lab School students reside. However, the Los Angeles Unified School District (LAUSD) is by far the largest, and it is estimated that up to 85 percent of Lab School students currently reside in the LAUSD boundaries. The LAUSD enrolls approximately 646,683 students from kindergarten through 12th grade, at over 900 schools and 187 public charter schools. The LAUSD boundaries encompass approximately 720 square miles and include the City of Los Angeles, as well as all or parts of 31 smaller municipalities, plus several unincorporated sections of Southern California (LAUSD 2016a). Approximately 4.8 million people live in the LAUSD boundaries (LAUSD 2016b). All of the other school districts in which Lab School students reside have a combined enrollment of approximately 150,632 students.



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Lab School Student Distribution

Figure 4.7-1

Geffen Academy at UCLA

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TABLE 4.7-1
SCHOOL DISTRICTS IN GEOGRAPHIC AREA
WHERE LAB SCHOOL STUDENTS RESIDE

School District	Service Area	Total Student Enrollment*
UCLA Lab School Students Living in the School District Boundaries		
Beverly Hills Unified	Beverly Hills	4,212
Centinela Valley Union High	Hawthorne, Lawndale, Alondra Park, El Segundo, Lennox, Del Aire, Inglewood	7,878
Compton Unified	Compton, Carson, Los Angeles	22,106
Culver City Unified	Culver City	6,757
Hawthorne	Hawthorne	8,809
Hermosa Beach Elementary	Hermosa Beach	1,479
Inglewood Unified	Inglewood, Ladera Heights	13,469
Las Virgenes Unified	Agoura Hills, Calabasas, Hidden Hills, Westlake Village	11,259
Lawndale Elementary	Lawndale	6,300
Los Angeles Unified	Los Angeles	646,683
Montebello Unified	Bell Gardens, Commerce, Downey, East Los Angeles, Montebello, Monterey Park, Pico Rivera, Rosemead, South San Gabriel	29,062
Santa Monica-Malibu Unified	Santa Monica, Malibu	11,289
Torrance Unified	Torrance	23,947
Wiseburn Unified	Hawthorne, El Segundo, Del Aire, Wiseburn	4,065
	Total	**797,315**
School Districts in the Geographic Area but with No Lab School Students Living in District Boundaries		
Burbank Unified	Burbank	16,332
El Segundo Unified	El Segundo	3,477
Glendale Unified	Glendale	26,168
Lennox	Lennox	7,022
Manhattan Beach Unified	Manhattan Beach	6,890
Redondo Beach Unified	Redondo Beach	9,364
	Total	**69,253**

UCLA: University of California, Los Angeles.
*Data for 2014–2015 school year.
Source: California Department of Education 2016.

Parks and Recreation

University of California, Los Angeles Campus

The UCLA campus provides extensive access to a broad range of recreational facilities, activities, and services that reflect the varied athletic, recreational, and leisure needs of students, faculty, and staff. Despite UCLA's relatively limited land area, there is a high value placed on preserving and developing on-campus recreational areas; enhancing existing recreational areas to increase utilization; and encouraging the use of non-traditional areas for recreational activities. Approximately 80 percent of students and 25 percent of faculty and staff use UCLA's indoor and outdoor recreational facilities (UCLA 2009a).

Existing athletic and recreational facilities on campus include several outdoor playing fields (formal spectator fields and informal fields), running tracks (including an on-campus track and an informal running path around the campus perimeter), courts (i.e., tennis, basketball), swimming pools, and lawn areas. Indoor facilities for multipurpose sports and fitness training, gymnastics, dance, and other cultural activities are also provided. The Central and Northwest zones contain most of the campus recreational and athletic facilities and playing fields. Major recreational facilities include Pauley Pavilion, Wooden Center, Student Activities Center (including South Pool), Spieker Aquatic Center, Los Angeles (LA) Tennis Center, Drake Track and Field Stadium/Marshall Field, Sunset Canyon Recreation Center, Sunset Tennis Courts, the Intramural Field, North Athletic Field, Spaulding Field, Easton Stadium, North Pool (Kaufman Building), and Sycamore Courts.

Particularly relevant to the proposed Project, the Kinross Recreation Center (KREC) located in the Kinross Building, which includes the Graduate Student Community Center, offers an exclusive recreation environment for UCLA graduate students and faculty/staff with UCLA Recreation South zone membership. The KREC offers cardio and strength and conditioning areas, an outdoor fitness area, studio for classes, day-use lockers, personal fitness trainers, and a convenience store. The KREC is open 7 days per week and is used by approximately 530 individuals on a daily basis.

City of Los Angeles/Off-Campus

While it is likely that most students who live on campus use on-campus recreational facilities, students living off campus and faculty and staff may use off-campus recreational facilities. Several off-campus recreational facilities are located in proximity to the campus. The City of Los Angeles Department of Recreation and Parks manages 3 public parks and recreational facilities within 1.5 miles of the project site: Barrington Recreation Center (17 acres), Holmby Park (8.5 acres), and the Westwood Park and Recreation Center (26.7 acres) (LARP 2009). The Barrington Recreation Center includes, but is not limited to, a play area, an auditorium, active sports fields, picnic facilities, tennis and volleyball courts, and a dog park (LARP 2015a). The Westwood Park and Recreation Center, located on Sepulveda Boulevard, includes a play area, a community building, tennis courts and game courts, active sports fields, picnic facilities, an indoor swimming pool, and other indoor activities (LARP 2015d). Holmby Park, an 8.5-acre facility located on Club View Drive, provides picnic and play areas (LARP 2015b).

4.7.2 PROJECT IMPACTS AND MITIGATION

Methods

Schools

Impacts on schools are determined by analyzing the projected increase in the demand for schools as a result of the proposed Project and comparing the projected increase with the remaining capacity to determine whether new or altered facilities would be required. While the proposed Project does not include any new housing for married students, faculty, or staff that would create a direct demand for public school facilities, there would potentially be an increase in campus population, including additional faculty and staff that could indirectly create a demand for school facilities. If these households distribute themselves similarly to existing faculty and staff, most would settle within the boundaries of the LAUSD, particularly on the west side.

Parks and Recreation

Neither the Board of Regents nor the UCLA campus has established minimum standards for the provision of parkland or recreational facilities, reflected in acres per person. Potential impacts of the proposed Project are based on a review of (1) the existing and proposed recreational facilities on campus and in the vicinity and (2) the increased demand for recreational facilities placed on these facilities as a result of the proposed Project.

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A) and circulated with the NOP concludes that implementation of the proposed Project would not exceed the following thresholds of significance as analyzed in the March 2009 Long Range Development Plan (LRDP) Amendment Final EIR, and, therefore, the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:
  - fire protection;
  - police protection; or
  - other public facilities or public services (i.e., libraries)?

The proposed Project would be located in an existing occupied building served by the Los Angeles Fire Department (LAFD) and the University of California Police Department (UCPD) and would not involve any new development on campus. Consistent with Program, Practice, and Procedure (PP) 4.11-2(a), the campus would continue to assess police staffing levels as individual development projects are proposed, and the UCPD would assist the proposed Geffen Academy's development team in identifying and procuring staff or contract safety/security personnel who have proven to be successful in similar facilities and programs currently in operation on the campus. The proposed Project can be adequately served within the established response times and distances for fire and police protection services and no new, expanded, or altered fire or police protection services or facilities would be required to serve the proposed Project. Therefore, no physical environmental impacts related to the provision of fire protection or police protection services would result. Incorporation of PP 4.11-1 into the proposed Project ensures that this impact remains less than significant by facilitating emergency response. Further, it should be noted that the campus population growth, as described in Section 4.6, Population and Housing, of this Draft SEIR, has not resulted in the need for expanded or new government facilities or adversely affected service ratios, response times, or other performance objectives. As required by the March 2009 LRDP Amendment Final EIR PPs 4.11-2(a) and PP 4.11-2(b), the University has assessed police staffing levels, including for University-owned housing, on an annual basis to ensure that adequate service is provided.

A substantial growth in new residents that would generate new demand for on- and off-campus library services and/or other public services would not occur with the proposed Project. Additionally, it is anticipated that the proposed Geffen Academy students and faculty would have access to library facilities and media resources provided by the UCLA Library, with a primary focus on utilization of the Library's digital content. Therefore, the proposed Project would not result in increased demand for on- or off-campus libraries or other public services such that new or expanded library facilities or other public service facilities would be required and no physical environmental impacts would result.

Thresholds Addressed in This Draft Subsequent Environmental Impact Report

The Initial Study concludes that additional project-level analysis of the following thresholds of significance is required in this Draft SEIR. According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact related to utilities and service systems if it will

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

<u>Impact Analysis</u>

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 Long Range Development Plan Amendment Final Environmental Impact Report

The following campus PPs and mitigation measures (MMs) were adopted as part of the March 2009 LRDP Amendment Final EIR; are incorporated as part of the proposed Project; and are assumed in the analysis presented in this section.

PP 4.12-1(a) *The campus shall continue to provide, operate, and maintain recreational facilities for students, faculty, and staff on campus.*

PP 4.12-1(b) *The campus shall continue to integrate landscaped open space (including plazas, courts, gardens, walkways, and recreational areas) with development to encourage use through placement and design.*

Threshold 7.1	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?

The analysis of Impact 4.11-3 in Section 4.11, Public Services, of the March 2009 LRDP Amendment Final EIR concluded there would be a less than significant impact to LAUSD services and facilities with implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009.

As described in Section 3.5.1, Geffen Academy Operations, of this Draft SEIR, the proposed Geffen Academy would provide an innovative college preparatory education on the UCLA campus for 6th through 12th grade students. The proposed Project does not involve the development of new homes that would result in a direct increase/generation of students in the LAUSD or other school districts in the area. However, with the estimated 620 students, the proposed Geffen Academy would require approximately 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees[1] by the 2020–2021 school year. Additionally, approximately 74 indirect jobs distributed throughout the County of Los Angeles would be generated. While the proposed Project would generate a relatively small number of new employment opportunities (183 direct and indirect employees) and these positions would likely be filled by the local labor pool, as discussed in Section 4.6, Population and Housing, of this Draft SEIR, the proposed Project could generate an indirect increase in new students within the LAUSD and other school districts. However, a substantial number of net new students attending schools within the LAUSD would not be expected as a result of the proposed Project, as discussed below.

The proposed Geffen Academy would provide school services for up to 620 students in grades 6 through 12. While it is not expected that all of these students are currently enrolled in public school districts in the area (as they could be attending private schools), it can be assumed that the majority of students are enrolled in the area. Based on data from the existing Lab School, it is expected that the majority of Geffen Academy students would come from areas within the LAUSD boundaries. With implementation of the proposed Project, it has potential to indirectly generate an increase in new students attending public schools in the area but would accommodate up to 620 students; thus, there would potentially be a net decrease in students attending LAUSD and other school districts in the area. The net decrease in students in these school districts would be negligible when taking into consideration the current total enrollment of the school districts as shown in Table 4.7-1. The proposed Geffen Academy would not require new or physically altered school facilities for LAUSD or other school districts in the area and no physical environmental impacts would occur.

Section 3.0, Project Description, of this Draft SEIR includes a description of the proposed Geffen Academy, including the physical improvements to the existing Kinross Building and in the adjacent area that would be required to accommodate the Academy. This would include internal modifications to all three levels of the building to accommodate the proposed uses and programs associated with the Geffen Academy and minor exterior site modifications. Proposed interior modifications generally include demolition of existing non-load-bearing walls; improvements in the way of proposed work; and installation of new walls, surfaces, lighting, and fixtures. Proposed exterior site modifications include construction of a proposed exit driveway at Kinross Avenue, the outdoor half-court basketball court, and the new main entry to the building along the western building facade. The physical environmental impacts associated with these improvements are addressed in the Initial Study included in Appendix A as well as the respective topical sections of this Draft SEIR (e.g., Section 4.1, Air Quality; Section 4.2, Greenhouse Gas Emissions; Section 4.3, Hydrology and Water Quality; Section 4.5, Noise and Vibration; and Section 4.8, Transportation/Traffic). Potential impacts to biological resources and cultural resources are addressed in the Initial Study included in Appendix A. As discussed, the environmental impacts resulting from the proposed Project related to construction (and operation) of the proposed Geffen Academy would be less than significant with the implementation of applicable PPs and MMs

[1] The 31 remote employees would be UCLA undergraduate and graduate students.

adopted as part of the March 2009 LRDP Amendment Final EIR, which are incorporated into the proposed Project.

In addition, the campus population growth, as described in Section 4.6, Population and Housing, of this Draft SEIR, has not resulted in the need for expanded or new government facilities or adversely affected service ratios, response times, or other performance objectives for schools. Of the growth reflected in the new population baseline (LRDP EIR projections to 2013-2014 versus new 2014-2015 baseline), 61 percent is associated with undergraduate and graduate students (2,884) (which would not generate an increase in demand for K-12 public education facilities), and 39 percent (2,125) associated with staff increases. The staff increases could have resulted in new demand for LAUSD, but it is likely that the local labor pool was sufficient to fill the types of staff jobs available at UCLA; thus, the new staff that have children, and have them enrolled in the LAUSD system, would have kept them in the LAUSD system following employment with the University.

Regarding the proposed Project, implementation of the proposed Geffen Academy is expected to result in a net decrease in the number of students throughout the LAUSD and other school districts in the area. Therefore, no new or expanded facilities would be needed for these school districts to maintain acceptable service levels. The physical impacts associated with implementation of the Geffen Academy at the Kinross Building site have been evaluated in the Initial Study included in Appendix A and this Draft SEIR and would be less than significant. The impact on schools from the proposed Project, or the new campus population baseline, would be less than significant and no mitigation is required.

<u>Additional Project-Level Mitigation Measures</u>

No mitigation measures are required.

<u>Level of Significance after Mitigation</u>

Less than significant impact related to schools.

Threshold 7.2	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The analysis of Impact 4.12-1 in Section 4.12, Recreation, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation on campus with an associated increase in the average weekday campus population, including students, faculty, and staff, would result in less than significant impacts related to substantial physical deterioration of on- or off-campus recreational facilities.

As discussed above, there are various City of Los Angeles park and recreational facilities in the vicinity of the project site. However, the proposed Project does not involve the development of new homes or other uses that would result in a direct increase in population and associated increased demand for off-campus park and recreational facilities. The proposed Project would result in the addition of up to 109 new full-time and part-time employees at the UCLA campus, approximately 31 remote employees, and approximately 74 indirect jobs distributed throughout the County of Los Angeles; it has the potential to result in indirect population growth, but the relatively small number of new employees would likely be filled by the local labor pool and would not represent potential new recreation facility users. Further, as identified in the March 2009 LRDP Amendment Final EIR and pursuant to PP 4.12-1(a), the campus will continue to provide, operate, and maintain recreational facilities for the on-campus population (including faculty and staff). The ongoing maintenance conducted by the campus ensures that substantial physical deterioration does not occur. Continued review of the demand for facilities and adjustments to operating procedures and facility design (e.g., extending hours of operation) ensure that the on-campus demands are met to the extent feasible.

Although there are athletic and recreational facilities provided on campus, the proposed Project does not involve the use of any on-campus facilities by the students at the Geffen Academy. As further discussed under Thresholds 7.3 and 7.4, the proposed Geffen Academy would have various competitive athletic teams and would provide on-site facilities to accommodate these teams and other recreational activities to be provided at the Academy. Additionally, consistent with PP 4.12-1(b), the proposed Project integrates hardscape and landscape improvements that are accessible to Academy students, staff, faculty, and visitors. Therefore, operation of the proposed Geffen Academy would not increase the use of existing neighborhood and regional parks or other recreational facilities, including athletic and recreational facilities on campus, such that substantial physical deterioration of the facility would occur or be accelerated.

As previously identified, the Kinross Building currently houses the KREC and Graduate Student Community Center. UCLA is evaluating existing UCLA-owned buildings, on- and off-campus, for their potential to be relocation sites for KREC. At this time, no location has been identified as the relocation site. Once a site is identified, and the scope of work to renovate that site/space is defined, a separate CEQA evaluation will be prepared for design approval. However, because the KREC and Graduate Student Community Center would be accommodated in a new facility, there would not be increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Further, the new campus baseline population did not result in the increased use of existing neighborhood and regional parks or other recreational facilities, resulting in substantial physical deterioration. Consistent with PP 4.12-1(a), the campus has provided expanded access to recreational facilities for the existing population without building new facilities. This includes KREC (April 2012 - developed in the Kinross Building); Bruin Fitness Center (September 2015 - redeveloped maintenance space in Carnesale Commons); and the conversion of the Intramural Field to artificial turf (May 2015), which greatly expands the field's program capacity. These improved or renovated facilities were many years in the making; on-campus housing has had long-term aspirations to have separate and dedicated undergraduate and graduate fitness facilities; whereas the IM Field conversion has been under study since 2005. Therefore, these renovated and improved facilities were designed and developed to accommodate existing students, staff, and faculty; were not mitigation for previously approved projects; nor were they done in anticipation of the proposed Project.

Consistent with the conclusions of the March 2009 LRDP Amendment Final EIR, the proposed Project would not increase the demand for on- or off-campus recreational facilities such that a substantial physical deterioration of on-campus recreational facilities or acceleration of such deterioration would occur. There would be a less than significant impact and no mitigation is required.

<u>Additional Project-Level Mitigation Measures</u>

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to physical deterioration of existing park or recreational facilities.

Threshold 7.3	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?
Threshold 7.4	Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The analysis of Impact 4.12-2 in Section 4.12, Recreation, of the March 2009 LRDP Amendment Final EIR identified that future recreational facilities, which may be implemented as part of buildout of the remaining development allocation on campus, would be subject to project-specific environmental review in accordance with CEQA.

As identified above, the proposed Geffen Academy would provide on-site facilities to accommodate its competitive athletic teams and other recreational activities that would be provided at the Academy. It is expected that this would include, but not be limited to, dance, wrestling, yoga, cardio and resistance training, and basketball and volleyball practice and instruction. As shown on the conceptual site plan provided in Figure 3-5 in Section 3.0, Project Description, of this Draft SEIR, a half court would be constructed in the northwest portion of the project site. Other facilities would be constructed inside the building or already exist. Accordingly, the potential impacts from implementation of recreational facilities and exterior landscape and hardscape areas proposed as part of the Geffen Academy have been addressed in this Draft SEIR. Construction-related and operational local and regional air quality impacts are addressed under Section 4.1, Air Quality; noise and vibration impacts are addressed under Section 4.5, Noise and Vibration; and traffic impacts are addressed under Section 4.8, Transportation/Traffic, of this Draft SEIR. Potential construction impacts related to the removal of trees and potential to encounter cultural resources are addressed in the Initial Study included in Appendix A of this Draft SEIR. As identified, the proposed Project's impacts would be less than significant with implementation of applicable March 2009 LRDP Amendment Final EIR PPs and MMs. No additional impacts associated with these improvements would occur beyond those addressed for the proposed Project. Therefore, these impacts are less than significant and no additional mitigation is required.

Should the use of additional park or recreational facilities, not located at the proposed Geffen Academy site, be identified as a future component of the Academy's program, that use or construction of new facilities would be addressed as part of separate environmental documentation prepared pursuant to CEQA, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR. It would be speculative to identify future facilities that may be needed and where they may be located.

As identified above, the KREC and Graduate Student Community Center would be relocated to existing buildings and no new structures would need to be developed. However, internal renovations of existing buildings to relocate the KREC would be required, and a separate CEQA review would cover these subsequent projects when the scope of work and final locations/spaces are finalized.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

The proposed Project would include athletic and recreational facilities, landscape and hardscape improvements. The environmental impacts of these proposed Project components are addressed throughout this Draft SEIR and the Initial Study included in Appendix A. There would be a less than significant impact.

4.7.3 CUMULATIVE IMPACTS

Schools

The geographic context for the analysis of cumulative school impacts is defined by the school districts where potential future students of the Geffen Academy would likely reside (based on data for the existing UCLA Lab School) and development of the related projects (see Table 4-1, Related Projects, of Section 4.0, Introduction to Environmental Analysis, of this Draft SEIR). Increased residential and nonresidential development throughout the City of Los Angeles would generate additional demand for public school classroom seating capacity in LAUSD and other school district schools. The degree to which this demand would be satisfied is dependent upon future enrollment trends. However, all new private-sector development will be required to pay statutory impact fees to LAUSD (pursuant to Senate Bill 50) to help fund construction of additional classroom capacity, and, under current law, payment of these fees is deemed to constitute full mitigation under CEQA. For these reasons and assuming that cumulative demand for school capacity would be met as planned by the LAUSD, cumulative impacts throughout the LAUSD would be less than significant. However, even in the event that significant cumulative impacts do occur as a result of future areawide population growth, the proposed Project's contribution would remain less than significant. Implementation of the proposed Geffen Academy is estimated to result in a net decrease in students enrolled in the LAUSD and other school districts in the geographic area. As a result, and as previously analyzed and concluded in the March 2009 LRDP Amendment Final EIR, the proposed Project would not have a cumulatively considerable contribution to cumulative impacts on school facility capacity. This is considered to be a less than significant impact.

Parks and Recreation

The geographic context for the analysis of cumulative recreational impacts is the City of Los Angeles and the potential development of the related projects (see Table 4-1, Related Projects, of Section 4.0, Introduction to Environmental Analysis, of this Draft SEIR).

The rationale for including the entire City is that since commuting students, faculty, and staff live off campus, they may utilize a variety of recreational facilities and programs offered by the campus and/or the City of Los Angeles. Based on the City of Los Angeles' *Public Recreation Plan* adopted in 1980, the City recommends 10 acres of parkland/recreational facilities per 1,000 residents, of which 4 acres should be parkland. The City of Los Angeles currently has over 16,000 acres of parkland (LARP 2015e). Based on the 2015 population of approximately 3,957,022 individuals (DOF 2016), there are approximately 4 acres of parkland per 1,000 residents, which is consistent with the City's goal. As additional residential development in the City is approved, in-lieu fees for parks or donation of parkland (pursuant to the Quimby Act[2]) are required as part of the individual City of Los Angeles projects. In addition, grants from State and County bond sources are available to fund additional park and recreational facilities in urban areas. These funding sources would provide additional parkland and recreational facilities to satisfy demand from future population growth. As identified under Threshold 7.2, implementation of the proposed Project would not result in an increased demand for off-campus recreational facilities. The majority of the campus population utilizes on-campus recreational facilities, and these facilities would continue to be provided and maintained for students, faculty, and staff. Additionally, the proposed Geffen Academy includes on-site athletic and recreational facilities to accommodate the Academy's program. Therefore, implementation of the proposed Project would not result in a substantial deterioration of existing facilities, nor would it accelerate such deterioration. The proposed Project's contribution to cumulative impacts on park and recreational facilities is, therefore, less than significant.

In order to accommodate projected, future, and cumulative demand for park and recreational facilities within the City of Los Angeles, it is assumed that such facilities would be developed and constructed throughout the City. With continued growth of the UCLA campus, both due to enrollment commitments and the ongoing conversion of UCLA from a commuter school to a residential campus, evaluation of recreational demand would be ongoing. Because the size, location, and type of these future facilities is not known at this time, it is impossible to assess the magnitude of cumulative impacts associated with the construction of these facilities. However, it is reasonable to expect that all facilities would undergo CEQA review in accordance with California law and that project-specific impacts associated with development of each of these facilities would be mitigated to the extent feasible.

As previously discussed, the proposed Project includes on-site athletic and recreational facilities (including an outdoor half-court basketball court). The potential construction impacts associated with the proposed Project are fully analyzed in each appropriate section of this Draft SEIR (e.g., Section 4.1, Air Quality) and the Initial Study included in Appendix A. As described in Section 3.0, Project Description, of this Draft SEIR and addressed in the respective analyses, there would be minimal improvements needed to implement the on-site facilities and the impact would be less than significant. The proposed Project would not result in a significant cumulative impact when considered in conjunction with the construction of future park and recreational facilities elsewhere in the City of Los Angeles. As a result, and as previously analyzed and concluded in the March 2009 LRDP Amendment Final EIR, the contribution of the proposed Project to cumulative impacts from construction of park and recreational facilities citywide is less than significant.

4.7.4 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to schools and parks and recreation. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to schools or parks and recreation.

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2 The Quimby Act allows local agencies, such as the City of Los Angeles, to establish ordinances requiring residential subdivision developers to pay impact fees that can be used to purchase and develop land and/or recreational facilities (LARP 2015c). The money generated from park in-lieu fees cannot be used for operating or maintaining parks but is solely for creating parks.

4.7.5 REFERENCES

California Department of Education (CDOE). 2016 (April 7). District Summary Data (2014-2015 Selected District Level Data for Beverly Hills Unified, Burbank Unified, Centinela Valley Union High, Compton Unified, Culver City Unified, El Segundo Unified, Glendale Unified, Hawthorne, Hermosa Beach City Elementary, Inglewood Unified, Las Virgenes Unified, Lawndale Elementary, Lennox, Los Angeles Unified, Manhattan Beach Unified, Montebello Unified, Redondo Beach Unified, Santa Monica-Malibu Unified, Torrance Unified, and Wiseburn Unified). Sacramento, CA: California Department of Education

California Department of Finance (DOF). 2015 (May). E-1 Population Estimates for Cities, Counties, and the State — January 1, 2014 and 2015 (an Excel spreadsheet). Sacramento, CA: DOF. http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/view.php.

Los Angeles, City of, Department of Recreation and Parks (LARP). 2015a. Barrington Recreation Center. Los Angeles, CA: the City. http://www.laparks.org/dos/reccenter/facility/barringtonRC.htm.

———. 2015b. Holmby Park. Los Angeles, CA: the City. http://www.laparks.org/dos/parks/facility/holmbyPk.htm.

———. 2015c. Quimby Program: Frequently Requested Information. Los Angeles, CA: the City. http://www.laparks.org/planning/quimby.htm.

———. 2015d. Westwood Recreation Center. Los Angeles, CA: the City. http://www.laparks.org/dos/reccenter/facility/westwoodRC.htm.

———. 2015e. Who Are We? Los Angeles, CA: the City. http://www.laparks.org/dos/dept/who.htm.

———. 2009. Facility Locator (Starting Address: 11000 Kinross Ave Los Angeles, CA 90024; Facility: All; Within 5 Miles). Los Angeles, CA: the City. http://raponline.lacity.org/maplocator/index.cfm?lng=-118.4467828&lat=34.059358&radius=5&filter=All&address=11000%20Kinross%20Ave%20Los%20Angeles%2C%20CA%2090024.

Los Angeles Unified School District (LAUSD). 2016a (April 7, access date). About the Los Angeles Unified School District. Los Angeles, CA: LAUSD. http://achieve.lausd.net/domain/32.

———. 2016b (April 7, access date). Fingertip Facts 2015–2016: Building a World Class Education. Los Angeles, CA: LAUSD. http://achieve.lausd.net/cms/lib08/CA01000043/Centricity/Domain/32/Fingertip%20Facts15-16_final-updated.pdf.

University of California, Los Angeles. 2009a (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; prepared by BonTerra Consulting). Los Angeles, CA: UCLA.

———. 2009b (March).*University of California, Los Angeles 2002 Long Range Development Plan.* Los Angeles, CA: UCLA.

University of California, Los Angeles, Early Care and Education (ECE). 2016 (April 28, access date). Learn about Early Care and Education. Los Angeles, CA: ECE. https://www.ece.ucla.edu/about-us/learn-about-early-care-and-education.

University of California, Los Angeles, Lab School (Lab School). About Us. Los Angeles, CA: Lab School. http://www.labschool.ucla.edu/about/.

4.8 TRANSPORTATION/TRAFFIC

This section of this Draft Subsequent Environmental Impact Report (SEIR) evaluates the potential for the proposed Project to result in transportation and traffic-related impacts. Sources used in preparation of this section include the *Traffic Impact Study for the Proposed Geffen Academy Project on UCLA Southwest Campus* conducted for the proposed Project by Crain and Associates (Traffic Impact Study) (April 2016) (included in Appendix D of this Draft SEIR); the *UCLA 2008 Northwest Housing Infill Project and Long Range Development Plan Amendment Final Environmental Impact Report* (referred to herein as the March 2009 LRDP Amendment Final EIR or Final EIR); and other sources, as cited in this section.

Relevant elements of the proposed Project related to transportation and traffic are described in Section 3.0, Project Description and include the following:

- Operation of the Geffen Academy at the existing Kinross Building.
- Modification of the existing vehicular circulation pattern, which would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building, following a route around the Kinross Building to the proposed new entrance and drop-off/pickup location along the west side of the building. Vehicles would then either (1) exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project (right turns only) or (2) during controlled periods, exit the site from a swing or sliding fence that would allow vehicles to use the existing Parking Lot 36 exit and turn left on Kinross Avenue.
- Installation of safety/security areas around the Kinross Building and associated outdoor areas, including parking areas, which would require the removal of 54 parking spaces from Parking Lot 36. Approximately 32 student, visitor, and Americans with Disabilities Act (ADA)-accessible parking spaces would be provided on-site.
- Implementation of the University of California, Los Angeles (UCLA) Transportation Demand Management (TDM) program by students, faculty and staff, and implementation of additional project-specific TDM measures that would be implemented during operation of the Geffen Academy, including, but not limited to, a requirement for all students to agree to use an alternative mode of transportation for travel to campus, student carpool requirements, installation of bike lockers on site, and use of school buses to reduce vehicular trips.
- Short-term construction activities that would involve heavy trucks on the identified construction routes, including trucks to haul demolition materials.

One comment letter was received in response to the Notice of Preparation (NOP) that addressed traffic issues. The California Department of Transportation (Caltrans) identified that (1) it does not expect the project to result in direct adverse impacts to existing State transportation facilities; (2) oversized-transport vehicles on State highways require a Caltrans transportation permit; and (3) large-size truck trips should be limited to off-peak commute periods.

4.8.1 ENVIRONMENTAL SETTING

Section 4.3.1, Environmental Setting, of the March 2009 LRDP Amendment Final EIR, includes a detailed discussion of the existing condition at the time the LRDP Final EIR was prepared for the Regional Highway and Street Network (streets and highways and study intersections); Alternative Transportation (public transit, campus transportation demand management program); and Campus Parking and Trip Generation. Following is a summary of this information that is either relevant to the proposed Project or that has been updated since the LRDP Final EIR was certified in March 2009, as presented in the Traffic Impact Study included in Appendix D.

Regional Highway and Street Network[1]

The traffic study area is located in the community of Westwood in the City of Los Angeles and is bound by Santa Monica Boulevard to the south, Hilgard Avenue and Selby Avenue to the east, Montana Avenue/Gayley Avenue and Westholme Avenue to the north, and the San Diego Freeway (Interstate [I]-405) to the west. Land uses in the Westwood area include a mixture of retail, residential, restaurant, educational, cultural, and commercial office uses. Access to and from the area is provided by a well-developed surface street network, I-405, and the Santa Monica Freeway (I-10). A substantial portion of the surface street traffic in the study area is "through" traffic, with origins or destinations in the areas of Westwood, Century City, Beverly Hills, and/or Santa Monica. Freeway and surface streets most relevant to the proposed Project are described below.

San Diego Freeway (I-405). I-405 is less than one-half mile west of the project site. It provides primary north-south regional access in the vicinity of the study area. It is a major traffic corridor between the San Fernando Valley to the north and Orange County to the south. The San Diego Freeway generally has four mainline travel lanes in each direction, plus auxiliary lanes and high-occupancy vehicle (HOV) lanes. Access is available via on- and off-ramps at Sunset Boulevard, Wilshire Boulevard, and Santa Monica Boulevard in the study area. This freeway also has a full interchange with the Santa Monica Freeway.

Santa Monica Freeway (I-10). I-10 is the primary east-west freeway in Los Angeles County. Located approximately 2.5 miles south of the project site, it is a continuous route from the City of Santa Monica eastward to the Los Angeles central business district (CBD) and beyond. The Santa Monica Freeway mainline generally has four travel lanes in each direction, along with auxiliary lanes between some ramp locations. As mentioned above, this freeway and the San Diego Freeway fully interchange with each other.

Gayley Avenue. Gayley Avenue, an "Avenue II" roadway, is a primary access route for Westwood Village and UCLA. Gayley Avenue bends northwesterly, intersecting the east side of Veteran Avenue. Directly opposite and intersecting the west side of Veteran Avenue is Montana Avenue. South of Wilshire Boulevard, Gayley Avenue becomes Midvale Avenue. Gayley Avenue provides two travel lanes and left-turn channelization in each direction at the study intersections. At Wilshire Boulevard, northbound and southbound right-turn lanes are also provided. A combination of bike routes and lanes are provided along portions of Gayley Avenue, Midvale Avenue, and Montana Avenue.

Glendon Avenue. Glendon Avenue is designated as a local street from Weyburn Avenue to Lindbrook Drive. The short segment between Lindbrook Drive and Wilshire Boulevard is classified as an "Avenue II" roadway. South of Wilshire Boulevard, Glendon Avenue continues as a local street. One travel lane is provided in each direction along with left-turn channelization at Weyburn Avenue, Lindbrook Drive, and Wilshire Boulevard. On-street parking is permitted along some portions of the roadway. Glendon Avenue is a bike route from Weyburn Avenue to Wellworth Avenue.

[1] The designation for the roadways that are within the City of Los Angeles are in accordance with the City's recently adopted Mobility Plan 2035.

Hilgard Avenue. Hilgard Avenue extends from Sunset Boulevard south to Lindbrook Drive and is designated as an "Avenue II" roadway. One to two travel lanes are provided in each direction, with left-turn channelization provided at most major intersections. On-street parking is permitted along some portions of the roadway.

Kinross Avenue. Kinross Avenue is a short street between Veteran Avenue and Glendon Avenue and forms the northern boundary of the project site. The segment between Veteran Avenue and Weyburn Place is on the UCLA Southwest Campus, while the segment between Weyburn Place and Glendon Avenue is a local street in the City of Los Angeles. Kinross Avenue generally provides two travel lanes in each direction with on-street parking permitted between Weyburn Place and Glendon Avenue.

Le Conte Avenue. Le Conte Avenue is an "Avenue II" roadway between Gayley Avenue and Hilgard Avenue, becoming a local street east of Hilgard Avenue. There is one travel lane and left-turn channelization in each direction on Le Conte Avenue between Levering Avenue and Hilgard Avenue. It is also striped with a bike lane in each direction between Gayley Avenue and Hilgard Avenue. On-street parking is permitted on some portions of the roadway. A scramble pedestrian crosswalk is located at the intersection with Westwood Boulevard/Plaza.

Lindbrook Drive. Lindbrook Drive from Gayley Avenue to Hilgard Avenue is an "Avenue II" roadway, and from Hilgard Avenue easterly, it is a local street. It provides two travel lanes in each direction at the study intersections. On-street parking is permitted on some portions of the roadway.

Levering Avenue. Levering Avenue is a local street that extends from Montana Avenue south to Gayley Avenue. The roadway provides one travel lane in each direction with on-street parking permitted along some portions of the roadway.

Manning Avenue. Manning Avenue is a local street between Hilgard Avenue and Wilshire Boulevard and south of Santa Monica Boulevard. Between Wilshire Boulevard and Santa Monica Boulevard, the roadway is designated an "Avenue III" roadway. One travel lane is provided in each direction.

Ohio Avenue. Ohio Avenue is a Collector street striped with one travel lane per direction with left-turn channelization installed at key intersections. Additionally, on-street parking is permitted on both sides of the roadway, and the roadway is designated a bike route.

Rochester Avenue. Rochester Avenue extends from Veteran Avenue east to Comstock Avenue. Between Veteran Avenue and Midvale Avenue, Rochester Avenue is designated as an "Avenue II" roadway west of Midvale Avenue and becomes a local street east of Midvale Avenue. One travel lane is provided in each direction, and on-street parking is permitted along both sides of the roadway.

Santa Monica Boulevard. Santa Monica Boulevard begins in the City of Santa Monica and continues easterly into the Silver Lake neighborhood. It is a State highway, State Route (SR) 2, except for the segment within the City of West Hollywood. Santa Monica Boulevard is also designated a "Boulevard II" roadway in the City of Los Angeles. It has three travel lanes in each direction and left-turn channelization at major intersections in the project site vicinity. In addition, bike lanes are located east of Sepulveda Boulevard, in both directions. Santa Monica Boulevard has full ramp connections with I-405.

Selby Avenue. Selby Avenue is a local street that extends from Weyburn Avenue south to just north of I-10. One travel lane is provided in each direction.

Sepulveda Boulevard. Sepulveda Boulevard is a “Boulevard II” roadway in the City of Los Angeles. It extends from the northern San Fernando Valley to the South Bay. It runs along the east side of I-405 and is located west of the project site. Sepulveda Boulevard is generally striped with two travel lanes per direction, along with left-turn channelization.

Strathmore Drive/Place. Strathmore Drive/Place extends from Veteran Avenue east to Westwood Plaza on the UCLA Main Campus. It is designated as a local street west of Gayley Avenue by the City of Los Angeles. One travel lane is provided in each direction and on-street parking is permitted along both sides of the roadway, west of Gayley Avenue. East of Gayley Avenue, the roadway provides two travel lanes in each direction along with an eastbound bike lane. Left- and right-turn channelizations are provided traveling westbound at Gayley Avenue: left-turn channelization is provided eastbound at Charles E. Young Drive West and right-turn channelization is provided eastbound at Westwood Plaza.

Tiverton Avenue. Tiverton Avenue is a short roadway between Lindbrook Drive and Le Conte Avenue, which continues onto the southern portion of the UCLA campus as Tiverton Drive. It is designated as a Collector street and is a bike route. Between Weyburn Avenue and Lindbrook Drive, Tiverton Avenue is a northbound one-way street that provides one travel lane. North of Weyburn Avenue, it is a two-way street and one travel lane in each direction is provided along with on-street parking.

Veteran Avenue. Veteran Avenue extends from Sunset Boulevard to south of Pico Boulevard. Veteran Avenue is an “Avenue II” roadway from Sunset Boulevard to Missouri Avenue, a Collector street from Missouri Avenue to Pico Boulevard, and then a local street farther south. It is striped with two travel lanes and left- and right-turn channelization north and south of Wilshire Boulevard. It forms the western boundary of the project site.

Weyburn Avenue. Weyburn Avenue extends easterly from Veteran Avenue to Le Conte Avenue and is designated as a local street. It has one to two travel lanes in each direction and westbound left-turn lanes at Veteran Avenue, Gayley Avenue, and Broxton Avenue. A bike route is provided between Gayley Avenue and Tiverton Avenue. On-street parking is permitted on some portions of the roadway. A scramble pedestrian crosswalk is located at the Broxton Avenue intersection.

Weyburn Place. Weyburn Place is an alley that extends from Strathmore Drive to Kinross Avenue. The alley, also known as Midvale Alley, continues south of Kinross Avenue to Lindbrook Drive where it forms the eastern boundary of the project site.

Westholme Avenue. Westholme Avenue is designated a Collector street from Hilgard Avenue south to Santa Monica Boulevard, and south of Santa Monica Boulevard the roadway becomes a local street. One travel lane is provided in each direction. On-street parking is permitted along some portions of the roadway. The roadway is designated as a bike route.

Westwood Boulevard. Westwood Boulevard is designated an “Avenue II” roadway from Le Conte Avenue to Wilshire Boulevard; from Wilshire Boulevard to Santa Monica Boulevard the roadway is a “Boulevard II”; and south it continues as an “Avenue II”. North of Le Conte Avenue Westwood Boulevard enters the UCLA campus and becomes Westwood Plaza, providing two to three travel lanes in each direction. South of Le Conte Avenue, the roadway has two travel lanes in each direction, except at Wilshire Boulevard where it has three northbound lanes. Northbound and southbound left-turn and right-turn lanes are also provided at some study locations. Northbound and/or southbound left turns from Westwood Boulevard are not permitted at Weyburn Avenue, Kinross Avenue, and Lindbrook Avenue during the AM and/or PM peak periods. On-street parking is permitted on both sides of the roadway. A bike lane is provided along Westwood

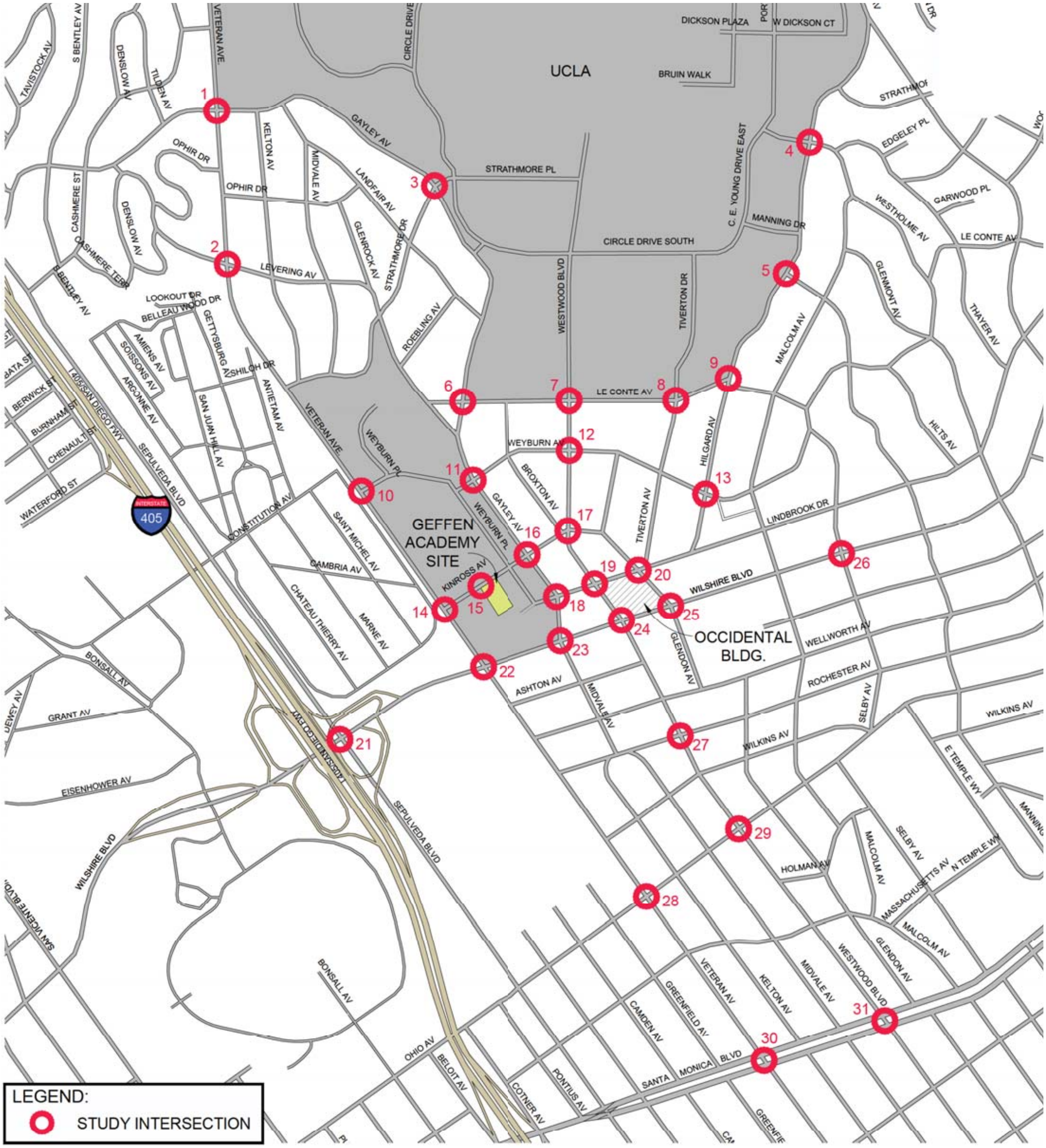
Plaza from Le Conte Avenue to Charles E. Young Drive North. A scramble pedestrian crosswalk is located at the intersection with Le Conte Avenue.

Wilshire Boulevard. Wilshire Boulevard is a major thoroughfare between the City of Santa Monica and downtown Los Angeles. It is classified a “Boulevard I” throughout its length in the City of Los Angeles. Full ramp access to and from the San Diego Freeway is provided via Wilshire Boulevard. Wilshire Boulevard forms the southern boundary of the Southwest Campus. In the study area, Wilshire Boulevard has three automobile travel lanes in both directions and left-turn channelization. Additionally, curb lanes east of Veteran Avenue are restricted to bus and right-turn-only operation during the weekday AM and PM peak periods. West of Veteran Avenue, the curb lanes service freeway interchange traffic.

Study Intersections

The Traffic Impact Study utilizes traffic impact assessment methodologies that are consistent with University and City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures. The selected study intersections are the locations expected to experience the large majority of proposed Project trips and, therefore, where potential project impacts would most likely occur. All of the study intersections are signalized and operate with LADOT’s Adaptive Traffic Control System (ATCS), an upgrade of the Automated Traffic Surveillance and Control System (ATSAC). LADOT estimates that ATSAC/ATCS improves the overall intersection capacity by an average of ten percent. The 31 study intersections are listed below and shown on Figure 4.8-1:

1. Veteran Avenue and Montana Avenue/Gayley Avenue
2. Veteran Avenue and Levering Avenue
3. Gayley Avenue and Strathmore Drive/Strathmore Place
4. Hilgard Avenue and Westholme Avenue
5. Hilgard Avenue and Manning Avenue
6. Gayley Avenue and Le Conte Avenue
7. Westwood Plaza/Westwood Boulevard and Le Conte Avenue
8. Tiverton Avenue and Le Conte Avenue
9. Hilgard Avenue and Le Conte Avenue
10. Veteran Avenue and Weyburn Avenue
11. Gayley Avenue and Weyburn Avenue
12. Westwood Boulevard and Weyburn Avenue
13. Hilgard Avenue and Weyburn Avenue
14. Veteran Avenue and Kinross Avenue
15. Structure 32/Parking Lot 36 and Kinross Avenue
16. Gayley Avenue and Kinross Avenue
17. Westwood Boulevard and Kinross Avenue
18. Gayley Avenue and Lindbrook Drive
19. Westwood Boulevard and Lindbrook Drive
20. Glendon Avenue/Tiverton Avenue and Lindbrook Drive



Source: Crain & Associates 2016

Traffic Study Intersections

Figure 4.8-1

Geffen Academy at UCLA

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21. Sepulveda Boulevard and Wilshire Boulevard
22. Veteran Avenue and Wilshire Boulevard
23. Gayley Avenue/Midvale Avenue and Wilshire Boulevard
24. Westwood Boulevard and Wilshire Boulevard
25. Glendon Avenue and Wilshire Boulevard
26. Selby Avenue and Wilshire Boulevard
27. Westwood Boulevard and Rochester Avenue
28. Veteran Avenue and Ohio Avenue
29. Westwood Boulevard and Ohio Avenue
30. Veteran Avenue and Santa Monica Boulevard
31. Westwood Boulevard and Santa Monica Boulevard

Existing Traffic Volumes[2]

Traffic volume counts for existing weekday conditions were conducted at 30 of the 31 intersections on Tuesday, January 12, 2016. Due to street construction work, the traffic counts for the intersection of Gayley Avenue and Kinross Avenue was deferred until Tuesday, January 26, 2016. UCLA classes were in normal session on both days. The traffic counts covered the 7:00 to 10:00 AM and 3:00 to 6:00 PM peak-traffic periods. The peak-hour volumes for each study intersection were determined on the basis of the combined four highest consecutive 15-minute traffic counts for all vehicular movements entering the intersection. The existing peak-hour volumes are depicted in Figures 4.8-2 (a and b) and 4.8-3 (a and b). The traffic count data sheets are provided in the Traffic Impact Study included in Appendix D of this Draft SEIR.

Traffic Operations

Although UCLA is not required to follow the LADOT Traffic Study Policies and Procedures, the Traffic Impact Study prepared for the proposed Geffen Academy incorporates these guidelines in the analysis, where applicable. The methods used in this study for the analysis and evaluation of each study intersection is based on procedures outlined in Circular Number 212, published in 1980 by the Transportation Research Board. In the discussion of Critical Movement Analysis (CMA) for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the Level of Service (LOS) provided for different levels of traffic volume and other variables, such as the number of critical signal phases and traffic lanes.

LOS describes the quality of traffic flow, ranging from excellent conditions at LOS A to failure conditions at LOS F. LOS D is recognized by the City of Los Angeles, and thereby by UCLA, as an acceptable service level in urban areas. LOS E is recognized by some cities as an acceptable standard in downtown areas, major commercial areas, and at freeway ramp intersections.

Determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the critical movement volumes have been summed, the values indicated in Table 4.8-1 can be used to determine the applicable LOS.

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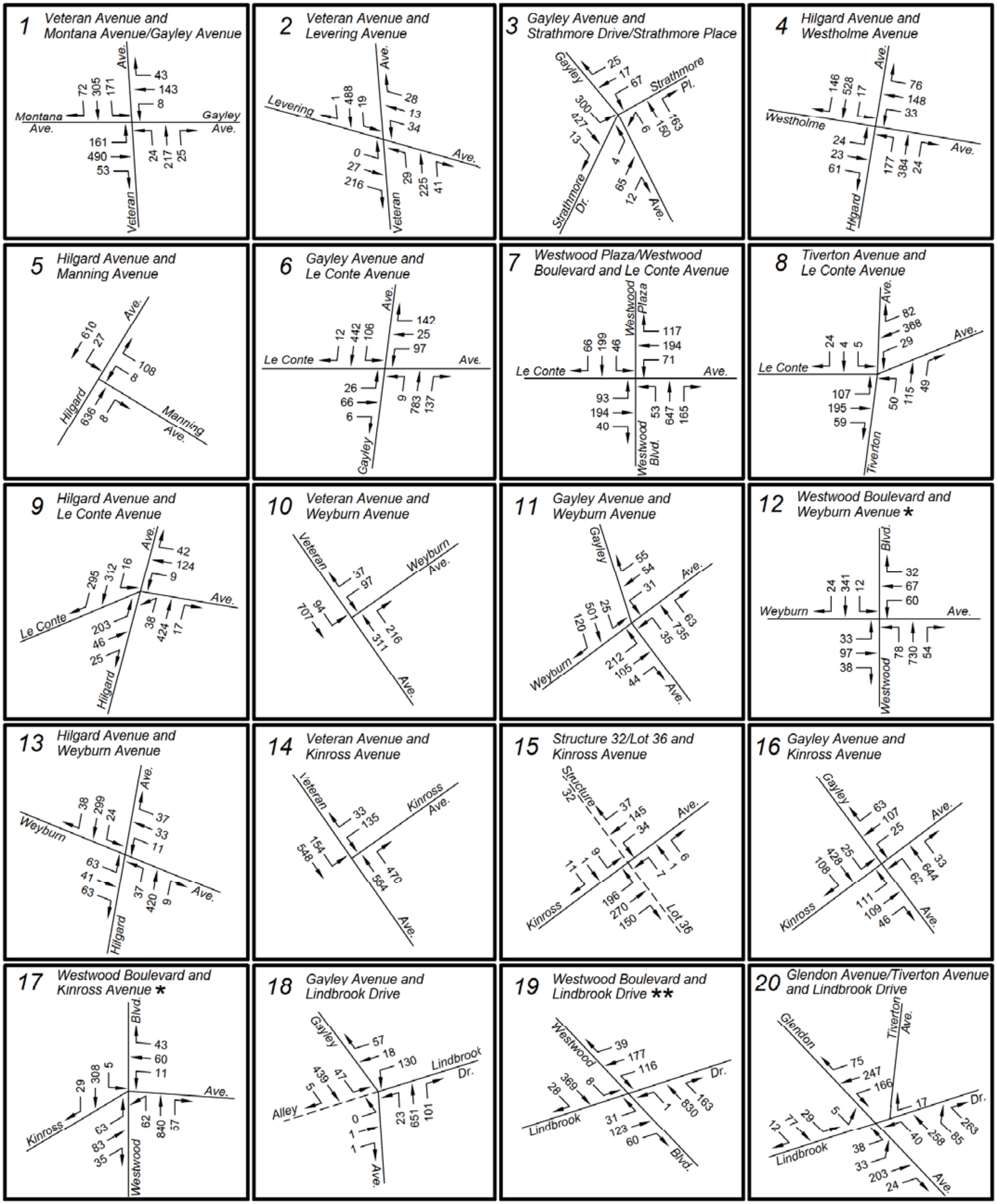
2 The existing traffic volumes include the new 2014-2015 baseline population of 67,233 average weekday, regular session students, employees, and other visitors.



Notes:

* **Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

** **Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

Source: Crain & Associates 2016

Existing 2016 Traffic Volumes AM Peak Hour

Figure 4.8-2a

Geffen Academy at UCLA

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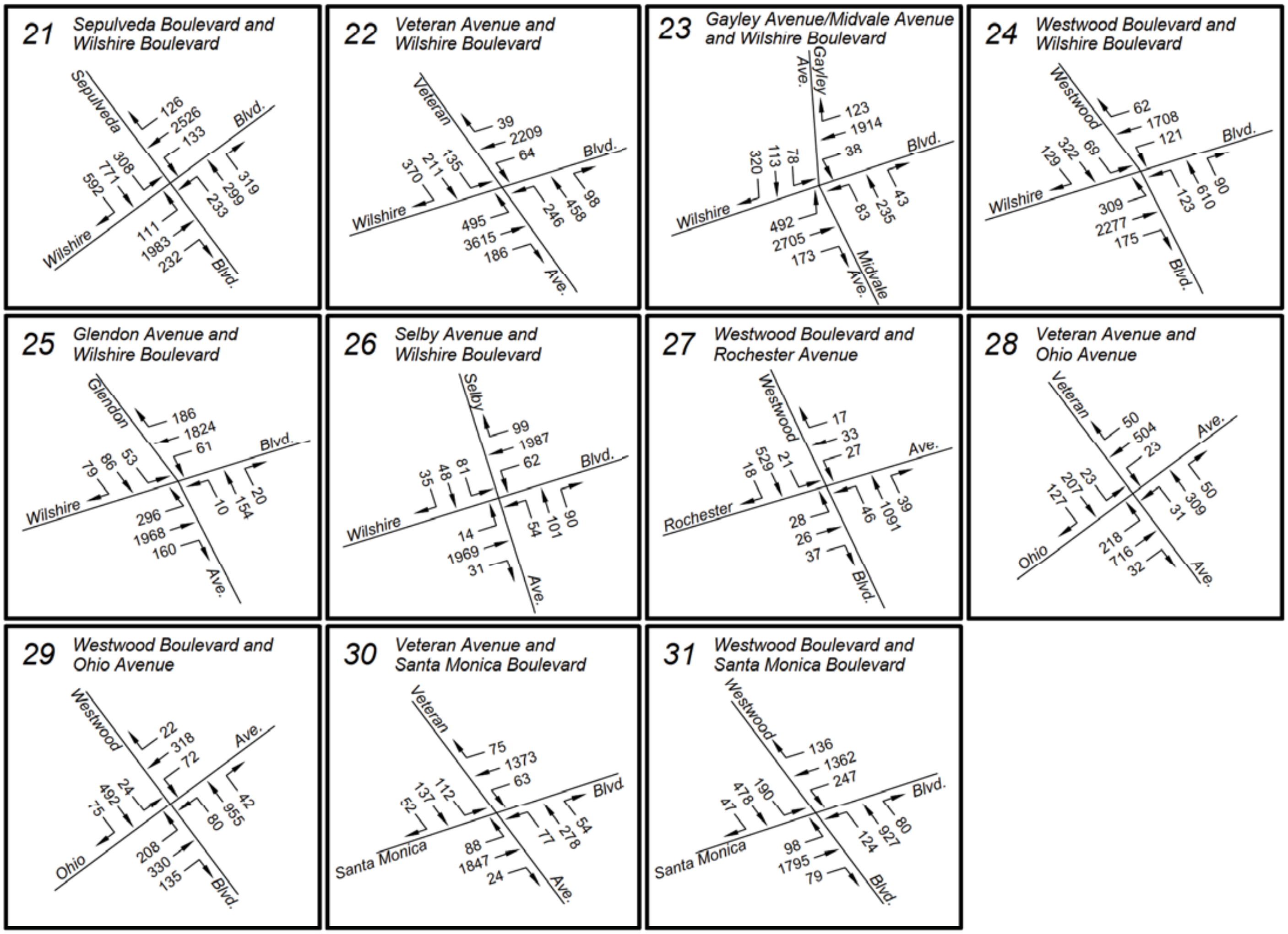

Source: Crain & Associates 2016

Existing 2016 Traffic Volumes AM Peak Hour

Figure 4.8-2b

Geffen Academy at UCLA

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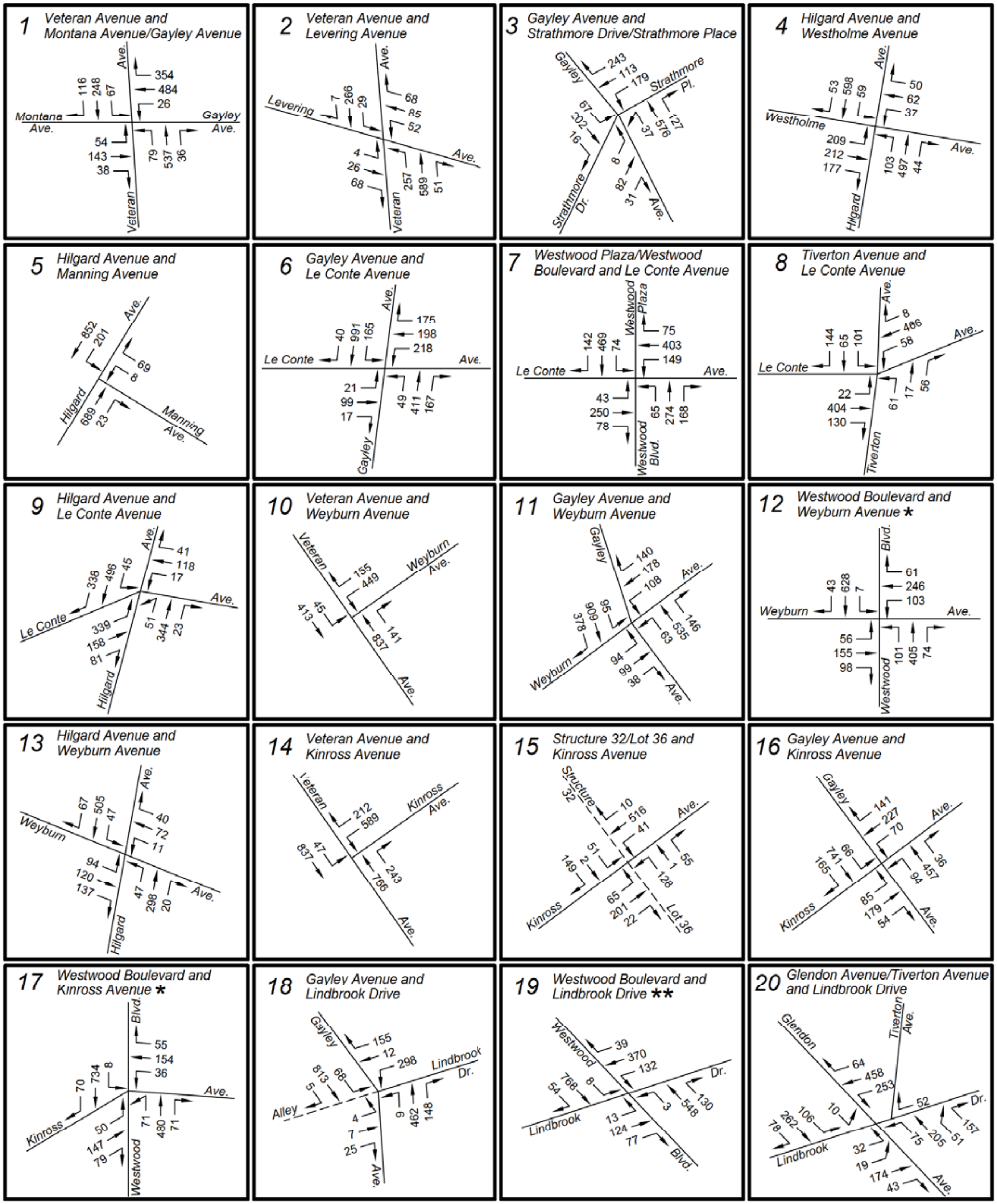

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

Source: Crain & Associates 2016

Existing 2016 Traffic Volumes PM Peak Hour

Figure 4.8-3a

Geffen Academy at UCLA

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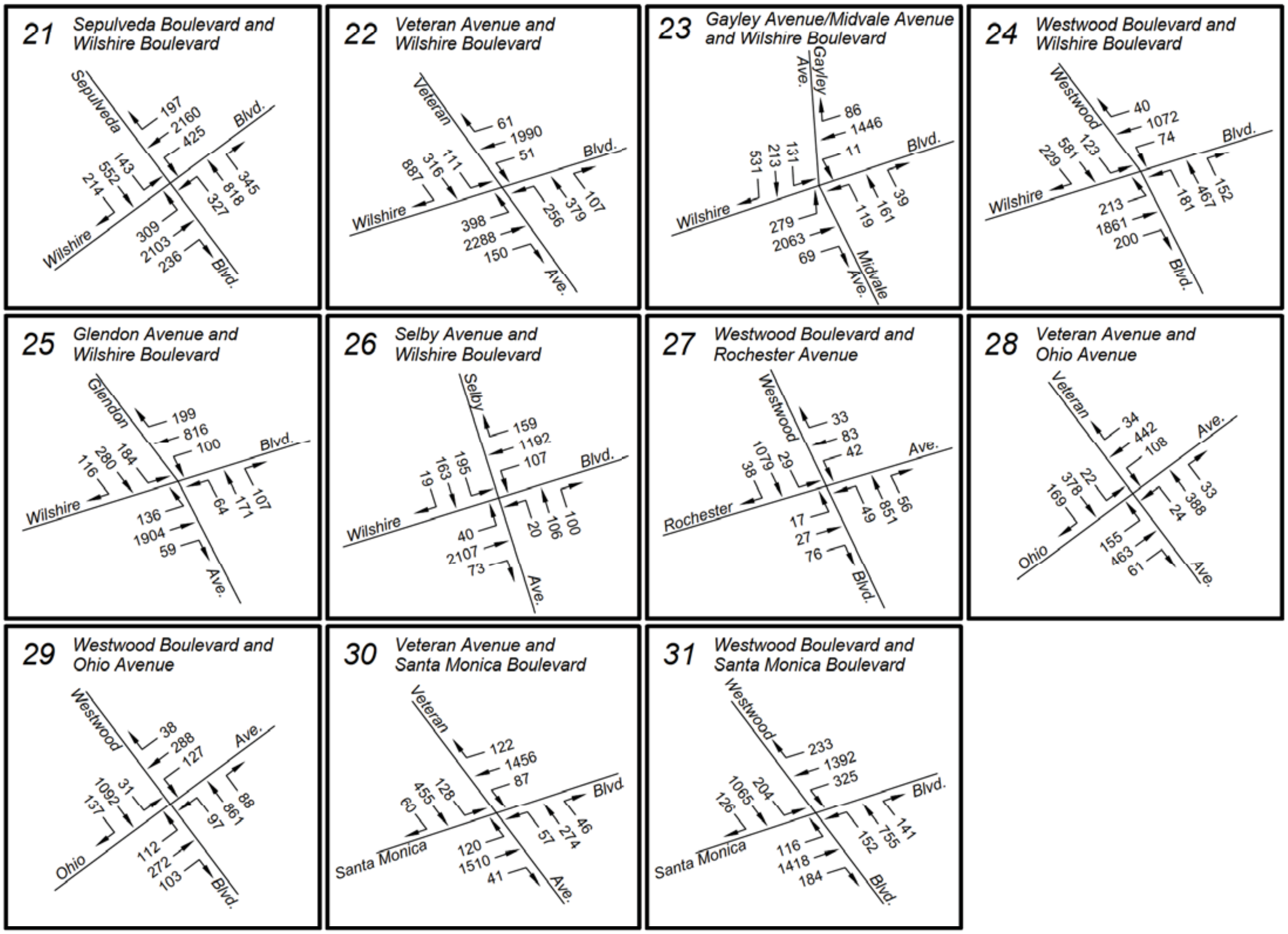

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Source: Crain & Associates 2016

Existing 2016 Traffic Volumes PM Peak Hour

Figure 4.8-3b

Geffen Academy at UCLA

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TABLE 4.8-1
CRITICAL MOVEMENT VOLUME RANGES*
FOR DETERMINING LEVELS OF SERVICE

Level of Service	Maximum Sum of Critical Volumes (Vehicles Per Hour)		
	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	N/A	N/A	N/A

*For planning applications only, i.e., not appropriate for operations and design applications
Source: Crain and Associates 2016.

"Capacity" represents the maximum total hourly volume of vehicles, i.e., vehicles per hour (VPH), in the critical lanes that is reasonably expected to proceed through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of LOS E, as indicated in Table 4.8-1. The volume-to-capacity (V/C) ratios used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Table 4.8-2 presents the LOS corresponding to a range of V/C ratios.

TABLE 4.8-2
LEVEL OF SERVICE AS A FUNCTION
OF VOLUME-TO-CAPACITY RATIOS

Level of Service	Description of Operating Characteristics	Range of V/C Ratios
A	Excellent. No vehicle waits longer than one red light.	0.000–0.600
B	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.601–0.700
C	Good. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701–0.800
D	Fair. Delays may be substantial during 0.801–0.900 portions of the rush hour but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.801–0.900
E	Poor. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901–1.000
F	Failure. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 1.000

V/C: volume-to-capacity.
Source: Crain and Associates 2016.

Information pertaining to intersection traffic lane configurations and signal operations were obtained from City engineering plans, online aerial photographs, and field checks. The study intersection lane configurations and signal controls are shown in the Traffic Impact Study that is included in Appendix D of this Draft SEIR. This information, together with the study intersection volumes in Figures 4.8-2 (a and b) and 4.8-3 (a and b), were analyzed and the V/C ratios and the corresponding service levels for existing traffic conditions at the study intersections were determined.

Per LADOT policy, the V/C ratios were reduced by 0.100 in order to approximate the 10 percent increase in intersection capacity attributable to ATSAC/ATCS. Following recent traffic studies in the project vicinity, additional adjustments to the CMA methodology were made to better account for the existing traffic congestion blocking intersections along Wilshire Boulevard and Westwood Boulevard. Intersection capacities at five Wilshire Boulevard and three Westwood Boulevard study intersections were reduced as follows:

- 15 percent capacity reduction during peak hours
    - Gayley Avenue/Midvale Avenue and Wilshire Boulevard (Intersection 23)
- 25 percent capacity reduction during peak hours
    - Westwood Boulevard and Weyburn Avenue (Intersection 12)
    - Westwood Boulevard and Kinross Avenue (Intersection 17)
    - Westwood Boulevard and Lindbrook (Intersection 19)
    - Sepulveda Boulevard and Wilshire Boulevard (Intersection 21)
    - Veteran Avenue and Wilshire Boulevard (Intersection 22)
    - Westwood Boulevard and Wilshire Boulevard (Intersection 24)
    - Glendon Avenue and Wilshire Boulevard (Intersection 25)
- 33 percent capacity reduction to account for the all-pedestrian signal phase operations
    - Westwood Plaza/Westwood Boulevard and Le Conte Avenue (Intersection 7)

The Existing 2016 V/C ratios and the corresponding LOS under existing AM and PM peak hour conditions for the study intersection are shown in Table 4.8-3.

TABLE 4.8-3
EXISTING 2016 PEAK HOUR LEVELS OF SERVICE

Intersection No.	Intersection	Peak Hour	Existing (2016) Conditions	
			CMA	LOS
1	Veteran Ave and Montana Ave/Gayley Ave	AM	0.708	C
		PM	0.991	E
2	Veteran Ave and Levering Ave	AM	0.443	A
		PM	0.623	B
3	Gayley Ave and Strathmore Dr/Strathmore Pl	AM	0.320	A
		PM	0.562	A
4	Hilgard Ave and Westholm Ave	AM	0.430	A
		PM	0.491	A
5	Hilgard Ave and Manning Ave	AM	0.210	A
		PM	0.323	A
6	Gayley Ave and Le Conte Ave	AM	0.406	A
		PM	0.539	A

TABLE 4.8-3
EXISTING 2016 PEAK HOUR LEVELS OF SERVICE

Intersection No.	Intersection	Peak Hour	Existing (2016) Conditions	
			CMA	LOS
7	Westwood Plaza/Westwood Blvd and Le Conte Ave	AM	0.710	C
		PM	0.760	C
8	Tiverton Ave and Le Conte Ave	AM	0.365	A
		PM	0.495	A
9	Hilgard Ave and Le Conte Ave	AM	0.425	A
		PM	0.570	A
10	Veteran Ave and Weyburn Ave	AM	0.215	A
		PM	0.689	B
11	Gayley Ave and Weyburn Ave	AM	0.397	A
		PM	0.646	B
12	Westwood Blvd and Weyburn Ave	AM	0.432	A
		PM	0.687	B
13	Hilgard Ave and Weyburn Ave	AM	0.321	A
		PM	0.509	A
14	Veteran Ave and Kinross Ave	AM	0.338	A
		PM	0.429	A
15	Structure 32/Parking Lot 36 and Kinross Ave	AM	0.104	A
		PM	0.305	A
16	Gayley Ave and Kinross Ave	AM	0.282	A
		PM	0.467	A
17	Westwood Blvd and Kinross Ave	AM	0.452	A
		PM	0.537	A
18	Gayley Ave and Lindbrook Dr	AM	0.289	A
		PM	0.428	A
19	Westwood Blvd and Lindbrook Dr	AM	0.475	A
		PM	0.521	A
20	Glendon Ave and Lindbrook Dr	AM	0.445	A
		PM	0.467	A
21	Sepulveda Blvd and Wilshire Blvd	AM	1.009	F
		PM	1.168	F
22	Veteran Ave and Wilshire Blvd	AM	1.456	F
		PM	1.176	F
23	Gayley Ave/Midvale Ave and Wilshire Blvd	AM	0.872	D
		PM	0.782	C
24	Westwood Blvd and Wilshire Blvd	AM	0.994	E
		PM	0.914	E
25	Glendon Ave and Wilshire Blvd	AM	0.843	D
		PM	1.080	F
26	Selby Ave and Wilshire Blvd	AM	0.569	A
		PM	0.733	C
27	Westwood Blvd and Rochester Ave	AM	0.369	A
		PM	0.422	A

TABLE 4.8-3
EXISTING 2016 PEAK HOUR LEVELS OF SERVICE

Intersection No.	Intersection	Peak Hour	Existing (2016) Conditions	
			CMA	LOS
28	Veteran Ave and Ohio Ave	AM	0.690	B
		PM	0.717	C
29	Westwood Blvd and Ohio Ave	AM	0.614	B
		PM	0.709	C
30	Veteran Ave and Santa Monica Blvd	AM	0.620	B
		PM	0.756	C
31	Westwood Blvd and Santa Monica Blvd	AM	0.939	E
		PM	0.872	D

CMA: Critical Movement Analysis; LOS: Level of Service; AM: morning; PM: evening.
Source: Crain and Associates 2016

As shown in Table 4.8-3, 24 of the 31 study intersections analyzed are operating at excellent to good LOS (i.e., LOS A, B, or C) during both AM and PM peak hours. The intersection of Gayley Avenue/Midvale Avenue and Wilshire Boulevard is operating at LOS D, a fair level of service, during the AM peak hour and LOS C during the PM peak hour. The remaining six intersections identified below are experiencing poor or failing service levels (LOS E or F) during one or both peak hours:

- **Veteran Avenue and Montana Avenue/Gayley Avenue (Intersection 1).** LOS E during the PM peak hour;
- **Westwood Boulevard and Santa Monica Boulevard (Intersection 31).** LOS E during the AM peak hour;
- **Glendon Avenue and Wilshire Boulevard (Intersection 25).** LOS F during the PM peak hour;
- **Westwood Boulevard and Wilshire Boulevard (Intersection 24).** LOS E during the AM and PM peak hours;
- **Sepulveda Boulevard and Wilshire Boulevard (Intersection 21).** LOS F during the AM and PM peak hours; and
- **Veteran Avenue and Wilshire Boulevard (Intersection 22).** LOS F during the AM and PM peak hours.

It should be noted that many of the poor and failing LOSs are due to the standing freeway traffic backups reducing capacity of the intersection, further decreasing intersection capacity. Hence reductions in capacity have been incorporated into the baseline of the existing condition at the affected intersections along Wilshire Boulevard stated above. The LOS analysis worksheets for existing conditions are provided in the Traffic Impact Study included in Appendix D of this Draft SEIR.

Campus Trip Generation and Parking

To determine the annual status of UCLA campus trip generation, UCLA conducts a week-long count of vehicles entering and exiting the campus during the third week of October. This week was chosen as it represents a heavy vehicle generation week during the regular session. This "Cordon count" is conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops and rubber hose counting systems). As a result, all trips entering and exiting the campus are recorded, including those associated with pass-through traffic (e.g., non-UCLA vehicles traversing the campus to travel from one location to another). The Wilshire Center's traffic is handled by an agreed-upon formula with LADOT and is added to the main campus Cordon count.

In conjunction with the adoption of the 1990 LRDP, UCLA entered into a Transportation Mitigation Monitoring Agreement (TMMA) with the City of Los Angeles, which limits the total number of vehicle trips that can be generated over the 15-year planning horizon of the 1990 LRDP to 139,500 average daily vehicle trips (this limit is codified as 1990 LRDP Mitigation Measure C-1.5). This commitment was extended an additional five years with the adoption of the 2002 LRDP, and UCLA extended it again as part of the 2002 LRDP Amendment in March 2009 (refer to PP 4.13-1[a] carried forward from the March 2009 LRDP Amendment Final EIR).

The historic campus vehicle trip generation (average daily traffic [ADT]) from 1990 to 2007 is shown in Table 4 of the March 2009 LRDP Amendment Final EIR Traffic Study. The total average daily trip generation for the UCLA campus has varied since the 1990 LRDP but has remained well below the LRDP trip cap of 139,500 average daily vehicle trips (pursuant to PP 4.13-1[a]). During the fall 2015 Cordon counts (the most current available information), the campus generated approximately 100,961 daily vehicle trips (UCLA 2016b), which is approximately 18,308 fewer daily vehicles trips than in 2007 when the March 2009 LRDP Amendment Final EIR was prepared (estimated at 119,269 daily vehicle trips). It should be noted that the fall 2015 Cordon counts included the new population baseline (see Section 4.6, Population and Housing, of this Draft SEIR). Despite the weekday average population increase, the campus Cordon counts for 2015 (100,961) are 15 percent less than the trips estimated in the LRDP EIR (119,269) and 28 percent less than the campus trip cap of 139,500.

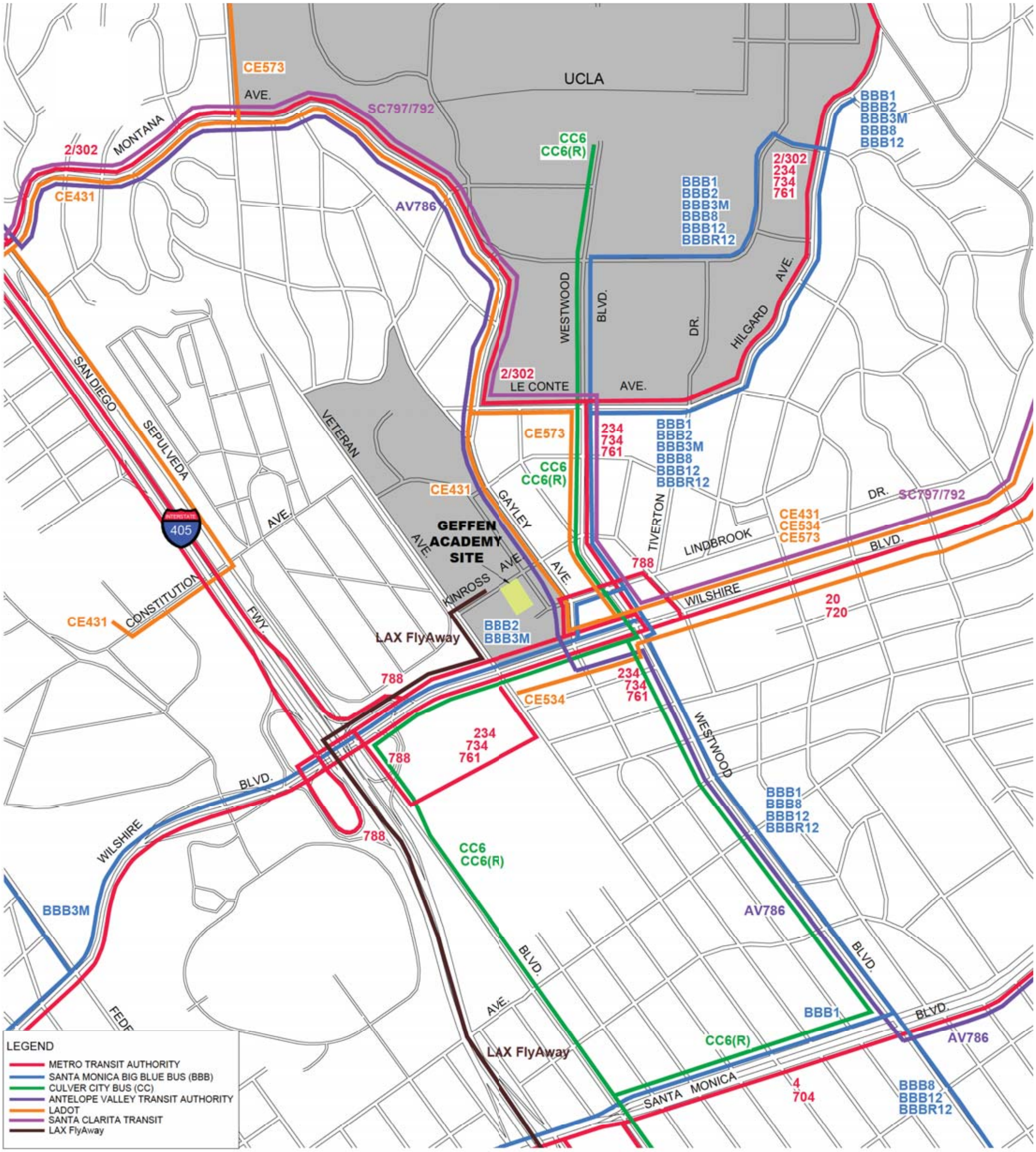
Based on the parking inventory also conducted in fall 2015, the UCLA campus currently has approximately 22,758 parking spaces (UCLA 2016b) (2,411 fewer spaces than the 25,169-space parking cap in the 2002 LRDP, as amended in March 2009 [PP 4.13-1(d)]).

Public and UCLA Transit

A detailed discussion of the modes of alternative transportation serving the UCLA campus is provided in the March 2009 LRDP Amendment Final EIR and the Traffic Impact Study prepared for the Geffen Academy Project (included in Appendix D of this Draft SEIR). A summary of this information is presented below.

There are numerous public transit lines serving the project site and study area. These lines include those operated by the Los Angeles County Metropolitan Transportation Authority (Metro), LADOT, Big Blue Bus (Santa Monica), Culver City Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and Los Angeles International Airport (LAX) FlyAway. These transit lines located within the project vicinity are illustrated in Figure 4.8-4. Table 1 of the Traffic Impact Study shows a summary of the routes and service provided within a two-mile radius, which includes local, express, and rapid bus service. This table also shows that many of these lines have stops within reasonable walking distance (approximately ¼ mile) of the site. When transfer opportunities are considered, these lines provide excellent transit access to the project site, the vicinity, and the greater Los Angeles region.

UCLA provides campus shuttles and evening van service to connect the UCLA Main Campus with the Southwest Campus and Westwood Village, including the project site. The BruinBus



Source: Crain & Associates 2016

Public Transportation Lines

Figure 4.8-4

Geffen Academy at UCLA

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D:\Projects\UCLA\J028\Graphics\EIR\ex_PublicTransportationLines_20160502.ai shuttle service includes the Campus Express, Wilshire Center Express, Weyburn Express, and Westwood Shuttle, which operates between the hours of 7:00 AM to 7:00 PM. The evening van service extends the BruinGo connection in the evening and provides service between the hours of 6:00 PM to 11:00 PM. The University Apartment Shuttle connects the UCLA campus and Westwood Village to the UCLA Apartments near Culver City and operates between 7:00 AM to 10:35 PM.

Campus Transportation Demand Management Program

University of California (UC) policy goals for achieving a sustainable transportation system are multifaceted, with a focus on increasing the Average Vehicle Ridership (AVR),[3] the number of low- or zero-emission vehicles (partial zero-emissions vehicle [PZEV] or zero-emissions vehicle [ZEV]), and the number of fuel efficient/alternative fuel vehicles in the campus fleet. The UCLA Transportation Demand Management (TDM) program began in 1984 with a mission of using parking fees and other UCLA resources to achieve cost-effective reductions in campus trip generation and parking demand, while increasing mobility options for faculty, staff, and students. The UCLA TDM program has grown into a comprehensive program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle.

The specific components of the TDM program will continue to change over time as the campus strives for the most cost-effective manner by which to maintain achievement of its required goals, so long as the overall effectiveness of the program is not compromised. A detailed description of the components of the UCLA TDM program is provided in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, and includes carpool matching, vanpool, campus transit/shuttles, emergency ride home program, bicycles, iWalk pedestrian program, motorcycles and scooters, telecommuting and alternative work schedules, car share, alternative fuel infrastructure, TDM outreach, BruinGo! transit program, non-stop bus service to LAX, and Go Metro Transit Access Pass (TAP) passes.

During the more than 32 years of operation, UCLA's TDM program has remained at the leading edge of such programs and has received numerous awards from regional and local agencies, including the State of California's Governor's Award, the City of Los Angeles Mayoral Award, and Rideshare Program Awards from the South Coast Air Quality Management District (SCAQMD) and Metro. In addition, UCLA has been recognized as a best workplace for commuters by the U.S. Department of Transportation (USDOT) and the U.S. Environmental Protection Agency (USEPA).

Since 1984, UCLA's comprehensive TDM program increased the campus-wide AVR from 1.26 to 1.66; exceeding the 1.5 AVR goal set by the SCAQMD. The TDM program includes incentives to reduce the employee drive-alone rate, which has resulted in a decline from 69 percent in 1990 to approximately 54 percent in 2015, which is substantially lower than the Los Angeles County drive-alone rate of 73 percent. The drive-alone rate has been accomplished through 1,032 carpools and 144 vanpools transporting 1,440 full-time riders (UCLA 2015). UCLA Transportation is responsible for monitoring compliance with the TDM program.

In addition, UCLA began the BruinGo! transit subsidy program in September 2000, which includes reduced fares on the Santa Monica Big Blue Bus and Culver City Bus. In 2005, the GoMetro program was launched, introducing 50 percent transit subsidies for Los Angeles County's Metro

[3] The AVR is the ratio of employees arriving between 6 AM and 10 AM to the motor vehicles they drive to campus.

Bus and Metro Rail systems. The LADOT, Santa Clarita Transit, and the Antelope Valley Transit Authority all have 50 percent transit subsidy agreements with the University.

Much has been accomplished toward meeting the goals to increase the University's fuel efficient/alternative fuel fleet. In the area of clean and fuel-efficient vehicles, the University's campus fleet includes PZEV and ZEV vehicles. Through development of the UCLA Fleet Optimization Plan, UCLA Transportation has systematically reduced the number of conventionally fueled fleet vehicles and increased the number of alternative fuel vehicles. As of May 2016, the campus fleet has 563 on-road vehicles that can operate on alternative fuel or power, compared to 508 vehicles that cannot operate with alternative fuel.

4.8.2 REGULATORY FRAMEWORK

A discussion of the State-mandated Congestion Management Program (CMP) is provided in the March 2009 LRDP Amendment Final EIR and is summarized under the discussion of Threshold 8.2 in this Draft SEIR.

Sustainable Transportation Practices

As with all UC campuses, UCLA implements the UC Sustainable Practices Policy (SPP) (UC 2015) (refer to PP 4.15-1 provided in Section 4.6, Greenhouse Gas Emissions, of this Draft SEIR). Section III.D addresses sustainable transportation; however, the majority of the SPP requirements are applicable at the UC-wide or campus-wide level and are not applicable to specific projects. However, the following requirement is applicable to the proposed Project:

- The University will pursue the expansion of Transportation Demand Management (TDM) programs and projects to reduce the environmental impacts from commuting. In conjunction with this effort, campuses will engage in advocacy efforts with local transit districts to improve routes to better serve student and staff ridership.

As discussed above, UCLA strives to incorporate alternative means of transportation to, from, and within the campus to improve the quality of life on campus and in the surrounding community. UCLA Transportation is also continuing to "green" the fleet through the purchase of clean and fuel efficient vehicles (PZEV, ZEV) as well as alternative fuel vehicles (AFVs) that use biodiesel, compressed natural gas, and/or ethanol.

4.8.3 PROJECT IMPACTS AND MITIGATION

Methods

Traffic Analysis Scenarios

The Traffic Impact Study addresses potential impacts of the proposed Project based on existing (2016) traffic conditions and future year (2020) traffic conditions. As previously identified, existing traffic conditions are based on traffic counts conducted in January 2016 for preparation of the Traffic Impact Study. The Existing Plus Project scenario overlays the estimated project trip generation on top of existing traffic conditions, not accounting for any future non-project-related growth. The combined volumes are presented in Figures 8(a) and 8(b) of the Traffic Impact Study included in Appendix D to this Draft SEIR and were analyzed in accordance with the CMA procedures previously discussed.

Future traffic conditions (Future Year 2020 Without Project traffic volumes) were determined based on two primary variables: (1) ambient traffic growth rate and (2) traffic due to other known or related future development projects. An ambient background traffic growth rate of one percent per year was applied to existing (2016) conditions. For purposes of this analysis, the proposed Project's planning horizon year is projected to be 2020; thus, a four percent growth rate was applied.

In addition to ambient growth, the other component of future background traffic is the known list of related/cumulative development projects proposed, approved, or under construction in the study area that could contribute traffic volumes to the study intersections through the year 2020. A listing of current related projects within approximately 1.5 miles of the project site was provided by LADOT. Additional research was conducted on the City of Los Angeles Department of City Planning website, on the Los Angeles Unified School District website, and in discussion with UCLA. A total of 19 related projects were identified as contributors of potentially significant traffic volumes to the study intersections. The list of related projects and associated trip generation is provided in Table 4.8-4; the trip generation assumptions are described in the Traffic Impact Study included in Appendix D of this Draft SEIR. The locations of these projects is presented in Figure 4.8-5. Figures 10a and 12b in the Traffic Impact Study illustrate the related project traffic volumes during the AM and PM peak hours at the 31 study intersections. As shown in Table 4.8-4, the related projects would generate approximately 30,616 average daily trips, 2,087 trips during the AM peak hour and 2,319 trips during the PM peak hour.

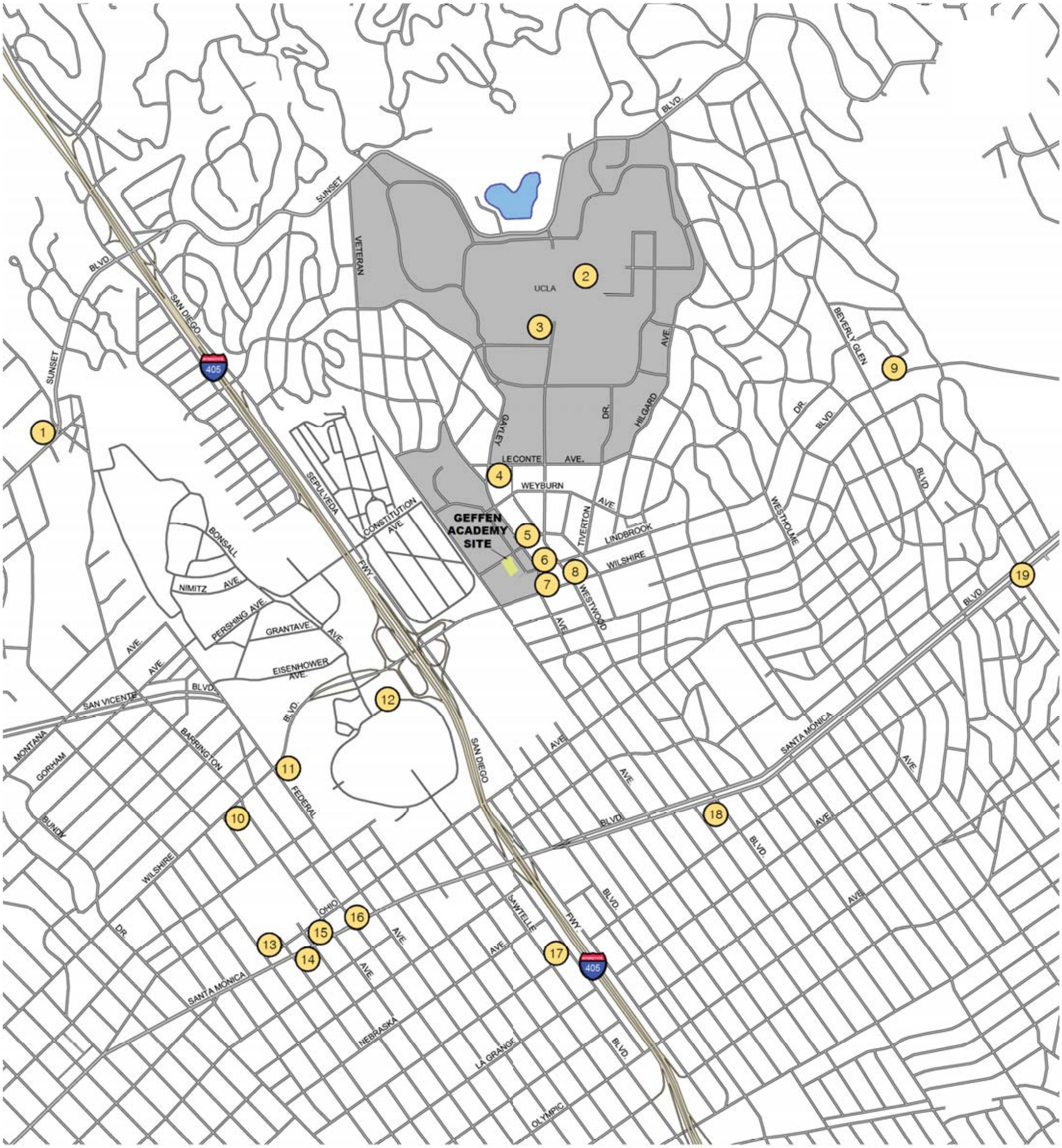
Additionally, two UCLA projects were included as part of the analysis. This includes the 2002 LRDP, as amended in March 2009, and the UCLA Meyer and Renee Luskin Conference and Guest Center Project. The trip generation estimates for these projects are based on the EIRs and associated traffic studies prepared for these projects. It should be noted that the Luskin Conference and Guest Center, as well as the proposed Geffen Academy, are tiered from the March 2009 LRDP Amendment Final EIR and the entitlement and impacts approved thereunder. Specifically, the traffic impacts related to the buildout of the LRDP have been accounted for in the analysis for the March 2009 LRDP Amendment Final EIR. Therefore, these projects, and their project-specific traffic impacts, have been incorporated as separate stand-alone projects <u>and</u> as part of the overall LRDP in an effort to provide the most conservative analysis.

Project traffic volumes were added to the Future Year 2020 Without Project volumes, producing the Future Year 2020 With Project traffic volumes. The Future Year 2020 With Project volumes were the basis for calculating the traffic impacts attributable to the Project, relative to the Future Year 2020 Without Project volumes.

Highway System Improvements

As previously discussed, all of the study intersections are operating under ATSAC/ATCS. The intersection capacity improvement attributable to ATSAC/ATCS has been incorporated into the analysis of existing and future conditions.

The analysis of future (2020) conditions included a review of the City of Los Angeles Bureau of Engineering's "Uniform Project Reporting System" website for potential street improvements that could affect capacity at the study intersections. Based on a review of future improvements, no highway system improvements are expected in the study area in future conditions; therefore, no improvements have been assumed the Year 2020 analysis (with and without the proposed Project) (Crain 2016).



Source: Crain & Associates 2016

Related Projects Location Map

Figure 4.8-5

Geffen Academy at UCLA

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TABLE 4.8-4
LIST OF RELATED/CUMULATIVE PROJECTS

	Project Name	Address	Size		Project Description	Daily	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
1.	Archer School for Girls	11725 W Sunset Blvd[a]	518	stu	School	1,184	61	43	104	174	42	216
2.	UCLA Northwest Housing Infill Project and LRDP Amendment[b]	UCLA	550,000	sf	School	6,397	358	89	447	177	413	590
3.	UCLA Meyer and Renee Luskin Conference Center and Guest Center Project[c]	UCLA (PS 6), corner of Westwood Plaza and Strathmore Drive	255,000	sf	Conference Center Guest Center	870	70	29	99	57	97	154
4.	Le Conte/Gayley Mixed-Use Project	10970 Le Conte Ave[d]	32,803 5,736	sf sf	Medical-Dental Office Specialty Retail	627	25	(5)	20	10	60	70
5.	Cava Grill Restaurant	1073 S Broxton Ave[e]	2,328	sf	Retail	449	0	0	0	8	7	15
6.	Lindbrook/Gayley Mixed-Use Project	10925 Lindbrook Dr/1130 S Gayley Ave[f]	34 5,250	du sf	Apartments Specialty Retail	459	7	17	24	22	21	43
7.	Westwood Hotel	10955 W Wilshire Blvd[g]	7,265 134 10 6,510 9,975 250	sf rm du sf sf du	Other Other Condominiums Retail Other Apartments	2,094	51	36	87	(32)	125	93
8.	Oxy Building	10899 Wilshire Blvd[h]	166,000	sf	General Office	1,831	228	31	259	42	205	247
9.	Apartments	888 S Devon Ave[e]	32	du	Apartments	213	3	13	16	10	6	16
10.	Landmark Apartments	11750 W Wilshire Blvd[e]	376	du	Mixed Use	(400)	(22)	99	77	(22)	(64)	(86)
11.	Office Project	11600 W Wilshire Blvd[i]	120,160 120,874	sf sf	Office Other	1,280	34	9	43	38	97	135
12.	VA West Los Angeles Medical Center	VA West Los Angeles[j]	1,840 797 6,280 4,100 450,000 7	du bd sf sf sf ac	Apartments Assisted Living Community Center General Office Hospital/Research Other	8,510	(82)	649	567	405	(162)	243
13.	YMCA	1466 S Westgate Ave[e]	65,000	sf	Other	1,204	52	33	85	27	46	73
14.	Mixed-Use Project	11800 W Santa Monica Blvd[e]	175 45,000	du sf	Apartments Retail	1,824	13	64	77	115	89	204

TABLE 4.8-4
LIST OF RELATED/CUMULATIVE PROJECTS

	Project Name	Address	Size		Project Description	Daily	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
15.	Mixed-Use Project	11701 W Santa Monica Blvd[h]	53	du	Apartments	251	0	18	18	12	3	15
			1,500	sf	Retail							
16.	Vons Supermarket	11660 W Santa Monica Blvd[i]	53,230	sf	Supermarket	1,946	51	32	83	37	36	73
17.	Mixed-Use Project	1900 S Sawtelle Blvd[e]	52	du	Mixed Use	327	13	28	41	25	13	38
18.	Mixed-Use Project	1855 Westwood Blvd[e]	30	du	Mixed Use	200	2	12	14	20	16	36
19.	Century City Shopping Center	10250 W Santa Monica Blvd[e]	73,008	sf	Retail	1,350	16	10	26	69	75	144

AM: morning; PM: evening; stu: student; UCLA: University of California, Los Angeles; LRDP: Long Range Development Plan; sf: square feet; du: dwelling unit; rm: room; VA: Veterans Affairs; bd: bed; ac: acre.

[a] Archer Forward: Campus Preservation and Improvement Plan Transportation Analysis Report, prepared by Fehr & Peers on 2/2014.
[b] Traffic Impact Study UCLA NHIP & LRDP Amendment, prepared by Iteris on 10/2008.
[c] Traffic Impact Study for the UCLA Meyer & Renee Luskin Conference & Guest Center, prepared by Iteris on 5/2012.
[d] Traffic Impact Study for the Le Conte/Gayley Mixed-Use Project in Westwood Village, prepared by Crain & Associates on 5/5/2014.
[e] Trip generation from LADOT database.
[f] Traffic Assessment of the Lindbrook/Gayley Mixed-Use Project in Westwood, prepared by Crain & Associates on 1/28/2013.
[g] Traffic Study for the Wilshire Gayley Project, prepared by Fehr & Peers on 3/2009.
[h] ITE *Trip Generation Manual*, 9th Edition, including standard adjustments adopted by LADOT.
[i] Trip generation from LADOT database; AM and PM inbound/outbound split not provided, splits generated from ITE *Trip Generation Manual*, 9th Edition.
[j] Traffic and Parking Analysis for Department of Veteran Affairs West LA Medical Center Master Plan Development, prepared by Crain & Associates on 12/4/2015.

Source: Crain and Associates 2016.

Thresholds of Significance

In March 2010, updates to the California Environmental Quality Act (CEQA) Guidelines were adopted, which included revisions to the thresholds for transportation and traffic. The Regents of the University of California (The Regents) subsequently updated UC checklists for CEQA documentation reflecting the updated State CEQA Guidelines Appendix G checklist. The analysis below is tiered from the March 2009 LRDP Amendment Final EIR, as applicable. New analysis is presented to address the updated thresholds; thresholds that were eliminated from the State CEQA Guidelines and UC checklists (including the potential for impacts related to parking) are not addressed.

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A of this Draft SEIR) and circulated with the NOP concludes that implementation of the proposed Project, which is a component of the LRDP, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR and therefore the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Would the project result in inadequate emergency access?

The UCLA campus is currently developed, and future development, including the proposed Project, would not increase air traffic levels or result in a change in the location of air traffic patterns resulting in substantial safety risks. Therefore, consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be no impact from implementation of the proposed Project related to air traffic patterns.

Local access to the project site is provided from Veteran Avenue and Gayley Avenue, with Kinross Avenue providing the primary access from Parking Lot 36. Midvale Alley, adjacent to and east of the Kinross Building, also provides access to the project site. Construction activities associated with the proposed Project would result in the installation of a new driveway (exit only) along Kinross Avenue. Construction activities may result in the temporary closure of on-campus traffic lanes or roadway segments and Midvale Alley adjacent to the Kinross Building to permit the delivery of construction materials; to transport demolition materials off site; or to accommodate construction activities. The reduction of roadway capacity, the narrowing of traffic lanes, and the occasional interruption of traffic flow could impair emergency access. The interruption of traffic flow on Kinross Avenue would not impair emergency access because travel in both directions would be maintained (as required by PP 4.13-5). Additionally, construction activities would be planned so that emergency access lanes, including all existing fire lanes in the project area, are fully accessible at all times, and emergency access to adjacent uses, including Parking Lot 36, Parking Structure 32, the Kinross South Building, and the Gayley Center, would be maintained during construction. Additionally, consultation with emergency service providers in the event of lane or street closures would be conducted (as required by PP 4.13-8).

With implementation of the proposed Project, existing emergency access points would be maintained to serve the proposed Project and surrounding areas. Therefore, consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be less than significant impacts related to emergency access during operation of the proposed Project.

Thresholds Addressed in this Draft SEIR

The Initial Study concludes that additional project-level analysis of the following thresholds of significance is required in this Draft SEIR. According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact related to transportation/traffic if it will:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

In the City of Los Angeles, the LADOT has established criteria to determine if a project has a significant traffic impact. For purposes of analysis in this Draft SEIR, the University has used this significance criteria for assessing intersection impacts resulting from the proposed Project. LADOT defines a significant project traffic impact according to a “stepped scale”, with intersections having high V/C ratios being more sensitive to additional traffic than those with small V/C ratios, which have more available capacity. The LADOT significant impact criteria, which affect LOSs C, D, E, and F, are summarized in Table 4.8-5. No significant impacts are deemed to occur at LOSs A and B, as these conditions exhibit sufficient surplus capacities to accommodate large traffic volumes with little effect on traffic delay.

TABLE 4.8-5
LOS ANGELES DEPARTMENT OF TRANSPORTATION CRITERIA FOR SIGNIFICANT INTERSECTION TRAFFIC IMPACT

Final V/C Ratio		
LOS	**Final V/C Ratio**	**Project-Related Increase in V/C**
C	0.700–0.800	Equal to or greater than 0.040
D	>0.800–0.900	Equal to or greater than 0.020
E, F	>0.900	Equal to or greater than 0.010

V/C: volume to capacity; LOS: level of service.
Source: Crain and Associates 2016.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 LRDP Amendment Final EIR

The following Programs, Practices, and Procedures (PPs) and Mitigation Measures (MMs) were adopted as part of the March 2009 LRDP Amendment Final EIR and are incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.13-1(d) *The campus shall continue to implement a TDM program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.*

PP 4.13-2 *UCLA Capital Programs will assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.*

PP 4.13-5 *To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.*

PP 4.13-6 *For any construction-related closure of pedestrian routes, the campus shall provide appropriate signage indicating alternative route and provide.*

Threshold 8.1	Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The analysis of Impacts 4.13-1 and 4.13-2 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addressed impacts to intersection and freeways during construction and operation concluded that implementation of the remaining development allocation on campus would result in:

- less than significant impacts to freeway mainline segments (Impact 4.13-1b);
- significant and unavoidable impacts to intersection LOSs (eight intersections) (project and cumulative) (Impact 4.13-1b); and
- significant and unavoidable impacts along roadway segments and at intersections from construction-related vehicle trips (project and cumulative) (Impact 4.13-2).

The trip generation and distribution assumptions of the proposed Project differ from those studied in the March 2009 LRDP Amendment Final EIR Traffic Study. Following is a discussion of short-term construction-related traffic impacts and long-term operational traffic impacts at study area intersections resulting from the proposed Project. Because the proposed Project is located in the City of Los Angeles, the City's Transportation Study guidelines are followed to determine the type and extent of the traffic analysis.

For the March 2009 LRDP Amendment Final EIR Traffic Study, additional detailed freeway analysis was also conducted in accordance with the Caltrans' *Guide for the Preparation of Traffic Impact Studies.* Because the proposed Project falls within the 2002 LRDP Amendment trip threshold and does not exceed the trip generation assumptions for the March 2009 LRDP Amendment Final EIR Traffic Study, no further freeway analysis is required. Additionally, in its NOP comment letter, Caltrans identified that direct adverse impacts to existing State transportation facilities were not expected.

Short-Term Construction Traffic

As identified in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, access to and from the campus is constrained due to the presence of residential streets, the Los Angeles National Cemetery, the Santa Monica Mountains, and Westwood Village. As a practical matter, two roadways (Wilshire and Sunset Boulevards) provide the primary access routes for construction vehicles. The March 2009 LRDP Amendment Final EIR assumed that the net effect of campus construction activities could result in localized traffic impacts in the vicinity of the campus, including the Wilshire and Sunset Boulevard intersections, which provide north/south access to the campus from Veteran Avenue.

As discussed in Section 3.0, Project Description, of this Draft SEIR, during site preparation and demolition activities, it is conservatively estimated that there would be approximately 2 round-trip truck trips every three days during an approximate 4-week period. Minor grading activities would also be required and would result in the generation of approximately 10 round-trip truck trips over an approximate 8-week period. Using the conservative assumption that the 10 round-trip truck trips would occur in one day and that these trips would be generated by a tractor-trailer combination (for which each truck trip is equivalent to 2.5 vehicle trips), peak construction traffic of approximately 25 car equivalent round trips could result. Because these trips would occur over a typical 8-hour construction day, approximately 3 trips would be generated during an average hour, including the AM peak hour. Construction would typically be completed each day prior to the PM peak hour; therefore, no PM peak hour impacts are anticipated.

As described in Section 3.0, Project Description, of this Draft SEIR, construction vehicles would access the project area via the I-405 freeway along routes that would include Wilshire Boulevard, Veteran Avenue, Kinross Avenue, and Midvale Alley. The generation of up to 3 equivalent trips during the AM peak hours could result in traffic delays along these routes but would not degrade intersection LOSs sufficiently to exceed the identified significance criteria. Therefore, construction-related traffic impacts from the proposed Project would be less than significant. Continued implementation of PP 4.13-2, which has been incorporated into the proposed Project, would require an assessment by UCLA of the construction schedules for major projects that could overlap and any adjustments made as necessary and to the extent feasible, in order to reduce construction-related traffic congestion.

Operational Traffic Impacts

<u>Project Trip Generation</u>

Trip generation rates for the proposed Project were calculated based on various methodologies due to the unique trip-generating characteristics of the proposed Project. As further described in the Traffic Impact Study included in Appendix D of this Draft SEIR, the two sources for trip generation rates were the current Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 9th Edition, and the March 2009 LRDP Amendment Final EIR Traffic Study. The ITE rates were used for the overall proposed Project trip generation that includes the Geffen Academy site and the Occidental employees vacating the Oxy Building.[4] The March 2009 LRDP Amendment Final EIR Traffic Study rates were used for UCLA faculty and staff and for the UCLA

[4] The analysis of the net trip impact on the Geffen Academy site considered the new Academy uses to be added to the site and the existing administrative employees in the Kinross Building that are to be relocated to the Oxy Building. For the net trip impact on the Oxy Building site, the relocation of the administrative staff from the Southwest Campus site to the Oxy Building was considered, in addition to the removal/relocation of the existing Oxy Building staff from the building. The relocated administrative employees from the existing Kinross Building would occupy approximately 3 of the 10 floors being vacated by an estimated 300 Occidental staff. Therefore, a credit for the trip reduction from 30 percent of the 300 Occidental staff, or 90 employees, was taken.

commuter students using the parking spaces no longer needed for the relocated administrative staff.

Trip-generation estimates and assumptions for the proposed Project are described in detail in the Traffic Impact Study included in Appendix D of this Draft SEIR. In summary, to allow for the distribution and assignment of the proposed Project trips, the overall school trip generation estimates were subdivided into the following subcategories for students:

- Students Bused (4 buses with approximately 120 students)
- Students with Parking (25 students assigned parking with a 3-student carpool)
- Transit/BruinBus/Walk (75 students, approximately 12 percent)
- Drop-Off/Pickup By Automobile[5] (approximately 350 students):
    - Parent Carpool Single Purpose Trips (approximately 25 percent)
    - Off-Campus Linked Trips (approximately 25 percent)
    - Main Campus Linked Trips (approximately 50 percent)

The Geffen Academy faculty and staff would receive the same incentives to rideshare as the other UCLA faculty and staff. The UCLA faculty and staff generation rates from the March 2009 LRDP Amendment Final EIR were determined to be most appropriate for estimation of the share of trips attributable to the 109 Geffen Academy faculty and staff. Additionally, a total of 212 administrative staff would be relocated from the Kinross Building to the Oxy Building. Based on the rates in the LRDP Final EIR, they are estimated to be using 112 spaces in Parking Lot 36 that would be freed for other uses. Based on the estimated Geffen Academy faculty and staff size of 109 persons and the LRDP Final EIR rates, 58 of the spaces would be used. In addition, 25 of the spaces would be used by Geffen Academy students. The remaining 29 spaces would be reserved for Geffen Academy visitors or removed to construct the fence and maintain circulation in Parking Lot 36. Therefore, no spaces would be available to reduce the current UCLA commuter student parking permit waiting list.

The estimated net trip generation from the proposed Project is shown in Table 4.8-6. As shown, the proposed Project is anticipated to generate a net increase of 824 daily trips, 260 AM peak hour trips (137 in and 123 out), and 153 PM peak hour trips (70 in and 83 out).

5 Specifically, to follow standard ITE procedures, it was necessary to separate the base “single purpose” trips (e.g., for non-UCLA affiliated parents dropping off a carpool and then returning home) from a “linked-diverted trip” (e.g., from a UCLA parent dropping off a carpool on their way to the UCLA Main Campus).

TABLE 4.8-6
ESTIMATED TRIP GENERATION CALCULATIONS
UCLA PER PARKING SPACE METHODOLOGY[a]

Category	Population			Motor Vehicle Trips							Trip Distribution & Assignment[e]
	% of Total	Persons	Parking Spaces	Daily Trips	AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	
Southwest Campus Trip Generation											
Geffen Faculty/Staff (109 Persons)			58	191	14	3	17	7	15	22	A
Geffen Students											
Bused	19.4%	120	0	16	4	4	8	4	4	8	A
Students with Parking	12.1%	75	25	93	25	0	25	0	25	25	A
Transit/BruinBus/Bike/Walk	12.1%	75	0	0	0	0	0	0	0	0	N/A
Off-Peak/Absent	0.0%	0	0	0	0	0	0	0	0	0	N/A
Drop-Off/Pickup by Automobile											
Single Purpose Trips[b]	14.1%	88	0	185	30	30	60	16	16	32	B
Off-Campus Linked Trips[c]	14.1%	88	0	185	30	30	60	16	16	32	C[f]
Main Campus Linked Trips[c]	28.2%	175	0	370	61	60	121	32	32	64	D[f]
Geffen Subtotal[d]	*100%*	*620*	*83*	*1,040*	*164*	*127*	*291*	*75*	*108*	*183*	
Change in Commuter Students Spaces[g]		0	0	0	0	0	0	0	0	0	A
Administrative Staff Shifted from Kinross to Oxy		-211	-112	-369	-26	-6	-32	-13	-30	-43	A
Southwest Campus Net Trips											
Net Driveway/Cordon Trips			**-29**	**671**	**138**	**121**	**259**	**62**	**78**	**140**	
Net Trips w/o Linked Trips			**-29**	**116**	**47**	**31**	**78**	**14**	**30**	**44**	
Oxy Building Trip Generation											
Administrative Staff Shifted from Kinross to Oxy		211	112	369	26	6	32	13	30	43	E
Vacating Occidental Staff		-90	-121	-216	-27	-4	-31	-5	-25	-30	E
Oxy Building Net Trips			**-9**	**153**	**-1**	**2**	**1**	**8**	**5**	**13**	
Project Total for Both Sites				**824**	**137**	**123**	**260**	**70**	**83**	**153**	
Non-Linked Trips for Both Sites				**269**	**46**	**33**	**79**	**22**	**35**	**57**	

TABLE 4.8-6
ESTIMATED TRIP GENERATION CALCULATIONS
UCLA PER PARKING SPACE METHODOLOGY[a]

Category	Population			Motor Vehicle Trips							Trip Distribution & Assignment[e]
	% of Total	Persons	Parking Spaces	Daily Trips	AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	
Assignment Pattern for Trips	**Daily**	**AM PH**	**PM PH**								
Park on Southwest Campus[h]	-8.4%	6.9%	7.8%	-69	17	1	18	-2	14	12	A
Single Purpose Drop-Off/Pickup	22.5%	23.1%	20.9%	185	30	30	60	16	16	32	B
Off-Campus Linked Trips	22.5%	23.1%	20.9%	185	30	30	60	16	16	32	C
Campus Linked Trips	44.9%	46.5%	41.8%	370	61	60	121	32	32	64	D
Park at Occidental Building	18.6%	0.4%	8.5%	153	-1	2	1	8	5	13	E
Total[i]	100%	100%	100%	**824**	**137**	**123**	**260**	**70**	**83**	**153**	

%: percent; AM: morning; PM: evening; N/A: not applicable; w/o: without; PH: peak hour.

a Table assumes 2008 LRDP Amendment EIR campus-wide rates for parking and trip generation. Use rates projected for 2013 in the EIR.
b Single purpose trips are only for picking up or dropping off students and do not serve as an intermediate stop on a parent's commute trip.
c Linked trips are being made for another purpose with the student drop-off or pickup made during an intermediate stop.
d Geffen subtotal of trips conservatively based on unadjusted ITE Middle/Junior High School and High School rates.
e Trip Distribution/Assignments:
- A Distribution taken from the 2008 LRDP Amendment EIR (Standard Distribution).
- B Distribution based on Lab School student residence zip codes.
- C Standard employment distribution not affiliated with UCLA.
- D Standard distribution adjusted to reflect Main Campus parking locations.
- E Standard distribution adjusted in the immediate vicinity of the Oxy Building.

f Linked trips will only have impacts from the rerouted portion of trips at local intersections.
g The number of commuter student spaces are expected to be reduced due to the Geffen Academy Project. However, to remain conservative for this analysis, no reductions in trip generation have been taken under this category.
h This estimated assignment pattern is used for the Geffen Academy faculty and staff, students, and buses as well as the Kinross Building administrative staff who currently park on the Southwest Campus.
i Due to the closure of the existing recreation center, library conservation lab, and archaeological collections storage in the Kinross Building, the work location for staff members would be shifted from the Kinross Building to other buildings, but that shift would not affect traffic generation or routing.

Totals may not add due to rounding.

Source: Crain and Associates 2016.

Trip Distribution and Assignment

As further described in the Traffic Impact Study included Appendix D of this Draft SEIR, estimation of the geographic distribution of proposed Project trips considered the nature of the proposed Project uses, current traffic patterns, characteristics of the surrounding roadway system, location of the project site and the Oxy Building and the proximity to freeways and major travel routes, and areas from which students and employees would likely be drawn. In summary, (1) the March 2009 LRDP Amendment Final EIR Traffic Study distribution was used for the single-purpose employee, carpooled student driver, and bus trips and (2) the zip codes of the students attending the UCLA Lab School were aggregated for use for the single-purpose student drop-off/pickup trips. Estimates were made of the overall geographic trip distribution percentages, which are shown in Table 4.8-7.

TABLE 4.8-7
PROJECT GEOGRAPHIC TRIP DISTRIBUTION PERCENTAGES

For Employee/Student Driver/Bus/Linked Trips	I-405 North	28%
	I-405 South	39%
	Surface North	1%
	Surface South	8%
	Surface East	9%
	Surface West	15%
For Single-Purpose Student Drop-Off/Pickup Trips	I-405 North	6%
	I-405 South	13%
	Surface North	4%
	Surface South	21%
	Surface East	26%
	Surface West	30%

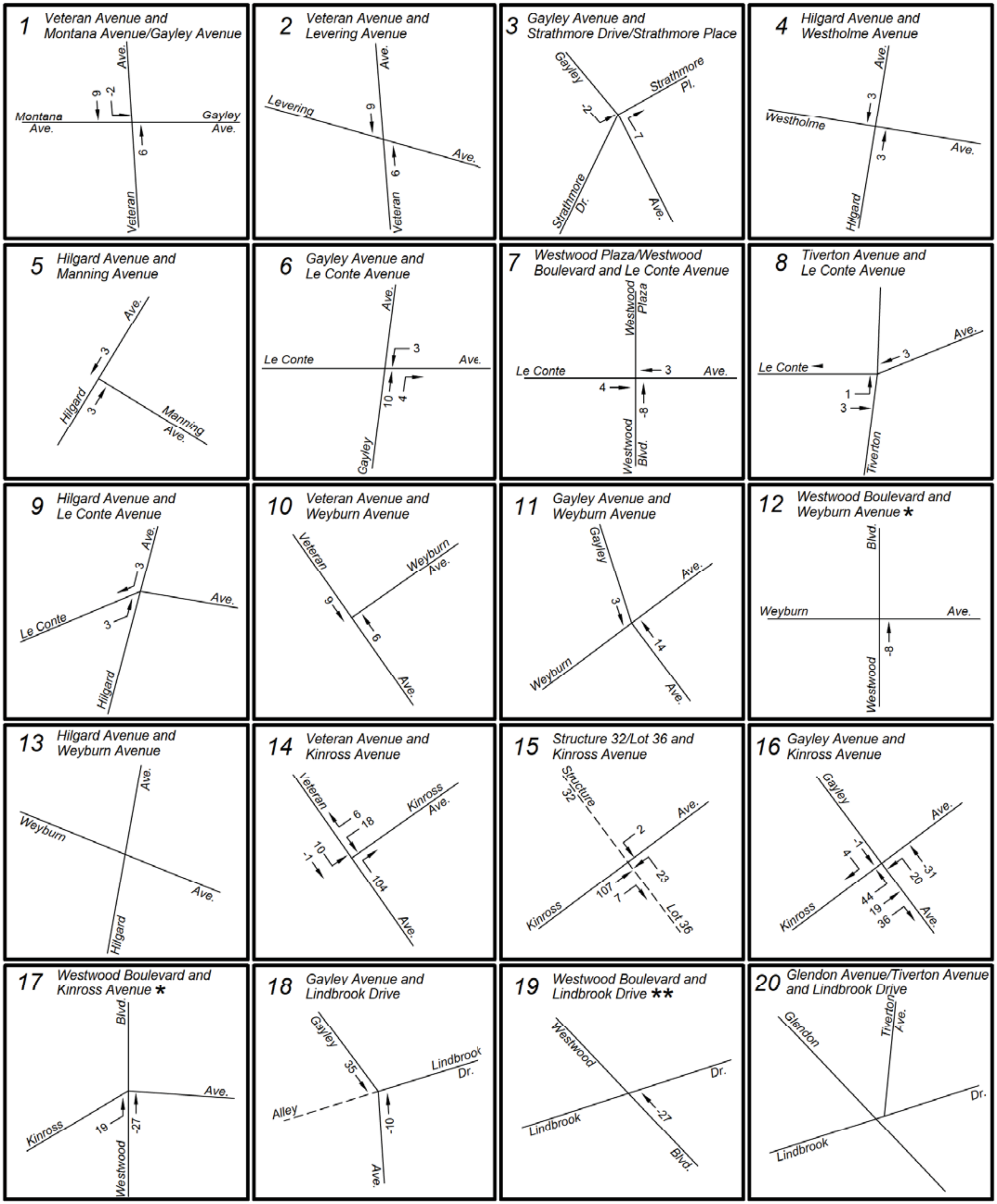
I: Interstate; %: percent.
Source: Crain and Associates 2016

The estimated proposed Project trip assignment percentages for the specific streets and intersections expected to be used to access the site were developed from the general distribution percentages in Table 4.8-7. The trip distribution percentages in the March 2009 LRDP Amendment Final EIR were also used for the trip assignment as well as the student home location data for students attending the UCLA Lab School.

Inbound and outbound trip assignments were developed for each study intersection and are illustrated in Figures 5a through 5g in the Traffic Impact Study included in Appendix D of this Draft SEIR. Applying these percentages to the proposed Project trips in Table 4.8-6, proposed Project traffic volumes at the 31 study intersections were determined for the AM and PM peak hours and are shown in Figures 4.8-6 (a and b) and 4.8-7 (a and b), respectively.

Existing (2016) Plus Project Conditions

The Existing Plus Project traffic analysis scenario overlays the estimated project trip generation on existing traffic conditions, not accounting for any future non-project-related growth. Figures 8a and 8b of the Traffic Impact Study included in Appendix D of this Draft SEIR illustrate the Existing Plus Project AM and PM peak hour traffic volumes at the study intersections.



Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

Source: Crain & Associates 2016

Project Traffic Volumes AM Peak Hour

Figure 4.8-6a

Geffen Academy at UCLA

N W E S

BonTerra PSOMAS

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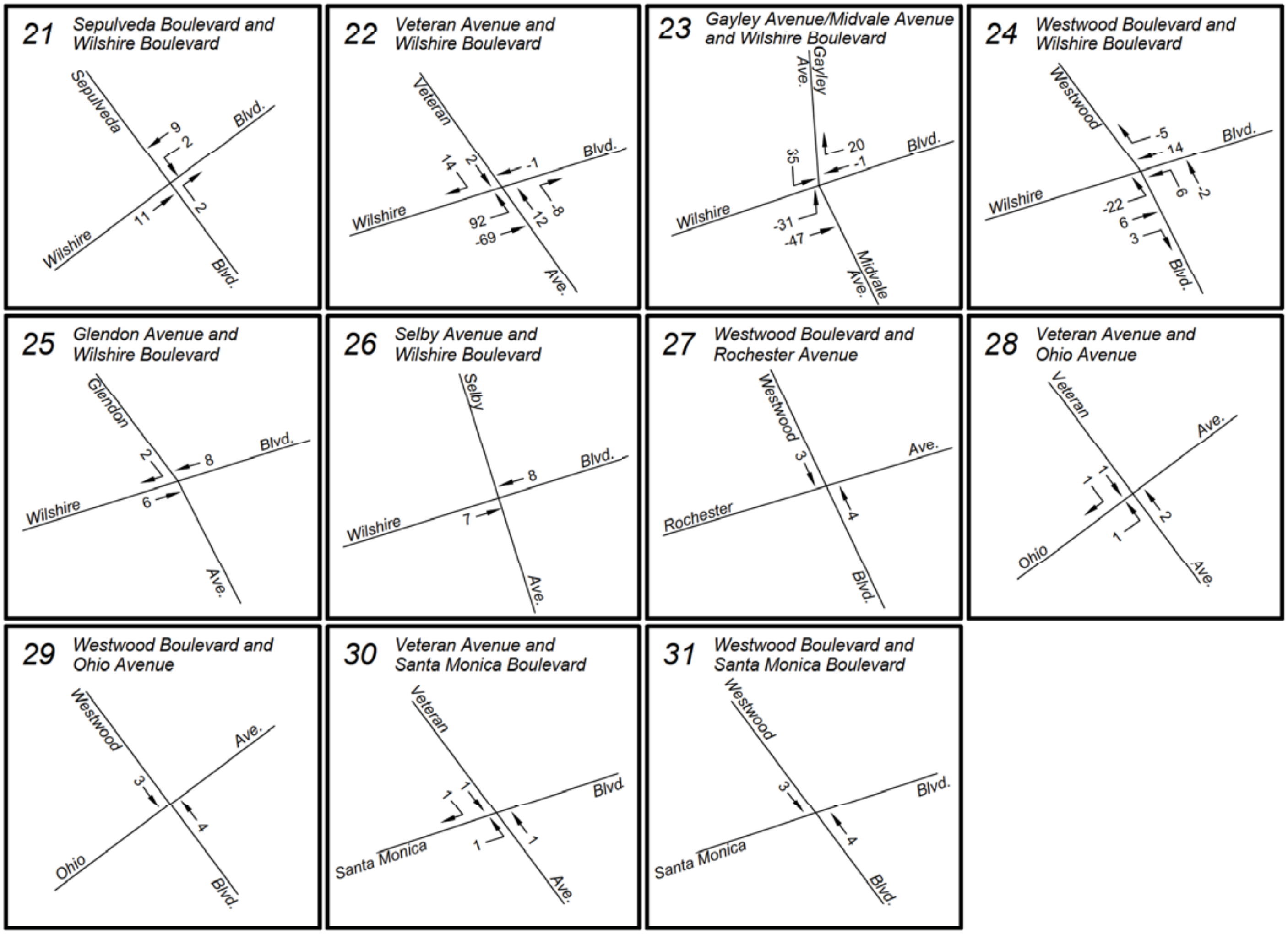

Source: Crain & Associates 2016

Project Traffic Volumes AM Peak Hour

Figure 4.8-6b

Geffen Academy at UCLA

N W E S

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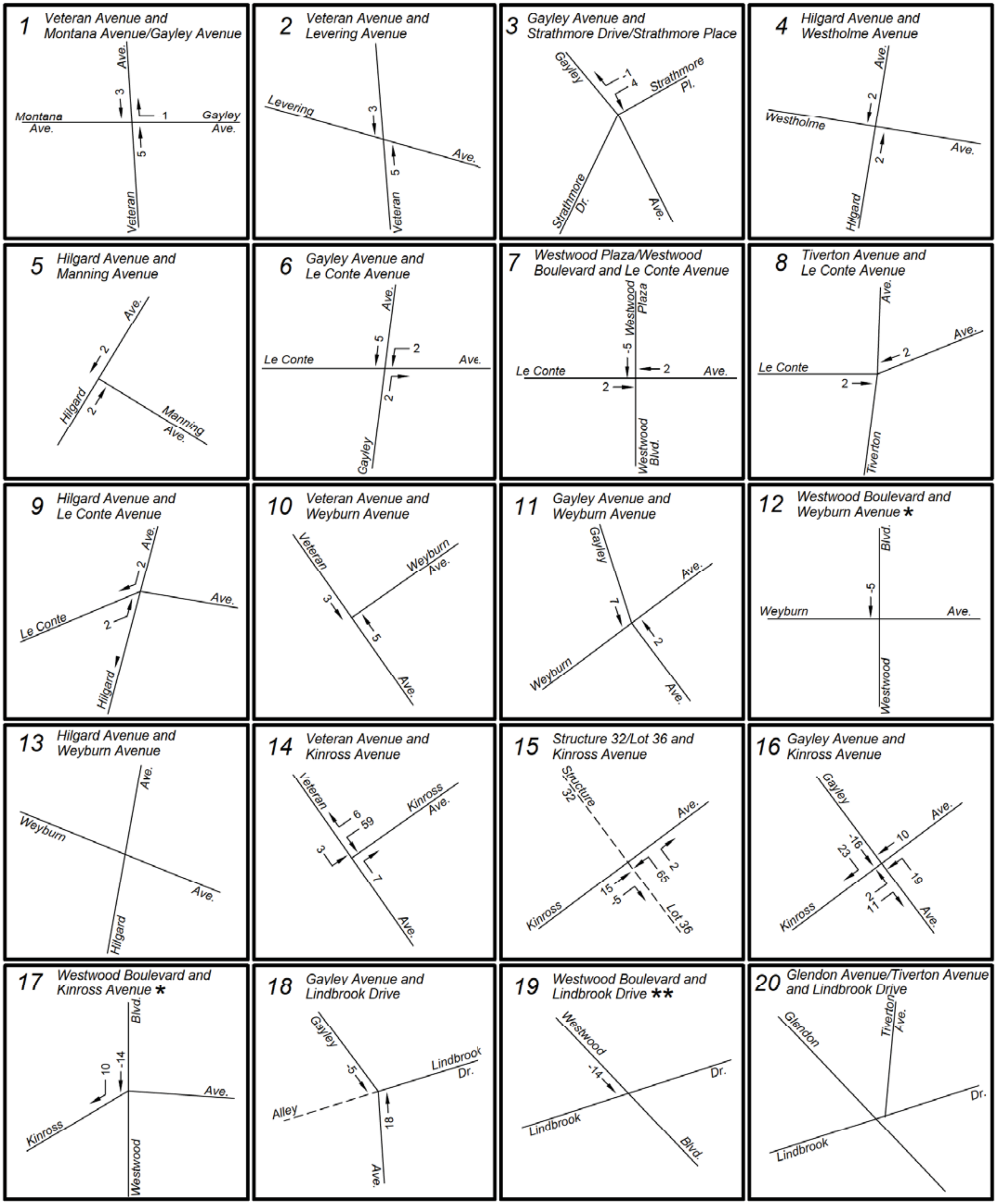


Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

Source: Crain & Associates 2016

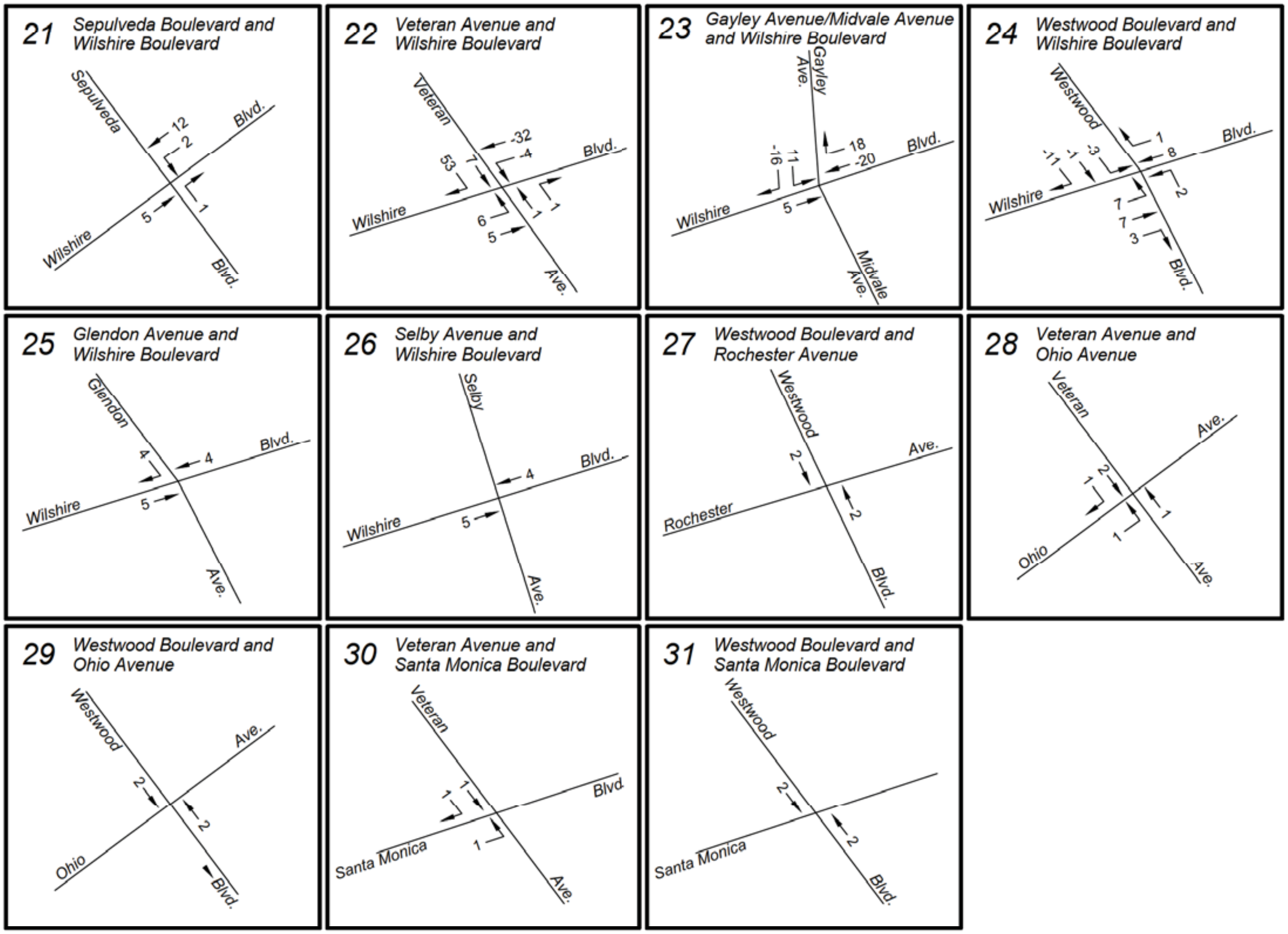
Project Traffic Volumes PM Peak Hour

Figure 4.8-7a

Geffen Academy at UCLA

N W E S

BonTerra PSOMAS



Source: Crain & Associates 2016

Project Traffic Volumes PM Peak Hour

Figure 4.8-7b

Geffen Academy at UCLA

N W E S

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The V/C ratios and the corresponding LOSs for all study intersections are shown in Table 8 of the Traffic Impact Study. Table 4.8-8 identifies the intersections that would not operate at an acceptable LOS under the Existing Plus Project traffic analysis scenario.

TABLE 4.8-8
EXISTING (2016) PLUS PROJECT
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY

No.	Intersection	Peak Hour	Existing (2016) Conditions				Change in V/C due to Project
			Existing		w/Project		
			CMA	LOS	CMA	LOS	
1	Veteran Ave and Montana Ave/Gayley Ave	AM	0.708	C	0.713	C	0.005
		PM	0.991	E	0.994	E	0.003
21	Sepulveda Blvd and Wilshire Blvd	AM	1.099	F	1.103	F	0.004
		PM	1.168	F	1.170	F	0.002
22	Veteran Ave and Wilshire Blvd	AM	1.456	F	1.439	F	-0.016
		PM	1.176	F	1.201	F	0.024*
24	Westwood Blvd and Wilshire Blvd	AM	0.994	E	0.996	E	0.002
		PM	0.914	E	0.916	E	0.002
25	Glendon Ave and Wilshire Blvd	AM	0.843	D	0.846	D	0.003
		PM	1.080	F	1.081	F	0.001
31	Westwood Blvd and Santa Monica Blvd	AM	0.939	E	0.940	E	0.001
		PM	0.872	D	0.873	D	0.001

CMA: Critical Movement Analysis; LOS: Level of Service; V/C: volume-to-capacity; AM: morning; PM: evening.
* Indicates a significant impact.
Source: Crain and Associates 2016.

As shown, the following 6 of the 31 study intersections are projected to operate at LOS E or F during the AM peak hour, PM peak hour, or both, under the Existing 2016 With Project scenario:

- No. 1: Veteran Avenue and Montana Avenue/Gayley Avenue (PM Peak Hour)
- No. 21: Sepulveda Boulevard and Wilshire Boulevard (AM and PM Peak Hours)
- No. 22: Veteran Avenue and Wilshire Boulevard (AM and PM Peak Hours)
- No. 24: Westwood Boulevard and Wilshire Boulevard (AM and PM Peak Hours)
- No. 25: Glendon Avenue and Wilshire Boulevard (PM Peak Hour)
- No. 31: Westwood Boulevard and Santa Monica Boulevard (AM Peak Hour)

Using the LADOT significant impact threshold criteria, the proposed Project would result in significant project-related impact at one intersection under the Existing Plus Project scenario:

- No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)

  Significant and unavoidable project impacts at this intersection were also identified in the March 2009 LRDP Amendment Final EIR (Impact 4.13-1[b]) for buildout of the remaining development on campus allowed by the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part. To determine the feasibility of mitigating impacts at this intersection, the following potential physical mitigation measures, as identified in the March 2009 LRDP Amendment Final EIR have been considered.

In conjunction with their approval of the Southwest Campus Housing and Parking project, The Regents adopted a mitigation measure (SWH C-6.2) to fund ATCS installation at Wilshire Boulevard and Veteran Avenue. Mitigation measure SWH C-6.2 also included widening the east side of Veteran Avenue (on University property) and restriping Veteran Avenue to create dual right-turn-only lanes in the southbound direction for cars turning onto westbound Wilshire Boulevard. These physical improvements to this intersection were completed in 2005. Because of the proximity of adjacent land uses to the roadway—including the Los Angeles National Cemetery (which is surrounded by a concrete and metal fence), the West Los Angeles Federal Building (which is surrounded by concrete bollards) and a private office building as well as the presence of street trees along Wilshire Boulevard and Veteran Avenue, additional widening of Wilshire Boulevard (east and west of the intersection) or Veteran Avenue (south of Wilshire Boulevard or on the west side of the roadway, north of Wilshire Boulevard) is not considered feasible. Additional widening of Veteran Avenue on the east side, north of Wilshire Boulevard (on University property) may be possible. However, this would result in an additional offset of the north and south legs of the intersection, requiring vehicles to veer when crossing the intersection, which could pose a traffic hazard. As identified in the March 2009 LRDP Amendment Final EIR, no other feasible mitigation measures have been identified for this intersection.

Because there is not feasible mitigation for the impact at this intersection, the impact would be considered significant and unavoidable, consistent with the conclusion of the March 2009 LRDP Amendment Final EIR.

Future 2020 Conditions

As previously identified, to estimate future traffic volumes for the Future Year 2020 Without Project scenario, traffic volumes were developed using both ambient growth and approved and pending projects near the project site. The V/C ratios and the corresponding LOSs for all study intersections are shown in Table 8 of the Traffic Impact Study. Table 4.8-9 identifies the intersections that would not operate at an acceptable LOS under the Future Year 2020 Without Project traffic analysis scenario.

TABLE 4.8-9
FUTURE YEAR 2020
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY

No.	Intersection	Peak Hour	Existing (2016) Conditions				Change in V/C due to Project
			w/o Project		w/Project		
			CMA	LOS	CMA	LOS	
1	Veteran Ave and Montana Ave/Gayley Ave	AM	0.786	C	0.791	C	0.005
		PM	1.109	F	1.111	F	0.002
21	Sepulveda Blvd and Wilshire Blvd	AM	1.262	F	1.266	F	0.004
		PM	1.283	F	1.286	F	0.003
22	Veteran Ave and Wilshire Blvd	AM	1.647	F	1.630	F	-0.017
		PM	1.387	F	1.408	F	0.021*
23	Gayley Ave/Midvale Ave and Wilshire Blvd	AM	0.989	E	1.004	F	0.015*
		PM	0.856	D	0.844	D	-0.012
24	Westwood Blvd and Wilshire Blvd	AM	1.091	F	1.092	F	0.001
		PM	1.002	F	1.003	F	0.001
25	Glendon Ave and Wilshire Blvd	AM	0.919	E	0.922	E	0.003
		PM	1.194	F	1.196	F	0.002
31	Westwood Blvd and Santa Monica Blvd	AM	1.011	F	1.012	F	0.001
		PM	0.946	E	0.947	E	0.001

w/o: without; w/: with; CMA: Critical Movement Analysis; LOS: Level of Service; V/C: volume-to-capacity.
* Indicates a significant impact.
Source: Crain and Associates 2016.

As shown, 7 of the 13 study intersections are projected to operate at LOS E or F under the Future 2016 Without Project scenario during the AM peak hour, the PM peak hour, or both:

- No. 1: Veteran Avenue and Montana Avenue/Gayley Avenue (PM Peak Hour)
- No. 21: Sepulveda Boulevard and Wilshire Boulevard (AM and PM Peak Hours)
- No. 22: Veteran Avenue and Wilshire Boulevard (AM and PM Peak Hours)
- No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour)
- No. 24: Westwood Boulevard and Wilshire Boulevard (AM and PM Peak Hours)
- No. 25: Glendon Avenue and Wilshire Boulevard (AM and PM Peak Hours)
- No. 31: Westwood Boulevard and Santa Monica Boulevard (AM and PM Peak Hours)

When the proposed Project traffic is added to the Future Year 2020 Without Project condition, the same intersections listed above would operate at LOS E or F. The Future Year 2020 With Project LOS at study area intersections is also shown in Table 4.8-9. Using the LADOT significant impact threshold criteria, the proposed Project would result in two significant cumulative traffic-related impacts.

- No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)
- No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour)

Significant and unavoidable cumulative impacts at these two intersections were identified in the March 2009 LRDP Amendment Final EIR (Impact 4.13-1[b]) for buildout of the 2002 LRDP, as amended in March 2009. As described above, there is no feasible mitigation for impacts at the intersection of Veteran Avenue and Wilshire Boulevard; therefore, the impacts would be considered significant and unavoidable, consistent with the findings of the March 2009 LRDP Amendment Final EIR. To determine the feasibility of mitigating impacts at the intersection of Gayley Avenue/Midvale Avenue and Wilshire Boulevard, the following potential physical mitigation measures, as identified in the March 2009 LRDP Amendment Final EIR have been considered.

- **No. 23: Gayley Avenue and Wilshire Boulevard.** Physical modification of the intersection to improve capacity could be used to mitigate potential impacts. However, this intersection is fully improved within the existing right-of-way and therefore restriping is not possible. Widening would require acquisition of land by the City of Los Angeles and, due to proximity of office or retail uses adjacent to the roadways, it is not feasible. No other feasible mitigation options have been identified for this intersection.

  Because there is not feasible mitigation for the impact at this intersection, the cumulative impact would be considered significant and unavoidable.

The V/C ratio at the significantly impacted intersections can be improved by capacity enhancements. In addition to the physical improvements addressed above for the impacted intersections, the existing signal and roadway infrastructure were reviewed for potential capacity increases. This included a review of the field conditions and improvements in the current West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) and the proposed update. Review of the field conditions noted that an I-405/Wilshire Boulevard interchange rebuilding was part of the I-405 Sepulveda Pass Improvement Program implemented by Metro and completed in 2015. This program fully developed the roadways at the impacted intersections within the limits of the available rights-of-way and no additional feasible roadway widenings or similar capacity enhancements were identified. Further, no physical measures to increase the capacity of either of the two significantly impacted intersections were identified in the review of the WLA TIMP. The WLA TIMP does contain reference to area-wide signal system improvements. However, the signal systems at the intersections that would be significantly impacted have already been enhanced to the state-of-the-art City of Los Angeles ATCS. Therefore, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR and the WLA TIMP, no remaining feasible capacity enhancements were identified for the significantly impacted intersections through the review conducted as part of the Traffic Impact Study for the proposed Project.

The V/C ratio at the significantly impacted intersections can also be improved by volume reductions. As previously discussed, to reduce traffic volumes in the Westwood area, UCLA has an extensive TDM program. As part of the proposed Project and as required by PP 4.13-1(d), the existing TDM program would be made available to the new Geffen Academy students, faculty, and staff. Additionally, to ensure the effectiveness of the TDM program, the following additional TDM measures would be implemented during operation of the Geffen Academy:

- School buses would be provided for student travel to and from the Geffen Academy and bus arrivals would be scheduled before the parent drop-offs/pick-ups;
- Ridesharing information kiosks would be developed in lobbies or other visible locations at the Geffen Academy;
- Information on ridesharing options and services would be included in Geffen Academy study enrollment packages, and Geffen Academy new hire packages for employees;

- Short-term and long-term bicycle parking would be upgraded at the Geffen Academy to meet City of Los Angeles requirements for a newly constructed building and/or actual demand, whichever is greater;
- All students would be required to, as part of registering for the Geffen Academy each year, indicate agreement of use of an alternative mode for travel to campus. Alternative modes of transportation could include the following:
    - Use of a school bus;
    - Use of public transit;
    - Use of the BruinBus;
    - Carpooling with a parent to their UCLA On-Campus work location;
    - Participation in a student carpool that is driven by a licensed student and includes at least two other students, with these carpools arriving before the parent drop-offs;
    - Participation in a parent carpool dropping-off/picking-up at least three students;
    - Participation in a vanpool serving the UCLA Campus; and
    - Walking or bicycling to school.
- Onsite student parking would be restricted to carpools with 3 or more students;
- Geffen Academy students would be required to pay at least the same rate for a parking permit as is charged to UCLA students. Geffen faculty and staff who park would be required to pay for permits at the same rate as UCLA faculty and staff.

Monitoring and enforcement of applicable UCLA TDM measures and TDM measures specific to the proposed Geffen Academy would be conducted by UCLA Transportation consistent with current practices for existing uses on campus. UCLA Transportation would develop a survey specific to the proposed Geffen Academy, which includes questions regarding standard UCLA TDM measures and measures required for the Academy, as described above. The survey would be submitted to the Academy for distribution to faculty, staff and students/parents; the Academy would be required to provide the results to UCLA Transportation.

In summary, the proposed Project, which would not involve new development on campus and is within the trip cap analyzed in the March 2009 LRDP Amendment Final EIR, would result in the following significant and unavoidable impacts: project impact at the intersection of Veteran Avenue and Wilshire Boulevard under the Existing Plus Project traffic analysis scenario and cumulative impacts at the intersections of Veteran Avenue and Wilshire Boulevard and Gayley Avenue and Wilshire Boulevard under the Future Year 2020 With Project traffic analysis scenario. The Existing Plus Project scenario was not addressed in the March 2009 LRDP Amendment Final EIR; however, these intersections were impacted based on the analysis in the March 2009 LRDP Amendment Final EIR, and the impacts were determined to be significant and unavoidable.

Additional Project-Level Mitigation Measures

No additional mitigation measures are required for construction-related traffic. No feasible mitigation measures are available for long-term operational traffic impacts.

Level of Significance after Mitigation

Construction-related traffic impacts would be less than significant.

The proposed Project would result in a significant and unavoidable project impact under the Existing Plus Project scenario at the following intersection:

- No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)

The proposed Project would result in significant and unavoidable intersection impacts under the Future Year 2020 With Project scenario at the following two intersections:

- No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)
- No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour)

There is no feasible mitigation; therefore, these intersection impacts are significant and unavoidable. The March 2009 LRDP Amendment Final EIR identified significant and unavoidable impacts at these intersections and a Statement of Overriding Considerations was adopted in March 2009 by the Board of Regents of the University of California as part of the approval of the March 2009 Amendment to the 2002 LRDP for the significant and unavoidable impacts resulting from implementation of the 2002 LRDP, as amended, of which the proposed Project is a part.

Threshold 8.2	Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The analysis of Impact 4.13-3 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addressed the applicable CMP, concluded that implementation of the remaining development allocation on campus would result in significant and unavoidable impacts to a CMP-designated intersection (project and cumulative) and less than significant impacts to CMP mainline freeway segments.

The CMP was created statewide as a result of Proposition 111 and has been implemented locally by Metro. The CMP for Los Angeles County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. A total of 160 intersections in the Los Angeles County system are identified for monitoring. This section discusses the potential for the proposed Project to impact the CMP system and has been conducted according to the guidelines set forth in the 2010 CMP for Los Angeles County.

According to the CMP Traffic Impact Analysis Guidelines developed by Metro, a traffic impact analysis is required given the following conditions:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours.
- CMP freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

Three of the 31 study intersections are part of the list of 160 CMP arterial monitoring intersections. These intersections are listed below, along with the number of peak-hour trips that would be added by the proposed Project.

- Wilshire Boulevard and Sepulveda Boulevard (24 peak-hour trips added)

- Wilshire Boulevard and Beverly Glen Boulevard (15 peak-hour trips added)
- Santa Monica Boulevard and Westwood Boulevard (7 peak-hour trips added)

These levels of proposed Project trips are less than the CMP threshold of 50 peak-hour trips for arterial monitoring locations. Therefore, no further CMP analysis of these intersections is warranted.

The focus of the analysis for CMP mainline freeway segments is to determine whether project-related trips would significantly impact the freeway system according to CMP guidelines. For purposes of analyzing the mainline freeway impact of the project, the nearest CMP freeway monitoring stations along I-405 are I-405 south of Mulholland Drive and I-405 north of Venice Boulevard, approximately 3.0 and 5.5 miles from the project site, respectively. According to the guidelines for CMP transportation impact analyses, if a proposed project fails to add 150 or more trips in either direction during the AM or PM weekday peak period, no further traffic analysis is required. Based on a review of the proposed Project's regional trip distribution pattern and proposed Project trip generation, it is estimated that the proposed Project volumes would be below the CMP freeway analysis threshold of 150 trips per direction. Thus, no impact would result, consistent with the findings of the March 2009 LRDP Amendment Final EIR, and no further CMP mainline freeway segment analysis is required.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

The proposed Project would not conflict with an applicable CMP including, but not limited to, LOS standards and travel demand measures or other standards established by the County congestion management agency for designated roads or highways.

Threshold 8.3	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

The analysis of Impacts 4.13-4 through 4.13-6 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addressed transportation hazards, concluded that construction activities and operations associated with implementation of the remaining development allocation on campus would result in less than significant impacts related to pedestrian and vehicular hazards during construction and to vehicular hazards during project operation.

Vehicular Hazards during Construction

The project site is located in the southern portion of the Southwest zone, south of the main campus. The proposed Project would involve the construction of a new driveway on Kinross Avenue (for exiting vehicles). The construction staging and laydown areas would be located in the project boundary; however, construction activities associated with the proposed Project could result in temporary closure of traffic lanes or roadway segments along the proposed construction traffic route to permit the delivery of construction materials or provide adequate site access. The reduction of roadway capacity, the narrowing of traffic lanes, and the occasional interruption of traffic flow on streets associated with project-related construction activities could pose hazards to vehicular traffic due to localized traffic congestion, decreased turning radii, or the condition of roadway surfaces.

During construction, commuter/passenger vehicles, public transit buses, and emergency vehicles would continue to use existing roadways in the vicinity of the project site, including Kinross Avenue and Midvale Alley. Existing access to Parking Lot 36, Parking Structure 32, and existing bus stops on the north and south sides of Kinross Avenue would be maintained. Delivery vehicle access to the Kinross South Building would be maintained via the existing entrance to Parking Lot 36 and Midvale Alley.

To minimize traffic disruption and congestion, the construction traffic route for the proposed Project was designated to minimize affected roadways and to efficiently move traffic through the campus and project area. In addition, implementation of PP 4.13-5, which requires maintenance of one travel lane in each direction (to the extent feasible) and/or the provision of signal carriers (i.e., flagpersons) when only a single lane can be maintained, ensures that impacts associated with a construction-related traffic lane or roadway closure remain less than significant, consistent with the findings of the March 2009 LRDP Amendment Final EIR.

Pedestrian Hazards During Construction

There are existing sidewalks throughout the project area, including on both sides of Kinross Avenue adjacent to the project site, on both sides of Gayley Avenue and Wilshire Boulevard, and on the east side of Veteran Avenue. Construction activities would require the temporary closure of the sidewalk on the south side of Kinross Avenue during construction activities to ensure pedestrian safety and to allow for the construction of the new exit driveway from the project site. None of the other sidewalks in the vicinity of the project would be impacted by project construction activities.

During construction, pedestrians would be able to access the Kinross South Building from either Midvale Alley or the south side of the building from Parking Lot 36. Pedestrian movement would be accommodated along Kinross Avenue; however, during construction of the new exit driveway for the Geffen Academy and other construction activities in the northern portion of the project area, pedestrians would be rerouted to the north side of the street. The designated alternate route would facilitate continued pedestrian movement within and around the project area as efficiently as possible. With incorporation of PP 4.13-6, which requires appropriate signage of alternate pedestrian routes into the proposed Project, there would be less than significant impacts related to pedestrian hazards during construction, consistent with the findings of the March 2009 LRDP Amendment Final EIR.

Vehicular Hazards During Operation

The proposed Project does not include permanent modifications to City of Los Angeles roadways; however, it does include circulation modifications within and adjacent to the project site, as described in Section 3.0, Project Description, of this Draft SEIR. The proposed circulation pattern for the Geffen Academy would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building, west of the Gayley Center, following a route around the Kinross Building to the proposed new entrance and pickup/drop-off location along the western side of the building. Vehicles would then either (1) exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project (right turns only) or (2) during controlled periods, exit the site from a swing or sliding fence that would allow vehicles to use the existing Parking Lot 36 exit and turn left on Kinross Avenue (refer to Figure 3-8 in Section 3.0, Project Description, of this Draft SEIR. To accommodate this vehicular movement, queueing would occur on site. The proposed Project would not require modifications to Midvale Alley or to the existing bus stop located immediately west of the proposed new driveway along Kinross Avenue. Further, the new driveway on Kinross Avenue would be designed in compliance with applicable requirements for sight distance.

Implementation of the proposed Project would not increase hazards due to design features or incompatible uses. Consistent with the findings of the March 2009 LRDP Amendment Final EIR, operation of the proposed Project would result in a less than significant impact related to vehicular hazards.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to a substantial increase in hazards due to a design feature or incompatible uses.

Threshold 10.4	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The analysis of Impact 4.13-12 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addresses alternative transportation policies, concludes that, with implementation of PP 4.13-1(c) and PP 4.13-1(d), implementation of the remaining development allocation on campus would result in less than significant impacts related to a conflict with adopted policies, plans, or programs supporting alternative transportation.

As noted previously, the UCLA TDM program is a comprehensive program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle. To reduce vehicular trips, the existing UCLA TDM program would also serve the Geffen Academy (faculty, staff, and students), consistent with PP 4.13-1(d), which is incorporated into the proposed Project. As part of the TDM program, UCLA actively provides and promotes vanpools; carpool matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transit, including bicycles, motorcycles, and scooters; alternative work schedules and telecommuting; a car share program; annual distribution of the UCLA Commuter's Guide; parking control management; and access restriction to main campus parking facilities for on-campus housing residents. Additionally, as identified previously, project-specific TDM measures would be implemented by the Geffen Academy, including but not limited to a requirement for all students to agree to the use of an alternative mode of transportation for travel to campus; bike lockers provided on site to encourage bicycle transportation; and student carpools of three of more students to be allowed to park on site. Additionally, school buses would be part of the Academy's transportation options to transport students to and from the Geffen Academy.

The location of the proposed Project in proximity to UCLA and public transit facilities supports UCLA's TDM program and use of existing transit facilities consistent with policies, plans, and/or programs regarding public transit, bicycle, or pedestrian facilities. As discussed previously, there are numerous public transit lines that serve the project site and would be accessible to faculty, staff, students, and visitors of the Geffen Academy. Many of these lines have stops within a quarter mile of the project site. Additionally, a BruinBus Campus Express stop is within 200 feet of the Kinross Building, on the south side of Kinross Avenue. Metro also has future plans to extend the Metro Purple Line subway to Westwood, with a proposed subway station along Wilshire Boulevard.

The proposed Project would result in the addition of 620 students and 109 faculty and staff on the UCLA campus, which would create an additional demand for alternative transportation facilities. When taking into consideration the 109 new faculty and staff and using the 2010 CMP guidelines, a 1.4 factor should be applied for a total of 81 persons arriving by automobile. It is conservatively estimated that the remaining 28 individuals would arrive by public transit. Additionally, as previously identified, a total of 75 students are estimated to arrive by public transit, BruinBus, bicycle, or walking. For purposes of this analysis, all 75 of these students were conservatively assumed to arrive by bus. The relocated administrative staff are not anticipated to change the number of individuals using public transit.

Based on a conservative assumption that Geffen Academy faculty, staff, and students would arrive in a single hour and depart in a single hour, the proposed Project could result in 103 additional bus passengers arriving in the morning and 103 additional passengers departing in the evening. A review of the existing bus transit lines and service summarized in Table 4 of the Traffic Impact Study included in Appendix D of this Draft SEIR indicates that an average of approximately 112 buses operate during the AM and PM peak hours at the bus stops within a walkable distance of approximately 0.25 mile from the project site. This means that the net proposed Project person trips added to transit would average less than 0.92 person per bus during the peak hours. This minor addition of proposed Project person trips to transit would not be expected to result in a significant transit impact.

After construction is complete, the proposed Project would not result in any modifications to pedestrian movement surrounding the project site. As noted previously, alternative pedestrian routes would be identified to accommodate pedestrian movement around the construction area on the south side of Kinross Avenue.

Therefore, the proposed Project, which incorporates PP 4.13-1(d), would support and would not conflict with adopted PPs supporting alternative transportation. Potential would be less than significant, consistent with the findings of the March 2009 LRDP Amendment Final EIR. No mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance after Mitigation

Less than significant impact related to conflicts with applicable policies, plans, or programs supporting alternative transportation.

4.8.4 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative transportation/traffic impacts includes future development on the UCLA campus as allowed by the 2002 LRDP, as amended in March 2009; the list of related projects presented in Table 4.8-4; and other future development within the general boundaries of the community of Westwood in the City of Los Angeles. As discussed previously, future traffic volumes for the project study area were projected using a combination of future known development projects, an ambient growth factor, plus traffic generated by the project. This was conservative in that the highest potential traffic volumes were estimated for each cumulative project. The results of this cumulative analysis are shown for the Future Year 2020 With and Without Project conditions (refer to Table 4.8-9), which shows future traffic conditions both with and without implementation of the proposed Project.

With implementation of the proposed Project, the number of campus-related vehicle trips would increase by approximately 824 average daily, 260 AM peak hour, and 153 PM peak hour trips compared to future "Without Project" conditions. This increase in average daily trips would contribute to the cumulative increases in traffic on local streets, as shown in Table 4.8-9. The feasibility of mitigating the potentially significant cumulative increases in traffic at the identified intersections resulting from the proposed Project was evaluated. As discussed previously, no feasible mitigation measures have been identified at the following two intersections that would be significantly impacted by the proposed Project under the Future Year 2020 traffic analysis scenario:

- No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)
- No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour)

Regional plans to improve some of the cumulative traffic conditions have been developed in the Southern California Association of Governments (SCAG) Regional Mobility Element, the Los Angeles County CMP, and the transportation elements of the Los Angeles General Plan, the West Los Angeles Transportation Improvement and Mitigation Specific Plan, the Westwood Community Plan, and certain interim control ordinances. However, this Draft SEIR does not assume implementation of any unfunded improvement or programs. In addition, because off-campus roadway improvements and regional transportation strategies are not within the jurisdiction of The Regents to implement and because some of these improvements and strategies are unfunded or are otherwise uncertain from a technical, economic, legal, or political perspective, these cumulative traffic impacts are considered significant and unavoidable for purposes of this Draft SEIR.

As further discussed in Section 4.0 of this Draft SEIR, the proposed Project would be under construction at the same time as one or more previously approved UCLA projects, including the Engineering VI-Phase 2 Building, the Wasserman Football Performance Center, and the Ostin Basketball Practice Facility. However, the period of heavy truck traffic for the proposed Project would not occur at the same time as the heavy truck traffic for these projects, which are already under construction. UCLA is also proposing redevelopment of the Margan Apartments located at 885 Levering Avenue in the Bridge zone. If approved, the period of heavy truck traffic for the Margan Apartments Redevelopment Project (estimated to start in July 2017) would not overlap with the period of heavy truck traffic for proposed Project (estimated to be the fall of 2016). Additionally, there is a potential that construction of the proposed Project could also overlap with construction of the approved Wilshire Gayley Project. However, the proposed Project involves renovation and reuse of an existing building and the construction activities would not be as extensive as that experienced for new building construction. As previously identified, during site preparation and demolition activities, it is conservatively estimated that there would be approximately two round-trip truck trips every three days during an approximate four-week period. Minor grading activities would also be required and would result in the generation of approximately ten round-trip truck trips over an approximate eight-week period. Additionally, the proposed Project, along with other construction projects on campus, incorporates PP 4.13-2 (which requires coordination of major construction projects on and adjacent to campus) and PP 4.13-5 (which requires one travel lane in each direction) to minimize construction traffic impacts to the extent feasible. Therefore, the proposed Project would not result in a cumulative considerable contribution to cumulative construction-related traffic impacts.

By its nature, the Los Angeles County CMP is a cumulative scenario that considers the impact of single projects in the context of cumulative traffic demand on CMP facilities. Cumulative impacts at CMP arterial monitoring stations and freeway mainline segments are therefore addressed under Threshold 8.2. As identified, the proposed Project would not result in a significant impact at a designated CMP arterial monitoring station or designated CMP freeways.

It is anticipated that future development of the related projects and other future development would be required to adhere to standard engineering practices and requirements and would be subject to City of Los Angeles planning and design review to avoid traffic hazards created by design features and land use incompatibilities. For this reason and because such impacts (if and where they occur) are relatively site specific, cumulative impacts associated with such traffic hazards are less than significant. As discussed under Threshold 8.3, the proposed Project would not result in the need for any new roadway segments or substantive changes in roadway configuration. All design development under the proposed Project would include the use of standard engineering practices to avoid design elements that would increase roadway hazards. Moreover, development of the proposed Project would not result in land use incompatibilities that would lead to the creation of traffic hazards. For these reasons, the proposed Project's contribution to any cumulative impacts from traffic hazards is also less than significant.

Due to the dispersed location of future development (including the related projects) and the anticipation that the related projects would be required to implement safety and access measures during construction (in accordance with City of Los Angeles requirements), cumulative impacts associated with vehicular and pedestrian hazards during construction are expected to be less than significant. The analysis under Threshold 8.3 discusses the proposed Project's potential to increase vehicular or pedestrian hazards as a result of the closure of traffic lanes, roadway segments, or sidewalks. As indicated, the campus follows procedures (PP 4.13-5 and PP 4.13-6) to maintain safety and accessibility during construction periods. As a result, these potential impacts, which are localized at the area of construction activity, would remain less than significant, making the proposed Project's contribution to cumulative impacts less than significant.

It is anticipated that development associated with the related projects and other future development would result in an increased demand on alternative transportation, although due to the locations of the various related projects, it is expected that cumulative increases in demand would be distributed among the various bus routes that serve the area. While it is possible that ridership demand on a particular bus route associated with future development could be significant when compared to existing conditions, it can generally be expected that cumulative impacts on bus service would be less than significant as a whole. Impacts of the proposed Project on alternative modes of transportation are discussed as Threshold 8.4. The contribution of the proposed Project to cumulative impacts on alternative modes of transportation is less than significant.

4.8.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to transportation/traffic. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to transportation/traffic.

4.8.6 REFERENCES

Crain and Associates. 2016 (April).*Traffic Impact Study for the Proposed Geffen Academy Project on UCLA Southwest Campus.* Culver City, CA: Crain and Associates (Appendix D).

University of California, Los Angeles (UCLA). 2016a (February). *Notice of Preparation of a Draft Environmental Impact Report for the Geffen Academy at UCLA.* Los Angeles, CA: UCLA Campus Capital Programs (Appendix A).

———. 2016b (March 28). Personal Communication. Email from T. Dudman (Campus and Environmental Planning, UCLA) to T. Andersen (BonTerra Psomas) entitled “2015 Cordon Counts”.

———. 2015. *State of the Commute: An Annual Report, January–December 2015*. Los Angeles, CA: UCLA. http://www.sustain.ucla.edu/wp-content/uploads/UCLATransportation_SOTC_2016_PPTSwebwithFoldout.pdf.

———. 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121). Los Angeles, CA: UCLA Campus Capital Programs.

University of California (UC). 2015 (June). *University of California Policy: Sustainable Practices.* http://policy.ucop.edu/doc/3100155/SustainablePractices.

4.9 UTILITIES AND SERVICE SYSTEMS

This section evaluates the effects on utilities and service systems related to implementation of the proposed Project. Utilities and service systems addressed in this section include water infrastructure, wastewater conveyance infrastructure and treatment, and domestic water supply. The capacity of the storm drain infrastructure is discussed in Section 4.3, Hydrology and Water Quality, of this Draft Subsequent Environmental Impact Report (SEIR).

Data used to prepare this section was taken from University of California, Los Angeles (UCLA)-provided data on current and projected utility demands and the analysis of campus-wide utilities presented in Section 4.14, Utilities and Service Systems, in the March 2009 Long Range Development Plan (LRDP) Amendment Final Environmental Impact Report (EIR), which included preparation of a Water Supply Analysis and Sanitary Sewer Study for buildout of the 2002 LRDP, as amended in March 2009.

Relevant elements of the proposed Project related to utilities and service systems include the renovation and reuse of the Kinross Building for the proposed Geffen Academy (no increase in square footage), which would result in a similar demand for water and similar generation of wastewater as existing building operations. The proposed Project would be designed to meet the UCLA minimum standard of a Leadership in Energy and Environmental Design (LEED™) Silver rating; however, UCLA would strive to achieve a Gold LEED rating for Existing Buildings.

There were no Notice of Preparation (NOP) comment letters received or comments during the scoping meeting that addressed utilities or service systems.

4.9.1 ENVIRONMENTAL SETTING

The following discussion of environmental setting is summarized from the March 2009 LRDP Amendment Final EIR (Section 4.16, Utilities and Service Systems). Updated information or relevant information specific to the project site has been provided, as appropriate.

Domestic Water

Water Supply

Los Angeles Department of Water and Power Service Area

The City of Los Angeles Department of Water and Power (LADWP) supplies domestic water to a 473-square mile area, including the UCLA campus. The Los Angeles Aqueducts (LAA), local groundwater, purchased water from the Metropolitan Water District of Southern California (MWD), and recycled water are LADWP's primary water supply sources.

The Water Supply Analysis prepared in 2008 as part of the March 2009 LRDP Amendment Final EIR utilized LADWP's 2005 Urban Water Management Plan (UWMP). In accordance with the California Urban Water Management Planning Act, the LADWP adopted a 2010 UWMP (LADWP 2011) and has prepared a 2015 UWMP, anticipated to be presented to the LADWP Board of Commissioners for adoption in June 2016 (LADWP 2016a).

The 2010 UWMP concludes that, with current water supplies, planned future water conservation, and planned future water supplies, LADWP will be able to reliably provide water to its service area, which includes the UCLA campus, through the 25-year 2010 UWMP planning period (LADWP 2011). The Draft 2015 UWMP reports the average annual water demand between the years 2011–2014 was 566,990 acre-feet (af), with residential uses representing approximately 66 percent of this demand, commercial uses representing approximately 17 percent, government uses representing approximately 8 percent, industrial uses representing approximately 3 percent, and non-revenue sources representing the remaining approximately 6 percent. The Draft 2015 UWMP projects yearly water demand to reach 675,685 af by 2040 or a total increase of 31 percent (i.e., 162,145 af) from the fiscal year 2015 total water demand of 513,540 af. However, Los Angeles' Sustainable City Plan (pLAn) 2040 target use is 565,600 af or a total increase of 10 percent (i.e., 52,060 af) from the fiscal year 2015 total water demand. In April 2015, pLAn was released, establishing a multifaceted approach to reducing water use and developing a locally sustainable water supply to meet the City's needs. The Draft 2015 UWMP also concludes that, with current water supplies, planned future water conservation, and planned future water supplies, LADWP will be able to reliably provide water to its service area through the 25-year Draft 2015 UWMP planning period (LADWP 2016b).

University of California, Los Angeles Campus and Kinross Building

The LADWP supplies water to the UCLA campus and ensures that the water meets all applicable State water quality standards. In 2007, the total campus water consumption was approximately 2.34 mgd (UCLA 2009). Water consumption on campus for 2014-2015 (which includes the new population baseline for students, employees and other individuals) was 2.72 mgd, which is still below the total water consumption projected through the March 2009 LRDP Amendment Final EIR horizon year of 2013 of 2.75 mgd. Approximately 80 to 85 percent of total campus water consumption is attributed to indoor use, with approximately 15 percent used for landscape irrigation. The largest portion of indoor water use is attributable to mechanical equipment used to cool campus buildings using the Cogeneration Plant cooling towers, steam boilers, and other stand-alone chiller equipment. Other indoor water uses include residence halls, research laboratories, medical and patient care activities, dining facilities, restrooms, gymnasium showers and swimming pools, custodial areas, and drinking fountains.

The monthly water consumption associated with operations at the Kinross Building between January and December 2015 was 2,942 hundred cubic feet (HCF) (approximately 72,346 gallons per day [gpd], or 0.072 mgd).

Water Conservation Efforts

In the 1990 LRDP, UCLA adopted measures to reduce overall water consumption by at least 15 percent from the levels used in academic year 1987–1988. Water use in 2001 decreased approximately 25 percent from that of 1987–1988, exceeding the 15 percent reduction goal adopted in the 1990 LRDP. Between 2001 and 2011, water use decreased by another 2.4 percent, for a total reduction in water consumption of 27.4 percent between 2001 and 2011. The campus also has a process whereby condensate water from mechanical equipment (such as air circulation fans) at the Center for the Health Sciences is captured for use in the Environmental Services Facility (ESF) cooling system. UCLA recycles approximately 50 percent of cooling water used in the ESF (chiller/Cogeneration facility) and continues to achieve reductions in water usage for cooling campus buildings. The campus has continued to improve its cooling water treatment program through alterations to water chemistry, thereby extending the number of times the water can be recycled through the system.

Infrastructure

There is an existing 4-inch water main in Kinross Avenue that serves the Kinross Building via 4- to 10-inch water lines extending along the west side of the building.

Wastewater

City of Los Angeles

As described in Section 4.14.3 of the March 2009 LRDP Amendment Final EIR, the City of Los Angeles provides wastewater transmission facilities from the campus to the City of Los Angeles' Hyperion Water Reclamation Plan (HWRP; formerly Hyperion Treatment Plant), located in Playa del Rey, directly west of the Los Angeles World Airport. The HWRP treats wastewater from Santa Monica, Beverly Hills, Burbank, Culver City, El Segundo, Glendale, San Fernando, portions of unincorporated Los Angeles County, 29 contract agencies, and most of the City of Los Angeles. The neighboring cities and agencies contract with the City of Los Angeles to treat their wastewater at the City's facilities. The HWRP has a design capacity of 450 mgd and, in 2015, treated an average of 258 mgd to primary and secondary treatment standards, using 3 levels of filtration treatment before discharging the treated wastewater 5 miles offshore (City of Los Angeles Bureau of Sanitation 2016; Kim 2016). Therefore, the HWRP currently operates at approximately 57 percent of its capacity.

University of California, Los Angeles Campus

As described in Section 4.14.3 of the March 2009 LRDP Amendment Final EIR, the UCLA Capital Programs Department determines utility needs and plan improvements to the campus sanitary sewer system. System conveyance enhancements are made, as appropriate, in conjunction with project-specific development requirements. The UCLA Office of Environmental Health & Safety (EH&S) ensures compliance with industrial wastewater regulations and oversees a campus-wide program that teaches and enforces procedures for proper industrial wastewater disposal. UCLA's Facilities Management Department maintains the campus sanitary sewer system.

Thirteen separate sewer lines, which generally run in a north-south direction, serve campus buildings. The lines vary in size from 6 inches to 21 inches in diameter. In addition, there are various minor laterals along the campus' perimeter that connect a building or a number of buildings directly to the off-site (i.e., City) sewer mains. There are five locations where campus sewer lines connect to the City of Los Angeles' lines along the southern portions of the campus (and identified as points C, D, E, M, and AA in Figure 4.14-1 in the March 2009 LRDP Amendment Final EIR). The Sanitary Sewer Study (sewer study) determined, as of 2008, that the average and peak flows at the five sewer locations where UCLA wastewater flows connect to the City's sewer lines are operating at or below each pipeline's design capacity (UCLA 2009). These include flows from upstream of UCLA that run through the UCLA sewer lines, as well as the UCLA campus.

Wastewater generated at the Kinross Building flows via a 6-inch lateral sewer line at the south end of the building to the existing 6-inch sewer line in Parking Lot 36, which flows to Midvale Alley.

Based on the current water consumption associated with operations at the existing Kinross Building and the limited amount of landscaping at the site, it is estimated that current uses at the Kinross Building generate slightly less than 72,346 gpd (0.072 mgd) of wastewater. Because there is a low landscape irrigation demand at the Kinross Building, it is assumed that almost all the water consumption (0.072 mgd) is associated with indoor use and therefore contributes to the wastewater stream.

4.9.2 REGULATORY FRAMEWORK

Section 4.14 of the March 2009 LRDP Amendment Final EIR provides a complete discussion of the regulatory framework for utilities and service systems relevant to development on campus. The following discussion focuses on the regulatory information that was presented in the LRDP Final EIR, which is particularly relevant to the proposed Project.

University of California Sustainable Practices Policy

As with all University of California (UC) campuses, UCLA is required to implement the UC Sustainable Practices Policy (refer to Campus Program, Practice, and Procedure [PP] 4.15-1 provided in Section 4.6, Greenhouse Gas Emissions, of this Draft SEIR). The Sustainable Practices Policy establishes goals in nine areas of sustainable practices and includes numerous campus-wide policies and accompanying procedures to address water conservation. A complete listing of policies is provided in Section 4.6. The policy most relevant to water conservation is:

> Section III.I - Sustainable Water Systems
>
> With the overall intent of achieving sustainable water systems and demonstrating leadership in the area of sustainable water systems, the University has set the following goals applicable to all locations:
>
> 1. In line with the State of California's law establishing a goal to reduce per capita potable water consumption by 20%, each location will strive to reduce potable water consumption adjusted for population growth by 10% by year 2017 and 20% by the year 2020. Locations that have already achieved this target are encouraged to set more stringent goals to further reduce potable water consumption.
>
> 2. Each location will develop and maintain a Water Action Plan that identifies long term strategies for achieving sustainable water systems.

In compliance with these policies, the campus developed a Water Action Plan in December 2013. The campus continues to study and evaluate the projects proposed under the WAP, and an array of other potential projects, that would enable the campus to meet the goals of the Sustainable Practices Policy.

4.9.3 PROJECT IMPACTS AND MITIGATION

Thresholds of Significance

Thresholds Addressed in the Initial Study

The Initial Study prepared for the proposed Project (included in Appendix A of this Draft SEIR) and circulated with the NOP concludes that implementation of the proposed Project, which is a component of the LRDP, would not exceed the following thresholds of significance as analyzed in the March 2009 LRDP Amendment Final EIR, and, therefore, the topics have been adequately addressed and further analysis in this Draft SEIR is not required:

- Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

- Would the project comply with applicable federal, State, and local statutes and regulations related to solid waste?
- Would the project create other utility and service system impacts?[1]

Implementation of the March 2009 Amendment to the 2002 LRDP was determined to have no impact related to wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) through the Initial Study process. The proposed Project would involve renovation and reuse of the Kinross Building as a grade 6 through 12 college preparatory school. Similar to existing uses on campus, the proposed Geffen Academy would include typical academic-related uses (e.g., classrooms and laboratories, food service, recreation areas, and offices). The proposed Geffen Academy would not generate wastewater-containing constituents capable of violating wastewater treatment requirements. Therefore, as previously analyzed and concluded in the March 2009 LRDP Amendment Final EIR, there would be no impact from implementation of the proposed Project related to Los Angeles RWQCB wastewater treatment requirements. Construction and operation of the proposed Project would not result in a violation of the Statewide General Waste Discharge Requirements (WDRs).

Construction activities associated with the proposed Project would involve the generation of a limited amount of green waste (e.g., trees and shrubs) and demolition and other debris that could be accommodated at any of the local landfills that serve the campus. Regarding long-term solid waste generation, the proposed Project would not increase the total amount of solid waste generated at the project site and would not increase the amount of solid waste disposed of at the receiving landfills, because it does not involve any additional square footage at the Kinross Building. It should be noted that UCLA surpasses the established 75 percent diversion goal identified in the UC Policy on Sustainability. UCLA's diversion of its solid waste stream also exceeds the State requirement (under Assembly Bill [AB] 939) for local governments to divert 50 percent of the solid waste generated. This is accomplished through recycling; use as green waste; and conversion from waste to energy.

Because the proposed Project does not involve any additional square footage at the Kinross Building, it would also not increase the electric or natural gas demand at the project site based on the demand factors established in the March 2009 LRDP Amendment Final EIR. Additionally, it is anticipated that the proposed Geffen Academy would have a comparable electrical consumption to existing uses, which is well below the projected consumption identified in the LRDP Final EIR.

<u>Thresholds Addressed in this Draft Subsequent Environmental Impact Report</u>

The Initial Study concludes that additional project-level analysis of the following thresholds of significance is required in this Draft SEIR. According to Appendix G of the State California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact related to utilities and service systems if it will

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

[1] The analysis of this threshold in the Initial Study addressed energy (electricity and natural gas) production and transmission facilities and the inefficient use of energy.

- Have insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed.

It should be noted that the capacity of storm drain facilities is addressed in Section 4.3, Hydrology and Water Quality, of this Draft SEIR.

Impact Analysis

Campus Programs, Practices, and Procedures and Mitigation Measures Carried Forward from the March 2009 Long Range Development Plan Amendment Final Environmental Impact Report

The following PPs and Mitigation Measures (MMs) were adopted as part of the March 2009 LRDP Amendment Final EIR; are incorporated as part of the proposed Project; and assumed in the analysis presented in this section.

PP 4.14-2(a) *New facilities and renovations (except for patient care facilities in the Medical Center) shall be equipped with low-flow showers, toilets, and urinals.*

PP 4.14-2(b) *Measures to reduce landscaping irrigation needs shall be used, such as automatic timing systems to apply irrigation water during times of the day when evaporation rates are low, installing drip irrigation systems, using mulch for landscaping, subscribing to the California Irrigation Management Information System Network for current information on weather and evaporation rates, and incorporating drought-resistant plants as appropriate.*

PP 4.14-2(c) *The campus shall promptly detect and repair leaks in water and irrigation pipes.*

PP 4.14-2(d) *The campus shall minimize the use of water to clean sidewalks, walkways, driveways and parking areas.*

PP 4.14-2(g) *The campus shall educate the campus community on the importance of water conservation measures.*

PP 4.14-5 *As part of the design process for proposed projects, an evaluation of the on-campus sewer conveyance capacity shall be undertaken, and improvements provided if necessary in order to ensure that connections are adequate and capacity is available to accommodate estimated flows.*

In addition, PP 4.15-1, discussed under the greenhouse gas (GHG) emissions analysis (Section 4.6 of this Draft SEIR), which requires implementation of the provisions of the UC Sustainable Practices Policy, is also incorporated in the proposed Project.

Threshold 9.1	Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Threshold 9.2	Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water Infrastructure

The analysis of Impact 4.14-1 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR states that new water infrastructure (lines) may be necessary with implementation of the remaining development allocation on campus; it also states that each future on-campus development would be subject to project-specific CEQA and site-specific analyses of potential impacts for construction and operation of individual projects, including infrastructure.

The existing and proposed domestic water facilities (i.e., conveyance pipes for domestic and fire water supply) that would serve the proposed Project are described fully in Section 3.0, Project Description, of this Draft SEIR. Domestic, fire, and irrigation water needs of the proposed Project would be served via an existing 4-inch water main in Kinross Avenue that serves the Kinross Building via 4- to 10-inch water lines extending along the west side of the building.

It has been determined that the proposed Geffen Academy would have a similar potable water demand as the existing operations of the Kinross Building. This determination was made by comparing the current (2015) water demand for the existing building uses to the anticipated water demand for a 620-student 6th through 12th grade school. The anticipated water demand was calculated by assessing the type, number, and flow rates of all plumbing fixtures to be used in the Geffen Academy, which would be low-flow fixtures consistent with PP 4.14-2(a) and even higher efficiency than some existing fixtures, and the total population and hours of operation planned for the Academy. As with the existing condition and consistent with PP 4.14-2(b) through (d), the limited landscaping on the site would reduce water use and water would not be used to clean hard surfaces around the building. Also, the Geffen Academy faculty, staff, and students would be part of the campus community to be educated regarding water conservation, consistent with PP 4.14-2(g). Finally, the proposed Project would not involve development of additional square footage on campus. It is noted the Kinross Building was operating with its building uses during preparation of the March 2009 LRDP Amendment Final EIR and the demand for water from this facility was part of the baseline demand for the campus analyzed in the LRDP Final EIR. Regarding the new population baseline for 2014-2015, Section 4.9.1, above, shows that the water demand of the campus in 2014-2015 was still below the anticipated and projected demand analyzed in the LRDP EIR. Thus, the water demand for the existing, completed, or new buildings (under construction) and the new baseline population, are still within the projected water demand of the campus and no new or expanded water facilities would be required.

As such, there would be capacity in the existing water infrastructure and no new or expanded water infrastructure, including lateral connections, would be required to serve the proposed Project. Therefore, consistent with the conclusion presented in the March 2009 LRDP Amendment Final EIR, there would be a less than significant impact related to the need to construct new or expanded water facilities, with implementation of PPs 4.14-2(a) through 4.14-2(d) and PP 4.14-2(g). No additional mitigation is required.

Wastewater Infrastructure and Treatment

The analysis of Impacts 4.14-5 and 4.14-6 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded that there would be a less than significant impact related to the need to construct new or expanded wastewater conveyance or treatment facilities with implementation of PPs 4.14-2(a) through 4.14-2(d), 4.14-2(f), 4.14-2(g), and 4.14-5. The LRDP Final EIR also determined that implementation of the remaining development allocation on campus contemplated by the March 2009 Amendment to the 2002 LRDP would not generate a volume of wastewater that would exceed the capacity of the HWRP wastewater treatment system in combination with the provider’s existing service commitments.

Wastewater generated at the Geffen Academy would flow via an existing 6-inch lateral sewer line at the south end of the building to the existing 6-inch sewer line in Parking Lot 36, which flows to Midvale Alley. In accordance with PP 4.14-5, UCLA has evaluated the proposed Project to determine if the wastewater generated by the proposed Geffen Academy would exceed the capacity of existing sewer lines, as part of determining the anticipated water demand. As discussed above under Thresholds 9.1 and 9.2, it has been determined the proposed Project, which would not increase the amount of development (building square footage) on the project site, would have a similar potable water demand, and therefore wastewater generation, as the existing operations of the Kinross Building. It is noted the Kinross Building was operating with its building uses during preparation of the March 2009 LRDP Amendment Final EIR and the generation of wastewater from this facility was part of the baseline demand for the campus analyzed in the LRDP Final EIR. Regarding the new population baseline for 2014-2015, Section 4.9.1, above, shows that the water demand of the campus in 2014-2015 was still below the anticipated and projected demand analyzed in the LRDP EIR. Because water demand was calculated in the LRDP EIR at 1.15 percent above wastewater generation, and water demand is still below the projected 2.75 mgd increase, the campus is still within the wastewater generation assumptions, even with new baseline population. No new or expanded wastewater facilities would be required as a result of the new baseline population.

As such, there is sufficient capacity in the existing sewer lines to serve the proposed Project and no new or expanded sewer lines would be required. Because the wastewater generation resulting from the proposed Project would be similar to existing conditions, the HWRP would continue to have adequate capacity to service the proposed Project in addition to other existing commitments. Therefore, the proposed Project would result in less than significant impacts related to wastewater infrastructure and treatment, consistent with the conclusion presented in the March 2009 LRDP Amendment Final EIR. No additional mitigation would be required.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact related to water and wastewater infrastructure and wastewater treatment.

Threshold 9.3	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The analysis of Impact 4.14-2 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded that implementation of the remaining development allocation on campus would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements with implementation of PPs 4.14-2(a) through 4.14-2(d), 4.14-2(f), and 4.14-2(g) and there would be a less than significant impact.

As discussed under Thresholds 9.1 and 9.2 above, it has been determined that the proposed Project would have a similar potable water demand as the existing operations of the Kinross Building. Also, the Kinross Building was operating with its building uses during preparation of the March 2009 LRDP Amendment Final EIR and, as such, the demand for water from this facility was part of the baseline demand for the campus analyzed in the LRDP Final EIR. As discussed above, the LADWP concludes in its current 2010 UWMP and its Draft 2015 UWMP that its present and planned supplies would be sufficient to meet existing and projected 25-year demands within its service area in average, single-dry year and multiple-dry year hydrological scenarios. Therefore, the water demand from the Geffen Academy would continue to be met with existing entitlements and resources and would not result in the need for new or expanded entitlements with continued implementation of the identified PPs. Consistent with the conclusions of the LRDP Final EIR, there would be a less than significant impact related to water supply with implementation of PPs 4.14-2(a) through 4.14-2(d) and PP 4.11-2(g) and no mitigation is required.

Additional Project-Level Mitigation Measures

No mitigation measures are required.

Level of Significance after Mitigation

Less than significant impact on water supplies.

4.9.4 CUMULATIVE IMPACTS

Domestic Water

As identified in the March 2009 LRDP Amendment Final EIR, the geographic context for the analysis of cumulative water supply is the City of Los Angeles, including cumulative growth therein, as represented by the full implementation of allowed development under the 2002 LRDP, as amended in March 2009; the City of Los Angeles General Plan Framework; and development of the related projects identified in Table 4-1, Related Projects, in Section 4.0, Introduction to Environmental Analysis, of the LRDP Final EIR. The City of Los Angeles represents the service area for the LADWP with respect to water supplies.

Development of cumulative projects would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. Because the proposed Project would not increase the potable water demand associated with the Kinross Building, it would not have a considerable contribution to cumulative impacts associated with water infrastructure or water supplies. This impact is considered less than significant, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR.

Wastewater

Cumulative growth in the HWRP service area could result in the need for additional conveyance infrastructure. Due to the built-out, urban nature of most of the service area, however, it is not expected that such expansion of conveyance infrastructure would result in significant environmental effects. Development of cumulative projects within the HWRP service area would generate additional quantities of wastewater requiring treatment at the HWRP, depending on net increases in population, square footage, and intensification of uses. Because the proposed Project would not increase the wastewater generation at the project site, it would not have a considerable contribution to cumulative impacts associated with wastewater infrastructure or treatment. This impact is considered less than significant, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR.

4.9.5 CONCLUSION

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the proposed Project or the circumstances under which the proposed Project is being implemented that will require major revisions to the March 2009 LRDP Amendment Final EIR due to new or substantially more severe significant effects related to water and wastewater infrastructure and treatment, wastewater treatment requirements, or water supply and related infrastructure. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to utilities and service systems.

4.9.6 REFERENCES

Kim, H. S. 2016 (March 30). Personal communication. Email from H. S. Kim (City of Los Angeles Sanitation Department) to A. McCoy (BonTerra Psomas) entitled “Hyperion Plant Capacity Numbers”.

Los Angeles, City of, Bureau of Sanitation. 2016 (April 12, access date). Hyperion Water Reclamation Plant. Los Angeles, CA: the City. https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=13v1zf6lrg_4.

Los Angeles, City of, Department of Water and Power (LADWP). 2016a (June 1, access date). 2015 Urban Water Management Plan. Los Angeles, CA: LADWP. https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-sos-uwmp?_adf.ctrl-state=15bqdusj91_29&_afrLoop=1642538277266959.

———. 2016b. *Draft 2015 Urban Water Management Plan.* Los Angeles, CA: LADWP. https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-sos-uwmp?_adf.ctrl-state=15bqdusj91_29&_afrLoop=1642538277266959.

———. 2011 (Adopted May 3). *2010 Urban Water Management Plan*. Los Angeles, CA: LADWP. https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=QOELLADWP005416&RevisionSelectionMethod=LatestReleased.

University of California, Los Angeles (UCLA). 2009 (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; Prepared by BonTerra Consulting). Los Angeles, CA: UCLA.

University of California Office of the President (UCOP). 2015. University of California – Policy: Sustainable Practices. Oakland, CA: UCOP.

SECTION 5.0 ALTERNATIVES TO THE PROPOSED PROJECT

5.1 INTRODUCTION

5.1.1 PURPOSE AND SCOPE

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (State CEQA Guidelines, Section 15126.6). This chapter identifies potential alternatives to the proposed Project and evaluates them, as required by CEQA.

Key provisions of the State CEQA Guidelines on alternatives (Sections 15126.6[b]–15126.6[f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objective, or would be more costly" (15126.6[b]).
- "The specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6[e][1]).
- "The 'no project' analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6[e][2]).
- "The range of alternatives required in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f]).
- For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6[f][2][A]).
- "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location" (15126.6[f][2][B]).

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6[f][3]).

Although the proposed Geffen Academy would not result in any significant and unavoidable impacts beyond that identified in the March 2009 Long Range Development Plan (LRDP) Amendment Final EIR, alternatives to the proposed Project are considered and evaluated in this Draft Subsequent EIR (SEIR). The discussion in this section provides:

1. A description of alternatives considered.
2. A comparative analysis of the alternatives under consideration and the proposed Project. The focus of this analysis is to determine if alternatives are capable of eliminating or reducing the significant environmental effects of the proposed Project to a less than significant level.
3. An analysis of whether the alternatives meet most of the objectives of the proposed Project (as presented in Section 3.2 of this Draft SEIR and restated below).

5.1.2 PROJECT DESCRIPTION

The proposed Geffen Academy is located in the Southwest zone of the UCLA campus. The proposed Project would be developed on the approximate 1.9-acre site of the existing Kinross Building (11000 Kinross Avenue), its associated outdoor spaces, and a portion of Parking Lot 36. The project site is bound by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively.

The proposed Geffen Academy would be operated by the University of California, Los Angeles (UCLA) and would provide an innovative college preparatory education for 6^{th} through 12^{th} grade students. The Geffen Academy is proposed to open for the 2017–2018 school year with approximately 160 students in grades 6 and 9, followed by an enrollment increase up to a maximum of 620 students in grades 6 through 12 by the 2020–2021 school year. New faculty and staff would be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees (not on campus). Based on preliminary estimates, with 620 students by the 2020–2021 school year, it is expected that the employee population would include approximately 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees.[1] The Geffen Academy would have recreational activities and various competitive athletic teams that would utilize on-site facilities, including a proposed outdoor halfcourt.

Internal modifications would be made to all 3 levels of the 75,000-gross-square-foot (gsf) Kinross Building to accommodate the proposed uses and programs associated with the Geffen Academy. Additionally, minor exterior site modifications are proposed, including a proposed exit driveway at Kinross Avenue, an outdoor half-court basketball court, and a new main entry to the building along the western building facade. The proposed Project would retain existing connections to campus utilities, including domestic water, sewer, storm drains, and dry utility systems that are currently located in the project area.

Existing uses at the Kinross Building would be relocated prior to occupancy by the Geffen Academy. The Fowler Museum artifacts and personnel would be relocated to the Life Sciences Building, while the library functions would be relocated to an as yet to be determined on-campus

[1] Remote employees would not be located on site; they are support for faculty for assignments such as reading and grading.

location. Approximately 211 administrative staff in the Kinross Building would move to the Occidental Building, which was purchased by UCLA in November 2015. This building is located at the corner of Westwood and Wilshire Boulevards (at 10889 Wilshire Boulevard), approximately 675 feet east of the project site. UCLA is evaluating existing buildings both on- and off-campus for their potential to be relocation sites for the Kinross Recreation Center (KREC). At this time, no location has been identified as the relocation site. Once a site is identified and the scope of work to renovate that site/space is defined, a separate CEQA evaluation will be prepared for design approval.

The proposed circulation pattern for the Geffen Academy would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building and west of the Gayley Center, following a route around the Kinross Building to the proposed new entrance and pickup/drop-off location at the northwest portion of the building. Vehicles would then either (1) exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project (right turns only) or (2) during controlled periods, exit the site from a swing or sliding fence that would allow vehicles to use the existing Parking Lot 36 exit and turn left onto Kinross Avenue. Parking for the Geffen Academy, including parking in compliance with the Americans with Disabilities Act (ADA), would be provided on site for Geffen Academy students and visitors. Full-time faculty or staff (which would also be UCLA faculty and staff) would have the opportunity to obtain a campus parking permit for either Parking Lot 36 or Parking Structure 32.

Interior and exterior renovation and construction activities at the Kinross Building are expected to begin in fall 2016 to accommodate opening of the Geffen Academy by September 2017. Additional interior renovation and construction activities to accommodate the full Academy population (6^{th} through 12^{th} grades) would continue through December 2018.

The proposed Project would not require an amendment to the 2002 LRDP (as amended in March 2009) since the proposed renovations to the Kinross Building would result in no new square footage being added in the Southwest zone.

As identified in Section 3.7, Anticipated Discretionary Approvals, of this Draft SEIR, the actions to be considered by The Board of Regents (The Regents) of the University of California or its delegate for the proposed Project include (1) budget approval, (2) certification of the Final Tiered Subsequent EIR, and (3) design approval of the Geffen Academy at UCLA Project.

5.1.3 PROJECT OBJECTIVES

As stated in Section 3.2 of this Draft SEIR and pursuant to Section 15124 of the State CEQA Guidelines, the following objectives have been established for the proposed Project to aid decision makers in their review of the proposed Project and its associated impacts.

1. Further the University of California's (UC's) mission of research and public service by offering an alternative 6^{th} through 12^{th} grade education in line with UCLA's founding a "model school" and moving away from the standard agrarian model of education.
2. Locate the Project proximate to campus and campus transit facilities to provide academic and research synergies with UCLA faculty, undergraduate, and graduate students, while facilitating a cross-cultural venue for faculty to develop non-departmental connections.
3. Locate the Academy in an existing facility that can provide the independent use for both a middle and high school experience and provide the physical attributes needed to meet the programmatic requirements of the Academy, including, but not limited to, the following:
    a. Provide a right-sized facility to accommodate both a middle and high school program, with associated staff and faculty;

b. Provide a program with 3 entry points for student admission: 6^{th}, 7^{th}, and 9^{th} grades;

c. Provide proper physical security components and security personnel;

d. Accommodate on-site circulation and parking demands;

e. Provide on-site outdoor space for recreation, daily activities, and special events; and

f. Locate in a facility that enables the Academy to open in fall 2017.

4. Develop a program that has the capacity to enroll both students of UCLA faculty and staff and the greater Los Angeles region, furthering the University's commitment to diversity.
5. Increase UCLA's competitive edge in the immediate recruitment of faculty and staff to address recent UC system-wide student enrollment increase requirements established by The Regents.
6. Locate the Academy proximate to alternative transportation that provides faculty, staff, and students, of both the Academy and UCLA, with a range of transit options.
7. Create work opportunities for UCLA undergraduate and graduate students that expose them to the education profession and generate the next wave of teachers and faculty, consistent with UC's mission and commitment to the State of California.

Additionally, the following objectives from the 2002 LRDP (as amended in March 2009) are particularly relevant to the proposed Geffen Academy:

1. Offer teaching, research, and service programs of the highest quality to serve the needs of the Los Angeles region, the State of California, and the nation.
2. Build an academic community of faculty and students in keeping with an institution of UCLA's caliber.
3. Continue to serve the Los Angeles region through provision of cultural, health, educational, and community programs.
4. Provide and promote opportunities for the use of alternative transportation modes.

5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As previously mentioned, an EIR should consider a range of feasible alternatives that would attain most of the project objectives listed above, while reducing one or more of the significant and unavoidable impacts of the project. Significant and unavoidable impacts that would result from implementation of the proposed Project include those listed below.

- **Construction Noise.** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus and off-campus locations, and the Geffen Academy could be exposed to construction noise from off-campus construction activities. There is no additional feasible mitigation for the project's construction-related impacts, and UCLA cannot require mitigation be implemented for the off-campus construction project. The March 2009 LRDP Amendment Final EIR identified that construction noise impacts to on- and off-campus uses would be significant and unavoidable.

- **Traffic–Intersection Impacts.** The proposed Project would result in significant and unavoidable impacts at the following two study intersections:

- **No. 22: Veteran Avenue and Wilshire Boulevard (PM Peak Hour)** under the Existing Plus Project and Future Year 2020 With Project traffic analysis scenarios.
- **No. 23: Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour)** under the Future Year 2020 With Project scenario.

Impacts under the Existing Plus Project scenario are generated by the proposed Project, and impacts under the Future 2020 With Project scenario are cumulative. The March 2009 LRDP Amendment Final EIR identified significant and unavoidable impacts at these intersections.

A Statement of Overriding Considerations was adopted in March 2009 by The Regents as part of the approval of the March 2009 Amendment to the 2002 LRDP for the significant and unavoidable impacts resulting from implementation of the 2002 LRDP, as amended, of which the proposed Project is a part, including construction-related noise impacts and Project-related and cumulative intersection impacts.

5.3 ALTERNATIVE CONSIDERED AND REJECTED FROM FURTHER CONSIDERATION

Section 15126.6(c) of the State CEQA Guidelines specifies that an EIR should (i) identify alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process and (ii) briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; and/or (iii) inability to avoid significant environmental impacts (State CEQA Guidelines, Section 15126.6[c]).

The following alternative was considered during the scoping and planning process but was not selected for detailed analysis in this Draft SEIR. As described in greater detail below, the main reason for rejecting this Alternative was that developing the proposed Project on an alternative off-campus site would not avoid or substantially reduce the impacts associated with the proposed Project and would not be consistent with the proposed Project's objectives.

5.3.1 ALTERNATIVE OFF-CAMPUS SITE

This Alternative would involve implementation of the proposed Geffen Academy at an off-campus location (i.e., not within the UCLA main campus), which could include, but not be limited to, one of UCLA's existing partner schools (e.g., the UCLA Community School located at 700 South Mariposa Avenue in the City of Los Angeles), another public school site in West Los Angeles, existing private school sites, or other sites capable of meeting the physical requirements established for the proposed Geffen Academy. The intent of the proposed Geffen Academy is to provide an innovative, on-campus college preparatory school for 6^{th} through 12^{th} grade students to advance UCLA's mission of research, teaching, and service. The school is envisioned as a facility that would enable UCLA to recruit and retain top UCLA faculty and provide hands-on teaching and educational opportunities for UCLA's undergraduate and graduate students, in support of the Academy's faculty. A key objective is to locate the Geffen Academy proximate to campus and campus transit facilities to provide academic and research synergies with UCLA faculty, undergraduate, and graduate students. Also, as a college preparatory program, students at this school need access to learning opportunities and classes provided by UCLA and UCLA facilities, which are beyond those offered by more traditional secondary schools.

Because an off-campus location would be physically separated from the main campus, it would not meet these key proposed Project objectives, which are dependent on the Geffen Academy being on campus for accessibility (for Academy students to have access to campus facilities and for UCLA faculty and students to have access to the Academy).

Another key objective of the proposed Geffen Academy is to locate the school in an existing facility that can provide the independent use for both a middle and high school experience and provide the physical attributes needed to meet the programmatic requirements of the Academy related to size, entry points for student admission (6^{th}, 7^{th}, and 9^{th} grades), physical security, on-site circulation and parking, outdoor spaces, and ability to open the Academy in the fall of 2017. There is a lack of available public school sites, including at UCLA's partner schools, that could accommodate the physical requirements needed to hold the proposed Geffen Academy and the existing school programs at the same location. Additionally, an off-campus location for the proposed Geffen Academy would likely require new construction, which was not anticipated for the proposed school. This could make the proposed Project financially infeasible. Further, CEQA does not require the consideration of sites not owned by the landowner or that could not be reasonably acquired by the landowner as alternatives to the proposed Project (State CEQA Guidelines, Section 15126.6[f][1]). UCLA does not own or otherwise control off-campus property that could accommodate the proposed Geffen Academy.

With respect to environmental impacts, it is not expected that development of the proposed Geffen Academy Project at an off-campus location would lessen any of the potential environmental impacts of the proposed Project. Conversely, it is expected that the environmental impacts at an off-campus site would have similar or potentially greater impacts than the proposed Project. As identified through the analysis presented in Section 4.0 of this Draft SEIR, the proposed Project would result in significant and unavoidable project-related and cumulative traffic impacts at two intersections. These intersection impacts were previously analyzed and identified in the March 2009 LRDP Amendment Final EIR. With implementation of applicable LRDP Final EIR programs, practices, and procedures (PPs) and mitigation measures (MMs), no other project or cumulative significant impacts would result.

With respect to traffic impacts, trip generation and intersection impacts resulting from development of the proposed Geffen Academy at an off-campus location would likely be greater than the proposed on-campus location primarily because (1) travel by Geffen Academy faculty, staff, and students and UCLA-affiliated parents between the Geffen Academy and the main campus would result in increased vehicular trips and (2) the trip reduction resulting from use of on campus transit facilities and implementation of UCLA's Transportation Demand Management (TDM) program would not occur at the same level as the on-campus facility, resulting in reduced use of non-vehicular modes of transportation. With increased trip generation and vehicular miles traveled, there would be an increase in emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx), and greenhouse gas (GHG) emissions associated with mobile sources (e.g., vehicles).

The construction-related impacts of the proposed Project are less than significant, primarily due to the limited amount of construction required to implement the Geffen Academy at the existing Kinross Building, which was originally constructed to serve as a multi-use facility. There would be minimal interior and exterior construction required to accommodate the Geffen Academy. It is likely that additional construction would be required at an off-campus location, resulting in an increase in air pollutant emissions associated with construction equipment and truck trips and increased construction noise and vibration. Additionally, the potential physical impacts related to a change in visual character, the potential to impact biological and cultural resources, geotechnical constraints, and changes to hydrology and water quality conditions would also be expected to be greater than the proposed Project.

In summary, an alternative site off campus for the proposed Geffen Academy would not meet the proposed Project's objectives to the same extent as the proposed Project, and an off-campus location of adequate size would not substantially reduce or avoid significant, unavoidable traffic impacts resulting from the proposed Project and may result in greater traffic and traffic-related impacted (e.g., air quality emissions, GHG emissions). Additionally, construction-related impacts are expected to be greater at an off-campus site compared to the construction activities necessary to accommodate the proposed Project at the existing Kinross Building. Therefore, further analysis of an alternative site(s) in this Draft SEIR is not required.

5.4 ANALYSIS OF ALTERNATIVES UNDER CONSIDERATION

As described in Sections 4.1 through 4.9 of this Draft SEIR, the potentially significant impacts of the proposed Project can be mitigated to a less than significant level with the exception of project and cumulative traffic impacts at two study area intersections. These significant and unavoidable impacts are consistent with the findings of the March 2009 LRDP Amendment Final EIR. Based on the criteria listed previously, the two alternatives described below have been determined to represent a reasonable range of alternatives for the proposed Project, which would not result in any new or more severe impacts compared to what was addressed in the LRDP Final EIR. The alternatives considered in this Draft SEIR include the following:

- No Project/No Build
- Alternative Campus Location

5.4.1 NO PROJECT/NO BUILD

Section 15126.6(e) of the State CEQA Guidelines requires than an EIR evaluate a "no project" alternative to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving that project. Section 15126.6(e)(3) of the State CEQA Guidelines describes the two general types of no project alternative: (1) when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the no project alternative would be the continuation of that plan and (2) when the project is other than a land use/regulatory plan, such as a specific development on an identifiable property, the no project alternative is the circumstance under which that project is not processed (i.e., no development).

The proposed Project does not involve an amendment to the 2002 LRDP, as amended in March 2009, or any other existing land use or regulatory plan. Therefore, Alternative 1 in this EIR represents the No Project Alternative assuming that the proposed Geffen Academy would not occur at the Kinross Building (No Project/No Build).

Description of the Alternative

Under the No Project/No Build Alternative, the proposed Geffen Academy would not be implemented at the Kinross Building. The Kinross Building would continue to operate as a multi-use, staging facility, similar to existing conditions. It should be noted that the No Project/No Build Alternative would not preclude development of the remaining development allocation on campus as allowed under the 2002 LRDP, as amended in March 2009 (currently approximately 276,487 gsf). Impacts associated with the implementation of remaining development allocation are not discussed in this analysis as they would remain the same as evaluated in the March 2009 LRDP Amendment Final EIR.

Comparative Analysis of Environmental Impacts

Air Quality

The No Project/No Build Alternative would not involve any construction activities (including demolition, earthwork, and building modifications) and would not result in a change in operations on campus, including increased trip generation. Therefore, there would be no increase in air quality emissions. The proposed Project, which incorporates applicable LRDP EIR PPs and MMs, and this Alternative would not result in air quality emissions that exceed thresholds recommended by the South Coast Air Quality Management District (SCAQMD) and would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

As with the proposed Project, the No Project/No Build Alternative would neither conflict with nor obstruct implementation of the Air Quality Management Plan (AQMP) since the proposed Project and this Alternative do not provide for population, housing, or employment growth that exceeds regional forecasts from the Southern California Association of Governments (SCAG), which form the basis of the land use and transportation control portions of the AQMP.

Implementation of the proposed Project and this Alternative, which would not change existing operations on campus, would not expose sensitive receptors to substantial pollutant concentrations and would not create objectionable odors resulting in a less than significant impact.

Greenhouse Gas Emissions

The No Project/No Build Alternative would not change or increase the amount and type of GHG emissions generated by existing uses in the project area and would avoid the less than significant impact associated with GHG emissions resulting from the proposed Project, which incorporates applicable LRDP EIR PPs and MMs.

Hydrology and Water Quality

Under this Alternative, the existing hydrology patterns and hydrologic characteristics of the project area would remain the same. The proposed Project would likely reduce the amount of storm water runoff from the project site and decrease demands on the existing storm drain system by increasing the amount of pervious area with the introduction of additional landscaped areas. While this Alternative would also have no adverse impact, there would be no reduction in storm water runoff and no implementation of additional water quality Best Management Practices (BMPs). Because this Alternative would not include any grading and construction, there would be no potential for construction-related water quality impacts, which would be less than significant for the proposed Project through incorporation of applicable LRDP EIR PPs and MMs and compliance with regulatory requirements.

Land Use and Planning

Under the No Project/No Build Alternative, the Kinross Building would remain operational. It is expected that the KREC and Graduate Student Community Center, Fowler Museum, and UCLA Library Conservation Center would remain at the Kinross Building; however, unrelated to the proposed Project, the administrative uses would likely be relocated to the Occidental Building. This would allow for use of the Kinross Building for other uses, as needed, similar to its original intended purpose to serve a multi-use facility for displaced departments. This Alternative would not result in any direct or indirect land use impacts and would not conflict with the provisions of the 2002 LRDP, as amended in March 2009, or other related planning programs. As with the proposed Project, this Alternative would not result in any significant land use impacts.

Noise

The No Project/No Build Alternative would not involve any grading or construction activities. Therefore, the significant and unavoidable construction-related noise impacts resulting from the proposed Project would not occur. This vibration effects associated with these construction activities would not occur under this Alternative. Additionally, the increase in long-term, traffic-related, and operational noise levels associated with the proposed Project would not occur. However, noise impacts from implementation of the proposed Project would be less than significant with incorporation of applicable LRDP EIR PPs and MMs. This Alternative would avoid the less than significant noise impacts resulting from implementation of the proposed Project.

Population and Housing

The proposed Geffen Academy would increase the on-campus population by approximately 729 individuals (620 students and 109 faculty/staff); however, there would not be substantial growth in the City of Los Angeles or the region. The No Project/No Build Alternative would not increase the on-campus population (students, employees, or other individuals) and would avoid the less than significant impact of the proposed Project related to population and housing.

Public Services and Recreation

Under the No Project/No Development Alternative, the demands for public services and recreational facilities would remain at existing levels. Because there would be no increase in the population on campus, increased demands on public services and recreational facilities would not occur and the impact of the No Project/No Development Alternative relative to public services and recreation would be less than the proposed Project. However, the proposed Project impacts are less than significant with incorporation of applicable LRDP EIR PPs and MMs.

Transportation/Traffic

The No Project/No Build Alternative would not change the existing circulation conditions because no new development or change in circulation patterns would occur within the project area. No short-term (construction) traffic would be generated; however, impacts from the proposed Project related to construction traffic would be less than significant. No long-term (operational) vehicular trips would be generated under the No Project/No Build Alternative; therefore, the significant project and cumulative impacts at two study area intersections would be avoided.

Utilities and Service Systems

As with the proposed Project, the No Project/No Build Alternative would not place new demands on local and regional utilities and service systems because no new development would occur and the total square footage at the Kinross Building would remain the same. Under this Alternative, no new utilities would be constructed and no physical impacts would result. The impacts to utilities under the proposed Project would be less than significant.

Ability to Meet the Project Objectives

Under the No Project/No Build Alternative, the proposed Geffen Academy would not be implemented at the Kinross Building. The No Project/No Build Alternative would not attain any of the proposed Project objectives identified above in Section 5.1.3.

5.4.2 ALTERNATIVE CAMPUS LOCATION

Description of the Alternative

With the Alternative Campus Location, the proposed Geffen Academy would be operated on campus but at the site of the existing Ueberroth Building, northeast of the intersection of Gayley Avenue and Le Conte Avenue, in the eastern portion of the Bridge zone, approximately 0.25-mile from the proposed Kinross Building site (refer to Figure 5-1). The Bridge zone contains approximately 5 acres of the 419-acre UCLA campus. The Bridge zone forms a physical land connection between the main campus zones and the Southwest zone and contains the Ueberroth Building, the University Extension (UNEX) Building, student apartments, and faculty apartments.

Existing occupants of the Ueberroth Building include various medical/clinical and office uses. Medical/clinical uses in the Ueberroth Building would be relocated to other on-campus facilities and office/administrative uses would be relocated off campus in the Occidental Building, similar to the administrative uses that would be relocated from the Kinross Building.

This Alternative would involve renovation of the existing approximate 50,000-gsf Ueberroth Building and construction of a new 25,000-gsf building on the adjacent undeveloped site to the west; this Alternative site encompasses approximately 2.1 acres. As with the proposed Project, implementation of the proposed Geffen Academy at the Alternative Campus Location would comply with the University of California Policy on Sustainable Practices. Renovations and new construction be designed to meet the minimum standard of a Leadership in Energy and Environmental Design (LEED™) “Silver” rating for Existing Buildings, and New Construction, as applicable, and would attempt to achieve a LEED™ “Gold” rating. Additionally, as with the proposed Project, exterior modification of the site would be required to accommodate outdoor recreation and other outdoor uses.

Vehicular access to this alternative Geffen Academy site would be provided along Le Conte Avenue and, similar to the proposed Project, parking, including parking that complies with the ADA, would be provided on site for students and visitors. Parking for the Geffen Academy students, staff and visitors would include spaces in the P1 Parking Structure adjacent to the Ueberroth Building no longer used by the vacated staff. As with the proposed Project, there would be no change in the number of parking spaces available to UCLA students, and therefore no resulting change in their trip generation levels.

This alternative site for the proposed Geffen Academy would also accommodate up to 620 students in grades 6 through 12. However, due to the need to renovate the existing Ueberroth Building and construct a new building, it is estimated that the Academy would not open until the 2018–2019 school year with approximately 160 students in grades 6 and 9. Thus, pushing the full enrollment of up to a maximum of 620 students to the 2021–2022 school year. As with the proposed Project, new faculty and staff would be hired to operate the Geffen Academy (approximately 109 faculty/staff and 31 remote employees).

There is currently no remaining development allocation in the Bridge zone; therefore, this Alternative would include a proposed amendment to the 2002 LRDP, as amended in March 2009, to transfer 25,000 gsf from the Southwest zone to the Bridge zone to accommodate the proposed Geffen Academy.

For this Alternative, it is assumed that the existing March 2009 LRDP Amendment Final EIR campus PPs and MMs would be implemented and thus serve to reduce or avoid potential significant impacts.

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Alternative Campus Location

Figure 5-1

Geffen Academy at UCLA

N W E S

350 175 0 350 Feet

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Comparative Analysis of Environmental Impacts

This Alternative specifically addresses implementation of the proposed Geffen Academy at an alternative location on campus. The following analysis focuses on the comparative impacts of implementation of the proposed Project at the Ueberroth Building site in the Bridge zone rather than the Kinross Building site in the Southwest zone. Impacts associated with the implementation of remaining development allocation under the 2002 LRDP, as amended in March 2009 (currently approximately 276,487 gsf), would be the same as the proposed Project and are not discussed in this analysis as they would remain the same as evaluated in the March 2009 LRDP Amendment Final EIR.

Air Quality

Development of the proposed Geffen Academy at the Alternative Campus Location would occur on the approximate 2.1-acre Ueberroth Building site and would require various construction activities. Minor grading and earthwork would be required to accommodate exterior improvements and a building pad for a new 25,000-gsf building. Because a new building would be constructed, which is not required with the proposed Project at the Kinross Building, the total construction period and construction emissions would be greater than the proposed Project but would still be less than significant with adherence to March 2009 LRDP Amendment Final EIR PPs and MMs, due to the relative small size of the construction area and new building.

The closest sensitive receptors to this alternative site are residential uses approximately 75 feet to the west across Gayley Avenue. Based on the local significance threshold (LST) analysis conducted for the proposed Project, impacts to the closest sensitive receptors would be less than significant. This Alternative, which would be located closer to sensitive receptors than the proposed Project, would be at the 25-meter distance used for the proposed Project LST analysis. Although on-site construction emissions would be slightly greater with the Alternative Campus Location, this Alternative would also have less than significant impacts because, as shown in Section 4.1, Air Quality, of this Draft SEIR, local emissions would be substantially less than the LST thresholds.

With respect to long-term air quality emissions, the energy use and area sources of emissions with the Alternative Campus Location would be similar to the proposed Project as the buildings would total 75,000 gsf and the population would be the same. As with the proposed Project, the proposed Project would result in a forecasted increase of 1,040 vehicle trips per day. Therefore, the operational emissions from this Alternative would be similar to the proposed Project and would be less than significant.

Peak hour trip generation for this Alternative would be 291 AM peak hour trips and 183 PM peak hour trips, consistent with the proposed Project. The analysis for potential carbon monoxide (CO) hotspots in Section 4.2 of this Draft SEIR showed that peak hour volumes at congested intersections would be substantially less than the 31,600 vehicle per hour screening threshold. As with the proposed Project, there would be no potential for a CO hotspot.

With respect to toxic air contaminants (TACs), as stated in Section 4.1 of this Draft SEIR, a Health Risk Assessment (HRA) that was prepared as part of the March 2009 LRDP Amendment Final EIR identified maximally exposed individual (MEI) locations on campus, dependent on the type of health risk. Health risks at those locations would be less than significant, and health risks at all other locations on campus would be less than at the MEI locations. The Alternative Campus Location would not be at either MEI location. There are no major off-campus manufacturing or similar facilities that would emit substantial TACs in the vicinity of the Alternative Campus Location.

A project-specific HRA was prepared for the proposed Project because of its location adjacent to Wilshire Boulevard and the planned major construction of the Wilshire Gayley Project, both sources of potentially substantial diesel particulate emissions. Short-term and long-term health risks were determined to be less than significant for the proposed Project. The Alternative Campus Location would neither be near a major arterial road nor adjacent to a major construction project. Therefore, the short-term and long-term health risks associated with those sources would be less than for the proposed Project and less than significant.

The development of the proposed Geffen Academy at the Alternative Campus Location would be within the remaining development allocation and population growth contemplated as part of the 2002 LRDP, as amended in March 2009, and would not involve any modifications to the previously adopted campus-wide vehicle trip generation or parking limits. The Alternative Campus Location would, therefore, also be consistent with the AQMP, similar to the proposed Project.

Therefore, long-term air quality impacts would be the same (less than significant) as the proposed Project related to mass emissions, CO hotspots, TACs, and consistency with the AQMP and would be less than significant.

Greenhouse Gas Emissions

Development of the proposed Geffen Academy at the Alternative Campus Location would result in increased construction activities associated with construction of a new 25,000-gsf building. Therefore, GHG emissions from this Alternative would be slightly greater than the proposed Project but when amortized over 30 years, would be negligible compared to the long-term GHG emissions, consistent with the proposed Project.

GHG emissions from mobile source and building energy use under the Alternative Campus Location would be similar to the proposed Project because the trip generation from the proposed Geffen Academy would be the same and the total building size would be the same (75,000 gsf).

Therefore, the GHG emissions from this Alternative would be similar to the proposed Project and would also be less than significant.

As with construction and operation of the proposed Project, with development of the proposed Geffen Academy at the Alternative Campus Location, the campus would continue to implement the UC Policy on Sustainable Practices, including compliance with the UCLA Climate Action Plan, as well as federal, State, and regional plans, policies, and regulations. As with the proposed Project, development of the proposed Geffen Academy at the Alternative Campus Location would incorporate relevant PPs and would not conflict with plans and policies adopted for the purposes of reducing GHGs, resulting in a less than significant impact.

Hydrology and Water Quality

As with the Kinross Building site, the Alternative Campus Location includes primarily impervious surfaces associated with the Ueberroth Building, portable buildings, drive aisles, and parking areas. Implementation of the Geffen Academy at the Alternative Campus Location would involve construction of a new building on a site that includes paved areas and portable buildings and minor exterior alterations around the Ueberroth Building; therefore, there would not be a substantial change in the rate or amount of storm water runoff. Impacts to storm drain infrastructure would be less than significant with this Alternative and the proposed Project and no new or expanded storm drains would be needed.

As with the proposed Project, there is a potential for sediments and non-sediment-related pollutants to enter storm water flows with this Alternative; potential impacts would be similar to the proposed Project because of the similar area of disturbance. With implementation of March 2009 LRDP Amendment PPs, the potential impacts related to erosion during construction from this Alternative would be less than significant, consistent with the proposed Project.

Similar to the proposed Project, surface runoff from the Alternative Campus Location would include pollutants consistent with the existing campus developed areas including the Ueberroth Building site. With implementation of the BMPs as required by March 2009 LRDP Amendment PPs, water quality impacts from this Alternative would be less than significant, similar to the proposed Project.

Land Use and Planning

The Alternative Campus Location at the Ueberroth Building site is located within the Bridge zone and, as with all of the campus, is located in a developed urban setting. Surrounding land uses are parking and medical uses to the north; medical uses and landscaped areas to the east; the UCLA Extension and residential use to the west, west of Gayley Avenue; and commercial uses along Le Conte Avenue to the south. The proposed Geffen Academy would be compatible with existing surrounding land uses.

There is currently no remaining development allocation in the Bridge zone; therefore, this Alternative would include a proposed amendment to the 2002 LRDP, as amended in March 2009, to transfer 25,000 gsf from the Southwest zone to the Bridge zone to accommodate the proposed Geffen Academy. As with the proposed Project, under the Alternative Campus Location, the remaining development allocation for the campus (approximately 276,487 gsf) would continue to be implemented. Therefore, when combined with previously approved development under the 2002 LRDP, as amended in March 2009, the total square footage of new potential development that could occur on the campus is the same as for the proposed Project. Since there are currently no future development projects proposed in the Southwest zone, the removal of square footage allocation from this zone would not affect long-term planning goals outlined in the LRDP.

The use and operation of the proposed Geffen Academy would be the same as the proposed Project and therefore, similar to the proposed Project, would be in compliance with the 2002 LRDP, as amended in March 2009, including provisions of the LRDP related to land use designations, population, and development objectives. Development of the proposed Project at the Alternative Campus Location would also be consistent with the UCLA Physical Design Framework and local and regional planning programs.

In summary, the Alternative Campus Location would have similar, less than significant impacts as the proposed Project related to land use and planning.

Noise

There are no buildings adjacent to the Ueberroth Building site that house vibration-sensitive instrumentation or other sensitive vibration receptors. Therefore, construction vibration impacts from development at the Alternative Campus Location would be less than significant with incorporation of applicable LRDP EIR PPs and MMs, similar to the proposed Project. Construction truck and operational vibration impacts for the Alternative Campus Location would also be less than significant, similar to the proposed Project.

Construction of the proposed Geffen Academy at the Alternative Campus Location would be within approximately 75 feet of residential receptors on the west side of Gayley Avenue. Similar to the proposed Project, construction equipment noise at the Alternative Campus Location would be audible at the nearby buildings. These construction activities would temporarily increase ambient noise levels by more than 10 A-weighted decibels (dBA). This would be a potentially significant impact, similar to the proposed Project. Continued compliance with March 2009 LRDP Amendment Final EIR PPs related to construction hour limits, muffling or shielding of construction equipment, stationary construction equipment located to direct noise away from sensitive receptors, and conducting meetings with on- and off-campus constituents would minimize construction noise impacts to the existing on-campus and off-campus uses. However, these actions would not ensure that the construction noise level increase would be less than 10 dBA at all sensitive areas. Therefore, this temporary impact would be significant and unavoidable, consistent with the findings of the March 2009 LRDP Amendment Final EIR, and the conclusions for the proposed Project.

Trip generation associated with the proposed Geffen Academy at the Alternative Campus Location would be approximately 1,024 average daily trips (ADT), the same as with the proposed Project. The net number of new trips would be less because trips currently generated on the Alternative Campus site would be relocated (refer to the discussion under Transportation/Traffic below). It is expected that trips to and from the site would be divided between Gayley Avenue north and south of Le Conte Avenue and Le Conte Avenue east and West of Gayley Avenue. Based on data in the Traffic Impact Study, existing traffic volumes are conservatively estimated to range from 5,000 ADT on Le Conte Avenue west of Gayley Avenue to more than 20,000 ADT on Gayley Avenue, north and south of Le Conte Avenue. The addition of the new traffic generated by the Alternative Campus Location to Gayley Avenue or to Le Conte Avenue east of Gayley Avenue would increase noise levels by less than 0.4 decibel (dBA). The addition the new traffic generated by the Alternative Campus Location to Le Conte Avenue west of Gayley Avenue, which would be highly unlikely, would increase noise levels by less than 1 dBA. Similar to the proposed Project, there would be no discernible change in noise levels from traffic on off-campus or on-campus roadways.

Noise impacts from stationary sources and landscape maintenance activities would be similar for the Alternative Campus Location and the proposed Project, would be similar to existing conditions, and would be less than significant. Similar to the proposed Project, new heating, ventilation and air conditioning (HVAC) equipment would be installed at the Ueberroth Building to replace existing equipment; however; noise generated by the new equipment would be similar to that generated by the existing equipment. New HVAC equipment would also be installed at the new 25,000-gsf building. Further, the March 2009 LRDP Amendment Final EIR PP 4.9-6(a) requires that all new stationary sources of noise be shielded from nearby noise-sensitive uses as part of the new building design. Therefore, new HVAC units or similar stationary sources of mechanical noise associated with the Alternative Campus Location would not substantially change the existing noise levels in the vicinity of the Alternative Campus Location.

Similar to the proposed Project, the Alternative Campus Location would include an outdoor recreation area for students, including a basketball court. Assuming that the recreation area would be located on the west side of the site, voices and ball-hitting-rim noise would likely be heard (along with traffic noise) at the nearby residences on the west side of Gayley Avenue. The increase in overall average daytime noise levels would not be substantial and would be less than significant. However, the impact for the Alternative Campus Location would be greater than for the proposed Project, which is not adjacent to sensitive receptors.

For the Alternative Campus Location, the existing ambient noise levels are estimated at 67 to 69 dBA Community Noise Equivalent Level (CNEL) adjacent to Gayley Avenue and 65 dBA CNEL adjacent to Le Conte Avenue. Exterior noise levels at the Ueberroth Building and proposed new building with this Alternative would be greater than those at the proposed Kinross Building site.

However, as described in Section 4.5 of this Draft SEIR, normal construction, including fresh air supply or air conditioning, would provide acceptable interior noise levels. The noise-land use compatibility impact would be less than significant, similar to the proposed Project.

As discussed in Section 4.5, Noise and Vibration, of this Draft SEIR, the Geffen Academy at the proposed Kinross Building site could be exposed to significant and unavoidable temporary noise impacts from the planned Wilshire Gayley project. These impacts would not occur at the Alternative Campus Location.

Development of the Geffen Academy at the Alternative Campus Location would result in similar or greater operational and noise impacts compared to the proposed Project primarily due to the proximity of the Alternative Campus Location to sensitive receptors. Construction-related noise impacts would potentially be significant and unavoidable.

Population and Housing

With implementation of the Alternative Campus Location, there would be no new housing development and the potential increase in the on-campus population (faculty/staff and students) would be the same as the proposed Project. Potential impacts would be less than significant with this Alternative and the proposed Project.

Public Services and Recreation

The increase in demands for public services and facilities under the Alternative Campus Location would be similar to that of the proposed Project and would be less than significant with adherence to applicable existing March 2009 LRDP Amendment Final EIR PPs and MMs.

This alternative would also involve development of outdoor recreation uses for use by Geffen Academy students. Therefore, the physical environmental impacts associated with construction of such facilities would be similar to the proposed Project and would be less than significant.

Transportation/Traffic

As the direct trip generation and secondary trip generation impacts from changes in student parking would remain the same, the trip generation for the Alternative Campus Location and the proposed Project would be approximately the same, as described in Section 4.8, Transportation/Traffic, of this Draft SEIR. However, the location of the parking and resultant trip generation would be shifted. Further, Parking Structure P1 is a high demand parking facility, and the allocation of dedicated parking for the proposed Geffen Academy may redistribute existing parking demand to other parking structures on-campus. To facilitate this potential shift in parking distribution of Geffen Academy staff, UCLA Transportation would evaluate an additional stop on the existing Bruins Bus route to connect the chosen parking location(s) to the Ueberroth Building.

Since the trip generation would remain approximately the same, the traffic impacts would remain approximately the same, except at intersections immediately adjacent to the proposed Kinross Building site and Alternative Campus Location parking location(s). The highest V/C values for the existing and projected future conditions at a study intersection for both the AM and PM peak hours are at the intersection of Wilshire Boulevard and Veteran Avenue. This intersection is also the location of one of the two significant Project traffic impacts. This Alternative would largely shift project-generated trips to and from I-405 to the Wilshire Boulevard and Gayley Avenue intersection. Therefore, this Alternative would be anticipated to reduce the impact at the Wilshire Boulevard/Veteran Avenue intersection, but would increase the potential impact at the Gayley Avenue/Wilshire Boulevard intersection, as well as at other study intersections, which may, in-turn, create one or more additional significant impact(s) compared to the proposed Project. This may include the Wilshire Boulevard and Westwood Boulevard.

There would be increased construction activities with the Alternative Campus Location compared to the proposed Project, primarily due to the construction of an additional 25,000-gsf building. However, with adherence to March 2009 LRDP Amendment Final EIR PPs and MMs, construction-related traffic impacts would be less than significant, consistent with the proposed Project.

As with the proposed Project, with incorporation of the applicable March 2009 LRDP Amendment Final EIR PPs and MMs, this Alternative would not cause significant vehicular or pedestrian hazards during operation or construction or impact emergency access.

Utilities and Service Systems

Because development of the Geffen Academy at the Alternative Campus Location would involve increased construction activities compared to the proposed Project due to the need to construct a new building, construction solid waste generation would also be greater. However, as with the proposed Project, with implementation of required waste diversion during construction, this impact would be less than significant.

The operations of the Geffen Academy would be the same at the Alternative Campus Location as with the Kinross Building site. However, under this Alternative, approximately 25,000 gsf of new development would be implemented, which would increase the utility demands on campus since the demand for utilities is based on the total amount of development square footage. Therefore, this Alternative would have increased demands for water, electricity, and natural gas and increased generation of wastewater and solid waste. As with the proposed Project, new utility lines would need to be constructed to connect the proposed buildings with existing utility lines; however, it is not expected that new or expanded backbone infrastructure would be needed to serve the new building. The construction impacts would be similar to that addressed for the proposed Project. With incorporation of the applicable PPs, the Alternative Campus Location would have similar, less than significant impacts as the proposed Project related to utilities and service systems.

Ability to Meet the Project Objectives

As discussed above, under the Alternative Campus Location, the proposed Geffen Academy would be implemented at the existing Ueberroth Building site and adjacent site to the west, which is currently occupied by portable buildings. The operations of the proposed Geffen Academy would be the same as the proposed Project. This Alternative would meet the following proposed Project objectives:

1. Further the University of California's (UC's) mission of research and public service by offering an alternative 6th through 12th grade education in line with UCLA's founding a "model school" and moving away from the standard agrarian model of education.
2. Locate the proposed Project proximate to campus and campus transit facilities to provide academic and research synergies with UCLA faculty, undergraduate, and graduate students, while facilitating a cross-cultural venue for faculty to develop non-departmental connections.
4. Develop a program that has the capacity to enroll both students of UCLA faculty and staff and the greater Los Angeles region, furthering the University's commitment to diversity.

7. Create work opportunities for UCLA undergraduate and graduate students that expose them to the education profession and generate the next wave of teachers and faculty, consistent with UC's mission and commitment to the State of California.

The following proposed Project objectives would not be met to the same extent as the proposed Project. While the Ueberroth Building is an existing building, under this Alternative, a new approximately 25,000-sf building would also be constructed to provide the space needed to accommodate the proposed Geffen Academy. While this Alternative, as defined, would meet the programmatic requirement for a right-sized facility (75,000 gsf consistent with the proposed Project), based on the need to construct a new building, it is estimated that the Academy would not open until the 2018–2019 school year with approximately 160 students in grades 6 and 9, pushing the full enrollment of up to a maximum of 620 students to the 2021–2022 school year. Therefore, while it would meet some, this Alternative would not meet all of the programmatic requirements outlined in Objective 3. This delay could also hinder the University's ability to immediately recruit faculty and staff, which would not be consistent with Objective 5. The Alternative Campus Location would be near existing transit routes, consistent with the proposed Kinross Building site; however, it would not be proximate to the planned future subway stop. Therefore, this Alternative would not be served by transit to the same extent as the Kinross Building site.

3. Locate the Academy in an existing facility that can provide the independent use for both a middle and high school experience and provide the physical attributes needed to meet the programmatic requirements of the Academy, including, but not limited to, the following:
    a. Provide a right-sized facility to accommodate both a middle and high school program, with associated staff and faculty;
    b. Provide a program with 3 entry points for student admission: 6^{th}, 7^{th}, and 9^{th} grades;
    c. Provide proper physical security components and security personnel;
    d. Accommodate on-site circulation and parking demands;
    e. Provide on-site outdoor space for recreation, daily activities, and special events; and
    f. Locate in a facility that enables the Academy to open in fall 2017.
5. Increase UCLA's competitive edge in the immediate recruitment of faculty and staff to address recent UC system-wide student enrollment increase requirements established by The Regents.
6. Locate the Academy proximate to alternative transportation that provides faculty, staff, and students, of both the Academy and UCLA, with a range of transit options.

The following objectives from the 2002 LRDP (as amended in March 2009) would be met with implementation of the proposed Geffen Academy at the Alternative Campus Location.

1. Offer teaching, research, and service programs of the highest quality to serve the needs of the Los Angeles region, the State of California, and the nation.
2. Build an academic community of faculty and students in keeping with an institution of UCLA's caliber.
3. Continue to serve the Los Angeles region through provision of cultural, health, educational, and community programs.

4. Provide and promote opportunities for the use of alternative transportation modes.

Therefore, development of the proposed Geffen Academy at the Alternative Campus Location would not meet proposed Project objectives as well as the proposed Project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the State CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Table 5-1 provides, in summary format, a comparison of the level of impacts for each alternative to the proposed Project. The impact of the respective alternatives is identified, followed parenthetically by the comparison to the impact of the proposed Project.

The No Project/No Build Alternative would avoid significant project and cumulative operational traffic impacts that would occur with implementation of the proposed Project. Because no development would occur under the No Project/No Build Alternative, there would also be fewer impacts for the following environmental topics: air quality, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services and recreation, population and housing, and utilities and service systems. With incorporation of applicable March 2009 LRDP Amendment Final EIR PPs and MMs, the impacts for these topics with implementation of the proposed Project would be less than significant.

Based on the comparative analysis provided in this section for each of the alternatives (as summarized in Table 5-1), development of the proposed Geffen Academy at the Alternative Campus Location (Ueberroth Building site) would result in similar or greater impacts than the proposed Project. Notably, this Alternative would result in greater construction-related impacts due to the need to construct a new 25,000-gsf building to accommodate the proposed Project. A potentially significant and unavoidable impact related to construction noise at sensitive residential receptors would occur with this Alternative; while the proposed Project would result in significant and unavoidable construction noise impacts to adjacent uses, there are no sensitive receptors in proximity to the Kinross Building. Similarly, this Alternative would also expose sensitive receptors to noise from on-site operations, which would not occur with the proposed Project because the Kinross Building is not in proximity to sensitive receptors. Additionally, the Alternative Campus Location does not meet the proposed Project objectives to the same extent as the proposed Project, specifically those associated with accommodating the Geffen Academy in an existing building to facilitate an opening in fall 2017–2018.

Additionally, the Alternative Campus Location would result in potentially significant traffic impacts at study area intersections, consistent with the proposed Project. However, due to the location of this Alternative it is likely that there would be additional intersections impacted.

The proposed Project is environmentally superior to the Alternative Campus Location. Although the proposed Project would result in significant and unavoidable construction-related noise impacts, and traffic impacts at two study area intersections, these impacts were previously analyzed in the March 2009 LRDP Amendment Final EIR and a Statement of Overriding Considerations was adopted by The Regents.

TABLE 5-1
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

Impact Area	Proposed Project	No Project/No Build (Alternative 1)	Alternative Campus Location Ueberroth Building Site (Alternative 2
Air Quality			
Construction	LS	No Impact (less)	LS (greater)
Operation	LS	No Impact (less)	LS (similar)
Cumulative	LS	No Impact (less)	LS (similar)
Greenhouse Gas Emissions	LS	No Impact (less)	LS (similar)
Hydrology and Water Quality	LS	No Impact (less)	LS (similar)
Land Use and Planning	LS	No Impact (less)	LS (similar)
Noise			
Construction	SU	No Impact (less)	SU (similar)*
Operation	LS	No Impact (less)	LS (greater)
Population and Housing	LS	No Impact (less)	LS (similar)
Public Services and Recreation	LS	No Impact (less)	LS (similar)
Transportation/Traffic			
Construction	LS	No Impact (less)	LS (similar)
Operation	SU (project and cumulative)	No Impact (less)	SU (similar – project and cumulative)
Utilities and Service Systems	LS	No Impact (less)	LS (similar)

LS: Less Than Significant; SU: Significant and Unavoidable.
* This is a significant unavoidable impact that does not occur with the proposed Project.

5.6 REFERENCES

Crain and Associates. 2016 (April). Traffic Impact Study for the Proposed Geffen Academy Project on UCLA Southwest Campus. Culver City, CA: Crain and Associates (Appendix D).

SECTION 6.0 OTHER CEQA CONSIDERATIONS

Section 15126 of the State California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the proposed project; (2) significant environmental effects that cannot be avoided if the proposed project is implemented; (3) significant irreversible environmental changes that would result from implementation of the proposed project; (4) growth-inducing impacts of the proposed project; (5) mitigation measures proposed to minimize significant effects; and (6) alternatives to the proposed project. Additionally, Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed projects.

6.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Table 1-1, Summary of Environmental Impacts and Mitigation Measures (which is contained in Section 1.0), and Sections 4.1 through 4.9 of this Draft Subsequent EIR (SEIR) provide a comprehensive identification of the proposed Project's environmental effects, including the level of significance both before and after mitigation.

6.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The proposed Project incorporates applicable campus programs, practices, and procedures (PPs) and mitigation measures (MMs) identified in the March 2009 Long Range Development Plan (LRDP) Amendment Final EIR. Even with incorporation of the applicable PPs and MMs, the proposed Project would result in potentially significant impacts related to construction noise, and traffic (project and cumulative intersection impacts), consistent with the findings of the March 2009 LRDP Amendment Final EIR. All other proposed Project impacts would be less than significant.

As concluded in the March 2009 LRDP Amendment Final EIR, there are no feasible mitigation measures to reduce the potentially significant construction-related noise impacts, and project and cumulative traffic impacts to a less than significant level; therefore, significant and unavoidable impacts that would result from implementation of the proposed Project include:

- **Construction Noise*.*** Construction activities could result in substantial temporary or periodic increases in ambient noise levels at on-campus and off-campus locations, and the Geffen Academy could be exposed to construction noise from off-campus construction activities. There is no additional feasible mitigation for the project's construction-related impacts, and UCLA cannot require mitigation be implemented for the off-campus construction project. The March 2009 LRDP Amendment Final EIR identified that construction noise impacts to on- and off-campus uses would be significant and unavoidable.

- **Traffic—Intersection Impacts.** The proposed Project would result in significant and unavoidable impacts at the following two study intersections:
    - No. 22 Veteran Avenue and Wilshire Boulevard (PM Peak Hours) under the Existing Plus Project and Future 2020 Plus Project traffic analysis scenarios and

- o No. 23 Gayley Avenue/Midvale Avenue and Wilshire Boulevard (AM Peak Hour) under the Future 2020 Plus Project traffic analysis scenario.

Impacts under the Existing Plus Project scenario are Project-generated and impacts under the Future 2020 Plus Project scenario are cumulative. These intersection impacts were adequately addressed in the March 2009 LRDP Amendment Final EIR and

A Statement of Overriding Considerations was adopted by the Board of Regents (The Regents) of the University of California (UC) as part of the approval of the LRDP Final EIR for the significant and unavoidable construction noise and traffic impacts resulting from implementation of development allowed by the 2002 LRDP, as amended in March 2009, of which the proposed Project is a part.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the State CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Specifically, Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy) (further discussed in Section 6.5, below).

The environmental effects related to the implementation of the proposed Project are discussed in Sections 4.1 through 4.9 of this Draft SEIR. Implementation of the proposed Project would involve the renovation and reuse of the existing 75,000-gross-square-foot (gsf) Kinross Building to accommodate the Geffen Academy. The long-term commitment of land resources to this development occurred with the initial development of the Kinross Building. The proposed Project would not extend or otherwise change this commitment of land resource; rather, the proposed Project would result in the continued commitment of the University of California, Los Angeles (UCLA) campus to University-related uses, thereby precluding any other uses for the lifespan of the campus. UCLA's ownership of the campus represents a long-term commitment of the campus to the University's education, research, and community service mission. Restoration of the campus to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment. The proposed Project does not change the overall remaining development allocation, trip cap, or parking limits established under the 2002 LRDP, as amended in March 2009 and previously analyzed in the March 2009 LRDP Amendment Final EIR. The proposed Project does not represent a change in commitment from existing conditions.

Construction and long-term operation of the proposed Project would require the commitment and reduction of nonrenewable and/or slowly renewable resources, including (1) petroleum fuels and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures) and (2) lumber, sand/gravel, steel, copper, lead, and other metals (for use in construction). Other resources that are slow to renew and/or recover from environmental stressors would continue to be impacted by project implementation, consistent with existing operations at the Kinross Building. These include air quality through the combustion of fossil fuels; production of greenhouse gases; and water supply through the continued potable water demands for drinking, cleaning, landscaping, and general maintenance needs. An increased commitment of public services (e.g., police, fire, utilities) would not be required as the demand would be similar to existing conditions. After the 50- to 75-year structural lifespan of the building is reached, it is improbable that the site would revert to its previous use before the Kinross Building was constructed due to the large capital investment that was previously committed for its construction and the investment that would be made to implement the proposed renovations to accommodate the Geffen Academy. Implementation of the proposed Project is an irreversible commitment of the land, energy resources, and public services, consistent with existing operations.

With respect to operational activities on campus, continued compliance with all applicable building codes, as well as PPs and MMs identified in this Draft SEIR that were previously adopted as part of the March 2009 LRDP Amendment Final EIR, would ensure that all natural resources are conserved to the maximum extent possible. Additionally, the amount and rate of consumption of resources during operation of the existing building with the proposed Geffen Academy would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources. The faculty, staff, and students who would occupy the Kinross Building represent a population group that is already in the region. Therefore, natural resources are currently being consumed by this population. Additionally, as discussed below, the renovation of the existing building would include features to increase energy efficiency. It is also possible that new technologies or systems will emerge or will become more cost-effective or user-friendly to further reduce the campus' reliance upon nonrenewable natural resources in the future.

The State CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with a project. While the campus uses, transports, stores, and disposes of hazardous wastes, as described in Impact 4.6-1 of Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR, the campus complies with all applicable federal and State laws and existing PPs (as required by PP 4.6-1) related to hazardous materials, which reduces the likelihood and severity of accidents that could result in irreversible environmental damage. In fact, over the campus history, there has never been an accident that resulted in irreversible environmental damage, indicating that current practices with respect to hazardous materials handling are adequate, and thus the potential for the proposed Project to cause irreversible environmental damage from an accident or upset of hazardous materials is less than significant.

6.4 GROWTH-INDUCING IMPACTS

As required by the State CEQA Guidelines, an EIR must include a discussion of the ways in which a proposed project could directly or indirectly foster economic development or population growth or the construction of additional housing, either directly or indirectly, and how that growth would, in turn, affect the surrounding environment (State CEQA Guidelines, Section 15126.2[d]). Growth can be induced in a number of ways, including the elimination of obstacles to growth or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval. Under CEQA, induced growth is not considered necessarily beneficial, detrimental, or of little significance to the environment.

In general, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project removes an impediment/obstacle to growth (e.g., the establishment of an essential public service, or the provision of new access to an area).
- The project results in an increase in population that requires the need to expand or construct new public service facilities to maintain desired levels of service that could result in significant environmental effects.
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion).
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval).

If a project meets any one of these criteria, it may be considered growth-inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways or encouraging premature or unplanned growth. Growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment (State CEQA Guidelines, Section 15126.2[d]). This issue is presented to provide additional information on ways in which this proposed Project could contribute to significant changes in the environment beyond the direct consequences of implementing the proposed Project examined in the preceding sections of this Draft SEIR.

1. **Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?** The proposed Project represents a continuation of the use of the UCLA campus for University purposes and would advance UCLA's mission of research, teaching, and service. The proposed Project maintains the same square footage, parking, and vehicle trip limits established by the 2002 LRDP, as amended in March 2009. Additionally, as discussed above, the proposed Project would be constructed and operated in compliance with all applicable building codes, as well as PPs and MMs identified in this Draft SEIR that were previously adopted as part of the March 2009 LRDP Amendment Final EIR. Therefore, the proposed Project would not result in a change in the operation of the campus and would not remove an impediment or obstacle to growth. With reuse and renovation of the existing Kinross Building, the proposed Project would not involve new development on campus, and continued development of the UCLA campus pursuant to the 2002 LRDP, as amended in March 2009, would not encourage growth through the provision of new and essential public services or access opportunities, nor would it result in urbanization of land in a remote location. The UCLA campus is located in an urbanized area that is served by an extensive network of electricity, water, sewer, storm drain, communications, roadways, and other infrastructure sized to accommodate or allow existing and planned growth.

2. **Would this project result in the need to expand one or more public services to maintain desired levels of service?** As discussed in the Initial Study included in

Appendix A, and in Section 4.8, Public Services and Recreation, of this Draft SEIR, the proposed Project would generate new students on campus (620 6th through 12th grade students by the 2020–2021 school year), new employment opportunities on campus (81 full-time faculty/staff and 28 part-time staff), and new visitors to the campus (such as parents of students). However, this population does not represent a permanent relocation of people that would create a substantial population growth in the area or necessitate the expansion or construction of new public service facilities.

3. **Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?** The proposed Project would generate approximately 109 faculty and staff positions at the UCLA campus as well as short-term employment opportunities during the construction period. However, as discussed in Section 4.6, Population and Housing, this increase would not exceed Southern California Association of Governments' (SCAG's) growth projections for the region and is a small component of the job growth anticipated in the local and regional economies. Additionally, most of these faculty and staff positions involve vocational opportunities that are generally found in most communities and may not offer a unique enough opportunity to induce job seekers to relocate to the area for the sole purpose of filling these positions. It is expected that qualified area residents would fill the vast majority of additional faculty and staff positions. Similarly, it is anticipated that construction employees would commute from elsewhere in the region, rather than relocate to the UCLA area for a temporary construction job. Nonetheless, implementation of the proposed Project may result in the creation of indirect and induced jobs. Indirect jobs are those that would be created when the campus purchases goods and services from businesses in the region, and induced jobs are those that are created when wage incomes of those employed in direct and indirect jobs are spent on the purchase of goods and services in the region.

   The proposed Project would not result in significant growth inducement as a result of economic expansion or population growth. The addition of population in an area has the potential to increase the amount of spending, thereby stimulating the economic activity of the area. Increased future employment generated by spending can ultimately result in the physical development of space or the need for services to accommodate additional employees to serve the new population. It is the provision of this physical space and its specific location that will determine the magnitude of environmental impacts of the additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are difficult to predict, since they can be spread throughout the region and beyond.

   UCLA's economic impacts are primarily the result of campus purchases of goods and services; payment of taxes and salaries; capital expenditures; and visitor spending, which affects the regional economy of the County and City of Los Angeles and, on a more indirect basis, the State of California. While UCLA contributes to the economic health of Westwood Village, historically, economic activity in Westwood Village, or the periodic fluctuation thereof, has not been determined by growth or decline in campus population. Rather, it has been based upon general economic conditions; fluctuations in consumer confidence and spending; the shifting popularity of Westwood as a destination for shopping and entertainment as compared to other similar areas in Southern California; and other social and economic trends.

4. **Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?** A decision by The Regents of the UC, or its delegate, to approve the

proposed Project is not a precedent-setting action. Approval of specific projects under the 2002 LRDP, as amended in March 2009, would be considered on a case-by-case basis and would not necessarily mean that other development approvals in the area would follow. As noted above, the UCLA campus is located in an already urbanized area. The proposed Project, which involves renovation and reuse of an existing building, would not increase the amount of development on campus and would be consistent with existing development assumed as part of the 2002 LRDP, as amended in March 2009. Additionally, as discussed above, the increase in population does not set any new precedents for growth.

6.5 ENERGY CONSERVATION

Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed projects. Appendix F states

> The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> (1) Decreasing overall per capita energy consumption,
>
> (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
>
> (3) Increasing reliance on renewable energy sources.

Appendix F of the State CEQA Guidelines also identifies that "EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy".

The UC's sustainability program and policy includes all ten campuses and five medical centers. The UC's sustainability commitment began in 2003 with The Regents' action that led to the adoption of a Presidential Policy on Green Building Design and Clean Energy Standards in 2004. Since adopting that policy, the University has expanded the scope to include climate protection, transportation, recycling and waste management, purchasing, food, and water. As with all UC campuses, UCLA is required to implement the UC Sustainable Practices Policy (refer to PP 4.15-1 provided in Section 4.2, Greenhouse Gas Emissions, of this Draft SEIR).

UCLA has instituted a Green Building program for new construction, renovations, and existing buildings. In addition, over the years, many energy conservation projects have been undertaken and continue to be implemented, including, but not limited to, lighting efficiency upgrades; heating, ventilation, and air conditioning (HVAC) unit efficiency upgrades; and installation of building lighting occupancy sensors, among others. In addition, the campus shall continue to implement all new development and renovation of existing buildings in accordance with the UC Policy on Sustainable Practices and specifications contained in Title 24 of the *California Code of Regulations* (CCR) and Title 24 Green Building Standards.

Through the efficient use of electricity on campus, the use of natural gas on campus also occurs in an efficient manner, as the Cogeneration Plant on campus is fired by natural gas. In January 1994, the Cogeneration Plant began providing electricity to the UCLA campus in two combustion turbine generators using a combination of methane gas from the nearby Mountaingate Landfill as well as natural gas. The facility simultaneously produces electricity and steam for the entire campus as well as chilled water for many buildings on the main campus for use in air conditioning and cooling activities. The simultaneous production of electricity and steam greatly increases the campus energy utilization efficiency and improves the capacity and reliability of the campus electrical distribution system. Operation of the facility has reduced the campus' long-term utility expenditures and dependence upon electricity provided by the Los Angeles Department of Water and Power (LADWP). The Cogeneration Plant currently provides 70 percent of the electrical needs of the campus. Remaining electrical needs are, and would be, supplied by LADWP. Consequently, a long-term increase in demand for electricity would occur.

It should be noted that the proposed Project does not involve new development on campus and there would not be any increase in energy consumption compared to existing conditions. However, the proposed Project would comply with applicable policies outlined in the UC Sustainable Practices and would adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. The provisions of the UC Sustainable Practices Policy that address energy efficiency and are applicable to the proposed Geffen Academy are further discussed in Section 4.2 of this Draft SEIR.

Leadership in Energy and Environmental Design (LEED™) is a green building rating system that contains prerequisites and credits in five areas, including energy efficiency and conservation of materials and resources. The proposed Geffen Academy has been designed to surpass the minimum standard of a LEED “Silver” rating and would attempt to achieve a LEED “Gold” rating for Existing Buildings. To achieve this rating and most relevant to energy consumption, the design, construction, and operation of the proposed Project incorporates a series of green building strategies, including, but not limited to, reducing building energy consumption through upgrades to the existing mechanical systems and the use of light-emitting diode (LED) lighting.

With respect to energy use associated with transportation, as discussed in Section 4.8, Transportation and Traffic, of this Draft SEIR, UCLA’s Transportation Demand Management (TDM) Program, which would be available to the students, faculty, and staff of the Geffen Academy, is a key component of meeting UC Policy goals for achieving a sustainable transportation system. UCLA’s focus is on increasing the Average Vehicle Ridership (AVR)[1], the number of low- (partial zero-emission vehicles [PZEVs]) or zero-emission vehicles (ZEVs), and the number of fuel efficient/alternative fuel vehicles in the campus fleet. Since its inception in 1984, the UCLA TDM program has grown into a comprehensive program that offers a broad range of services to encourage and assist UCLA commuters in utilizing alternatives to the single-occupancy vehicle, which serves to reduce vehicle trips and their associated energy use. As part of its ongoing TDM Program, UCLA actively provides and promotes vanpools; carpool-matching and parking incentive programs; financial incentives for carpool and vanpool participants; accommodation of the use of other modes of transportation, including walking, bicycles, motorcycles, and scooters; an on-campus car share program; alternative work schedules and telecommuting; annual distribution of the UCLA Commuter’s Guide; parking control management; and access restriction to main campus parking facilities for on-campus housing residents.

In addition to participation in the UCLA TDM Program, the Geffen Academy would restrict student parking to carpools to reduce the number of students driving to campus and would provide bike lockers. Further, the campus, including the project site, is served by numerous public transit lines. With respect to the project site, these lines include those operated by Metro (Los Angeles County Metropolitan Transportation Authority), Los Angeles Department of Transportation (LADOT), Big Blue Bus (Santa Monica), Culver City Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and Los Angeles International Airport (LAX) FlyAway. Additionally, the Geffen Academy would provide school buses for student travel to and from the project site.

1 The AVR is the ratio of employees arriving between 6 AM and 10 AM to the motor vehicles they drive to campus.

The Geffen Academy would not result in an inefficient, wasteful, or unnecessary consumption of energy.

6.6 MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS

Table 1-1 (provided in Section 1.0 of this Draft SEIR) provides a comprehensive identification of the applicable PPs and MMs from the March 2009 LRDP Amendment Final EIR that are included in the proposed Project, the level of significance of proposed Project impacts, and mitigation measures.

6.7 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed Project are presented in Section 5.0, Alternatives, of this Draft SEIR.

SECTION 7.0 LIST OF EIR PREPARERS AND CONTRIBUTORS

7.1 REPORT PREPARERS

7.1.1 UNIVERSITY OF CALIFORNIA (LEAD AGENCY)

University of California, Los Angeles – Capital Programs

Kathy FitzGerald .... Director, Project Development
Tracy Dudman .... Senior Planner, Campus & Environmental Planning

Office of the General Council

Kelly Drumm .... University Senior Counsel

Office of the President

Brad Werdick, AICP .... Senior Planner
Brian Harrington .... Planning Specialist

7.1.2 BONTERRA PSOMAS (EIR PREPARATION)

Christina Andersen .... Principal-In-Charge/Project Manager
James Kurtz .... Director, Air Quality and Acoustical Programs
Jillian Neary .... Environmental Planner
Daria Sarraf .... Air Quality Specialist
Jeffrey Gershon .... Environmental Analyst
Ashley McCoy .... Environmental Analyst
Trevor Bristle .... Arborist
Leah Mori .... Technical Editor
Sheryl Kristal .... Word Processor
Jonathan Zimmer .... GIS/Graphics

7.1.3 CRAIN & ASSOCIATES (TRAFFIC ANALYSIS)

Diana Skidmore .... Managing Director
George Rhyner .... Senior Transportation Engineer
Ryan J. Kelly, T.E. .... Transportation Engineer

7.1.4 PLACEWORKS (HEALTH RISK ASSESSMENT)

Cathleen M. Fitzgerald, DEnv, PE, QSD/QSP .... Senior Engineer
Steve Bush, PD .... Associate Engineer

7.2 EIR CONTRIBUTORS

- Dr. Carnochan Catalan, S. – Head of School, Geffen Academy at UCLA
- Coleman, W. – Assistant Director, Campus Capital Planning, UCLA Capital Programs
- Fortier, R. – Executive Director, UCLA Events & Transportation
- Grant-Martin, M. – Sr. Project Manager, UCLA Design and Construction
- Grode, D. – UCLA Facilities Management

- Karwaski, D. – Sr. Associate Director, Planning, Policy and Traffic Systems, UCLA Transportation
- Katz, N. – UCLA Chief Sustainability Officer
- Kim, H.S. – City of Los Angeles Sanitation Department
- Kramer, N., PhD – Assistant Head of School, Geffen Academy at UCLA
- Manta, D. – UCLA Capital Programs
- Marks, G. – Division Manager, Environmental Programs, UCLA Office of Environmental Health and Safety
- O'Reilly-Rosenblatt, L. – Director, UCLA Asset Management
- Santon, S. – Associate Vice Chancellor, UCLA Capital Programs
- Striff, R. – UCLA Facilities Management

Appendix A

Notice of Preparation/Initial Study and Comments

UCLA Capital Programs
www.capitalprograms.ucla.edu

February 10, 2016

State of California
Office of Planning and Research
1400 Tenth Street, Room 222
Sacramento, California 95814

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF SCOPING MEETING

Project Title:	Geffen Academy at UCLA
Project Location:	University of California, Los Angeles Campus; Kinross Building (11000 Kinross Avenue, Los Angeles, California)
Lead Agency:	The Regents of the University of California
County:	Los Angeles

Project Description:

The proposed Geffen Academy at UCLA (Geffen Academy or proposed Project) would be located at the existing Kinross Building (11000 Kinross Avenue) in the City of Los Angeles. The project site encompasses approximately 2.0 acres and is developed with the Kinross Building and associated outdoor spaces and a portion of Parking Lot 36. The project site is surrounded by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located south and west, respectively. Figures 1, 2 and 3 attached to this Notice of Preparation (NOP) provide the regional location and local vicinity; an aerial photograph of the project site, and a conceptual site plan, respectively.

The proposed Geffen Academy would be operated by UCLA, and would advance UCLA's mission of research, teaching, and service. The Geffen Academy would provide an innovative college preparatory education for 6th through 12th grade students that would help UCLA recruit and retain top faculty, whose career decisions are often influenced by the availability of college preparatory education for their children. Operation of the Academy would, in turn, provide hands-on teaching and educational opportunities for UCLA's undergraduate and graduate students to work for the Academy, in support of the faculty. Further, the Geffen Academy staff and faculty would join in the on-going collaboration that already occurs between an existing network of partner schools including the UCLA Lab School, the UCLA Community School, four public schools near campus, and the Graduate School of Education and Information Studies (GSEIS) that expand educational opportunities for students, faculty, and families. The GSEIS is the conduit for the collaboration of ideas, teaching methodologies, and data sharing between the partner schools. As a college preparatory program, Geffen Academy students would have access to learning opportunities and classes provided by UCLA, which are beyond those offered by more traditional secondary schools.

The Geffen Academy is proposed to open for the 2017-2018 school year with approximately 160 students in grades 6 and 9. The enrollment is projected to increase to up to a maximum of 620 students in grades 6 through 12 by the 2020-2021 school year. New faculty and staff would also be hired to operate the Geffen Academy. No new permanent structures would be constructed; however; interior and exterior building modifications and exterior site modifications would be required to accommodate the proposed Geffen Academy. Notably, a new main entry to the building would be constructed along the western facade at the proposed drop-off/pickup location, and a new driveway would be installed along Kinross Avenue (right-turn out only). Other existing building occupants would be relocated to various UCLA facilities on- and off-campus.

Environmental Review and Comment:

In compliance with the State and University of California guidelines for implementing the California Environmental Quality Act (CEQA), this Notice of Preparation (NOP) and Draft Initial Study are hereby sent to inform you that UCLA is preparing a tiered Draft Subsequent Environmental Impact Report (SEIR) for the proposed Geffen Academy at UCLA Project. In accordance with Section 15063 of the CEQA Guidelines, UCLA has determined that an EIR will be required for this Project.

The project-level analysis for the Project will be tiered from the program-level analysis in the Final EIR for the 2002 Long Range Development Plan (LRDP), as Amended in March 2009 (LRDP Final EIR). The Initial Study checklist included in Appendix G of the State CEQA Guidelines lists 17 broad parameters or environmental topics that are to be considered when evaluating the potential effects of a proposed Project or action. The tiered Initial Study presented in Attachment A has evaluated the environmental impacts from the proposed Project for all these parameters and has determined that the impacts have been adequately addressed, partially or in full by the analysis provided in the Final EIR for the 2002 LRDP, as Amended in March 2009 (LRDP Final EIR), for the following topics: Aesthetics, Agriculture Resources, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality (Groundwater Resources, Flood Hazards), Land Use and Planning (Community Division, Habitat Conservation), Mineral Resources, Noise (Airports-public or private), Population and Housing (Housing Construction), Public Services (Fire, Police, Libraries, other Public Facilities or Service Impacts), Transportation/Traffic (Air Traffic Patterns, Emergency Access) and Utilities and Service Systems (Solid Waste, Gas, and Electricity).

Based on the analysis in the tiered Initial Study, it has been determined that the program-level analysis in the LRDP Final EIR does not adequately address all of the impacts of the proposed Project. Additional project-specific analysis will be conducted in the Draft SEIR for components of the following topical environmental issues for which the proposed Project has a potential to result in environmental effects: Air Quality, Greenhouse Gas Emissions, Land Use and Planning (Land Use Plan and Policy Consistency, Other Impacts), Noise (Noise Exposure, Vibration, Ambient Noise, Periodic Noise), Public Services (Schools and Parks), Recreation, Transportation/Traffic, and Utilities and Services Systems (Water, Wastewater and Stormwater facilities). It should be noted that the tiered Initial Study identifies individual checklist questions under each of these topical issues that do not require further evaluation in the Draft EIR. The project-specific analysis will also include an evaluation of alternatives to the Geffen Academy at UCLA Project that could avoid or reduce one or more of the Project's potentially significant effects.

As the Lead Agency, we need to know the views of public agencies with respect to the scope and content of the environmental information that is germane to each agency's statutory responsibilities in connection with the proposed Project. Copies of this NOP and Initial Study have been forwarded to the agencies and other groups and individuals listed below, which is also available at:
http://www.capitalprograms.ucla.edu/EnvironmentalReview/ProjectsUnderEnvironmentalReview.

Due to the time limits mandated by State law, responses to this NOP must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. The NOP's 30-day review period will extend from **February 10, 2016, to March 10, 2016**.

Comments regarding the scope of the Geffen Academy at UCLA Project tiered Draft EIR must be received no later than 5:00 PM on March 10, 2016. They may be mailed or emailed to:

Tracy Dudman, Senior Planner
Campus and Environmental Planning
UCLA Capital Programs
1060 Veteran Avenue
Los Angeles, California 90095-1365
t.dudman@capnet.ucla.edu

Please designate a contact person in your agency and send responses to the address above.

A Public Information and **EIR Scoping Meeting** will be conducted at the UCLA Faculty Center, Sierra Room, located at 480 Charles E. Young Drive East, on **Thursday, February 25, 2016, from 6:00 PM to 8:00 PM**. Interested individuals may offer written or oral comments on the proposed scope of the environmental analysis at the public scoping meeting. The Scoping Meeting will be advertised on the UCLA main webpage (Happenings Section) and in direct mailings to interested individuals, organizations and associations. Courtesy parking will be available in Parking Structure 2 by obtaining a parking pass from the parking kiosk located at the Westholme Avenue entrance to the campus off Hilgard Avenue.

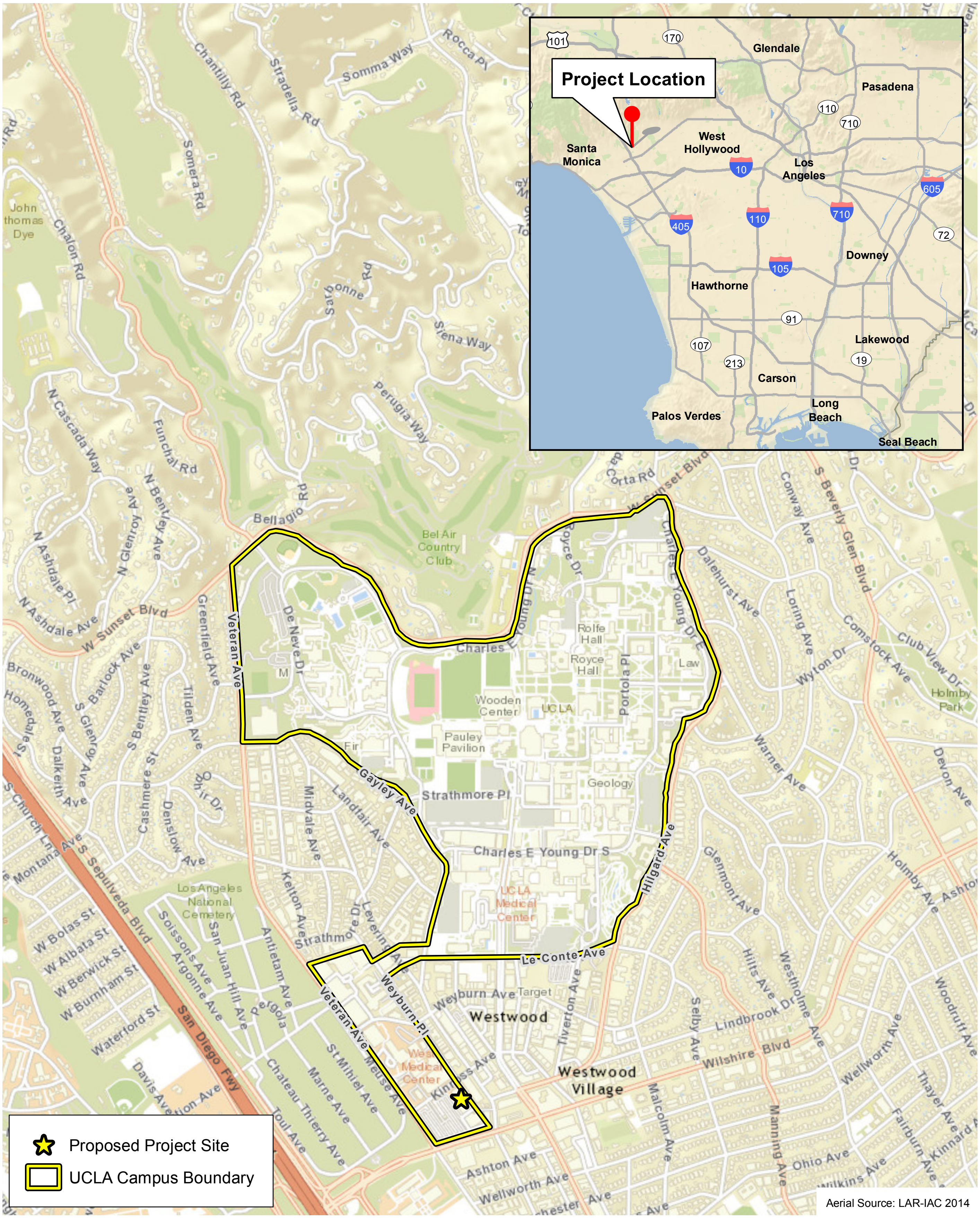
If you have any questions about the environmental review for the proposed Project, please contact Tracy Dudman at (310) 206-9255.

Sincerely,

Tracy Dudman
Senior Planner
UCLA Capital Programs

Attachments: Document Transmittal Form (Notice of Completion)
Attachment A – Tiered Initial Study

cc: City of Los Angeles, Planning Department
Councilmember, 5th District
County of Los Angeles, Regional Planning, Environmental Section
Los Angeles Department of Transportation
Southern California Association of Governments
South Coast Air Quality Management District
Los Angeles Unified School District
Local Associations, Groups, and Individuals
University of California and UCLA Administrators



Regional Location and Local Vicinity

Figure 1

Geffen Academy at UCLA

N W E S

1,500 750 0 1,500 Feet

BonTerra PSOMAS

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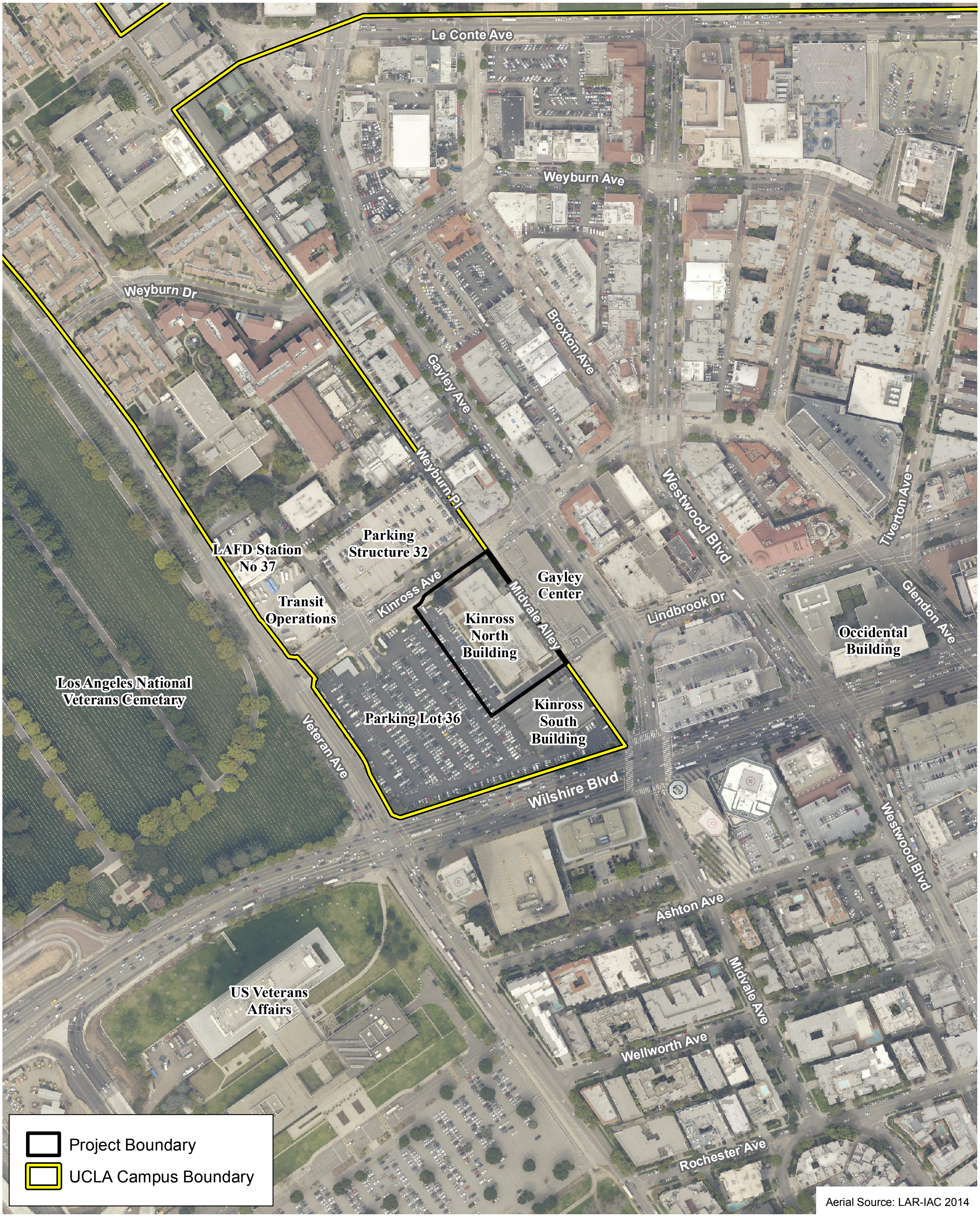

Aerial Photograph of Project Site

Figure 2

Geffen Academy at UCLA

N W E S

350 175 0 350 Feet

BonTerra PSOMAS

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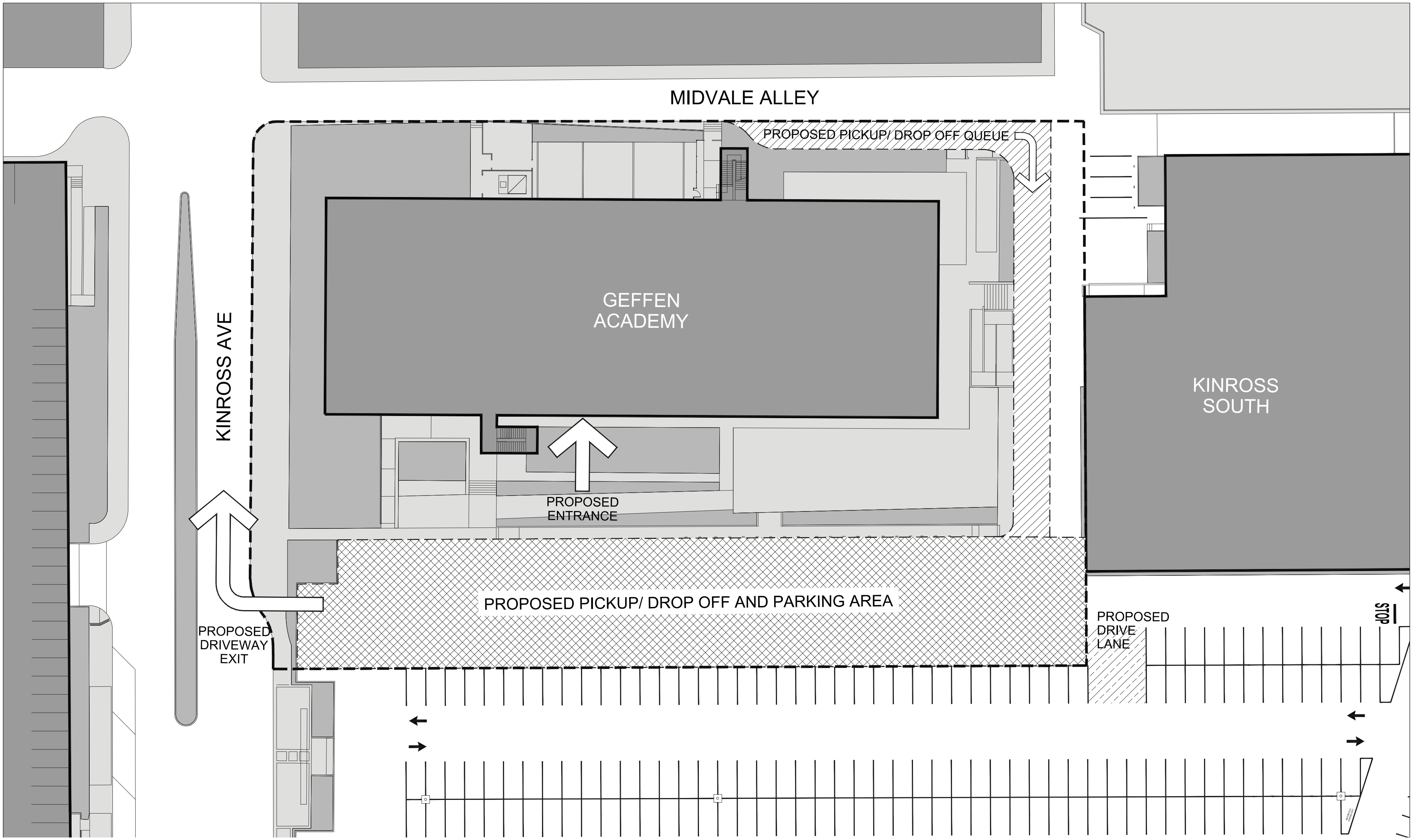

Source: Capital Programs 2016

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Conceptual Site Plan

Figure 3

Geffen Academy at UCLA

60 30 0 60 Feet

Bonterra PSOMAS

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ATTACHMENT A

GEFFEN ACADEMY AT UCLA PROJECT INITIAL STUDY

ATTACHMENT A

GEFFEN ACADEMY at UCLA
UNIVERSITY OF CALIFORNIA, LOS ANGELES

Project No. 94849.01

Initial Study and Environmental Checklist Form

I. PROJECT INFORMATION

1. PROJECT TITLE

Geffen Academy at UCLA

2. LEAD AGENCY NAME AND ADDRESS

The Regents of the University of California
1111 Franklin Street, 12th Floor
Oakland, California 94607

3. CONTACT PERSON AND PHONE NUMBER

Tracy Dudman, Senior Planner
University of California, Los Angeles
Capital Programs, Environmental Planning
1060 Veteran Avenue
Los Angeles, California 90095-1365
(310) 206-9255

4. PROJECT LOCATION

University of California, Los Angeles
Los Angeles, California 90095
(Refer to Figures 1 and 2)

5. PROJECT SPONSOR'S NAME AND ADDRESS

University of California, Los Angeles
Capital Programs, Environmental Planning
1060 Veteran Avenue
Los Angeles, California 90095-1365

6. CUSTODIAN OF THE ADMINISTRATIVE RECORD FOR THIS PROJECT

Same as listed under No. 3 above

7. IDENTIFICATION AND LOCATION OF ENVIRONMENTAL IMPACT REPORT(S) BEING RELIED ON FOR TIERING

The *UCLA 2008 Northwest Housing Infill Project and Long Range Development Plan Amendment Final Environmental Impact Report* (referred to herein as the March 2009 LRDP Amendment Final EIR or Final EIR) (State Clearinghouse No. 2008051121) certified by the

University of California Board of Regents (The Regents) in March 2009[1], is the document for which a Subsequent EIR is being prepared. The March 2009 LRDP Amendment Final EIR updated the impact analysis and conclusions of the 2002 LRDP Final EIR (SCH No. 2002031115) certified in February 2003. Both of these documents are located at the address listed under No. 3 above and at www.capital.ucla.edu/LRDP.html for inspection.

Introduction

The 2002 Long Range Development Plan (LRDP) Final EIR (State Clearinghouse [SCH] No. 2002031115) was prepared to analyze the environmental impacts resulting from implementation of the 2002 Long Range Development and was certified by the University of California Board of Regents (The Regents) in February 2003. The March 2009 LRDP Amendment Final EIR (SCH No. 2008051121) was certified by The Regents in March 2009, and addresses the proposed Northwest Housing Infill Project and 2002 LRDP Amendment Project. The March 2009 LRDP Amendment Final EIR updated the impact analysis and conclusions of the 2002 LRDP Final EIR. The 2002 LRDP Final EIR and March 2009 LRDP Amendment Final EIR are Program EIRs prepared in accordance with the California Environmental Quality Act (CEQA) (*Public Resources Code,* Sections 21000, et seq., specifically, Section 21094), the CEQA Guidelines (14, *California Code of Regulations* [CCR], Sections 15000 et seq.), and the *University of California Procedures for the Implementation of CEQA*.

It has been determined that a Subsequent EIR (or SEIR) tiered from the March 2009 LRDP Amendment Final EIR is the appropriate environmental document for the proposed Geffen Academy at the University of California, Los Angeles (UCLA) (Geffen Academy or proposed Project). This Initial Study has been prepared in accordance with CEQA, the CEQA Guidelines, and University of California Guidelines for the Implementation of CEQA, to determine whether topics analyzed in the March 2009 LRDP Amendment Final EIR adequately address the potential environmental effects of the proposed Project or whether further analysis is required.

Section 15162 of the CEQA Guidelines provides that a Subsequent EIR is required if:

1. Substantial changes are proposed in the project requiring major revisions to the previous EIR because of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes have occurred with respect to the circumstances under which the project is undertaken, which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete shows any of the following: (a) the project will have one or more significant effects not discussed in the previous EIR; (b) significant effects previously examined will be substantially more severe than shown in the previous EIR; (c) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (d) mitigation measures or alternatives which are considerably different from those analyzed in the Final

[1] March 2009 Regents Action: Certification of Environmental Impact Report, Amendment of Long Range Development Plan, And Approval of Design, Northwest Campus Student Housing Infill Project: http://www.universityofcalifornia.edu/regents/regmeet/mar09/gb4.pdf.

EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

With respect to tiering from the March 2009 LRDP Amendment Final EIR, Section 15152 of the CEQA Guidelines states, "'Tiering' refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on issues specific to the later project." CEQA and the CEQA Guidelines encourage the use of tiered environmental documents to eliminate repetitive discussions of the same issues. Therefore, this Initial Study and the Subsequent EIR are hereby tiered from the March 2009 LRDP Amendment Final EIR. The document is available for review at the UCLA Capital Programs Environmental Planning office, at the address listed above in Section I, and online at www.capital.ucla.edu.

The March 2009 LRDP Amendment Final EIR analyzes the direct and indirect impacts resulting from implementation of the remaining development allocation (i.e., 1.87 million gross square feet [gsf]) on the UCLA campus, as identified in the 2002 LRDP, as amended in March 2009. Measures to mitigate, to the extent feasible, the significant adverse project (direct and indirect) and cumulative impacts identified for that development are identified in the Final EIR.

Section 15152(f) of the CEQA Guidelines instructs that when tiering, a later EIR or Negative Declaration shall be prepared only when, in the basis of an Initial Study, the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR or Negative Declaration. Significant environmental effects are considered to have been "adequately addressed" if the lead agency determines that:

(A) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report;

(B) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project; or

(C) they cannot be mitigated to avoid or substantially lessen the significant impacts despite the project proponent's willingness to accept all feasible mitigation measures, and the only purpose of including analysis of such effects in another environmental impact report would be to put the agency in a position to adopt a statement of overriding considerations with respect to the effects.

Following review of the proposed LRDP Project and the analysis presented in the LRDP Final EIR, it has been determined that the proposed Geffen Academy is a "project" under CEQA that was not fully addressed in the Final EIR. Additionally, there is a potential for the proposed Project to result in either new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, additional environmental review is required. Accordingly, a Subsequent EIR will be prepared.

In conjunction with certification of the March 2009 LRDP Amendment Final EIR and approval of the March 2009 amendment to the UCLA 2002 LRDP, The Regents also adopted a Mitigation Monitoring and Reporting Program (MMRP) (UC Regents 2009). The MMRP ensures that campus programs, practices, and procedures (PPs) and mitigation measures (MMs) that are the responsibility of the University of California are implemented in a timely manner. As individual projects, such as the proposed Project, are designed and constructed, the projects include features necessary to implement relevant PPs and MMs. In accordance with The Regents' March 2009 approval of the LRDP Amendment and certification of the Final EIR, all relevant LRDP EIR PPs and MMs are incorporated into the proposed Project and will be implemented as a part of the Project and monitored through the MMRP approved for the March 2009 LRDP Amendment Final EIR. LRDP EIR PPs and MMs that are relevant to the analysis presented in this Initial Study are listed in the introduction to the analysis for each topical issue in Section V, Evaluation of Environmental Impacts. Additional relevant LRDP EIR PPs and MMs will be presented in the analysis provided in the Draft SEIR, as applicable.

This tiered Initial Study has been prepared to identify issue areas that have been adequately addressed by the March 2009 LRDP Amendment Final EIR with incorporation of LRDP EIR PPs and MMs, as applicable, and no further evaluation is required. Additionally, this tiered Initial Study identifies those issues that have not been fully addressed requiring additional project-level impact analysis in the Subsequent EIR.

II. PROJECT LOCATION AND DESCRIPTION

1. PROJECT LOCATION

Located in the community of Westwood in the City of Los Angeles, the University of California, Los Angeles (UCLA) campus is approximately 12 miles northwest of downtown Los Angeles. The main campus is generally bound by Le Conte Avenue to the south, Gayley Avenue and Veteran Avenue to the west, Sunset Boulevard to the north, and Hilgard Avenue to the east.

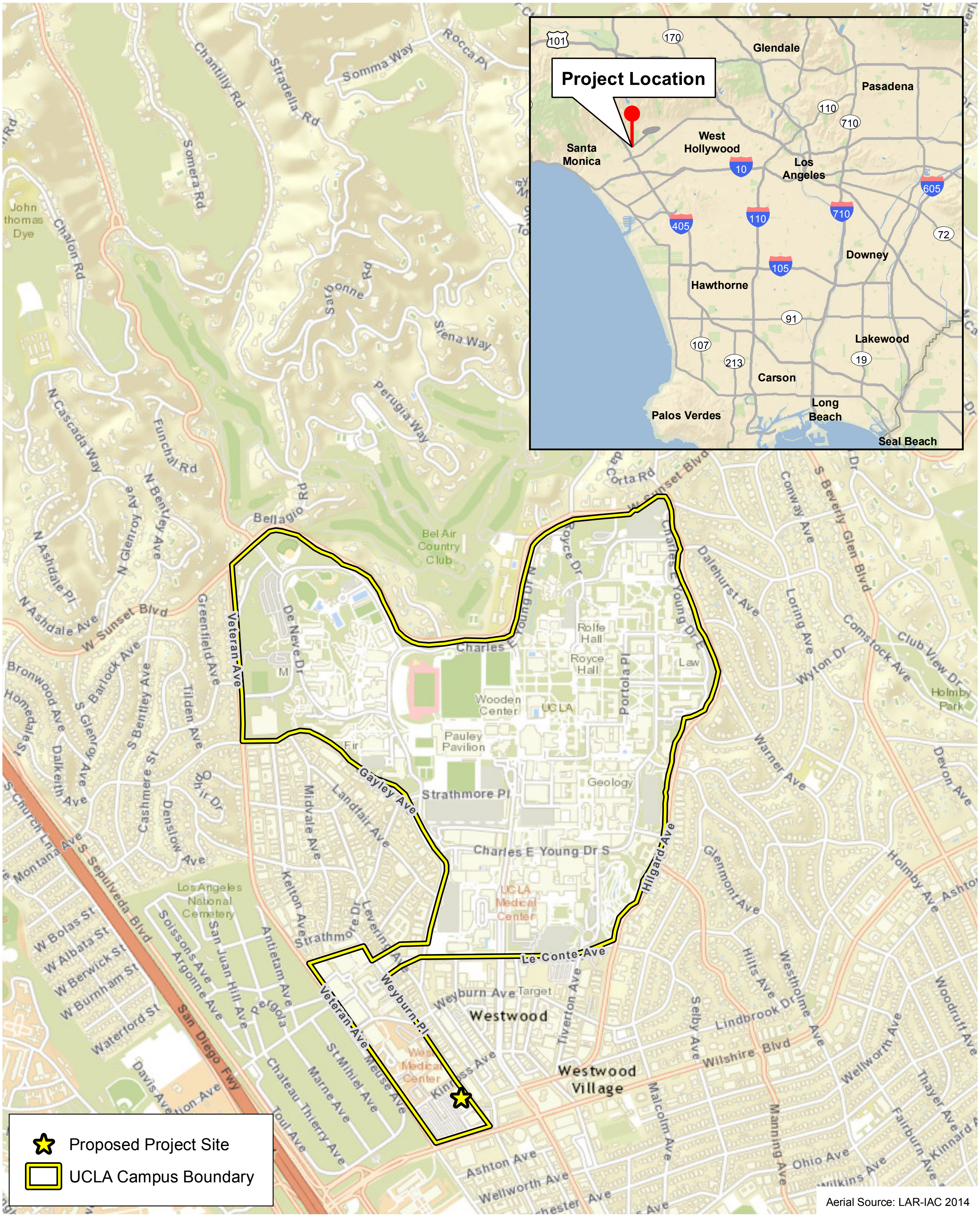
The proposed Geffen Academy at the UCLA campus (Geffen Academy or proposed Project) would be developed on campus, at the existing Kinross Building (11000 Kinross Avenue). The regional location and local vicinity of the proposed Project are depicted on Figure 1. Figure 2 provides an aerial photograph depicting the project site and adjacent uses.

2. ENVIRONMENTAL SETTING

The proposed Project is located in the Southwest zone of the UCLA campus, which contains approximately 35.5 acres of the 419-acre UCLA campus. In addition to the Kinross Buildings (North and South), the Southwest zone is occupied by a variety of uses, including, but not limited to, surface Parking Lot 36 and Parking Structure 32, Weyburn Terrace graduate student housing and parking facilities, Warren Hall, the Larry L. Hillblom Islet Research Center, the Rehabilitation Center, the West Medical Building, the Capital Programs Building, the Science and Technology Research Building (STRB), the Campus Transit Yard, Los Angeles Fire Station No. 37, and a steam plant.

The project site, as shown in Figure 2, encompasses approximately 2.0 acres and is developed with the Kinross Building (also referred to as the Kinross North Building) and associated outdoor spaces and a portion of Parking Lot 36. The project site is surrounded by Parking Structure 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively.

The Kinross Building opened in 2001 and was originally constructed to serve as an interim staging building for displaced departments on the UCLA campus while other facilities underwent seismic upgrades or renovation. The three-level building is approximately 75,000 gross square feet (gsf) and was designed with flexible classroom, office, and lab space, providing a versatile arrangement open to adaptation and technological innovation to accommodate various potential users. Initially the Kinross Building accommodated the Department of Art and Department of



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Regional Location and Local Vicinity

Figure 1

Geffen Academy at UCLA

N W E S

1,500 750 0 1,500 Feet

BonTerra PSOMAS

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Aerial Photograph of Project Site

Figure 2

Geffen Academy at UCLA

N W E S

350 175 0 350 Feet

BonTerra PSOMAS

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World Arts and Cultures when their respective buildings (Dickson Art Center and the Dance Building) underwent seismic renovation. The Kinross Building accommodated the studios, shops, class labs, gallery and office space from each building. Following completion of the seismic renovation projects, each department returned to their original locations, and the Kinross Building was available to stage the occupants of other academic facilities. Notably, the UCLA Police Department (UCPD), UCLA Library Conservation Center and Fowler Museum at UCLA have occupied the building. The UCPD moved out in 2010, at which time the Kinross Recreation Center (KREC) began to occupy the space.

The Kinross Building currently houses the KREC and associated Graduate Student Community Center, the Fowler Museum at UCLA, the UCLA Library Conservation Center, the Office of Intellectual Property, and various office spaces supporting Research and other departments. The KREC is open every day and is limited to use by UCLA graduate students and faculty/staff with UCLA Recreation SOUTH ZONE membership. Not including the individuals that use the KREC, there are approximately 218 individuals (faculty and staff) that occupy the remaining areas at the Kinross Building.

Currently, the primary entrance to the building is along the north facade. Parking for the occupants of the Kinross Building is primarily provided at Parking Lot 36 and Parking Structure 32, both of which are accessed from Kinross Avenue. Service and delivery vehicle access is provided from Midvale Alley east of the building. There are various transit uses serving the project site. BruinBus lines travel along Kinross Avenue and the Campus Express stops at Parking Lot 36, adjacent to the project site. Culver City Route No. 6 also travels along Kinross Avenue with a stop at Parking Lot 36. Big Blue Bus Routes No. 2 and No. 3 and Metro Route No. 20 and 720 travel along Wilshire Boulevard and stop at Parking Lot 36 at its intersection with Veteran Avenue. A Los Angeles International Airport (LAX) FlyAway stop is on the north side of Kinross Avenue adjacent to Parking Structure 32.

Vegetation on the project site consists of various tree species, including along Kinross Avenue, and ornamental vegetation typical of the developed portions of the campus. There are no naturalized areas, stream channels, or otherwise sensitive hydrologic or biological resources within the project site.

3. PROJECT DESCRIPTION

The proposed Project involves the renovation of the Kinross Building and adjacent areas for the Geffen Academy at UCLA campus. Following is a description of the proposed operations and physical improvements associated with the proposed Project, followed by a discussion of the relocation of existing uses in the Kinross Building and the relationship of the proposed Project to the 2002 LRDP (as amended in 2009).

Proposed Operations

The proposed Geffen Academy, which would be located on campus and operated by UCLA, would advance UCLA's mission of research, teaching, and service. The Geffen Academy would provide an innovative college preparatory education for 6^{th} through 12^{th} grade students. The facility would help UCLA recruit and retain top faculty, whose career decisions are often influenced by the availability of college preparatory education for their children. Operation of the Academy would, in turn, provide hands-on teaching and educational opportunities for UCLA's undergraduate and graduate students to work for the Academy, in support of the faculty. Further, the Geffen Academy staff and faculty would join in the on-going collaboration that already occurs between an existing network of partner schools, including the UCLA Lab School, the UCLA Community School, four public schools near campus, and the Graduate School of Education and

Information Studies (GSEIS) that expand educational opportunities for students, faculty, and families. The GSEIS is the conduit for the collaboration of ideas, teaching methodologies, and data sharing between the aforementioned partner schools. As a college preparatory program, Geffen Academy students would have access to learning opportunities and classes provided by UCLA, which are beyond those offered by more traditional secondary schools.

The Geffen Academy is proposed to open for the 2017-2018 school year with approximately 160 students in grades 6 and 9. The enrollment is projected to increase to up to a maximum of 620 students in grades 6 through 12 by the 2020-2021 school year. The Geffen Academy would continue UCLA's commitment to diversity by serving a diverse population of families from different racial, ethnic, linguistic, religious, and socioeconomic backgrounds. It is currently anticipated that a maximum of 50 percent of the students would come from UCLA staff and faculty families and the remainder would come from the larger Los Angeles community. It is anticipated that the Geffen Academy would be funded through tuition paid for the Academy and philanthropy; no public funds or tuition paid by UCLA students would be used.

New faculty and staff would also be hired to operate the Geffen Academy. This would include full- and part-time faculty and staff and remote employees. Based on preliminary estimates, it is assumed there would be 42 full-time faculty/staff, 7 part-time staff, and 8 remote employees[2] when the Academy opens for the 2017-2018 school year. With the estimated 620 students by the 2020-2021 school year, it expected that the employee population would increase to 81 full-time faculty/staff, 28 part-time staff (total of 109 faculty/staff), and 31 remote employees. The Academy would require janitorial and maintenance support, which is currently provided in the existing facility by UCLA Facilities Management. It is anticipated that those services, and the provider, would continue to serve the Academy.

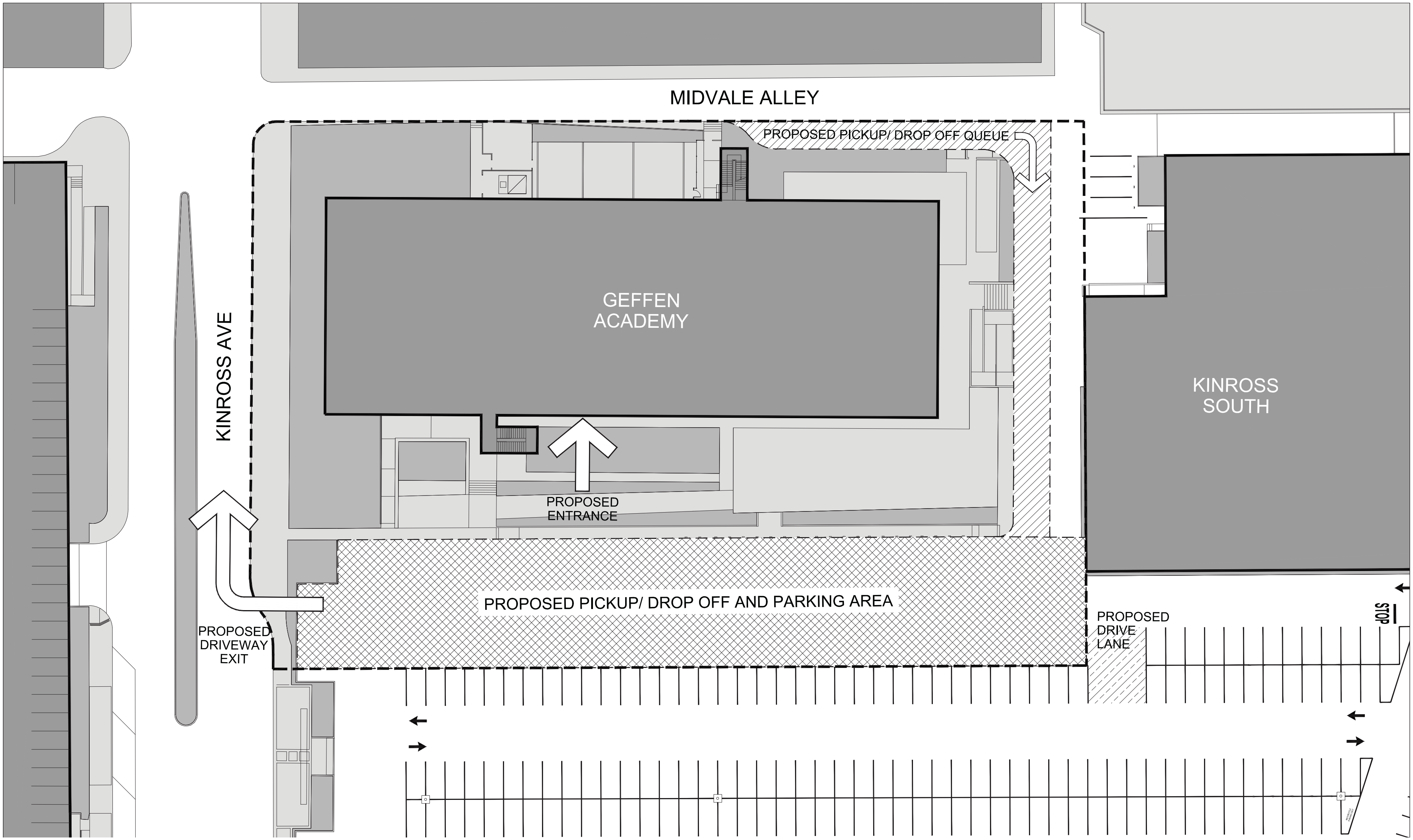
The Geffen Academy would generally follow UCLA's academic calendar. For purposes of analysis in this Initial Study and the Draft SEIR, certain assumptions regarding operations have been made. It is assumed that the Academy facility would be open and staffed between 7:30 am to 6:30 pm, Monday through Friday, with school/instructional hours extending from approximately 9:00 a.m. to 4:30 p.m during the academic school year (fall through spring). Classes would be held Monday through Friday and certain school activities could occur in the evening and/or on the weekend. The Geffen Academy would have various athletic teams that could use facilities on or off-campus. The locations of these facilities have not been determined; however, potential locations will be discussed in the Draft SEIR.

Proposed Physical Improvements

The Kinross Building would be renovated to house the proposed Geffen Academy. In addition to the renovation of the Kinross Building, the proposed Project would involve physical site modifications to accommodate the Geffen Academy; a conceptual site plan is provided in Figure 3. The proposed on-site modifications include:

- **Kinross Building Modifications.** Internal modifications would be made to the Kinross Building to accommodate the proposed uses and program associated with the Geffen Academy. As identified above, the Kinross Building was originally designed and constructed to be flexible for future uses and to anticipate on-going staging needs that would require internal modifications to accommodate a revolving group of users. Interior modifications for the Geffen Academy could include, but would not be limited to demolition

[2] Remote employees would not be located onsite; they are support for faculty for assignments such as reading and grading.



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Source: Capital Programs 2016

Conceptual Site Plan

Figure 3

Geffen Academy at UCLA

Bonterra PSOMAS

(02/01/2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\IS\ex3_ConceptSitePlan.pdf of existing non-load bearing walls and improvements in the way of proposed work and installation of new walls, surfaces, lighting, and fixtures.

- **External Site Modifications.** To accommodate the Geffen Academy, physical modifications to the exterior areas of the Kinross Building would be required, as conceptually shown on Figure 3. Notably, a new main entry would be constructed along the western facade at the proposed drop-off/pickup location (refer to Figure 4). Existing outdoor areas that are fenced would be retained, and additional areas would be enclosed to provide secure outdoor spaces for students for various types of uses. It is anticipated that the existing north entrance on Kinross Avenue would be modified to provide an enclosed entrance, while the main entrance would be moved to the west side of the building.

- **Vehicular Circulation**. The proposed circulation pattern for the Geffen Academy would involve vehicles entering the site at the Midvale Alley entrance east of the Kinross Building, west of the Gayley Center, following a route around the Kinross Building to the proposed new entrance and pickup/drop-off location at the northwest portion of the building. Vehicles would then exit onto Kinross Avenue from a new driveway to be constructed as part of the proposed Project; only right-turns would be allowed. To accommodate this vehicular movement, queueing areas would be constructed on UCLA property (refer to Figure 3). The proposed Project would not require modifications to the existing bus stop located immediately west of the proposed new driveway along Kinross Avenue.

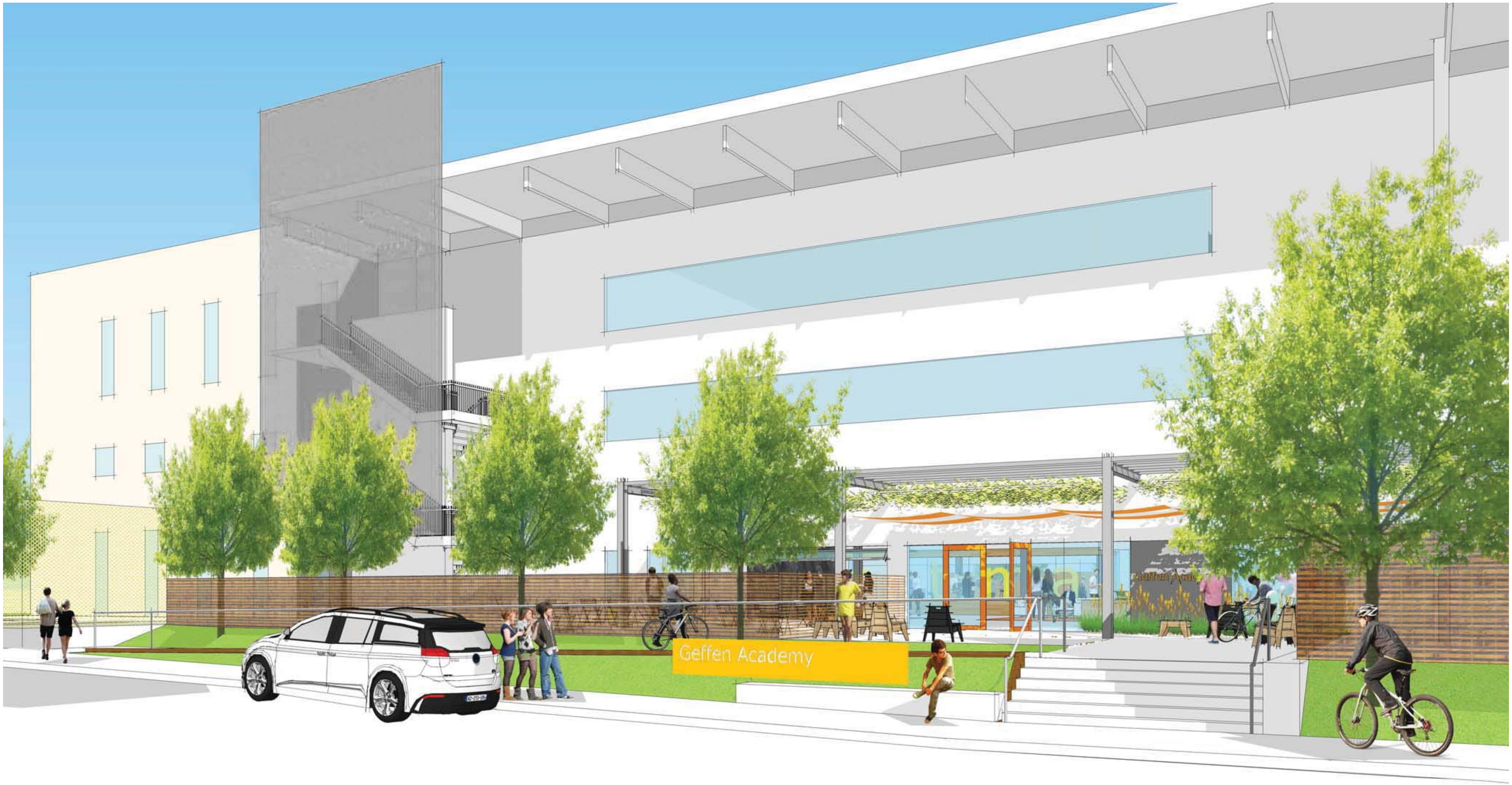
- **Parking.** As shown on Figure 3, parking for the Geffen Academy would be provided onsite, adjacent to Parking Lot 36. This parking would provide permit parking for faculty and staff, and visitor/short-term parking for parents of students.

- **Safety/Security Fencing, Landscaping, and Lighting.** Safety/security fencing would be installed around the Kinross Building and associated outdoor areas, including parking areas. As further discussed in the Initial Study, implementation of the proposed Project would potentially require the removal of existing trees and some landscaping within the project site area. Any trees removed would be replaced, in compliance with existing requirements. New landscaping and lighting would be installed, as necessary.

- **Utility Infrastructure.** It is expected that the existing utility infrastructure serving the Kinross Building (water, sewer, storm drain, electric and natural gas) would be sufficient to accommodate the proposed Geffen Academy and no offsite utility upgrades would be required. Onsite infrastructure may be modified to accommodate the proposed Project.

Initial construction activities for the proposed Geffen Academy are anticipated to last approximately 9 to 12 months, potentially beginning in Fall 2016 and extending through Summer 2017 to accommodate the initial classes. Additional construction, primarily internal to the building, would likely be required to accommodate additional classes at the Geffen Academy. Because the proposed Project involves renovation of an existing building, the construction activities would be minimal compared to construction of a new building. The use of heavy equipment is not expected to be needed.

The currently proposed Project does not involve the construction of any new buildings. Should an expansion of the Geffen Academy be proposed in the future beyond that addressed for the currently proposed Project, as described herein, separate environmental review pursuant to CEQA would be required.



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Source: Capital Programs 2016

Preliminary West Facade: Drop-Off/Pick-Up and Entry

Figure 4

Geffen Academy at UCLA

BonTerra PSOMAS

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Relocation of Existing Uses

Existing uses and occupants of the Kinross Building, including KREC, would be relocated to other UCLA facilities on and off campus. Fowler Museum and Library personnel would be relocated to on-campus facilities, while the remaining administrative departments would be relocated to the off-campus Occidental Building, recently purchased by UCLA. This building is located at 10889 Wilshire Boulevard, at the corner of Westwood and Wilshire Boulevards, approximately 675 feet east of the project site.

4. RELATIONSHIP TO THE LONG RANGE DEVELOPMENT PLAN

The proposed Project would not require an amendment to the 2002 LRDP (as amended in 2009) since the proposed renovations to the Kinross Building would result in no new square footage being added in the Southwest zone. Further, although on-campus population will increase with the proposed Project through the introduction of Geffen Academy students, faculty, and staff, the UCLA LRDP does not include a population cap.

Projected on-campus population are discussed and analyzed in the March 2009 LRDP Amendment Final EIR (pages 4.10-1-4.10-11). The LRDP EIR population projections were based on a three quarter average and an on-campus weekday average for students, academic employees, staff employees and other individuals (visitors). Using this data, the on-campus population figures in the LRDP EIR were adjusted to reflect that all students, faculty, and staff are not on campus, simultaneously, on any given day.

> "This accounts for variations in weekday attendance patterns for students and employees due to class and teaching schedules, vacations, sick leave, and absences from campus for travel, among other reasons, and other less than full-time work or study schedules. Due to these variations, the number of enrolled students and employed individuals on campus on any given weekday is less than the total number of people enrolled and employed. The average weekday population adjusts the total on-campus population to represent the average number of people (student and employees) physically on campus on any given weekday."

Population growth, in and of itself, is not an environmental impact. However, population growth may contribute to an increase in impacts in other topical areas. For example, in 1990, the UCLA campus entered into a Transportation Mitigation Monitoring Agreement with the City of Los Angeles to limit the total number of vehicle trips (a trip cap) set at 139,500 average daily vehicle trips. To date, the campus has never exceeded the trip cap even though population has grown since 1990 (2015 daily vehicle count was 100,490 trips; a 28 percent reduction). The proposed Project would not involve any modifications to the previously adopted campus-wide vehicle trip generation or parking limits.

The Final EIR (Table 4.10-4) projected population for students, employees, and visitors out to 2013-2014. The projections were solely for the purpose of conducting impact analyses, This Initial Study assumes that the proposed Geffen Academy will add up to 620 new students and 109 new faculty staff members.

In addition, UC-system wide enrollment increases were approved by the UC President and The Regents in November 2015. This Initial Study will also include any known and planned enrollment increases targeted for the UCLA campus. This Initial Study establishes the project's population numbers, as described above; however, the detailed population analysis will be provided in the pending Geffen Academy SEIR.

5. ANTICIPATED PROJECT APPROVALS

The Regents, or its delegate for budget and design approval and CEQA determination, will consider the proposed Geffen Academy at UCLA and the Subsequent EIR for Project approval. Delegates of The Regents include, but are not limited to, the UCLA Chancellor. The Regents, or its delegate, and the responsible agencies identified below are expected to use the information contained in this Initial Study and the Subsequent EIR for consideration of approvals related to and involved in the implementation of the proposed Geffen Academy. This Initial Study and the Subsequent EIR inform State, regional, and local government approvals needed for construction and/or operation of the proposed Project, whether or not such actions are known or are explicitly listed. Anticipated approvals required from UCLA and the responsible agencies to implement the proposed Project include, but are not limited to, those listed below.

University of California Board of Regents

- Budget approval
- Certification of the Final Subsequent EIR.
- Design approval of the Geffen Academy at UCLA Project.

Responsible Agencies

- **City of Los Angeles.** The proposed project may require street improvement and/or construction easements for Kinross Avenue and Midvale Alley.
- **State of California Regional Water Quality Control Board**. UCLA, or its designee, will comply with requirements of the applicable National Pollution Discharge Elimination System (NPDES) Permit.

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III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project. As indicated by the checklist on the following pages, the project's potential effect on these factors has been assessed under two categories where either additional project-level impact analysis is required or the project impact has been adequately addressed in an earlier environmental document.

☐ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☒ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☒ Hydrology/Water Quality
☒ Land Use/Planning	☐ Mineral Resources	☒ Noise
☒ Population/Housing	☒ Public Services	☒ Recreation
☒ Transportation/Traffic	☒ Utilities/Service Systems	☒ Mandatory Findings of Significance

IV. DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of the initial evaluation that follows:

☐ I find that the proposed project WOULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment and additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

for Dudman
Signature

02/09/16
Date

Traci Dudman Senior Planner
Printed Name and Title

V. EVALUATION OF ENVIRONMENTAL IMPACTS

The University has defined the column headings in the Initial Study checklist as follows:

A) **"Additional Project-level Impact Analysis Required"** applies where the project may result in an environmental impact that was not considered in an earlier document, or not considered in sufficient detail, and/or substantial project changes, changed circumstances, or new information of substantial importance triggering CEQA Section 15162 has occurred since certification of the earlier document.

B) **"Project Impact Adequately Addressed in the LRDP EIR"** applies where the potential impacts of the proposed project were adequately addressed in the March 2009 LRDP Amendment Final EIR and either no changes or no substantial changes to the project are proposed, and no new information of substantial importance has been identified.

Impact Questions and Responses

1. Aesthetics

Aesthetics issues are addressed in Section 4.1 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to aesthetics/visual change include minor modifications to the exterior of the Kinross Building and potential removal of trees to accommodate modified access to the project site and modifications to the exterior spaces. New hardscape and landscape would be installed. Removed trees would be replaced as required by UCLA policies (MM 4.3-1[c]) and the City of Los Angeles Protected Tree Ordinance (MM 4.3-4) (as discussed below under Section VI.4, Biological Resources).

The following PPs and MMs were adopted as part of the March 2009 LRDP Amendment Final EIR, are relevant to the analysis presented in this section, and are incorporated into the proposed Project and assumed in the analysis presented in this section.

PP 4.1-2(c) *Projects proposed under the 2002 LRDP shall include landscaping*.

MM 4.1-3(a) *Design for specific projects shall provide for the use of textured non-reflective exterior surfaces and non-reflective glass.*

MM 4.1-3(b) *All outdoor lighting shall be directed to the specific location intended for illumination (e.g., roads, walkways, or recreation fields) to limit stray light spillover onto adjacent residential areas. In addition, all lighting shall be shielded to minimize the production of glare and light spill onto adjacent uses.*

MM 4.1-3(c) *Ingress and egress from parking areas shall be designed and situated so the vehicle headlights are shielded from adjacent uses. If necessary, walls or other light barriers will be provided.*

In addition, the March 2009 LRDP Final EIR MM 4.3-1(c), which addresses the replacement of mature trees, and Final EIR MM 4.3-4, which addresses the replacement of protected trees, are incorporated into the proposed Project (refer to Section VI.4, Biological Resources), to ensure that potential visual impacts are less than significant.

Project Impact Analysis

Threshold(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project have a substantial adverse effect on a scenic vista?	☐	☒

Discussion

As discussed on page 4.1-11 of the March 2009 LRDP Amendment Final EIR, views of scenic vistas may be generally described in two ways: panoramic views (visual access to a large geographic area for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, setting, or feature of interest).

Examples of panoramic views include urban skylines, valleys, mountain ranges, or large bodies of water. As concluded through the Initial Study process for the March 2009 LRDP Amendment Final EIR, implementation of the total remaining development allocation on campus would not impact any panoramic views that include the campus because new development would be subject to the PPs identified above that relate to the provision of landscaping and building design (e.g., height, massing, and other features). The proposed Project would incorporate the PPs identified above; would not involve any new development; and would not have impacts on panoramic views, consistent with the finding in the LRDP Final EIR.

As described on page 4.1-11 of the LRDP Final EIR, focal views include views of natural landforms, public art/signs, and visually important structures, such as historic buildings. Focal views on campus include views of outdoor public art spaces and historic buildings (located primarily in the Core zone of the campus). The proposed Project is not located within or adjacent to identified focal views of public art spaces or historic buildings. The closest public art space to the project site is the Rolfe Sculpture Courtyard, which is approximately 1.0 mile to the northeast. The closest historic resource is Pauley Pavilion, which is potentially eligible for listing in the California Register of Historic Resources (CRHR), located approximately 0.7 mile north of the project site. Due to distance and intervening development, the project site is not visible from focal view locations. Thus, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not have an adverse effect on a panoramic or focal view. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒

Discussion

Implementation of the remaining development allocation under the 2002 LRDP, as amended in March 2009, was determined to have no impact related to State scenic highways through the Initial Study process and was not carried forward for further discussion in the March 2009 LRDP Amendment Draft EIR (refer to Appendix A of the Draft EIR). There are no State scenic highways located near the UCLA campus; however, Sunset Boulevard is identified as a scenic highway in the Mobility Plan 2015, an Element of the *Los Angeles Citywide General Plan* (City of Los Angeles 2015a). As identified in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, the City has not adopted a Corridor Plan for Sunset Boulevard but does have Scenic Highways Guidelines to guide future development that may affect a scenic highway with an adopted Corridor Plan (City of Los Angeles 2015a). The project area is located in the Southwest zone of the campus, approximately 0.9 mile south of Sunset Boulevard at the nearest point and is not visible from any portion of Sunset Boulevard due to distance and intervening development. As previously analyzed and concluded in the LRDP Final EIR, there would be no impact from implementation of the proposed Project on scenic resources within a State scenic highway. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒

Discussion

The analysis of Impact 4.1-2 in Section 4.1, Aesthetics, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PPs 4.1-1(a), 4.1-1(b), and 4.1-2(a) through 4.1-2(c) and MM 4.3-1(c), the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009, would result in a less than significant impact to the visual character or quality of the campus and the immediately surrounding area. As discussed above, relevant PPs and MMs have been incorporated into the proposed Project.

The analysis of visual impacts focuses on the nature and magnitude of changes in the visual character and quality of the project site and surrounding areas due to implementation of the proposed renovations and reuse of the Kinross Building to accommodate the Geffen Academy. This analysis includes visual compatibility with adjacent uses and views from public vantage points where visual changes would be evident.

The project area is surrounded by existing development and the primary views of the project area are from immediately adjacent vantage points, including pedestrians and motorists; views from more distant vantage points are obstructed by intervening buildings and landscaping. Therefore, the most prevalent views of the project site are from motorists and pedestrians traveling along Kinross Avenue; the public alley (Midvale Alley) along the east side of the Kinross Building; and from Parking Lot 36. There would be similar but more distant views from Veteran Avenue and Wilshire Boulevard. The existing visual character of the project site and immediate surrounding area is depicted in the site photographs provided in Figures 5a through 5d and described below. As further described in Section II.2, Environmental Setting, of this Initial Study, and shown on the aerial photograph provided in Figure 2, the project site is surrounded by existing parking (surface and structure); the Kinross South Building; commercial/office uses of varying ages and architectural styles; roadways; and ornamental landscaping.

- **View 1 – View to the southwest from the corner of Weyburn Place and Kinross Avenue.** This photograph shows the north side of the Kinross Building, which would be one of the primary public views of the proposed Project. The Kinross Building and Kinross Avenue streetscape, including the landscape median and mature trees, are the focal point

View 1

View 2

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Existing Site Views

Figure 5a

Geffen Academy at UCLA

N W E S

BonTerra PSOMAS

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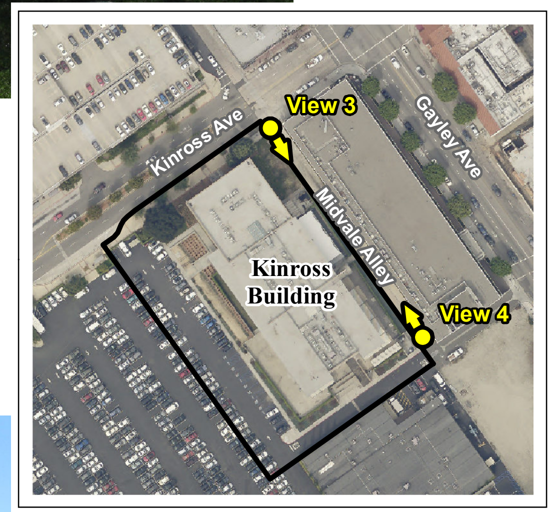
View 3



View 4

Existing Site Views

Figure 5b

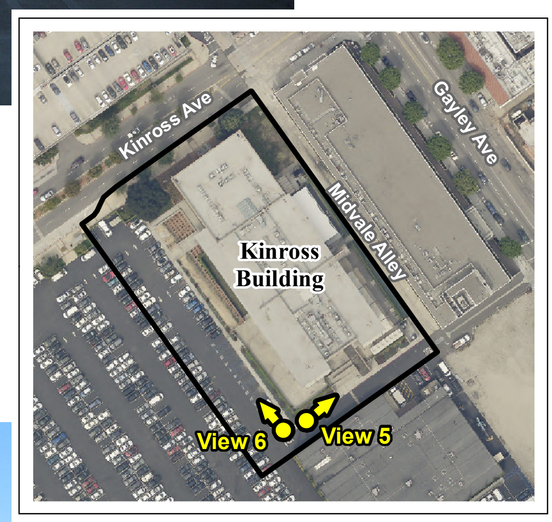
Geffen Academy at UCLA

N W E S

BonTerra PSOMAS

(02-08-2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\IS\ex5b_SP.pdf

View 5



View 6

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Existing Site Views

Figure 5c

Geffen Academy at UCLA

N W E S

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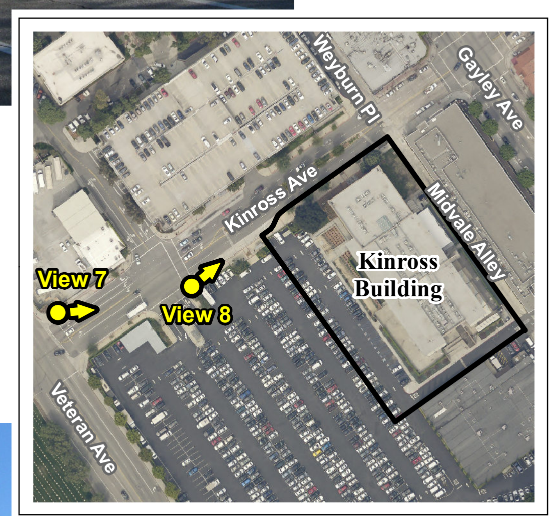
View 7



View 8

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Existing Site Views

Figure 5d

Geffen Academy at UCLA

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(02-08-2016 JAZ) R:\Projects\UCL\J0028.06\Graphics\IS\ex5d_SP.pdf of this view. There are obstructed views of Parking Lot 36. Distant background views are obstructed by existing development and mature vegetation.

- **View 2 – View to the northeast from the south side of Parking Lot 36.** This photograph shows the west and south facades of the Kinross Building in the middle ground view, with parked cars in Parking Lot 36 in the foreground view. A portion of Parking Structure 32 is visible along the left side of the photograph, and a portion of the Kinross South Building is visible along the right side. This view demonstrates that views beyond or around the Kinross Building are obstructed due to the height of the structure and the presence of surrounding development.

- **View 3 – View to the southeast from the north end of Midvale Alley.** This photograph depicts the view of the alley between the Kinross Building and Gayley Center that would serve as the vehicular access point for the Geffen Academy. Turf and trees in the landscaped area at the northeast corner of the Kinross Building are visible in the foreground next to the Kinross Building and a high-rise office tower on Wilshire Boulevard is visible in the background view. Distant views are obstructed.

- **View 4 – View to the northwest from the south end of Midvale Alley.** This photograph depicts the view of the project site looking north from the alley. There are distant views along the alley, which continues in a northwest direction from its terminus near the project site.

- **View 5 – View to the northeast from the southwest corner of the Kinross Building.** This photograph shows a portion of the south side of the Kinross Building and its relationship to the Kinross South Building. Landscaping along the perimeter of the Kinross Building site and vegetation covering the facade of the Kinross South Building is prominent in the foreground. The Gayley Center and other off-campus commercial and office buildings are prominent visual features in the middle ground and background views. Distant views are obstructed by the intervening development.

- **View 6 – View to the northwest from the southwest corner of the Kinross Building.** This photograph shows a portion of the west side of the Kinross Building. A portion of Parking Lot 36 is visible in the foreground, and Parking Structure 32 is visible in the middle ground. Trees near the Kinross Building, along Kinross Avenue, and beyond Parking Structure 32 are also visible. The Weyburn Graduate Student Housing complex is partially visible in the background. Distant views are obstructed by the intervening development.

- **View 7 – View to the northeast from the corner of Kinross Avenue and Veteran Avenue.** This photograph depicts the view of the Kinross Building from the intersection of Kinross Avenue and Veteran Avenue, a designated “campus entry”. As shown, mid-rise and high-rise buildings along Lindbrook Drive and Wilshire Boulevard are the focal point of the view from this vantage point. Existing trees and other vegetation along Kinross Avenue, in the project site, and in Parking Lot 36 are a key visual feature in the middle ground and partially obstruct views of the Kinross Building.

- **View 8 – View to the northeast from the south side of Kinross Avenue.** This photograph, at the Parking Lot 36 driveway, depicts the streetscape along Kinross Avenue and the limited view of the Kinross Building from pedestrian and motorists traveling in this vicinity due to the density of vegetation. Background and distant views are obstructed by existing developed and mature vegetation.

There would be exterior modifications to the Kinross Building and immediately adjacent areas to accommodate the proposed Geffen Academy. These modifications would primarily be limited to installation of metal fencing along the site perimeter for safety and security; construction of a new entrance along the western façade of the building, where the vehicular drop-off/pickup would be located (refer to Figure 4); installation of a new exit driveway onto Kinross Avenue; construction of a vehicular queuing area along the northeast corner of the building; installation of a new retaining wall; and perimeter enclosures of exterior open areas (similar to other areas around the building). These modifications would not substantially alter the facade of the Kinross Building, including materials, colors, and windows. There would be no change in the height of the structure or overall massing.

The project site has minimal landscaping, which consists of trees, shrubs, and ground covers along the perimeter of the structure where space allows; however, some landscaping would be removed as part of the proposed Project and new landscaping would be installed. As discussed under Threshold 4(e) below, six trees may be removed but would be replaced at the required ratio with implementation of the proposed Project.

While there would be a visual change as a result of the proposed Project, this change would not substantially degrade the visual character or quality of the sites and surrounding areas, which are highly urbanized and developed with a variety of architectural styles, sizes, and conditions. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would result in a less than significant impact related to change in visual character or quality of the project sites and surrounding areas, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒

Discussion

As identified in Section 4.1 of the March 2009 LRDP Amendment Final EIR, future development could create new sources of light from exterior building illumination, lighted recreation/athletic facilities, and parking lots or structures; as well as glare from reflective building surfaces and/or the headlights of vehicular traffic. It was concluded that these new sources of light or glare could affect day or nighttime views of adjacent sensitive land uses on campus or in the immediate vicinity, resulting in a potentially significant impact. Lighting for new development projects would be designed to limit spillover onto adjacent residential land uses by focusing additional light only on the surface to be illuminated. By incorporating the design features required by the LRDP Final EIR (such as MM 4.1-3[a]) (e.g., the use of non-reflective textured surfaces on building exteriors and avoidance of the use of reflective glass), impacts resulting from glare from new development would be reduced to a less than significant level. MM 4.1-3(b) requires that lighting be specifically directed to the intended illumination site to prevent spill onto adjacent residential areas. Additionally, with incorporation of energy conservation and exterior lighting fixtures with full cutoff features (which is part of the Green Building Design component of the UC Policy on Sustainable Practices and Guidelines [refer to Section 4.15, Climate Change of the March 2009 LRDP Amendment Final EIR]), light and glare impacts would be further reduced.

Existing sources of light are intended to provide a safe environment for vehicular and pedestrian travel to and from the existing uses and along adjacent roadways. Due to the highly developed urban nature of the UCLA campus and Westwood community to the east, there is a significant existing amount of ambient light on the site and in the immediately surrounding area. Existing sources of light include street lights, vehicle headlights, and interior and exterior lighting from the Kinross Building and other existing buildings in the area as well as from Parking Lot 36 to the west.

The type and amount of lighting to be implemented with the proposed Project would be similar to existing lighting on the project site and in the area. Specifically, proposed lighting would be designed to complement the Kinross Building architecture and be compatible with the existing night lighting features used for the buildings and other features in the Southwest zone, with the primary objective to illuminate entrances and provide adequate site lighting to enhance both pedestrian and vehicular wayfinding and circulation. If necessary, a limited amount of additional lighting may be installed to meet the needs of the proposed Geffen Academy. The additional illumination from the proposed Project would not noticeably increase the intensity of nighttime ambient light from the project site compared to existing conditions, including lights from vehicles entering and existing the site. Finally, LRDP Final EIR MM 4.1-3(b) requires that lighting be shielded to minimize the production of glare and light spill onto adjacent uses and MM 4.1-3(c) requires that ingress and egress from parking areas be designed and situated so vehicle headlights are shielded from adjacent uses; the adjacent use that would be in the line of headlights from exiting vehicles is Parking Structure 32, which is not a light-sensitive use.

Glare is a common daytime phenomenon in the Southern California area due mainly to the occurrence of a high number of days per year with direct sunlight and the highly urbanized nature of the region, which results in a large concentration of potentially reflective surfaces. Excessive glare not only restricts visibility but also increases the ambient heat reflectivity (i.e., albedo) in a given area. Potentially reflective surfaces in the project vicinity include windows at the project site and adjacent buildings and on automobiles traveling and parked on streets in the project site vicinity as well as on the adjacent Parking Lot 36. The proposed Project would involve minor exterior modifications to the Kinross Building and adjacent areas, which could include the installation of additional windows or reflective surfaces. However, in compliance with LRDP Final EIR MM 4.1-3(a), non-reflective textured surfaces on building exteriors and non-reflective glass would be used. With implementation of MM 4.1-3(a), impacts resulting from glare from the proposed Project would be less than significant.

Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not result in a substantial new source of light or glare and there would be less than significant impacts related to daytime or nighttime light and glare with incorporation of LRDP Final EIR MM 4.3-1(a), MM 4.3-1(b), and MM 4.3-1(c). Additionally, with incorporation of energy conservation and exterior lighting fixtures with full cutoff features (which is part of the Green Building Design component of the University of California [UC] Policy on Sustainable Practices and Guidelines), light and glare impacts would be further reduced. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to aesthetics. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to aesthetics. Further evaluation of this environmental issue is not required in the Draft SEIR.

2. Agricultural Resources

Agricultural resource issues were addressed in the Initial Study included in Appendix A of the March 2009 LRDP Amendment Final EIR. There are no relevant elements of the proposed Project related to agricultural resources. There were no PPs or MMs related to agricultural or forest land resources adopted as part of the March 2009 LRDP Amendment Final EIR.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA Resources Agency, to non-agricultural use?	☐	☒
b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☒
c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☒
d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒
e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒

Discussion

It was determined that implementation of the remaining development allocation contemplated under the March 2009 LRDP Amendment would have no impact on agricultural resources. As identified in the Initial Study of the March 2009 LRDP Amendment Draft EIR, the soils on campus do not have the qualities for listing as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the Soil Candidate Listing for Prime Farmland of Statewide Importance, Los Angeles County, which was prepared by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) in 1995. Additionally, the UCLA campus is within an area that falls outside of the NRCS soil survey and is not mapped as part of the California Department of Conservation's Farmland Mapping and Monitoring Program.

No farmland, agricultural activity, forest land, or timberland exist on the campus; no portion of the campus is zoned for agricultural, forest land, or timberland; and it is not under a Williamson Act Contract. Therefore, the proposed Project would not convert or result in the conversion of agricultural uses to non-agricultural uses, nor would it result in the loss or conversion of forest land. As previously analyzed and concluded in the LRDP Final EIR, because there is no farmland or agricultural activity on or near the UCLA campus, there would be no impact to agricultural resources or forest land resources with implementation of the proposed Project.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to agricultural and forest land resources. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to agricultural and forest resources. No further evaluation of this issue is required in the Draft SEIR.

3. Air Quality

Air quality issues are addressed in Section 4.2 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to air quality include the use of diesel-powered and other construction equipment that would contribute to local and regional emissions. The proposed Project would introduce new students and faculty/staff associated with the proposed Geffen Academy to the UCLA campus and would generate new traffic.

There are no relevant PPs or MMs adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the analysis presented below. Applicable PPs and MMs related to air quality will be present in the Draft SEIR.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	☒	☐

Discussion

As discussed in the March 2009 LRDP Amendment Final EIR, air quality in the South Coast Air Basin (Basin), including Los Angeles County, is regulated by the South Coast Air Quality Management District (SCAQMD), which is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB). The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs).

The analysis of Impact 4.2-1 in Section 4.2, Air Quality, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009, would not obstruct implementation of any SCAQMD AQMPs and there would be a less than significant impact.

Subsequent to certification of the Final EIR, the SCAQMD prepared the 2012 AQMP, which is a regional and multi-agency effort (SCAQMD, California Air Resources Board [CARB], the Southern California Association of Governments [SCAG], and the U.S. Environmental Protection Agency [USEPA]). The 2012 AQMP replaces the 2007 AQMP discussed in the March 2009 LRDP Amendment Final EIR. The 2012 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emissions inventory methods for various source categories, and SCAG's latest growth forecasts (SCAQMD 2014). The 2012 AQMP was approved by the SCAQMD Governing Board on December 7, 2012. On December 20, 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the State Implementation Plan (SIP) (SCAQMD 2014). The 2012 AQMP was approved by CARB on January 25, 2013 (CARB 2014a). It should also be noted that the SCAQMD is currently developing the 2016 AQMP. Adoption by the SCAQMD Governing Board is scheduled for April 2016. The 2016 AQMP will develop integrated strategies and measures to meet certain National Ambient Air Quality Standards (NAAQS).

Consistency of the proposed Project with the applicable AQMP will be addressed in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐

Discussion

The analysis of Impacts 4.2-2 and 4.2-3 in the March 2009 LRDP Amendment Final EIR determined that, even with application of the identified PPs, implementation of the remaining development allocation on campus could result in significant and unavoidable impacts related to:

- Construction emissions of oxides of nitrogen (NOx); and
- Operational emissions of NOx and volatile organic compounds (VOC).

As identified in the March 2009 LRDP Amendment Final EIR, individual proposed development projects on campus are subject to project-specific air quality impact analyses. The proposed Project has potential short-term construction-related emissions primarily related to localized demolition and excavation to install the new driveway as well as minor exterior modifications. Long-term emissions would primarily be related to increased traffic associated with faculty/staff and students commuting to/from the proposed Geffen Academy. An analysis of the short-term construction-related and long-term operation emissions resulting from implementation of the proposed Project will be included in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐

Discussion

The analysis of Impact 4.2-4 in the March 2009 LRDP Amendment Final EIR determined that, even with application of the identified PPs, implementation of the remaining development allocation on campus would result in significant and unavoidable impacts related to a cumulatively considerable net increase of pollutants for which the project region is in nonattainment.

Subsequent to the certification of the March 2009 LRDP Amendment Final EIR, there have been changes in the attainment status in the SoCAB. Currently, on a national level, the SoCAB is designated as an “extreme” nonattainment area for the 1997 eight-hour ozone (O_3) standard, meaning that the national ambient air quality O_3 standard is not expected to be met until 2024. In 2010, the Los Angeles County portion of the SoCAB was designated as a national nonattainment area for lead. The SoCAB was also redesignated for respirable particulate matter less than 10 micrometers in diameter (PM10) from nonattainment to attainment-maintenance effective July 26, 2013 (CARB 2014b). Construction and/or operation of projects can result in emissions of O_3, nitrogen dioxide (NO_2), PM10, and fine particulate matter less than 2.5 micrometers in diameter (PM2.5). Therefore, cumulative regional emissions of VOCs and NOx (which are O_3 precursors) as well as PM10 and PM2.5 during construction and operation will be addressed in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Would the project expose sensitive receptors to substantial pollutant concentrations?	☒	☐

Discussion

The March 2009 LRDP Amendment Final EIR evaluates exposure of local sensitive receptors to carbon monoxide (CO) hotspots and substantial criteria pollutant concentrations based on the SCAQMD’s Localized Significance Thresholds (LST) or pollutant emissions from campus-generated toxic air contaminant (TAC) emissions. Potential impacts were determined to be less than significant.

The proposed Project would introduce 6^{th} through 12^{th} grade students to the project site. The potential to expose sensitive receptors to substantial criteria and TAC pollutant concentrations will be addressed in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
e) Would the project create objectionable odors affecting a substantial number of people?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Final EIR, implementation of the remaining development allocation on campus would have no impact related to objectionable odors.

Construction activities may generate some odors, such as diesel exhaust associated with operations of construction vehicles. These odors are typical of urbanized environments and would be subject to construction and air quality regulations, including proper maintenance of machinery to minimize engine emissions. These emissions would occur during daytime hours and would be isolated to the immediate vicinity of construction activities. The odors would not be objectionable because of the relatively small magnitude and short duration; they would quickly disperse into the atmosphere. Additionally, there would not be a substantial number of people exposed. Consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be a less than significant impact related to construction-related odors.

The proposed Project does not propose any odor-generating use identified by the SCAQMD (e.g., wastewater treatment plants, agricultural operations, landfills, composting, food processing plants, chemical plants, refineries) and would not create an odor nuisance pursuant to Rule 402. Furthermore, none of these odor-generating land uses are located in the vicinity of the site. There would be no food preparation at the proposed Geffen Academy; therefore, there would not be potential airborne odors from cooking activities that typically occur with food service. Potential odor-generating activities include landscape maintenance equipment exhaust, which occurs under existing conditions. Potential odors, if any, associated with instructional laboratory facilities are localized and do not permeate to off-campus locations and would be consistent with similar existing uses on campus. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not generate objectionable odors affecting a substantial number of people and no mitigation is required. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, for Threshold 3(e) related to odors, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to odors. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to odors. No further evaluation of this issue is required in the Draft SEIR.

Air Quality impacts under the remaining Thresholds 3(a) through 3(d) will be further evaluated in the Draft SEIR.

4. Biological Resources

Biological resource issues are addressed in Section 4.3 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to biological resources include removal of existing mature and protected trees and ornamental vegetation located within the project area. The proposed Project would also involve replacement of trees removed.

The following PPs and MMs, which are relevant to the analysis presented below, were adopted as part of the March 2009 LRDP Amendment Final EIR, and are incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.3-1(a) *Mature trees to be retained and protected in place during construction, shall be fenced at the drip-line, and maintained by the contractor in accordance with landscape specifications contained in the construction contract.*

PP 4.3-1(b) *Trees shall be examined by an arborist and trimmed, if appropriate, prior to the start of construction.*

PP 4.3-1(c) *Construction contract specifications shall include the provision for temporary irrigation/watering and feeding of these trees during construction, as recommended by the designated arborist.*

PP 4.3-1(d) *Construction contract specifications shall require that no building material, parked equipment, or vehicles shall be stored within the fence line of any tree.*

PP 4.3-1(e) *Examination of these trees by an arborist shall be performed monthly during construction to ensure that they are being adequately maintained.*

MM 4.3-1(a) *Prior to the onset of construction activities that occur between March and mid-August (February 1 through June 30 for raptors), surveys for nesting special status avian species and raptors shall be conducted on the affected portion of the campus following USFWS and/or CDFG guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.*

MM 4.3-1(b) *If active nests for avian species of concern or raptor nests are found within the construction footprint or within a 250-foot buffer zone around the construction site, exterior construction activities shall be delayed within the construction footprint and buffer zone until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFG.*

MM 4.3-1(c) *In conjunction with CEQA documentation required for each project proposal under the 2002 LRDP, as amended, that would result in the removal of one or more mature trees, the project will include a tree replacement plan with a 1:1 tree replacement ratio at the development site where feasible and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the campus boundaries, the tree replacement plan will include the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging or roosting habitat for birds so that the replacement number of trees and shrubs will result in a 1:1 replacement ratio.*

MM 4.3-4 *UCLA shall replace protected trees removed for construction of projects under the 2002 LRDP, as amended, with protected trees of the same species at a 2:1 ratio as presented in the City of Los Angeles Protected Tree Ordinance (Ordinance Number 177404). Protected trees are defined as coast live oak, valley oak, western sycamore, Southern California black walnut, and California bay laurel.*

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒

Discussion

Regulatory Framework

The March 2009 LRDP Amendment Final EIR, which has been incorporated by reference, includes a detailed discussion of the federal, State, and local regulatory framework for biological resources. As previously discussed, the project site is developed with the existing Kinross Building and surface parking and is located in a developed urban area. Biological resource regulations that are most relevant to the proposed Project include the federal Migratory Bird Treaty Act (MBTA) and the provisions of the *California Fish and Game Code* regarding protection of birds of prey and migratory birds.

Pursuant to the MBTA of 1918, as amended in 1972, federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [USC] 703), except as allowed by permit (pursuant to 50 *Code of Federal Regulations* [CFR] 21). In addition, Section 3503.5 of the *California Fish and Game Code* specifically protects birds of prey and states:

> It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Section 3513 of the *California Fish and Game Code* duplicates the federal protection of migratory birds (i.e., the MBTA) and states:

> It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

Nesting Birds/Raptors

The analysis of Impact 4.3-1 in Section 4.3, Biological Resources of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PP 4.3-1(a) through PP 4.3-1(e) and MM 4.3-1(a) through MM 4.3-1(c), implementation of the remaining development allocation on campus would result in less than significant impacts on nesting birds, including nesting raptors, if trees are removed during the breeding season.

The project site is in an urbanized area and is currently developed with the Kinross Building and Parking Lot 36. Native and ornamental vegetation is present along the building margins and north of the project site, in the median of Kinross Avenue. As identified in the March 2009 LRDP Amendment Final EIR, future development on campus would require the removal and/or disturbance of trees and shrubs located within project-specific impact areas. Common species of birds and raptors that occur in the project vicinity may nest on site in these trees and shrubs. Nesting birds and raptors are protected by the MBTA; raptors are also protected by the *California Fish and Game Code.* As concluded in the LRDP Final EIR, the removal or pruning of trees and shrubs to allow for construction of the proposed Project could directly impact nesting birds, including nesting raptors. In addition, the dust, noise, and/or increased human presence associated with proposed Project construction could indirectly impact nesting birds, including nesting raptors.

The loss of an occupied nest as a result of construction or demolition activities would constitute a substantial adverse effect (such as “take” or “destruction” under Section 3513 of the *California Fish and Game Code*) and, in the case of raptors, would constitute the “take” or “destruction” of the nest or egg (under Section 3503.5 of the *California Fish and Game Code*). Therefore, the proposed Project incorporates LRDP Final EIR MM 4.3-1(a), which requires a pre-construction survey during the breeding season to determine whether birds or raptor species are nesting within a construction site. The LRDP Final EIR MM 4.3-1(b), which prohibits construction within a specific buffer zone if occupied nests are found, ensures that potential impacts would be less than significant.

Additionally, the loss of vegetation (including trees and shrubs) as a result of proposed Project construction could result in a reduction in potential foraging, roosting, and nesting opportunities for birds (including raptors). Construction activities for the proposed Project would remove existing mature trees, resulting in loss of habitat that would be considered a potentially significant impact. However, the proposed Project incorporates MM 4.3-1(c) and MM 4.3-4 from the LRDP Final EIR, which require replacement of mature and protected trees, respectively, that would be removed and ensures that impacts on mature and protected trees and the habitat they provide for birds, including raptors, would be less than significant, consistent with the conclusions of the March 2009 LRDP Amendment Final EIR. No further evaluation of this issue is required in the Draft SEIR.

<u>Special Status Plant and Wildlife Species</u>

The analysis of Impact 4.3-2 in Section 4.3, Biological Resources, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of MM 4.3-2(a) through MM 4.3-2(e), implementation of the remaining development allocation on campus would result in less than significant impacts on special status plant and wildlife species.

Only two limited areas of natural open space occur on the UCLA campus: (1) the four-acre parcel between Veteran Avenue and Parking Lot 11 (Northwest zone) and (2) the aboveground portion of Stone Canyon Creek in the northeastern portion of the campus (Core zone) that flows from Sunset Boulevard/Royce Drive adjacent to the Corinne A. Seeds University Elementary School to the Andersen School, Collins Executive Education Center.

The proposed Project is located in the Southwest zone and does not involve any development within Stone Canyon Creek; therefore, it does not have the potential to impact special status plant or wildlife species that may occur in this area. Additionally, although it has been determined that there are no special status plant or wildlife species within the four-acre parcel, this area would not be developed with implementation of the proposed Project. Therefore, the proposed Project would have no impact, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒
c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒

Discussion

The analysis of Impact 4.3-5 in Section 4.3, Biological Resources, of the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts to riparian or other sensitive natural communities in the area along Stone Canyon Creek or to coastal sage scrub within the four-acre parcel with implementation of LRDP Final EIR MM 4.3-2(a) through MM 4.3-2(c), MM 4.3-5(a), and MM 4.3-5(b).

As previously discussed, the proposed Project does not involve any development within or near the four-acre parcel in the Northwest zone or along Stone Canyon Creek in the Core zone; therefore, it does not have the potential to impact riparian habitat, wetlands, or other sensitive natural communities that may occur in these areas. Therefore, the proposed Project would have no impact, and no mitigation would be required. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
e) Would the project conflict with any applicable policies protecting biological resources?	☐	☒

Discussion

The analysis of Impact 4.3-4 in Section 4.3, Biological Resources, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PPs 4.3-1(a) through 4.3-1(e), MM 4.3-1(c), and MM 4.3-4, the removal of mature and protected trees would result in a less than significant impact.

As noted in the March 2009 LRDP Amendment Final EIR, the University of California is not subject to local zoning and planning ordinances, including the City of Los Angeles Native Tree Protection Ordinance (LANTPO) (No. 177404). UCLA mitigates the loss of trees consistent with the March 2009 LRDP Amendment Final EIR MMs, which would be applied to the proposed Project. The

LANTPO requires the replacement of “protected species”, defined as coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California sycamore (*Platanus racemosa*), Southern California black walnut (*Juglans californica* var. *californica*), or California bay laurel (*Umbellularia californica*). Tree replacement mitigation is determined on a case-by-case basis by the Urban Forestry Division of the Bureau of Street Services (City of Los Angeles), typically at a ratio of 2:1. Although not required, UCLA has historically met or exceeded the City of Los Angeles tree replacement requirements.

A tree survey was conducted by a Certified Arborist at the project site (refer to Figure 6). The survey area included all areas within the property boundaries as well as areas immediately adjacent to the project site. All trees with trunks greater than 12 inches in diameter at breast height (dbh) (mature trees) and any native trees greater than 4 inches dbh were included in the survey. During the survey, the size, height, canopy width, aesthetic value, and overall health of each tree was assessed, and their location was mapped. The tree survey data are provided in Appendix A. A total of eleven trees were surveyed and included seven coast live oaks (*Quercus agrifolia*), one Canary Island pine (*Pinus canariensis*), one southern magnolia (*Magnolia grandiflora*), and two unidentified non-native species that did not meet the criteria for further evaluation. Of these, a total of six trees (4 coast live oaks, the Canary Island pine, and the southern magnolia) may be removed during construction activities associated with the proposed Project or may be adjacent to construction activities.

The proposed Project incorporates MM 4.3-1(c), adopted as part of the March 2009 LRDP Amendment Final EIR, requiring that mature trees (greater than 12 inches dbh) be replaced at a 1:1 ratio. Two mature trees may be removed (tree numbers 1 and 9). Trees would be replaced within or near the project area and/or elsewhere within the campus boundaries where feasible. If it is not feasible to plant replacement trees at a 1:1 ratio within the project boundary, MM 4.3-1(c) requires the planting of native shrubs in ecologically appropriate areas within the campus boundaries that would provide nesting, foraging, or roosting habitat for birds so that the number of replacement trees and shrubs would result in a 1:1 replacement ratio.

In addition, the proposed Project incorporates MM 4.3-4, which requires that protected tree species based on the LANTPO be replaced at a 2:1 ratio (please note that native trees greater than 12 inches dbh are subject to both MMs, but the higher replacement ratio under MM 4.3-4 supersedes MM 4.3-1(c)). Four protected coast live oak trees (tree numbers 2 through 5) may be removed; none of these coast live oaks surveyed achieve a size of 12 inches dbh. Consistent with the provisions of the LANTPO, removal of these trees would require up to eight replacement trees to be planted.

In summary, a total of six trees would be removed and replaced with ten trees as required by UCLA and the City of Los Angeles tree replacement requirements. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project’s impact on local policies protecting biological resources would be less than significant impact. No further evaluation of this issue is required in the Draft SEIR.

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Tree Impacts

Figure 6

Geffen Academy at UCLA

N W E S

60 30 0 60 Feet

BonTerra PSOMAS

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Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒
f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	☐	☒

Discussion

As identified in Section 4.3, Biological Resources, of the March 2009 LRDP Amendment Final EIR, the UCLA campus consists of developed and ornamental areas that are surrounded by developed and ornamental areas; the campus does not provide a connection between two areas of open space. Therefore, the campus does not contain suitable habitat that would be used as a wildlife corridor and does not facilitate regional connectivity to core wildlife habitat. There are no established wildlife corridors on the campus. The campus also does not include any marshes, wetlands, or tidal zones that could function as wildlife nursery sites. As previously analyzed and concluded in the LRDP Final EIR, no impacts would result from the proposed Project, and no mitigation would be required. Refer to the discussion above under Threshold 4(a) for a discussion of impacts on nesting bird species.

As identified in the Initial Study, prepared for the March 2009 LRDP Amendment Final EIR, the UCLA campus is not located within an area governed by a habitat conservation plan (HCP) or natural community conservation plan (NCCP). Therefore, as previously analyzed and concluded in the LRDP Final EIR, implementation of the proposed Project would not conflict with such plans. There would be no impact resulting from implementation of the proposed Project, and no mitigation would be required. No further evaluation of these issues is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to biological resources. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to biological resources. Further evaluation of this environmental issue is not required in the Draft SEIR.

5. Cultural Resources

Cultural resources issues are addressed in Section 4.4 of the March 2009 LRDP Amendment Final EIR. There are no relevant elements of the proposed Project related to cultural resources.

There are no relevant PPs or MMs related to cultural resources adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the proposed Project, or the analysis presented below.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒

Discussion

The proposed Project would involve the renovation and reuse of the existing Kinross Building, which was completed in 2001 and is not a historic resource. As discussed under Threshold 1(a), Pauley Pavilion is the closest potentially historic resource and is approximately 0.7 mile to the north. There would be no direct or indirect impacts to historic resources, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒

Discussion

Archaeological Resources

The analysis of Impact 4.4-2 in Section 4.4, Cultural Resources, of the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to archaeological resources with implementation of MM 4.4-2(a) through MM 4.4-2(c).

As discussed in the March 2009 LRDP Amendment Final EIR (Impact 4.4-2), no archaeological materials have been recovered or recorded on the campus to date. The majority of the campus is developed and exposed ground consists of fill material or other earth that has been subject to previous disturbance for construction of existing structures and/or infrastructure. However, there is a potential to discover archaeological remains during excavation for future campus projects in areas containing native sediment and soils. The LRDP Final EIR concluded that the potential to encounter previously unidentified archaeological resources during construction is a potentially significant impact that would be reduced to a less than significant level with implementation of MM 4.4-2(a) through MM 4.4-2(c).

However, implementation of the proposed Project including proposed modifications to the Kinross Building and exterior areas, would not involve excavations into native soils. Limited shallow excavation into existing fills from previous development would be required to install the proposed perimeter fence, construct the driveway on Kinross Avenue, and complete proposed exterior modification to the Kinross Building and surrounding areas, including installation of new landscape and hardscape features. Therefore, there is no potential to encounter previously unidentified archaeological resources. There would be no impact, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Assembly Bill 52 – Native American Consultation

In September 2014, Governor Brown signed Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014), which creates a new category of environmental resources that must be considered under CEQA: “tribal cultural resources”. The legislation includes new requirements for offering to consult with California Native American tribes regarding projects that may affect a tribal cultural resource. Recognizing that tribes may have expertise regarding their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. MMs agreed upon during consultation must be recommended for inclusion in the environmental document.

AB 52 became effective on July 1, 2015, and requires that the lead agency provide project notifications to California Native American tribes that request notification in writing prior to a lead agency’s release of a Notice of Preparation (NOP) for an EIR, a Mitigated Negative Declaration (MND), or Negative Declaration (ND). Once Native American tribes receive a project notification, they have 30 days to respond as to whether they wish to initiate consultation regarding the project and specifically consultation regarding mitigation for any potential project impacts. To date, UCLA has received no written requests to be notified of projects occurring on campus. No consultation under AB 52 has been requested and is not required.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒

Discussion

The analysis of Impact 4.4-3 in Section 4.4, Cultural Resources, of the March 2009 LRDP Amendment Final EIR, concluded that there would be less than significant impacts related to paleontological resources with implementation of MM 4.4-3(a) and MM 4.4-3(b). No unique geological feature is known to exist, and no fossils have been documented on the campus. However, rock units identical to those that underlie the campus, including native alluvium, have yielded significant paleontological specimens in the nearby area that contributed to scientific understanding of the distant past. Accordingly, the rock units underlying the campus are considered paleontologically sensitive. The LRDP Final EIR concluded that the potential to encounter previously unidentified paleontological resources during construction is a potentially significant impact that would be reduced to a less than significant level with implementation of MM 4.4-3(a) through MM 4.4-3(b).

As discussed under Threshold 5(b), implementation of the proposed Project would not involve excavations into native soils. Therefore, there is no potential to encounter previously unidentified paleontological resources. There would be no impact, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Would the project disturb any human remains, including those interred outside of formal cemeteries?	☐	☒

Discussion

With implementation of PP 4.4-5, implementation of the remaining development allocation on campus was determined to have a less than significant impact related to potential disturbance of human remains (refer to the Initial Study included in Appendix A of the March 2009 LRDP Amendment Draft EIR). No archaeological materials, including human burials, have been discovered on the campus. Although the potential still exists for such resources to be present and for excavation during construction activities for the proposed Project to disturb these resources, the likelihood of discovery of such resources is extremely low.

As discussed under Threshold 5(b), implementation of the proposed Project would not involve excavations into native soils. Therefore, there is no potential to disturb human remains, including those interred outside of formal cemeteries. There would be no impact, and no mitigation would be required. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects Related to cultural resources. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to cultural resources. No further evaluation of this environmental issue is required in the Draft SEIR.

6. Geology and Soils

Geology and soils issues are addressed in Section 4.5 of the March 2009 LRDP Amendment Final EIR. Because the Kinross Building is being renovated and reused without major structural changes to the interior or exterior, there are no relevant elements of the proposed Project related to geology and soils. There are no PPs or MMs adopted as part of the March 2009 LRDP Amendment Final EIR that are relevant to the proposed Project. However, PP 4.7-1 and MM 4.7-1 presented in Section VI.9, Hydrology and Water Quality, of this Initial Study are also applicable to the analysis of geology and soils and are considered part of the proposed Project.

There are no relevant PPs or MMs related to geology and soils adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the proposed Project, or the analysis presented below.

Project Impact Analysis

Regulatory Framework

Section 4.5.2 of the March 2009 LRDP Amendment Final EIR includes a detailed discussion of the federal, State, and University regulatory framework related to geology and soils and is hereby incorporated by reference. As identified, the national model code standards (i.e., the *International Building Code*) adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The current version of the *California Building Code* (CBC) applicable to the proposed Project is the 2013 triennial edition, which became effective on January 1, 2014; the current version of the CBC supersedes the 2007 CBC discussed in the March 2009 LRDP Amendment Final EIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒
iv) Landslides?	☐	☒

Discussion

As identified in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, the UCLA campus is not located within an Alquist-Priolo Earthquake Fault Zone as established by the California Department of Conservation, California Geologic Survey, and no known active or potentially active faults traverse the campus. Therefore, it was concluded in the Initial Study that development on campus would have no impact related to surface rupture of a known earthquake fault. This is consistent with the findings of the project-specific Initial Study prepared for the existing Kinross Building (UCLA 1999). As previously analyzed and concluded in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, because there are no known on-site faults, there would be no impact from implementation of the proposed Project related to surface rupture of a known earthquake fault. Further evaluation of this issue is not required in the Draft SEIR.

As identified in Figure 4.5-3, Potential Seismic Hazard Zones, of the March 2009 LRDP Amendment Final EIR, there are two small areas identified as a potential landslide hazard zone on campus within the Northwest zone. The project site and surrounding areas are developed, and the topography is essentially flat with no hillside areas. Development of the proposed Project would not expose people or structures to landslides. No impacts would occur, and no mitigation is required. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
ii) Strong seismic ground shaking?	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒

Discussion

The analysis of Impacts 4.5-1, 4.5-3, and 4.5-4 in Section 4.5, Geology and Soils, of the March 2009 LRDP Amendment Final EIR determined that, with implementation of PPs 4.5-1(a) through 4.5-1(d), there would be less than significant impacts related to strong seismic ground shaking or seismic-related hazards.

Implementation of the proposed Project would involve interior building renovations and exterior modifications to the existing building and adjacent area. The proposed Project would not involve the development of any new habitable structures and would not result in, or exacerbate, seismic risks present on the site. Any necessary geotechnical measures related to soil engineering constraints, such as liquefaction, settlement, and expansive soils, were implemented per applicable local and state requirements during construction of the Kinross Building. However, the Kinross Building was constructed in compliance with the CBC in effect at the time. As required by current regulations, the proposed Project would be designed to comply with applicable provisions of the current CBC requirements, which may require structural upgrades.

As previously analyzed and concluded in the LRDP Final EIR, there would be less than significant impacts related to seismic- or soil-related hazards, and no mitigation would be required. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project result in substantial soil erosion or the loss of topsoil?	☐	☒

Discussion

The analysis of Impact 4.5-2 in Section 4.5, Geology and Soils, of the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to soil erosion and loss of topsoil with implementation of PP 4.7-1 and MM 4.7-1, included under the Hydrology and Water Quality analysis of this Initial Study.

Soil erosion can occur as a result of and can be accelerated by site preparation, excavation, and grading activities. There would be limited earth-disturbing activities associated with construction of the proposed Project. Construction activities associated with the proposed Project would comply with all provisions of the 2013 CBC related to excavation activities, grading activities, and erosion control to minimize or eliminate soil erosion or loss of topsoil. In addition, the proposed Project would minimize or eliminate soil erosion during construction activities through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (as required by PP 4.7-1). Although the SWPPP is focused on water quality, as opposed to geology or geotechnical issues, it incorporates erosion-control Best Management Practices (BMPs) (as required by MM 4.7-1). When these construction-level BMPs are applied, they significantly reduce the erosion potential of project construction to negligible amounts. Erosion-control BMPs are designed to prevent erosion and include, but are not limited to, slope stabilization using rock, revegetation, and/or hydroseeding. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would result in less than significant impacts related to soil erosion or loss of topsoil. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☒

Discussion

Through the Initial Study process for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation contemplated under the 2002 LRDP, as amended in March 2009, was determined to have no impact related to soils constraints for alternative wastewater disposal systems and was not carried forward for further discussion in the Draft EIR. As previously analyzed and concluded in the LRDP Final EIR, there would be no impact related to use of septic tanks or alternative wastewater disposal systems resulting from implementation of the proposed Project because it would utilize the existing wastewater infrastructure. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to geology and soils. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to geology and soils. No further evaluation of this environmental issue is required in the Draft SEIR.

7. Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions issues are addressed in Section 4.15 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to GHG emissions include the construction and operation of the proposed Project. The proposed Project would have the potential to increase the campus-generated GHG emissions.

There are no relevant PPs and MMs adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the analysis presented below. Applicable PPs and MMs related to GHG emissions will be presented in the Draft SEIR.

Project Impact Analysis

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐

Discussion

The proposed Project would have the potential to increase GHG emissions with an increase in vehicle trips and increase in the demand for water and energy and the generation of solid waste and wastewater. The potential for the proposed Project to generate GHG emissions during construction and operation, either directly or indirectly, that may have a significant impact on the environment will be evaluated in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐

Discussion

In June 2004, the University of California developed detailed guidelines for the Policy on Green Building Design and Clean Energy Standards. This comprehensive policy established the university as a leader in promoting environmental stewardship among institutions of higher education. Subsequently renamed the Policy on Sustainable Practices, the policy has been revised several times, most recently in June 2015, and establishes goals in nine areas of sustainable practices: green building, clean energy, transportation, climate protection, operations, waste reduction and recycling, environmentally preferable purchasing, and sustainable food service, and sustainable water systems (UCOP 2015).

The UC policy also calls for each UC campus to draft a Climate Action Plan (CAP) that examines the feasibility of meeting these goals. The UCLA CAP was completed in December 2008 (UCLA 2008). The CAP was reviewed and endorsed by the UCLA Campus Sustainability Committee and presented to the UCLA Administration and Chancellor prior to submittal to the University of California Office of the President (UCOP). UCLA is in the process of updating the CAP (Katz 2016).

The proposed Project's contribution to cumulative GHG emissions and compliance with the requirements of the UC Policy on Sustainable Practices; UCLA's CAP; and other applicable federal, State, or regional plans, policies, or regulations addressing GHG will be addressed in the Draft SEIR.

Conclusion

Further evaluation of potential impacts related to GHG emissions (Thresholds 7[a] and 7[b]) is required in the Draft SEIR.

8. Hazards and Hazardous Materials

Hazards and hazardous materials issues are addressed in Section 4.6 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to hazards and hazardous materials include the operation of the Geffen Academy, which would provide a college preparatory education for 6th through 12th grade students. This would include, but not be limited to, science classes, associated teaching laboratories, and fine arts classes. However, operation of the Geffen Academy, including science-based curricula, would not involve handling of hazardous materials not already in use on campus. The campus has multiple State-issued permits for the handling of hazardous materials for furtherance of current and ongoing scientific research. These materials are highly documented and reported by the UCLA Office of Environment, Health, and Safety (EH&S) under compliance with those State agency requirements. The standard chemicals and paints of a secondary school would be covered by those permits and reporting requirements. Additionally, landscape maintenance chemicals and cleaning products would be used, consistent with existing conditions on the site. The design of the proposed Project would ensure that emergency access, to and around the project area, is maintained.

Section 4.6.2 of the March 2009 LRDP Amendment Final EIR includes a detailed discussion of the hazardous materials used on the UCLA campus and the federal, State, and University regulations that guide the use of hazardous materials on campus. This information is hereby incorporated by reference and summarized below, as applicable.

The following PP was adopted as part of the March 2009 LRDP Amendment Final EIR, is relevant the analysis presented below, and is incorporated as part of the proposed Project and assumed in the analysis presented in this section.

PP 4.6-1 *The campus shall continue to implement the same (or equivalent) health and safety plans, programs, practices, and procedures related to the use, storage, disposal, or transportation of hazardous materials during the LRDP Amendment planning horizon, including, but not necessarily limited to, the Business Plan, Hazardous Materials Management Program, Hazard Communication Program, Injury and Illness Prevention Program, Chemical Exposure Monitoring Program, Asbestos Management Program, Respiratory Protection Program, EH&S procedures for decommissioning and demolishing buildings that may contain hazardous materials, and the Broadscope Radioactive Materials License. These programs may be subject to modification as more stringent standards are developed or if the programs become obsolete through replacement by other programs that incorporate similar health and safety protection measures.*

In addition, PPs 4.13-5 and 4.13-8 presented under the Transportation/Traffic analysis of this Initial Study, which address emergency access, are also incorporated into the proposed Project and assumed in the analysis of potential hazards.

Project Impact Analysis

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒
b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒

Discussion

Construction-Related Hazards

The analysis of Impact 4.6-2 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR identified that demolition and renovation of existing buildings could release hazardous materials if asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and/or mercury-containing equipment are present in the structure(s). The analysis of Impact 4.6-4 concluded that implementation of the remaining development allocation on campus would not create a significant risk of exposing campus occupants and/or construction workers to contaminated soil or groundwater. The LRDP Final EIR concluded that, with implementation of PP 4.6-1 and PP 4.6-4, there would be a less than significant impact related to the exposure of the public and/or construction workers to hazards and hazardous materials during construction.

There would be no demolition or renovation of the Kinross Building that would result in release of ACMs, lead-based paint, or PCBs, as the building was constructed in 2001 after use of these materials was discontinued. As discussed previously, there would be limited, shallow excavation associated with project construction. During the 12-year operation of the Kinross Building, there have been no spills or other release of any hazardous materials, including common materials such as cleaning products and landscape maintenance chemicals, that would result in shallow soil contamination (Marks 2016). The groundwater level is estimated to be approximately 42 feet below grade level and would not be impacted by any proposed construction activities (UCLA 1999). As such, it is unlikely that contaminated soil or groundwater would be encountered during construction.

As previously analyzed and concluded in the LRDP Final EIR, continued compliance with all applicable federal, State, and local laws and regulations as well as incorporation of PP 4.6-1 would ensure that impacts associated with the exposure of the public and/or construction workers to hazards and hazardous materials during construction and exposure to contaminated soil or groundwater are less than significant. No significant impact during construction would result, and no mitigation is required. No further evaluation of these issues is required in the Draft SEIR.

Operational Hazards

The analysis of Impacts 4.6-1 and 4.6-3 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR concluded that implementation of PP 4.6-1 and the remaining development allocation on campus would have a less than significant impact during long-term operations related to public exposure to hazards from: (1) the routine transport, use, or disposal of hazardous materials; and (2) a reasonably foreseeable upset and accident condition involving the release of hazardous materials.

The LRDP Final EIR identified that the implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009, would result in the potential development of additional laboratories and other research facilities that would use, store, and/or require the transportation and disposal of hazardous materials as well as a limited increase in the average weekday on-campus population that could be exposed to hazardous materials risks. Hazardous materials used on campus are discussed in Section 4.6.2 of the March 2009 LRDP Amendment Final EIR, and that information is hereby incorporated by referenced and summarized below.

Hazardous materials that may be used during operations at the proposed Geffen Academy primarily include selected materials used in science classrooms, laboratories, and for fine arts; commercial cleaning products; and landscape maintenance chemicals. Operation of the Geffen Academy, including science-based curricula, would involve handling of hazardous materials already in use on campus. Non-household-type hazardous materials used in UCLA teaching and research laboratories include chemical reagents, solvents, radioisotopes, and biohazardous substances. Fine arts instruction may involve the use of solvents, paints, and acids, consistent with similar facilities currently existing on campus. It should also be noted that when the Kinross Building was initially constructed, it served as the temporary building for various fine arts classes.

Cleaning products are currently used at the existing Kinross Building and would continue to be disposed of either through the wastewater system (i.e., sinks, laundry) or evaporation. Neither chlorine nor standard cleaning products (i.e., degreasers, window cleaning products) would be used in quantities that would result in adverse health effects either through direct exposure to the skin or inhalation. Pesticides and herbicides are directly applied to affected areas using methods that follow State and County laws and/or guidelines, and this activity currently occurs in the landscaped areas surrounding the Kinross Buildings.

Because the proposed Geffen Academy would involve uses and associated operations and maintenance activities that already occur on campus, the potential to create a significant hazard involving hazardous materials on campus would not increase. Additionally, operation of the proposed Project would comply with applicable federal, State, and local laws and regulations and with the existing UCLA PPs required by PP 4.6-1 identified above (and described in detail in Section 4.6.2 of the March 2009 LRDP Amendment Final EIR). Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazards materials, and there would be a less than significant impact. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒

Discussion

The analysis of Impact 4.6-5 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR concluded there would be a less than significant impact related to handling of hazardous materials in proximity to an existing school with implementation of PP 4.6-1. Specifically, the LRDP Final EIR concluded that implementation of the remaining development allocation on campus could require the handling of hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school. However, these materials would not exist in quantities significant enough to pose a risk to occupants of the school or the campus community, as established through the analysis presented for Impacts 4.6-1 through 4.6-4 of the March 2009 LRDP Amendment Final EIR.

The proposed Project is a school for 6th through 12th grade students; however, as discussed above, operation of the proposed school would not use or emit hazardous or acutely hazardous materials that are not already used on campus or that could pose a risk to occupants of the Geffen Academy.

Existing schools within or in proximity to the campus include: the Corinne A. Seeds University Elementary School, Fernald Child Development Center (adjacent to the elementary school), and the Infant Development Program (Franz Hall) located in the Core Campus zone; Marymount High School(located off campus just north of Sunset Boulevard); and the Krieger Childcare Center, located in the Northwest zone. The project site is located approximately 0.7 mile southwest of the Infant Development Program, 1.1 mile south-southwest of the elementary and high schools, and approximately 1.2 mile southeast of the Krieger Childcare Center.

While the proposed Project would involve the use of commercial cleaning products, landscape maintenance chemicals, and materials associated with instruction, the types and amounts of hazardous materials are essentially the same as currently used in the routine operation and maintenance of the existing buildings on campus, including the Southwest zone. Cleaning products would continue to be disposed of either through the wastewater system (i.e., sinks, laundry) or evaporation. Neither chlorine nor standard cleaning products (i.e., degreasers, window cleaning products) are used in quantities that would result in adverse health effects either through direct exposure to the skin or inhalation. Pesticides and herbicides are directly applied to affected areas using methods that follow State and County laws and/or guidelines. Therefore, there would be no new or more hazardous materials handled, stored at, or transported to the proposed Project. Similar to the findings of the LRDP Final EIR, these materials would not exist in quantities significant enough to pose a risk to occupants of the school or the campus community. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not result in a significant impact related to hazardous emissions within ¼ mile of the school. Additionally, continued compliance with federal, State, and local regulations pertaining to hazardous materials and with existing (or equivalent) campus programs and procedures is required by PP 4.6-1, which has been incorporated into the proposed Project. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒

Discussion

The analysis of Impact 4.6-6 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR determined that there would be a less than significant impact related to construction of facilities on sites containing hazardous materials with implementation of PP 4.6-1. Preparation of the LRDP Final EIR included review of federal, State, and County hazardous waste databases compiled pursuant to Section 65962.5 of the *California Government Code,* as required by Section 21092.6 of the *California Public Resources Code.* Databases searched include, but are not limited to, the Leaking Underground Storage Tanks (LUST) List, the Hazardous Waste Substance List (Cortese List), the Emergency Response Notification System, and registered small or large hazardous waste generators on campus (summarized in Appendix F2 of the March 2009 LRDP Amendment Final EIR).

The database review performed as part of the LRDP Final EIR determined there are hazardous materials sites identified on campus, largely related to current or past underground storage tanks (USTs), medical and laboratory facilities, UCLA fleet and campus maintenance, and campus power generation and other mechanical facilities. At the time of preparation of the LRDP Final EIR, there were three on-campus sites identified on the Cortese List and all are related to former, localized areas of soil contamination in connection with LUSTs. All UST locations where spills or leaks previously occurred have been remediated and received regulatory closure. Regarding other hazardous materials databases, the Engineering IV building at 420 Westwood Plaza, east of the project site, was identified on the State's UST database due to the presence of a diesel UST. USTs remaining in use on campus are permitted by the City of Los Angeles Fire Department (LAFD) and are subject to *Uniform Fire Code* requirements that reduce or eliminate the potential for fire and explosion and hazardous materials leaks through secondary containment, release detection, corrosion protection, and testing. In accordance with applicable federal, State, and local regulations and standards, all USTs are double-walled and equipped with leak-detection devices and anti-corrosion features.

A data base review was conducted for the project site by Environmental Data Resources, Inc. (EDR) in January 2016 (EDR 2016). The project site is not included on the list of known hazardous materials sites identified , including hazardous materials sites listed pursuant to Section 65962.5 of the *California Government Code* (i.e., the Cortese List). Additionally, as part of this Initial Study preparation, the current Cortese List data resources published on the California Environmental Protection Agency (CalEPA) website were reviewed (CalEPA 2015). Consistent with the finding of the previous and current database review conducted during preparation of the March 2009 LRDP Amendment Final EIR, the project site and surrounding area is not included on the Cortese List. Therefore, there would be no impact related to construction of the proposed Project on a hazardous materials site that could create a significant hazard to the public or environment. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation on campus was determined to have no impact related to public use airports and was not carried forward for further discussion in the Draft EIR. Specifically, the UCLA campus is not located within two miles of a public airport or public use airport and has not been included in an airport land use plan.

There are no private airstrips near the proposed Project; however, Ronald Reagan UCLA Medical Center (RRUCLAMC) operates a helistop (with two helipads) under a California Department of Transportation (Caltrans) Aeronautics Heliport Permit. The analysis of Impact 4.6-7 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR concluded there would be a less than significant impact related to the safety of people residing or working on campus from helistop operations at the RRUCLAMC.

The RRUCLAMC helistop is located on top of the ten-story facility and receives an average of two flights per day. This flight activity is limited to emergency patient transport and support of the organ transplant program. The project area is located approximately ½ mile south of the RRUCLAMC helistop. The elevation of the project area is relatively lower—approximately 315 feet above mean sea level (msl)—than the RRUCLAMC, which lies at an elevation of approximately 350 feet above msl. However, the helipads are located on top of the building from which the 8:1 approach/departure surface (8 feet horizontal to 1 foot vertical) is determined. The helistop is at an elevation of approximately 507 feet above msl.

The proposed Project would not involve building modifications that would increase the height of the Kinross Building, including roof apparatus. Therefore, the proposed Project would not penetrate the established 8:1 approach/departure surface, consistent with existing conditions and the requirements of the Caltrans Aeronautics Heliport Permit. Also, implementation of the proposed Project would not increase the number or frequency of medical helicopter operations at the RRUCLAMC. As previously analyzed and concluded in the LRDP Final EIR, the provisions of the existing Caltrans Aeronautics Heliport Permit ensure that potential safety hazards associated with operations of the helistop are less than significant. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒

Discussion

The analysis of Impact 4.6-8 in Section 4.6, Hazards and Hazardous Materials, of the March 2009 LRDP Amendment Final EIR concluded that there would be a less than significant impact related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. The campus has developed and implemented a number of emergency response plans, which are discussed in detail in Section 4.6.1 of the LRDP Final EIR. In addition, both the City and County of Los Angeles have Emergency Contingency Plans that address emergency situations that could occur on the UCLA campus.

Construction and operation of the proposed Geffen Academy would be designed to ensure that existing emergency response or evacuation plans are maintained and do not impede emergency access on campus, including existing fire lanes near the project area. The regional evacuation area serving the Southwest zone is Parking Lot 36, adjacent to the project site (UCLA EH&S 2015). While a portion of the eastern area of Parking Lot 36 would be incorporated into the boundaries of the proposed Geffen Academy, this would not prevent use of Parking Lot 36 as an evacuation area. Occupants of the proposed Geffen Academy would evacuate to the parking area inside the security fence for the school. As lead agency, the UCLA Fire Marshal and Building Official would review all plans for compliance with applicable CBC and Fire Code related to emergency access and egress for both pedestrians and vehicles.

Fire and emergency access would be maintained during construction and operation via Kinross Avenue and/or adjacent roadways and Midvale Alley, to the east. Multiple emergency access or evacuation routes are provided on campus to ensure that, in the event one roadway or travel lane is temporarily blocked, another may be utilized, as required by PP 4.13-5. Additionally, ongoing coordination among the University of California Police Department (UCPD), the LAFD, and UCLA pursuant to PP 4.13-8 ensures that roadway or travel lane closures would be coordinated with emergency response personnel. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not impair implementation of or physically interfere with emergency response and evacuation efforts with incorporation of PPs 4.13-5 and 4.13-8 (included under the Transportation/Traffic analysis of this Initial Study). No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation on campus was determined to have no impact related to wildfires because the UCLA campus is not located adjacent to a wildland area. Consistent with the findings of the March 2009 LRDP Amendment Final EIR, there would be no impact related to wildland fires from implementation of the proposed Project. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to hazards and hazardous materials. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to hazards and hazardous materials. No further evaluation of this environmental issue is required in the Draft SEIR.

9. Hydrology and Water Quality

Hydrology and water quality issues are addressed in Section 4.7, Hydrology and Water Quality, of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to hydrology and water quality include a nominal increase in impervious surfaces with a nominal change in anticipated storm water runoff volumes and flow rates and the use of structural and non-structural BMPs to capture and treat runoff in compliance with applicable regulations.

The following PP adopted as part of the March 2009 LRDP Amendment Final EIR is incorporated as part of the proposed Project and is relevant to the analysis presented in this section. Additional LRDP Final EIR PPs and MMs related to hydrology and water quality will be presented in the Draft SEIR, as applicable.

PP 4.7-5 *Site-specific hydrologic evaluation shall be conducted for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume and flow rate from the proposed project site; (2) identification of project-specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project. Project design shall include measures to upgrade and expand campus storm drain capacity where necessary, as identified through the project-specific hydrologic evaluation. Design of future projects shall include measures to reduce runoff, including, but not limited to, the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials.*

Project Impact Analysis

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project violate any water quality standards or waste discharge requirements?	☒	☐
f) Would the project otherwise substantially degrade water quality?	☒	☐

Discussion

The analysis of Impact 4.7-1 in Section 4.7, Hydrology and Water Quality, of the March 2009 LRDP Amendment Final EIR determined that with implementation of PP 4.7-1 and MM 4.7-1, there would be a less than significant impact related to violation of existing water quality standards or waste discharge requirements and degradation of water quality. As with other areas on campus, the storm water runoff from the project site would discharge into the existing local storm drain system, through which flows eventually pass into the Los Angeles County drainage system. The CWA establishes a framework for regulating potential water quality impacts from construction activities through the NPDES program.

The proposed Project would involve limited construction activities at the project site, and would involve exterior site modifications that could alter the amount of impervious surface at the project site. As required by the PPs identified above, potential short-term construction-related and long-term operational impacts of the proposed project on water quality will be evaluated in the Draft SEIR, and BMPs will be identified, if required by current regulations.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒

Discussion

The analysis of Impact 4.7-2 in the March 2009 LRDP Amendment Final EIR concluded that implementation of the remaining development allocation on campus would result in a less than significant impact related to substantial depletion of groundwater supplies or interference with groundwater recharge.

No groundwater recharge currently occurs on the project site as it is almost completely developed with the Kinross Building and other impervious surfaces, including Parking Lot 36. Because implementation of the proposed Project would involve redevelopment on an already largely impervious site that is not a groundwater recharge area, no impact to groundwater recharge would occur.

Currently, the UCLA campus utilizes water from the Los Angeles Department of Water and Power (LADWP), and the proposed Project would not involve direct withdrawal of groundwater. The Kinross Building is currently occupied, as it was when the LRDP Final EIR was prepared. As previously analyzed and concluded in the LRDP Final EIR, while water sources for the LADWP include groundwater supplies, the LADWP has adequate water supplies to serve the existing and future development on campus as identified in the 2002 LRDP, as amended in March 2009. Therefore, the proposed Project, which involves the renovation and reuse of the existing Kinross Building, would not substantially deplete groundwater supplies, and potential impacts would be less than significant. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐
d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☒	☐
e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐

Discussion

The analysis of Impacts 4.7-3, 4.7-4, and 4.7-5 in the March 2009 LRDP Amendment Final EIR regarding existing drainage patterns and storm drain system capacity concluded there would be less than significant impacts with implementation of PP 4.7-1, PP 4.7-5, and MM 4.7-1.

Stone Canyon Creek is the only regional drainage feature that traverses the campus and is not located within or near the project area. Implementation of the proposed Project would not alter regional drainage features. In addition, as identified in Section II, Project Location and Description, there are no natural drainage features on the project site. The site is currently developed with urban land uses (Kinross Building and Parking Lot 36) with limited landscaping.

In compliance with PP 4.7-5, the proposed Project will be evaluated by the Project Engineer to assess existing and proposed storm water runoff conditions, identification of appropriate BMPs, and identification of the need for new or upgraded storm drain infrastructure. The results of this analysis will be presented in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☒
h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☒
i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☒
j) Would the project inundation by seiche, tsunami, or mudflow?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation on campus was determined to have no impacts related to development within a 100-year flood hazard area; flooding as a result of failure of a levee or dam; or inundation by seiche, tsunami, or mudflow. These issues were not carried forward for further discussion in the Draft EIR.

Additionally, based on a current review of the City's Zoning Information and Map Access Site (ZIMAS), the project site is not within a tsunami inundation zone or a 100-year flood hazard area designated by the Federal Emergency Management Agency (FEMA) (City of Los Angeles 2015b), consistent with the findings of the March 2009 LRDP Amendment Final EIR. As documented in the March 2009 LRDP Amendment Final EIR, the campus is not susceptible to up-gradient reservoirs (i.e., dams and other enclosed bodies of water) that can be a source of failure and/or seiche. Therefore, there would be no impact related to flooding. No further evaluation of these issues is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to groundwater supplies, flooding, or inundation by a seiche, tsunami, or mudflow. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to these issues, and no further evaluation is required in the Draft SEIR.

Further evaluation of the proposed Project's potential water quality impacts during construction and operation (Thresholds 9[a] and 9[f]); potential to result in changes in drainage patterns (Thresholds 9[c] and 9[d]); and capacity of the storm drain system (Threshold 9[e]), will be evaluated in the Draft SEIR.

10. Land Use and Planning

Land use issues are addressed in Section 4.8, Land Use and Planning, of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to land use include (1) renovation and reuse of the Kinross Building for the Geffen Academy, which would accommodate up to 620 students in grades 6 through 12 and approximately 109 faculty and staff, and (2) consistency with the remaining development allocation and goals of the 2002 LRDP, as amended in March 2009.

There are no relevant PPs and MMs adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the analysis presented below. LRDP Final EIR PPs and MMs related to land use and planning will be presented in the Draft SEIR, as applicable.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project physically divide an established community?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, it was concluded that implementation of the remaining development allocation on campus would have no impact related to division of an established community. This issue was not carried forward for further analysis in the Draft EIR. The 2002 LRDP, as amended in March 2009, guides development within the campus boundaries, such as the proposed Project, and does not therefore affect the established community outside the UCLA campus. The proposed Project would involve the renovation and reuse the Kinross Building and would not involve new construction that would physically divide an established community. As previously analyzed and concluded in the LRDP Final EIR, no impact would result. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐

Discussion

The analysis of Impact 4.8-2 in the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to conflicts with applicable land use plans, policies, and regulations.

University of California, Los Angeles

UCLA planning programs applicable to the proposed Project include the 2002 LRDP, as amended in March 2009, and the UCLA Physical Design Framework. An analysis of the proposed Project's consistency with applicable UCLA planning programs will be provided in the Draft SEIR.

City of Los Angeles

As discussed in the March 2009 LRDP Amendment Final EIR, the University of California, as a constitutional entity, is not subject to municipal regulations, such as the *City of Los Angeles General Plan*. The UCLA campus is currently designated as "Public Facilities" in the Westwood Community Plan General Plan Land Use Map (City of Los Angeles 2010b), the Generalized Land Use Map for Westwood (City of Los Angeles 2010a), and the Zoning Map for the City of Los Angeles (City of Los Angeles 2015b). Although UCLA is not subject to *The Westwood Community Plan,* the proposed Project, which is internal to the campus and involves a school for grades 6 through 12 operated by UCLA, is consistent with this land use designation. Further evaluation of the consistency of the proposed Project with City planning programs is not required and will not be included in the Draft SEIR.

Regional Planning Programs

With respect to regional planning, SCAG is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, the federal government mandates that SCAG research and draw up plans for transportation, growth management, hazardous waste management, and air quality. SCAG's responsibilities are outlined in Section 4.8, Land Use and Planning, of the March 2009 LRDP Amendment Final EIR. Notably, SCAG reviews EIRs for projects of regional significance for consistency with regional plans (SCAG 2016a).

The proposed Project would not be considered regionally significant by SCAG based on the established criteria in Section 15206 of the State CEQA Guidelines, which is applied by SCAG to determine regional significance (SCAG 2016b). However, the March 2009 LRDP Amendment Final EIR was considered regionally significant and regional plans for which a consistency analysis is provided in the March 2009 LRDP Amendment Final EIR include the *Regional Comprehensive Plan and Guide* (RCPG), the *Regional Transportation Plan* (RTP), and the *Compass Growth Vision Report* (CGV). It should be noted that SCAG has prepared the 2012 RTP/SCS to supersede the 2008 RTP; the 2012 RTP/SCS was adopted in April 2012. In addition to meeting federal and State transportation planning requirements, the 2012 RTP/SCS includes a chapter that complies with California's Senate Bill (SB) 375 mandate for a regional SCS. Per SB 375, the RTP/SCS must coordinate transportation and land use planning in a manner that results in GHG emission reductions sufficient to meet 2020 and 2035 targets set by CARB. The goals and policies of the 2012 RTP/SCS focus on transportation and land use planning that include building compact infill projects; locating residents closer to where they work and play; designing walkable environments; and designing communities so there is access to high-quality transit service (SCAG 2012). It should also be noted that the SCAG 2016-2040 RTP/SCS is in the planning process. The draft 2016-2040 RTP/SCS and accompanying Program EIR (PEIR) were released for public review on December 7, 2015; the public review period ends February 1, 2016. Approval of the 2016-2040 RTP/SCS and PEIR are planned for Spring 2016. The proposed Project, which is not regionally significant, would not conflict with the regional goals and policies of the 2012 RTP/SCS or the draft 2016-2040 RTP/SCS. Further evaluation of the consistency of the proposed Project with regional planning programs is not required and will not be included in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☒

Discussion

As identified in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, the UCLA campus is not located within an area governed by an HCP or NCCP. Therefore, there would be no impact resulting from implementation of the proposed Project. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
d) Would the project create other land use impacts?	☒	☐

Discussion

The analysis of Impact 4.8-2 in Section 4.8, Land Use and Planning, of the March 2009 LRDP Amendment Final EIR concluded there would be less than significant impacts related to land use incompatibilities with implementation of PP 4.1-1(a) as well as PPs 4.8-1(a) through 4.8-1(e). An analysis of the proposed Project's potential to create other land use impacts will be provided in the Draft SEIR. The compatibility of the proposed Project with on campus and off campus land uses will also be addressed in the Draft SEIR. Notably, compatibility with air quality emissions and noise levels compatibility will be addressed in the respective sections of the SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to dividing an established community, consistency with the City of Los Angeles and regional planning programs, and conflict with an HCP. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for these topics. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to these issues. No further evaluation of these issues is required in the Draft SEIR.

Further evaluation of the proposed Project's consistency with applicable UCLA planning programs (Threshold 10[b]) and the potential for other land use impacts (Threshold 10[d]) will be evaluated in the Draft SEIR.

11. Mineral Resources

Mineral resource issues were addressed in the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR. There are no relevant elements of the proposed Project related to mineral resources. Additionally, there were no PPs or MMs adopted as part of the March 2009 LRDP Amendment Final EIR related to mineral resources.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☒
b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☒

Discussion

Implementation of the March 2009 LRDP Amendment Final EIR was determined to have no impact on mineral resources through the Draft EIR Initial Study process. Because there are no mineral resources of value to the region or the State, nor mineral resource sites defined by the *City of Los Angeles General Plan* on the UCLA campus, there would be no impact from implementation of the proposed Project. No further evaluation is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to mineral resources. No further evaluation of this environmental issue is required in the Draft SEIR.

12. Noise

Noise and vibration issues are addressed in Section 4.9 of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to noise and vibration include the use of diesel-powered and other equipment during construction. The proposed Project would also use mechanical equipment (such as air conditioning units) for operation; however, there is existing mechanical equipment on the roof of the Kinross Building. It is estimated that the proposed Geffen Academy would accommodate up to 620 students in grades 6 through 12 by the 2020-2021 academic year and approximately 109 faculty and staff (i.e., new employees) located at the project site. The proposed Project would generate new traffic and associated traffic-related noise. Proposed outdoor activities associated with school operations also have the potential to generate noise.

There are no PPs and MMs adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the analysis presented below. Applicable PPs and MMs related to noise will be presented in the Draft SEIR.

Project Impact Analysis

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	☒	☐

Discussion

As discussed in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR, the University of California is not subject to municipal regulations, such as the County and City General Plans. Nevertheless, UCLA has considered local plans and policies for the communities surrounding the campus. The City of Los Angeles, through the CEQA Thresholds Guide, classifies land uses for noise compatibility as normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable depending on the noise level and land use. Noise levels ranging from 50 to 70 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) are classified as normally acceptable for educational uses. There is a potential for future students at the proposed Geffen Academy to be exposed to noise levels in excess of established noise standards. This potentially significant impact will be evaluated in the Draft SEIR.

Threshold(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction)?	☒	☐

Discussion

The analysis of Impacts 4.9-2 through 4.9-9 in Section 4.9, Noise, of the March 2009 LRDP Amendment Final EIR concluded that buildout of development included in the 2002 LRDP, as amended in March 2009, would result in less than significant impacts related to:

- off-campus vibration during construction from heavy trucks and on- and off-campus vibration during long-term campus operations;
- on- or off-campus ambient roadway noise levels with implementation of PP 4.13-1(c) and PP 4.13-1(d);
- on- or off-campus ambient stationary source noise levels with implementation of PP 4.9-6(a); and
- cumulative operational noise impacts.

The analysis of Impacts 4.9-2 through 4.9-9 in the March 2009 LRDP Amendment Final EIR also determined that buildout of development included in the 2002 LRDP as amended (2009) would result in significant and unavoidable impacts related to:

- on-campus vibration during construction even with implementation of MM 4.9-2, PP 4.9-2, PP 4.9-7(a), and PP 4.9-7(d) and
- on- and off-campus ambient noise levels during construction even with implementation of MM 4.9-7, PP 4.9-7(a) through 4.9-7(d), and PP 4.9-8.

The Draft SEIR will include an analysis of potential noise and vibration impacts from construction and operation of the proposed Project.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒

Discussion

Implementation of the remaining development allocation under the 2002 LRDP, as amended in March 2009, was determined to have no impact related to noise from public airport operations through the Initial Study process for the March 2009 LRDP Amendment Draft EIR. Consistent with these findings, implementation of the proposed Project would not expose people in the project area to excessive noise levels because the UCLA campus, including the project site, is neither within an airport land use plan nor within two miles of a public airport or public use airport.

The analysis of Impact 4.9-10 in Section 4.9, Noise and Vibration, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PP 4.9-1 (which requires that interior noise levels for residential uses are less than 45 dBA CNEL), implementation of the remaining development allocation on campus would result in a less than significant impact related to on-campus noise levels generated by helistop operations at the RRUCLAMC. As discussed previously, campus uses are currently exposed to short-term noise levels generated by helicopter operations to and from the RRUCLAMC. These helicopter operations occur approximately twice per day. Implementation of the proposed Project would not increase the frequency of helicopter operations. As shown on Figure 4.9-4, Helicopter Noise Contours, of the March 2009 LRDP Amendment Final EIR, the project site is located outside the 65 dBA helicopter noise level contour that defines the area for aircraft noise impacts to noise-sensitive land uses. The helicopter noise levels experienced by students, faculty and staff, and visitors at the proposed Geffen Academy would not be excessive. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not expose people in the project area to excessive noise levels from RRUCLAMC helistop operations. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to air traffic noise. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for this issue. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to air traffic noise. No further evaluation of this issue is required in the Draft SEIR.

Further evaluation of the proposed Project's potential to conflict with noise standards (Threshold 12[a]) and to cause construction-related and operational noise and vibration impacts (Thresholds 12[b] through 12[d]) will be evaluated in the Draft SEIR.

13. Population and Housing

Population and housing issues are addressed in Section 4.10, Population and Housing, of the March 2009 LRDP Amendment Final EIR. It is estimated that the proposed Geffen Academy would accommodate up to 620 new students in grades 6 through 12 by the 2020-2021 academic year and approximately 109 new faculty and staff (i.e., new employees) located at the project site.

There were no PPs or MMs adopted as part of the March 2009 LRDP Amendment Final EIR related to population and housing.

<u>Project Impact Analysis</u>

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐

Discussion

The analysis of Impact 4.10-1 in Section 4.10, Population and Housing, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009, would not result in substantial population growth, either directly or indirectly (i.e., through job creation).

Implementation of the proposed Project would increase the existing on-campus population through the introduction of up to 620 new students and 109 new faculty and staff associated with the proposed Geffen Academy. The potential for the project to induce substantial population growth compared to existing campus and regional growth projections will be addressed in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☒
c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☒

Discussion

The Initial Study for the March 2009 LRDP Amendment Draft EIR concluded that implementation of the remaining development allocation under the 2002 LRDP, as amended in March 2009, would have no impact related to the displacement of people or housing necessitating the need for construction of replacement housing. The existing Kinross Building does not accommodate housing or other overnight accommodations. Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not result in any displacement of housing that would necessitate the construction of replacement housing elsewhere. There would be no impact and no mitigation is required. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects regarding displacement of housing or people necessitating construction of replacement housing. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR these issues. No further evaluation of this issue is required in the Draft SEIR.

Further evaluation of the proposed Project's potential to generate substantial population growth (Threshold 13[a]) will be evaluated in the Draft SEIR.

14. Public Services

The provision of public services on campus (i.e., fire, police, and schools) is addressed in Section 4.11, Public Services, of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to public services include the renovation and reuse of the Kinross Building for the proposed Geffen Academy, which would provide a college preparatory education for up to 620 students in grades 6 through 12. Fire and emergency access would be maintained via Kinross Avenue, Gayley Avenue, and existing fire lanes in the project area, including Midvale Alley, adjacent to and east of the Kinross Building.

The following PPs, adopted as part of the March 2009 LRDP Amendment Final EIR, are incorporated as part of the proposed Project and are relevant to the analysis presented in this section. Additional LRDP Final EIR PPs and MMs related to public services will be presented in the Draft SEIR, as applicable.

PP 4.11-1 *Fire alarm connections to the University Police Command Center shall continue to be provided in all new and renovated buildings to provide immediate location information to the Los Angeles Fire Department to reduce response times in emergency situations.*

PP 4.11-2(a) *Police staffing levels and equipment needs shall continue to be assessed on an ongoing basis as individual development projects are proposed and on an annual basis during the campus budgeting process to ensure that the appropriate service levels will be maintained to protect an increased campus population and an increased level of development.*

Project Impact Analysis

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		
a) Fire protection?	☐	☒

Discussion

The analysis of Impact 4.11-1 in Section 4.11, Public Services, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PP 4.11-1, there would be a less than significant impact related to the need for new or physically altered fire protection facilities to accommodate the increased demand resulting from implementation of the remaining development allocation on campus and to maintain acceptable response times and fire flows.

The LAFD provides fire suppression and rescue operations for the UCLA campus. Fire alarm calls on campus are received by UCPD command center staff, who screens calls, determines the call location, and then alerts the LAFD.

Fire Station Nos. 37 and 71 have primary responsibility for a first alarm call to the campus. In cases where there is a need for backup support, additional LAFD fire stations would provide the necessary assistance. Fire Station No. 37 is located at 1090 Veteran Avenue in the Southwest zone, approximately 375 feet northwest of the project site, and Fire Station No. 71 is located at 107 South Beverly Glen Boulevard, approximately 1.5 miles northeast of the project site. Fire Station No. 37, a task force unit that responds to the majority of real emergency calls to the campus, includes a truck and two engines; Basic Life Support (BLS, for evening hours only) and Advanced Life Support (ALS staffed 24/7) ambulances; and, a fire chief command car. The station is staffed daily by 15 sworn fire personnel, including 3 paramedics and 1 member of the battalion command team. Initial response times on a citywide basis meet the goal of 5 minutes or less 90 percent of the time (McKnight 2016). In addition to LAFD paramedics, UCLA paramedics and ambulances from the RRUCLAMC respond to a number of emergency calls both on and off campus (UCLA 2009a).

Fire prevention PPs for the campus are managed by EH&S Fire Protection Section. Their primary responsibility is to assist in enforcing State building codes and regulations, which involve reviewing all plans for new construction and renovation as well as conducting inspections of existing campus buildings. EH&S Fire is also responsible for training UCLA staff and building coordinators on emergency procedures and safety techniques; performing annual inspections; and implementing mandatory fire drills (UCLA 2009a).

State fire regulations are set forth in Sections 13000 et seq. of the *California Health and Safety Code,* which include regulations concerning building standards (as also set forth in the CBC); fire protection and notification systems; fire protection devices, such as extinguishers and smoke alarms; building access; high-rise building and childcare facility standards; emergency response notification systems; and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California, including UCLA.

The Campus Fire Marshal reviews and approves all individual development plans prior to construction to ensure that adequate fire flows will be maintained; an adequate number of fire hydrants will be provided in the appropriate locations; and circulation and design features will allow adequate emergency vehicle access in compliance with the *City of Los Angeles Municipal Code.* The Campus Fire Marshal also inspects buildings during and after construction, and buildings can only be occupied with the approval of the Fire Marshal (UCLA 2009a). In addition, the proposed Project would comply with all regulations of the *California Health and Safety Code*.

In October 2015, UCLA and LAFD Battalion No. 9 agreed to reduce unnecessary first response from Fire Station No. 37 to UCLA false fire alarms. False alarms (called Code-8) are an ongoing issue for the campus, where an individual pulls a manually accessible fire alarm for prank or intended disruption of scheduled activities within an existing building. Also in the category of a Code-8 are alarms set off by burnt food (e.g., toast or popcorn) or worker activity. During the 2015 calendar year, 489 Code-8 calls were recorded by the UCLA Police command center; of those 489 calls, the following response by UCLA and LAFD were recorded:

- Total Code-8 alarms that both UCLA FIRE-1 and LAFD were dispatched to the alarm call – 145;
- Total Code-8 alarms that only UCLA FIRE-1 was dispatched to the alarm call – 151; and
- Total Code-8 alarms that only LAFD were dispatched to the alarm call – 193.

The purpose of the agreement is to alleviate LAFD from unnecessary use of manpower and equipment for on-campus Code-8 calls. The agreement was developed between Dana Johnson, UCLA Fire Marshal, and LAFD Battalion 9 Chief, Antoine McKnight. Through this agreement, UCLA will take responsibility as first responder to all UCLA fire alarm calls. Upon assessment of the situation, they will request Fire Station No. 37 to provide response only for real fire situations. During the planning and design stages of the proposed Project, UCLA coordinated with the Campus Fire Marshal regarding safety issues and compliance of the proposed Project with LAFD regulations. Fire and emergency access would be maintained primarily via Kinross Avenue, Midvale Alley (an alley between Veteran and Gayley Avenues), and UCLA Parking Lot 36. Pedestrians would utilize existing emergency exit stairs and routes located on the west, east, and south of the building. The Geffen Academy administration would be responsible for developing meeting locations for the children and young adults of the school.

The proposed Project would be located in an existing occupied building in close proximity to Fire Station No. 37 and would not involve any new development on campus. In compliance with PP 4.11-1, to ensure adequate response to life-safety issues, the Kinross Building has direct fire alarm connections to the UCPD command center to facilitate emergency response by providing immediate location information. Per the agreement described above, UCLA Fire would be the first responders to all fire alarms initiated from the Kinross Building and would request backup support from LAFD only as needed. Due to the efficacy of the Memorandum of Understanding (MOU) and the proximity of Fire Station No. 37 to the project site (approximately 830 feet travel distance), the proposed Project would not require additional firefighting personnel or apparatus in order to maintain an acceptable level of service.

As previously analyzed and concluded in the LRDP Final EIR, the proposed Project can be adequately served within the established response times and distances. No new, expanded, or altered fire protection services or facilities would be required to serve the proposed Project (Johnson 2016). Therefore, no physical environmental impacts related to the provision of fire protection services would result.

Because emergency access and fire flows would be adequate to serve the proposed Project and no new, expanded, or altered fire protection services or facilities would be required, impacts associated with the provision of fire protection services from implementation of the proposed Project are considered less than significant, as previously analyzed and concluded in the LRDP Final EIR. Incorporation of PP 4.11-1 into the proposed Project ensures that this impact remains less than significant by facilitating emergency response. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
b) Police protection?	☐	☒

Discussion

The analysis of Impact 4.11-2 in Section 4.11, Public Services, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PP 4.11-2(a), there would be less than significant impacts related to the need for new or physically altered police facilities to accommodate the increased demand resulting from implementation of the remaining development allocation on campus and to maintain acceptable response times.

As with other University campuses, the UCPD has primary responsibility for the campus and all off-campus properties owned and operated by UCLA. According to Section 92600 of the *California Education Code,* the UCPD has concurrent jurisdiction with the LAPD within a one-mile radius of University-owned property. The UCPD is often the first responder at properties around the campus and may take primary responsibility for student-oriented events off campus (UCLA 2009a). The UCPD are duly sworn police officers under 830.2(b) of the *California Penal Code* and its jurisdictional responsibilities are articulated in the aforementioned section of the *California Education Code.* The UCPD station is located on campus, at the northwestern corner of the intersection of Charles E. Young Drive South and Westwood Plaza, approximately ½ mile north of the project site.

UCPD personnel are used in crime prevention, investigations, and administration (UCLA 2009a). In addition, UCPD personnel are instrumental in providing training to staff and faculty on leadership in emergency situations, observation tactics, active shooter scenarios, and use of safety equipment and technology. All sworn officers are available on an on-call basis to respond in emergency situations, as needed. On a part-time basis, students are employed as Community Service Officers (CSOs) to provide escort services, equipment security services, and patrol assistance. UCPD has indicated that staffing levels are currently considered acceptable with approximately 64 sworn officers, 20 EMTs that operate the campus 911 ambulance response, 8 full-time guards, and 72 students employed as CSOs (Greenstein 2016a; Parga 2016). The campus evaluates police protection needs on an ongoing basis and considers the need to augment UCPD and CSO staffing levels as institutional priorities.

The UCPD and LAPD have concurrent jurisdiction for providing police protection to the neighborhoods adjacent to the campus (Greenstein 2016a). While officers from the LAPD do not patrol the UCLA campus, the LAPD will provide assistance in homicide investigations, bomb disposals, and large demonstrations. The campus has MOUs with the Santa Monica Police Department, the California Highway Patrol, and the LAPD (Greenstein 2016a).

The proposed Project would be located in an existing occupied building and would not involve any new development on campus. Further, the UCPD would also assist the proposed Geffen Academy's development team in identifying and procuring staff or contract safety/security personnel that have proven to be successful in similar facilities and programs currently in operation on the campus. The types of service calls for police services to the proposed Geffen Academy would be similar to existing campus facilities.

Consistent with UCLA's standard practice to ensure adequate response to life-safety issues, the Kinross Building has direct fire alarm connections to the UCPD command center to facilitate emergency response by providing immediate location information. In addition, the UCPD would continue its current practice of cooperating with the LAPD, the Santa Monica Police Department, and the California Highway Patrol to help ensure the adequacy of police protection services for the campus, including the project site.

As previously analyzed and concluded in the LRDP Final EIR, the proposed Geffen Academy can be adequately served with existing facilities and the UCLA police station on Westwood Plaza (Greenstein 2016b). Consistent with PP 4.11-2(a), the campus would continue to assess police staffing levels as individual development projects are proposed.

Therefore, as previously analyzed and concluded in the LRDP Final EIR, the proposed Project would not result in a need for the construction of new or altered police protection facilities. Therefore, no physical environmental impacts related to the provision of police protection services would result.

No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Schools?	☒	☐

Discussion

The analysis of Impact 4.11-3 in Section 4.11, Public Services, of the March 2009 LRDP Amendment Final EIR concluded there would be a less than significant impact to Los Angeles Unified School District (LAUSD) services and facilities with implementation of the remaining development allocation contemplated by the 2002 LRDP, as amended in March 2009.

The proposed Geffen Academy would provide a college preparatory education for up to 620 students in grades 6 through 12. This would be accommodated through the renovation and reuse of the existing Kinross Building on the UCLA campus. The physical impacts associated with implementation of the proposed Project and operational characteristics of the proposed Project relevant to LAUSD services will be analyzed in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
d) Parks?	☒	☐

Discussion

The analysis of the proposed Project's impacts on parks and other recreation facilities is provided in Section VI.15, Recreation, of this Initial Study. An analysis of the proposed Project's potential impacts to on-campus and/or off-campus park facilities will be included in the Draft SEIR.

Issue(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
e) Other public facilities?	☐	☒
f) Create other public service impacts?	☐	☒

Discussion

Thresholds 14(e) and 14(f) are included in the current UC environmental checklist for CEQA documents and were not addressed in the March 2009 LRDP Amendment Final EIR. Therefore, the analysis of other public facilities (which shall refer to libraries for the purposes of this analysis) and other public services is not tiered from the Final EIR.

There are numerous library facilities provided by UCLA Library on campus: Arts Library, Biomedical Library, Charles E. Young Research Library, Law Library (with restricted access), Management Library, Music Library, Powell Library, Science and Engineering Library, and Southern Regional Library. These facilities are accessible to UCLA students, staff, and faculty. Members of the general public over the age of 18 can also obtain library cards with proper identification and payment of a fee. There are other provisions in place for access and use of library facilities by other members of the public (UCLA Library 2015).

As discussed above, the proposed Project would result in an increased on-campus population of grade 6 through 12 students, faculty, and staff associated with the proposed Geffen Academy. The proposed Project does not involve the development of new homes and the proposed Project's relatively small number of new employees (up to 109) would likely be filled by the local labor pool. A substantial growth in new residents that would generate new demand for on- and off-campus library services and/or other public services would not be anticipated with the proposed Project. Additionally, it is anticipated that the proposed Geffen Academy students and faculty would have access to library facilities and media resources provided by the UCLA Library, with a primary focus on utilization of the Library's digital content. Therefore, the proposed Project would not result in increased demand for on- or off-campus libraries or other public services such that new or expanded library facilities or other public service facilities would be required, and no physical environmental impacts would result. As previously analyzed and concluded in the LRDP Final EIR, there would be a less than significant impact. No further evaluation of these issues is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to police, fire, or library services. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe or these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to these services. No further evaluation of these issues is required in the Draft SEIR.

Further evaluation of the proposed Project's potential to impact school services (Threshold 14[c]) and park services (Threshold 14[d]) will be evaluated in the Draft SEIR.

15. Recreation

Recreation issues are addressed in Section 4.12, Recreation, of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to recreation include the relocation of the KREC, which is currently located in the Kinross Building, to another location on campus and the use of on-campus and/or off-campus recreational facilities by the proposed Geffen Academy (e.g., for athletic programs). Other physical education activities (e.g., non-competitive recreation, dance, yoga, etc.) would take place at the project site.

There are no relevant PPs and MMs adopted as part of the March 2009 LRDP Amendment Final EIR relevant to the analysis presented below. Applicable Final EIR PPs and MMs related to recreation will be presented in the Draft SEIR.

<u>Project Impact Analysis</u>

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☒	☐

Discussion

The analysis of Impact 4.12-1 in Section 4.12, Recreation, of the March 2009 LRDP Amendment Final EIR determined that implementation of the remaining development allocation on campus with an associated increase in the average weekday campus population of students, faculty, and staff would result in less than significant impacts related to substantial physical deterioration of on- or off-campus recreational facilities. The analysis of Impact 4.12-2 in Section 4.12, Recreation, of the March 2009 LRDP Amendment Final EIR identified that future recreational facilities, which may be implemented as part of the buildout of the remaining development allocation on campus, would be subject to project-specific environmental review in accordance with CEQA. These issues will be further addressed in the Draft SEIR.

Conclusion

Further analysis of the proposed Project's impact on recreational facilities (Thresholds 15[a] and [b]) resulting from increased demand from the proposed Geffen Academy and the relocation of the KREC will be included in the Draft SEIR.

16. Transportation and Traffic

Transportation and traffic issues are addressed in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR. In March 2010, updates to the CEQA Guidelines were adopted, which included revisions to the thresholds for transportation and traffic. The Regents subsequently updated UC checklists for CEQA documentation reflecting the updated CEQA Guidelines Appendix G checklist. The analysis below is tiered from the March 2009 LRDP Amendment Final EIR, as applicable, and new analysis is presented to address the updated checklist questions.

Relevant elements of the proposed Project related to transportation and traffic include modification of the circulation around the Kinross Building, including a new driveway on Kinross Avenue to accommodate a one-way drop-off/pickup route and short-term construction activities that would involve construction vehicles on the identified construction routes.

The following campus PPs were adopted as part of the March 2009 LRDP Amendment Final EIR, are relevant to the analysis presented in this section, and are incorporated as part of the proposed Project and assumed in the analysis presented in this section. Other applicable Final EIR PPs and MMs related to transportation and traffic will be presented in the Draft SEIR.

PP 4.13-5 *To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the campus shall provide appropriate signage indicating alternative routes.*

PP 4.13-8 *To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, UCLA shall consult with the UCPD, EH&S, and the LAFD to disclose temporary lane or roadway closures and alternative travel routes.*

Project Impact Analysis

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐

Discussion

The analysis of Impacts 4.13-1 through 4.13-3 in Section 4.13, Transportation/Traffic, of the LRDP Final EIR, which addressed roadway capacity and congestion management programs, concluded that implementation of the remaining development allocation on campus, including construction of remaining parking spaces, would result in:

- less than significant impacts to freeway mainline segments and Los Angeles Congestion Management Program (CMP) freeway facilities;
- significant and unavoidable impacts to intersection levels of service (eight intersections) (project and cumulative); and
- significant and unavoidable impacts along roadway segments and at intersections from construction-related vehicle trips (project and cumulative).

Construction and operation of the proposed Geffen Academy would result in additional traffic generation from the project site. Potential project-specific short-term construction-related and long-term operational traffic-related impacts, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit will be addressed in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐

Discussion

The analysis of Impact 4.13-3 in Section 4.13, Transportation/Traffic, of the LRDP Final EIR, which addressed CMPs, concluded that implementation of the remaining development allocation on campus, including construction of remaining parking spaces, would result in significant and unavoidable impacts to CMP-designated roadways (project and cumulative). Potential project-specific impacts to Los Angeles County CMP facilities will be addressed in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☒

Discussion

Based on the Initial Study prepared for the March 2009 LRDP Amendment Draft EIR, implementation of the remaining development allocation on campus would have no impact related to air traffic patterns. The UCLA campus is currently developed, and future development, including the proposed Project, would not increase air traffic levels or result in a change in the location of air traffic patterns resulting in substantial safety risks. Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be no impact from implementation of the proposed Project related to air traffic patterns. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐

Discussion

The analysis of Impacts 4.13-4 through 4.13-6 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addressed transportation hazards, concluded that construction activities and operations associated with implementation of the remaining development allocation on campus would result in less than significant impacts related to pedestrian and vehicular hazards during construction and to vehicular hazards during Project operation.

The proposed Project is internal to the campus and involves the construction of a new driveway on Kinross Avenue (for exiting vehicles). Construction activities associated with the proposed Project could result in temporary closure of traffic lanes or roadway segments along the proposed construction traffic route to permit the delivery of construction materials or provide adequate site access. Additionally, vehicular access to the proposed Project would be provided from Midvale Alley adjacent to and east of the Kinross Building. Project-specific analysis of potential hazards to pedestrians and vehicles during construction and operations will be addressed in the Draft EIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
e) Would the project result in inadequate emergency access?	☐	☒

Discussion

The analysis of Impacts 4.13-7 and 4.13-8 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addressed emergency access, concluded that construction and operational activities associated with implementation of the remaining development allocation on campus would result in less than significant impacts to emergency access with implementation of PP 4.13-8.

<u>Emergency Access during Construction</u>

Local access to the project site is provided from Veteran Avenue and Gayley Avenue, with Kinross Avenue providing the primary access from Parking Lot 36. Midvale Alley adjacent to and east of Kinross Building also provides access to the project site. Construction activities associated with the proposed Project would result in the installation of a new driveway (exit only) along Kinross Avenue (refer to Figure 3). Construction activities may result in the temporary closure of on-campus traffic lanes or roadway segments and Midvale Alley adjacent to the Kinross Building to permit the delivery of construction materials; to transport demolition materials off site; or to accommodate construction activities. The reduction of roadway capacity, the narrowing of traffic lanes, and the occasional interruption of traffic flow could impair emergency access.

Consistent with PP 4.13-5, the interruption of traffic flow on Kinross Avenue would not impair emergency access because travel in both directions would be maintained. Additionally, construction activities would be planned so that emergency access lanes, including all existing fire lanes in the project area, are fully accessible at all times, and emergency access to adjacent uses, including Parking Lot 36, Parking Structure 32, the Kinross South Building, and the Gayley Center, would be maintained during construction. Additionally, implementation of PP 4.13-8 as part of the proposed Project would require consultation with emergency service providers in the event of lane or street closures. Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be less than significant impacts related to emergency access during construction of the proposed Project. No further evaluation of this issue is required in the Draft SEIR.

<u>Emergency Access during Operation</u>

With implementation of the proposed Project, existing emergency access points would be maintained to serve the proposed Project and surrounding areas. Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be less than significant impacts related to emergency access during operation of the proposed Project.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☒	☐

Discussion

The analysis of Impact 4.13-12 in Section 4.13, Transportation/Traffic, of the March 2009 LRDP Amendment Final EIR, which addresses alternative transportation policies, concludes that, with implementation of PP 4.13-1(c) and PP 4.13-1(d), implementation of the remaining development allocation on campus would result in less than significant impacts related to a conflict with adopted policies, plans, or programs supporting alternative transportation. PP 4.13-1(d) addresses the continued implementation of the transportation demand management (TDM) program, which encourages the use of alternative modes of transportation, including walking, bicycles, and campus shuttles.

As discussed previously, the proposed Project would result in the addition of up to 620 students and 109 faculty and staff on the UCLA campus, which would create an additional demand for alternative transportation facilities. The proposed Project's relationship to adopted policies, plans, or programs that support alternative transportation will be addressed in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to changes in air traffic patterns or emergency access. Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to these issues. No further evaluation of these issues is required in the Draft SEIR.

Further evaluation of the proposed Project's potential traffic impacts to the circulation system and CMP facilities during construction and operation (Thresholds 16[a] and 16[b]); potential design hazards (Threshold 16[d]); and the proposed Project's potential to conflict with non-vehicular modes of transportation (Threshold 16[f]) will be evaluated in the Draft SEIR.

17. Utilities and Service Systems

Utilities and service systems (i.e., water supply, solid waste, wastewater, and energy) are addressed in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR. Relevant elements of the proposed Project related to Utilities and Service Systems include the renovation and reuse of the Kinross Building for the proposed Geffen Academy, which would increase the demand for water and energy and the generation of solid waste and wastewater within the project area.

The following campus PPs were adopted as part of the March 2009 LRDP Amendment Final EIR, are relevant to the analysis presented in this section, and are incorporated as part of the proposed Project and assumed in the analysis presented in this section. Other applicable Final EIR PPs and MMs related to utilities and service systems will be presented in the Draft SEIR.

PP 4.14-3 *The campus shall continue to implement a solid waste reduction and recycling program designed to limit the total quantity of campus solid waste that is disposed of in landfills during the LRDP horizon.*

PP 4.14-9 *The campus shall continue to implement energy conservation measures (such as energy-efficient lighting and microprocessor-controlled HVAC equipment) to reduce the demand for electricity and natural gas. The energy conservation measures may be subject to modification as new technologies are developed or if current technologies become obsolete through replacement.*

PP 4.15-1 *The campus shall continue to implement provisions of the UC Policy on Sustainability Practices including, but not limited to: Green Building Design; Clean Energy Standards; Climate Protection Practices; Sustainable Transportation Practices; Sustainable Operations; Recycling and Waste Management; Environmentally Preferable Purchasing Practices; and provisions of the applicable UCLA Climate Action Plan.*

<u>Project Impact Analysis</u>

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒

Implementation of the March 2009 Amendment to the 2002 LRDP was determined to have no impact related to wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) through the Initial Study process.

Wastewater generated on campus is treated at the City of Los Angeles' Hyperion Treatment Plant (HTP) located in Playa del Rey directly west of LAX. The quality of effluent that the HTP can discharge is established by the Los Angeles RWQCB through an NPDES permit that specifies WDRs. Operation of the HTP is subject to regulations set forth by the California Department of Health Services (DHS) and the SWRCB. In 2006, the SWRCB adopted the Statewide General WDRs for publicly owned sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California (City of Los Angeles DPW 2015), which includes the City's sanitary sewer system and the HTP. The WDRs were developed to ensure that adequate levels of treatment would be provided for the wastewater flows emanating from all land uses within its service area, including the project sites. In addition, the City has completed a *Sewer System Management Plan* (SSMP) for the HTP, dated 2009, in compliance with the State's WDRs.

The proposed Project would involve renovation and reuse of the Kinross Building as a grade 6 through 12 college preparatory school. Similar to existing uses on campus, the proposed Geffen Academy would include typical academic-related uses (e.g., classrooms and laboratories, food service, recreation areas, and offices). The proposed Geffen Academy would not generate wastewater-containing constituents capable of violating wastewater treatment requirements. Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be no impact from implementation of the proposed Project related to Los Angeles RWQCB wastewater treatment requirements. Construction and operation of the proposed Project would not result in a violation of the Statewide General WDRs. No further evaluation of this issue is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐
e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐

Discussion

The analysis of Impacts 4.14-5 and 4.14-6 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded there would be a less than significant impact related to the need to construct new or expanded wastewater conveyance or treatment facilities and the capacity of the wastewater treatment provider, with implementation of PPs 4.14-2(a) through 4.14-2(d), 4.14-2(f) and 4.14-2(g), and 4.14-5. The LRDP Final EIR included preparation of a Sanitary Sewer Study (sewer study) to analyze projected wastewater generation and infrastructure needs with implementation of the remaining development allocation on campus, as contemplated by the 2002 LRDP, as amended in March 2009.

The Draft SEIR will address project-specific wastewater generation and water consumption and the ability of the existing wastewater, wastewater treatment, and water facilities to serve the proposed Project. The need for new or expanded facilities and the potential environmental impacts resulting from these facilities, if needed, will also be addressed in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐

Discussion

Because the proposed Project would involve modifications to an existing building on a developed site, storm water runoff volumes and flow rates would be similar to the existing condition. There would be no substantive net change to the amount or rate of runoff entering the storm drain system; however, the Draft SEIR will address the potential impacts to the existing storm drain system.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐

Discussion

The analysis of Impact 4.12-2 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded that, although implementation of the remaining development allocation on campus would generate an additional demand for water, with implementation of PPs 4.14-2(a) through 4.14-2(d), 4.14-2(f), and 4.12(g), it would not require water supplies in excess of existing entitlements and resources or result in the need for new or expanded entitlements.

As mentioned above, since the proposed Project involves renovation and reuse of the Kinross Building for the proposed Geffen Academy, the net change in water demand resulting from the proposed Project will be determined. This issue will be addressed in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒
g) Would the project comply with applicable federal, state, and local statutes and regulations related to solid waste?	☐	☒

Discussion

The analysis of Impacts 4.14-3 and 4.14-4 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PPs 4.14-3 and 4.15-1, there would be a less than significant impact related to increased solid waste generated (there is adequate space in landfills serving the campus) and to compliance with all applicable federal, State, and local statutes and regulations related to solid waste, respectively.

Section 4.14.2, Solid Waste, of the March 2009 LRDP Amendment Final EIR, includes a discussion of applicable regulations related to solid waste management, which is hereby incorporated by reference. Specifically, the LRDP Final EIR discusses the California Integrated Waste Management Act of 1989 (AB 939) and the UC Sustainability Policy (subsequently renamed the UC Policy on Sustainable Practices). Since certification of the LRDP Final EIR, revised and new regulations related to solid waste management have become effective.

AB 939 set diversion requirements of 25 percent in 1995 and 50 percent in 2000; jurisdictions select and implement the combination of waste prevention, reuse, recycling, and composting programs that best meet the needs of their community while achieving the diversion requirements. The Solid Waste Disposal Measurement Act approved in 2008 (SB 1016) makes the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. On October 6, 2011, Governor Brown signed AB 341, establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020 and requiring the California Department of Resources Recycling and Recovery (CalRecycle) to provide a report to the legislature that recommends strategies to achieve the policy goal by January 1, 2014.

The UC Policy on Sustainable Practices has been revised several times, most recently in June 2015, and establishes goals in nine areas of sustainable practices, including waste reduction and recycling. Continued implementation of the provisions of the UC Policy on Sustainable Practices is required by PP 4.15-1. The UC's current goal for diverting municipal solid waste from landfills is 75 percent, with an ultimate goal of zero waste by 2020.

UCLA contracts with a private waste disposal company (Athens Services) to collect, recycle, and dispose of campus-generated solid waste. The private solid waste hauler is responsible for all UCLA facilities and residence halls, including the project site. The hauler transports and deposits waste at the American Waste Transfer Station in Gardena. Following waste separation, sorting, and recycling activities, the recovery facility then ships remaining waste to Sunshine Canyon and/or Chiquita Canyon landfills.

Construction activities associated with the proposed Project would involve the generation of a limited amount of green waste (e.g., trees and shrubs) and demolition and other debris related to interior and exterior building modifications and exterior site improvements (including asphalt and concrete). It is estimated that proposed construction activities would generate approximately 200 tons of debris. When taking into consideration the required 75 percent waste diversion, the amount of construction wasted generated by the proposed Project would be reduced to approximately 50 tons. The combined daily permitted capacity of the Sunshine and Chiquita Canyon Landfills (the landfills that currently receive municipal solid waste generated at UCLA) is 18,100 tons per day (tons/day) (LACDPW 2015). Therefore, if all of the proposed Project's construction waste stream (approximately 50 tons) were to be disposed of in 1 day, this would be approximately 0.003 percent of the permitted remaining daily intake at the local landfills that serve the campus. In reality, the total construction waste stream would be disposed of at these facilities over several days, rather than in one day. Therefore, construction of the proposed Project, which incorporates PP 4.14-3, would result in a less than significant impact to landfill space.

Implementation of the remaining development allocation contemplated by the March 2009 Amendment to the 2002 LRDP was estimated to generate an additional 1,586 tons per year of solid waste (based on a generation factor of 1.57861 pounds per year/gsf[3]), for a projected total solid waste stream by the campus of 20,908 tons per year. This is an average generation factor applied for the entire campus, regardless of use. Based on this solid waste generation factor and because the proposed Project does not involve any additional square footage at the Kinross Building, the proposed Project would not increase the total amount of solid waste generated at the project site (estimated to be approximately 118,396 pounds per year, or 59.5 tons). When taking into consideration the required 75 percent waste diversion, the amount of solid waste generated under existing and future conditions would be approximately 14.90 tons per year (0.04 tons/day). There would no increase in the amount of solid waste disposed of at the receiving landfills.

It should be noted that UCLA surpasses the established 75 percent diversion goal identified in the UC Policy on Sustainability. UCLA's diversion of its solid waste stream also exceeds the State requirement (under AB 939) for local governments to divert 50 percent of the solid waste generated. This is accomplished through recycling, use as green waste, and conversion from waste to energy. Therefore, the actual solid waste generation in the future would likely be less than projected based on the previous solid waste stream from the campus.

Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be a less than significant impact from construction and operation of the proposed Project related to solid waste disposal and compliance with solid waste regulations. No further evaluation of these issues is required in the Draft SEIR.

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
h) Would the project create other utility and service system impacts?	☐	☒

Discussion

The analysis of Impacts 4.14-7 through 4.14-9 in Section 4.14, Utilities and Service Systems, of the March 2009 LRDP Amendment Final EIR concluded that, with implementation of PP 4.14-9, there would be a less than significant impact related to the need to construct new or expanded energy (electricity and natural gas) production or transmission facilities. As identified in Section 4.14.4 of the LRDP Final EIR, campus energy supply sources include electricity generated by the on-campus Cogeneration Plant; electricity purchased from the LADWP; natural gas purchased from The Gas Company; and landfill gas purchased from SCS Renewable Energy-Mountaingate, LLC.

Section 4.14.4, Energy, of the March 2009 LRDP Amendment Final EIR includes a discussion of applicable regulations related to energy (electricity and natural gas) demand, which is hereby incorporated by reference. Specifically, the LRDP Final EIR discusses the Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6) and the UC Policy on

[3] This solid waste generation factor is based on the amount of solid waste generated on campus in 2007 with a waste diversion of 42 percent.

Sustainable Practices in effect at that time. Since certification of the LRDP Final EIR, revised and new regulations related to energy have become effective.

The energy efficiency standards outlined in Title 24 of the CCR were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The current applicable standards are the 2013 Standards, effective July 1, 2014, and apply to alterations to existing buildings. The 2016 Code will be published on or before July 1, 2016, and will go into effect on January 1, 2017 (CBSC 2016). The requirements of the energy efficiency standards result in the reduction of natural gas and electricity consumption.

The UC Policy on Sustainable Practices establishes policies related to green building design, including for building renovations and clean energy. Continued implementation of the provisions of the UC Policy on Sustainable Practices is required by PP 4.15-1.

Implementation of the remaining development allocation contemplated by the March 2009 Amendment to the 2002 LRDP was estimated to increase the campus' annual electrical demand by approximately 28.4 million kilowatt-hours per year (kWh/yr), resulting in a total annual demand of approximately 374 million kWh/yr. The campus' annual natural gas demand was estimated to increase by 15,987 million British thermal units per year (MMBTU/yr), resulting in a total annual demand of approximately 150,192 MMBTU/yr. Because the Kinross Building was existing at the time the LRDP Final EIR was prepared, the electric and natural consumption from building operations was taken into consideration in the calculation of the overall campus energy consumption.

The LRDP Final EIR concluded that existing campus and LADWP electrical facilities and natural gas facilities would be sufficient to supply the projected increase in demand, and new infrastructure beyond project-specific distribution lines that would be addressed in site-specific environmental documentation would not be necessary. In addition, it was anticipated that ongoing campus energy conservation measures and the increased campus capacity to store chilled water would offset some of the increased demand, as discussed in detail in the LRDP Final EIR.

The LRDP Final EIR established an electric demand factor of 14.14778 kWh/gsf/yr and a natural gas demand factor of 0.00797 MMBTU/yr/gsf for the campus. These are average generation factors applied for the entire campus, regardless of use. Based on these factors and because the proposed Project does not involve any additional square footage at the Kinross Building, the proposed Project would not increase the electric demand at the project site (estimated to be approximately 1.06 million kWh/yr) or the natural gas demand at the project site (estimated to be 597.75 MMBTU/yr). The Kinross Building has its own electrical meter and for the 2015 calendar year, the facility used 149,474 kWh/hr, which is 15 percent of the projected consumption using LRDP metrics for electricity. It is anticipated that the propose Geffen Academy would have a comparable electrical consumption, well below the projected consumption identified in the LDRP Final EIR.

UCLA would comply with current applicable energy efficiency standards established by the State and the UC and would incorporate energy conservation measures as required by PP 4.14-9. Therefore, the application of the campus-wide electric demand factor likely overstates the current electric and natural gas demand from the Kinross Building; the actual consumption would likely be less.

Electricity and natural gas would be supplied to the proposed Project via existing lines located on the west and south sides of the existing building, and there would be no need for new or expanded electric infrastructure to serve the proposed Project.

Therefore, as previously analyzed and concluded in the LRDP Final EIR, there would be a less than significant impact related to electric and natural gas facilities. No further evaluation of this issue is required in the Draft SEIR.

Conclusion

With respect to Section 15162 of the State CEQA Guidelines, no substantial changes are proposed with the Project, or the circumstances under which the Project is being implemented that will require major revisions to the LRDP Final EIR due to new or substantially more severe significant effects related to wastewater treatment requirements, solid waste, and other utilities (electric and natural gas). Additionally, no new information of substantial importance shows the proposed Project will have one or more significant effects not discussed in the LRDP Final EIR, or that significant effects previously examined would be more severe for these issues. For these reasons, there are no major revisions required to the analysis provided in the LRDP Final EIR related to these issues. No further evaluation of these issues is required in the Draft SEIR.

Further evaluation of the proposed Project's potential impacts related to water and wastewater treatment facilities (Thresholds 17[b] and 17[e]), storm drain facilities (Threshold 17[c]), and water supply (Threshold 17[d]) will be evaluated in the Draft SEIR.

18. Mandatory Findings of Significance

<u>Project Impact Analysis</u>

Issue(s)	**Additional Project-level Impact Analysis Required**	**Project Impact Adequately Addressed in the LRDP EIR**
MANDATORY FINDINGS OF SIGNIFICANCE — The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where prior to commencement of the environmental analysis a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per Section 15065 of the State CEQA Guidelines):		
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐

Discussion

As discussed in Section VI.4, Biological Resources, the proposed Project would have no potential to impact special status plant and wildlife species or sensitive habitats (as the project site is not within Stone Canyon Creek) and wildlife corridors (as there are none on campus). The proposed Project incorporates MM 4.3-1(a) and MM 4.3-1(b) and, as a result, would have a less than significant impact on nesting birds. The proposed Project also incorporates PPs 4.3-1(a) through 4.3-1(e), MM 4.3-1(c), and MM 4.3-4 to ensure a less than significant impact related to removal of trees. Therefore, the potential for the proposed Project to degrade the quality of the environment related to biological resources would result in a less than significant impact.

As discussed under Section VI.5, Cultural Resources, the proposed Project has no potential to disturb paleontological or archaeological resources. Additionally, there are no historic resources identified within or surrounding the project site. Thus, there would be no impact related to the potential to eliminate important examples of the major periods of California history or prehistory.

As described in the responses above, the proposed Project has a potential to degrade the quality of the environment due to construction-related and operational air quality, noise, and traffic impacts. These impacts will be addressed in the Draft SEIR.

Threshold(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future project)?	☒	☐

Discussion

The Draft SEIR will address the potential for new or more significant cumulative impacts than addressed and disclosed in the March 2009 LRDP Amendment Final EIR with continued implementation of applicable PPs and MMs (identified for each environmental topic analyzed above in Sections VI.1 through VI.17 of this Initial Study).

Threshold(s)	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in the LRDP EIR
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐

Discussion

The Draft EIR will evaluate the potential for the proposed Project to result in new or more significant impacts than addressed and disclosed in the March 2009 LRDP Amendment Final EIR with continued implementation of applicable PPs and MMs (identified for each environmental topic analyzed above in Sections VI.1 through VI.17 of this Initial Study) from the MMRP adopted as part of the March 2009 LRDP Amendment Final EIR.

Fish and Wildlife Determination

Based on consultation with the California Dept. of Fish and Wildlife, there is no evidence that the project has a potential for a change that would adversely affect wildlife resources or the habitat upon which the wildlife depends.

___ Yes (No Effect)

_x_ No (Pay fee)

VI. SUPPORTING INFORMATION SOURCES

California Air Resources Board (CARB). 2014a (November 7, last reviewed). Board Meetings. Sacramento, CA: CARB. http://www.arb.ca.gov/board/meetings.htm#future.

———. 2014b (January 10 last reviewed). Air Quality Standards and Area Designations. Sacramento, CA: CARB. http://www.arb.ca.gov/desig/desig.htm.

California Building Standards Commission (CBSC). 2016 (accessed January 17). California Building Standards Commission web site. http://www.bsc.ca.gov/.

California Department of Conservation, Division of Land Resource Protection (DOC). 2011 (September). *Los Angeles Important Farmland Map 2010*. Sacramento, CA: DOC. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/los10.pdf.

California Environmental Protection Agency (CalEPA). 2015 (January 12, last accessed). Cortese List Data Resources. Sacramento, CA: CalEPA. http://www.calepa.ca.gov/SiteCleanup/CorteseList/.

Greenstein. 2016a (January 21). Personal communication. Email conversation between Nancy Greenstein (Director, UCLA Police Community Services Bureau), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

———. 2016b (February 1). Personal communication. Email conversation between Nancy Greenstein (Director, UCLA Police Community Services Bureau), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

Environmental Data Resourcs, Inc. (EDR). 2016 (January). *The EDR Radius Map™ Report with GeoCheck®; UCLA Kinross Building.* Shelton, CT: EDR.

Johnson. 2016 (January 10). Personal communication. Telephone conversation between Dana Johnson (UCLA Fire Marshal), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

Katz. 2016 (February 1). Personal communication. Telephone conversation between Nurit Katz (UCLA Chief Sustainability Officer), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

Los Angeles, City of (City of Los Angeles). 2015a (approved by City Planning Commission May 28). Mobility Plan 2015, An Element of the General Plan. Los Angeles, CA: City of. http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf.

———. 2015b (January 12, last accessed). *Zoning Information and Map Access System (ZIMAS); Assessor Parcel Number 4363-026-905*. Los Angeles, CA: the City. http://zimas.lacity.org/.

———. 2014b (September 30, last update). *City of Los Angeles Municipal Code.* Cincinnati, OH: American Legal Publishing Corporation for the City.

———. 2010a (December 8). Generalized Land Use: Westwood. Los Angeles, CA: the City. http://cityplanning.lacity.org/complan/westla/pdf/genlumap.wwd.pdf.

———. 2010b (December 8). General Plan Land Use Map: Westwood Community Plan. Los Angeles, CA: the City. http://cityplanning.lacity.org/complan/westla/PDF/wwdplanmap.pdf.

———. 2006a. *Los Angeles CEQA Thresholds Guide*. Los Angeles, CA: the City.

———. 2006b (March, as approved). Ordinance No. 177404 (Native Tree Protection Ordinance). Los Angeles, CA: the City. http://cityplanning.lacity.org/Code_Studies/Other/ProtectedTreeOrd.pdf.

Los Angeles County Department of Public Works (LACDPW). 2015 (December). *2014 Annual Report: County of Los Angeles Countywide Integrated Waste Management Plan.* Los Angeles, CA: LADPW. https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=3473&hp=yes&type=PDF.

Los Angeles, City of, Department of Public Works (DPW). 2015 (February). Sewer System Management Plan: *Hyperion Sanitary Sewer System*. Los Angeles, CA: DPW. http://san.lacity.org/lasewers/ssmp/pdfs/SSMP_Hyperion.pdf

Marks. 2016 (February 1). Personal communication. Telephone conversation between Gillian Marks (Environmental Divisions Manager, EH&S), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

McKnight. 2016 (January 11). Personal communication. Telephone conversation between Antione McKnight (LAFD Battalion 9 Chief), and Tracy Dudman (Senior Planner, UCLA Capital Programs).

Parga. 2016 (February 1). Personal communication. Email conversation between Sarah Parga (Manager – Alarms, CSO Programs & Payroll, UCLA Police Department), and Tracy Dudman (UCLA Capital Programs, Senior Planner).

Southern California Association of Governments (SCAG). 2016a (January, last accessed). About SCAG. Los Angeles, CA: SCAG. http://www.scag.ca.gov/about/Pages/Home.aspx.

———. 2015b (January, last accessed). Intergovernmental Review. Los Angeles, CA: SCAG. https://scag.ca.gov/programs/Pages/IGR.aspx.

———. 2012 (April). *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy.* Los Angeles, CA: SCAG.

South Coast Air Quality Management District (SCAQMD). 2014. Air Quality Management Plan. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt.

University of California, Los Angeles. 2014a (January 8, access date). UCLA Sustainability: Climate & Energy. Los Angeles, CA: UCLA. http://www.sustain.ucla.edu/our-initiatives/climate-and-energy/.

———. 2009a (March). *University of California, Los Angeles 2008 Northwest Housing Infill Project and 2002 Long Range Development Plan Amendment Final Environmental Impact Report. Volume I* (SCH No. 2008051121; prepared by BonTerra Consulting). Los Angeles, CA: UCLA.

———. 2009b (March).*University of California, Los Angeles 2002 Long Range Development Plan.* Los Angeles, CA: UCLA.

———. 2009c (July). *University of California, Los Angeles, Physical Design Framework.* Los Angeles, CA: UCLA.

———. 2008 (December). *Climate Action Plan.* Los Angeles, CA: UCLA.

———. 1999 (December). *Final Tiered Initial Study, Southwest Campus Staging Building – Dickson Art Center and Dance Building Seismic Renovation Projects*. Los Angeles, CA: UCLA.

UCLA Library. 2015. Library Cards. Los Angeles, CA: UCLA. http://www.library.ucla.edu/use/access-privileges/library-cards

UCLA Office of Environmental Health & Safety (UCLA EH&S). 2015 (October). *Campus Evacuation Areas for Major Emergencies or Disasters*. http://maps.ucla.edu/downloads/pdf/Emergencymap_07_08_15.pdf.

University of California Office of the President (UCOP). 2015. University of California – Policy: Sustainable Practices. Oakland, CA: UCOP.

University of California Regents (UC Regents). 2009 (March 17). Action Item: Certification of Environmental Impact Report, Amendment of Long Range Development Plan, and Approval of Design, Northwest Campus Student Housing Infill Project, Los Angeles Campus. Oakland, CA: UC Regents. http://www.universityofcalifornia.edu/regents/regmeet/mar09/gb4.pdf.

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REPORT PREPARERS

UNIVERSITY OF CALIFORNIA (LEAD AGENCY)

University of California, Los Angeles – Capital Programs

Kathy Fitzgerald .... Director, Campus Environmental Planning
Tracy Dudman .... Senior Planner, Campus Environmental Planning

Office of the President

Kelly Drumm .... University General Counsel
Brad Werdick, AICP .... Senior Planner

PSOMAS (INITIAL STUDY PREPARATION)

Christina Andersen .... Principal-In-Charge/Project Manager
Jillian Neary .... Assistant Project Manager
James Kurtz .... Director, Air Quality and Acoustical Programs
Jon Zimmer .... GIS Specialist
Leah Mori .... Technical Editor
Sheryl Kristal .... Word Processor

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APPENDIX A

TREE DATA

Project Name: Geffen Academy at UCLA   Date: 12.22.15   Page 1 of 1

Tree Tag #	Tree Species	# Main Trunks	D.B.H. (in)	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	CDFW Tree?	LANTPO	Mature Tree	To be removed	Notes
			1st Trunk									
1	*Pinus canariensis*	1	25.4	60	35	4	4	N		x	x	
2	*Quercus agrifolia*	1	5.5	12	8	4	3	N	x		x	
3	*Quercus agrifolia*	1	11.7	25	20	4	4	N	x		x	
4	*Quercus agrifolia*	1	10.6	30	20	4	4	N	x		x	
5	*Quercus agrifolia*	1	8.3	20	20	4	3	N	x		x	leaning NW
6	*Quercus agrifolia*	1	6.6	20	18	3	3	N	x			dieback/abnormal shoot growth
7	*Quercus agrifolia*	1	7.7	22	20	2	3	N	x			leaning W, abnormal shoot growth, adventitious shoots on trunk, scarring
8	*Quercus agrifolia*	1	10.5	20	20	3	3	N	x			adventitious shoots, abnormal shoot growth, weeping wound @ 3 ft up from root collar, included bark
9	*Magnolia grandiflora*	1	32.3	60	40	4	3	N		x	x	broken branch 15 ft up from root collar

Aesthetics/Health Rating: 1=Very Poor, 2=Poor, 3=Fair, 4=Good, and 5=Excellent

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

February 10, 2016

To: Reviewing Agencies

Re: Geffen Academy at UCLA
SCH# 2016021050

Attached for your review and comment is the Notice of Preparation (NOP) for the Geffen Academy at UCLA draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, <u>within 30 days of receipt of the NOP from the Lead Agency</u>. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Tracy Dudman
University of California, Los Angeles
1060 Veteran Avenue, CPB
Los Angeles, CA 90095

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH#	**2016021050**
Project Title	Geffen Academy at UCLA
Lead Agency	University of California, Los Angeles

Type **NOP** Notice of Preparation

Description The proposed Project involves the renovation of the existing Kinross Building and adjacent areas for the Geffen Academy at UCLA, a 6th through 12th grade college preparatory school. There would be up to 620 new students and 109 faculty/staff. A new driveway would be constructed at Kinross Avenue to allow vehicles to exit the project site. The Academy is planned to open for grades 6 and 9 in the 2017-2018 school year, with full enrollment in all grades expected by the 2020-2021 school year.

Lead Agency Contact

Name Tracy Dudman
Agency University of California, Los Angeles
Phone 310-206-9255 *Fax*
email
Address 1060 Veteran Avenue, CPB
City Los Angeles *State* CA *Zip* 90095

Project Location

County Los Angeles
City
Region
Cross Streets Kinross Avenue & Gayley Avenue
Lat / Long 34° 03' 33.50" N / 118° 26' 48.55" W
Parcel No.
Township *Range* *Section* *Base*

Proximity to:

Highways I-405
Airports
Railways
Waterways
Schools Various
Land Use Kinross Building at UCLA Campus (Designated as Public Facility in the City of Los Angeles General Plan and Zoning)

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Landuse; Other Issues

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Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Fish and Wildlife, Region 5; Department of General Services; Native American Heritage Commission; California Highway Patrol; Caltrans, District 7; Air Resources Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 4

Date Received 02/10/2016 *Start of Review* 02/10/2016 *End of Review* 03/10/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

Appendix C

2016021050

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # NA

Project Title: Geffen Academy at UCLA

Lead Agency: University of California, Los Angeles campus — Contact Person: Tracy Dudman
Mailing Address: UCLA Capital Programs, 1060 Veteran Avenue — Phone: (310) 206-9255
City: Los Angeles — Zip: 90095 — County: Los Angeles

Project Location: County: Los Angeles — City/Nearest Community: Westwood
Cross Streets: Kinross Avenue & Gayley Avenue — Zip Code: 90095
Longitude/Latitude (degrees, minutes and seconds): 34°03′33.50″ N/118°26′48.55″ W — Total Acres: approx. 2
Assessor's Parcel No.: — Section: — Twp: — Range: — Base:
Within 2 Miles: State Hwy. #: Interstate 405 — Waterways:
Airports: — Railways: — Schools: Marymount High Schools, Fairburn Elemtary School, St. Sebastian and other schools

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Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Governor's Office of Planning & Research
[illegible] 10 2016
STATE CLEARINGHOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other:

Development Type:

☐ Residential: Units ___ Acres ___
☐ Office: Sq.ft. ___ Acres ___ Employees ___
☐ Commercial: Sq.ft. ___ Acres ___ Employees ___
☐ Industrial: Sq.ft. ___ Acres ___ Employees ___
☒ Educational: 6th - 12th grade classes in existing 75,000 gsf building
☐ Recreational
☐ Water Facilities: Type ___ MGD ___
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type ___ MW ___
☐ Waste Treatment: Type ___ MGD ___
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetics/Visual ☐ Agricultural Land ☒ Air Quality ☒ Archaeological/Historical ☒ Biological Resources ☐ Coastal Zone ☒ Drainage/Absorption ☒ Economic/Jobs
☐ Fiscal ☒ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☒ Geologic/Seismic ☐ Minerals ☒ Noise ☒ Population/Housing Balance ☒ Public Services/Facilities
☒ Recreation/Parks ☒ Schools/Universities ☐ Septic Systems ☒ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☒ Solid Waste ☒ Toxic/Hazardous ☒ Traffic/Circulation
☒ Vegetation ☒ Water Quality ☒ Water Supply/Groundwater ☐ Wetland/Riparian ☐ Growth Inducement ☒ Land Use ☐ Cumulative Effects ☒ Other: GHG emissions

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Present Land Use/Zoning/General Plan Designation:

Kinross Building at University of California, Los Angeles Campus (Designated as Public Facility in the City of Los Angeles General Plan and Zoning)

Project Description: *(please use a separate page if necessary)*

The proposed Project involves the renovation of the existing Kinross Building and adjacent areas for the Geffen Academy at UCLA, a 6th through 12th grade college preparatory school. There would be up to 620 new students and 109 faculty/staff. A new driveway would be constructed at Kinross Avenue to allow vehicles to exit the project site. The Academy is planned to open for grades 6 and 9 in the 2017-2018 school year, with full enrollment in all grades expected by the 2020-2021 school year.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g., Notice of Preparation or previous draft document) please fill in.

NOP Distribution List

SM

County: LOS ANGELES

SCH# 2016021050

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Denise Peterson
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Lisa Johansen
- [ ] **Dept. of Conservation**
  Elizabeth Carpenter
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  James Herota
- [x] **Office of Historic Preservation**
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- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
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  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [ ] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Curt Babcock
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Craig Weightman
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [x] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  Becky Ota
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [x] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Anna Garbeff
  Environmental Services Section
- [ ] **Delta Stewardship Council**
  Kevan Samsam
- [ ] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Michael Machado
- [ ] **OES (Office of Emergency Services)**
  Marcia Scully
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [ ] **Public Utilities Commission**
  Supervisor
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [ ] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans – Planning HQ LD-IGR**
  Terri Pencovic
- [x] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Eric Federicks – South
  Susan Zanchi - North
- [ ] **Caltrans, District 4**
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  Larry Newland
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  Michael Navarro
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  Dianna Watson
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  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [x] All Other Projects
  Cathi Slaminski
  - [ ] Transportation Projects
    Nesamani Kalandiyur
  - [ ] Industrial/Energy Projects
    Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Karen Larsen – Asst Deputy
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [x] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [x] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** ____________

- [ ] ____________
  Conservancy

Last Updated 2/9/2016

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

Edmund G. Brown Jr., Governor

February 17, 2016

Tracy Dudman
University of California, Los Angeles
1060 Veteran Avenue, CPB
Los Angeles, CA 90095

sent via e-mail:
t.dudman@capnet.ucla.edu

RE: SCH# 2016021050, Geffen Academy at UCLA Project, City of Los Angeles, Los Angeles County, California

Dear Ms. Dudman:

The Native American Heritage Commission has received the DEIR Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
    - **a.** A brief description of the project.
    - **b.** The lead agency contact information.
    - **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
    - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
    - **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
    - **a.** Alternatives to the project.
    - **b.** Recommended mitigation measures.
    - **c.** Significant effects. (Pub. Resources Code § 21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
   a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
   b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
       i. Planning and construction to avoid the resources and protect the cultural and natural context.
       ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
       i. Protecting the cultural character and integrity of the resource.
       ii. Protecting the traditional use of the resource.
       iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

    This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    - **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    - **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    - **a.** If part or all of the APE has been previously surveyed for cultural resources.
    - **b.** If any known cultural resources have been already been recorded on or adjacent to the APE.
    - **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
    - **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    - **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    - **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    - **a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    - **b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    - **a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    - **b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    - **c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5,

subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton
Associate Governmental Program Analyst

cc: State Clearinghouse

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

February 19, 2016

Tracy Dudman, Senior Planner
Campus and Environmental Planning
UCLA Capital Programs
1060 Veteran Avenue
Los Angeles, CA 90095-1365

Notice of Preparation of a CEQA Document for the
Geffen Academy at UCLA Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the CEQA document upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies.
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at Jwong1@aqmd.gov or call me at (909) 396-3176.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

LAC160211-04
Control Number

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN, JR., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, OFFICE OF REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-0219
FAX: (213) 897-1337

Serious drought
Help save water!

February 23, 2016

Ms. Tracy Dudman
University of California, Los Angeles
1060 Veteran Avenue, CPB
Los Angeles, Ca 90095

Re: Geffen Academy at UCLA
Vic: LA-405/ PM 55.277
SCH# 2016021050
IGR# 160235ME-NOP

Dear Ms. Dudman:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Geffen Academy at UCLA Project.

The proposed Project involves the renovation of the Kinross Building and adjacent areas for the Geffen Academy at UCLA campus. The Geffen Academy is proposed to open for the 2017-2018 school year with approximately 160 students in grades 6 and 9. The enrollment is projected to increase to up to a maximum of 620 students in grades 6 through 12 by the 2020-2021 school year.

The nearest State facilities to the proposed project is Interstate-405. Caltrans does not expect project approval to result into a direct adverse impact to the existing State transportation facilities

However, Storm water run-off is a sensitive issue for Los Angeles Counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State Highway facilities without a storm water management plan.

As a reminder, any transporting of heavy construction equipment and/or materials which require the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute periods.

If you have any questions regarding these comments, please contact project coordinator Ms. Miya Edmonson, at (213) 897-6536 and refer to IGR/CEQA No 160235ME.

Sincerely,

Dianna Watson

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

Appendix B

Air Quality/GHG Emissions Model Output and Health Risk Assessment

Geffen Academy UCLA

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	75.00	1000sqft	1.92	75,000.00	729

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2017
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	982.4	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2014 CO2 IF

Land Use - Data needs and total final population

Construction Phase - Based off data needs and engineering judgement

Off-road Equipment -

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - 2 backhoes

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - cement mixer, 1 backhoe

Trips and VMT - PDF and assumptions

Demolition -

Grading - 50 cy exported

Architectural Coating - Defaults

Vehicle Trips - ADT= 1040

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating - VOC 100- no exterior paint

Energy Use - Existing use/future use difference negligible

Water And Wastewater - Existing use and future use difference negligible

Construction Off-road Equipment Mitigation - Tier 3 for all construction equipment

Energy Mitigation - 20 percent higher than Title 24 2013 codes

Waste Mitigation -

Operational Off-Road Equipment - Assumptions

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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tblProjectCharacteristics	CO2IntensityFactor	1227.89	982.4
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	12.00	16.00
tblTripsAndVMT	HaulingTripNumber	6.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	6.00	2.00
tblVehicleTrips	ST_TR	4.37	4.80
tblVehicleTrips	SU_TR	1.79	1.97
tblVehicleTrips	WD_TR	12.89	13.87
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	2,490,348.00	0.00
tblWater	OutdoorWaterUseRate	6,403,752.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.7780	7.2031	5.3743	7.7900e-003	0.1517	0.5232	0.6750	0.0271	0.4829	0.5100			786.1077	0.2037	0.0000	790.3846
2017	8.4924	11.9853	9.5302	0.0132	0.1010	0.8783	0.9794	0.0194	0.8095	0.8290			1,321.4288	0.3750	0.0000	1,329.3032
Total	**9.2704**	**19.1884**	**14.9045**	**0.0210**	**0.2528**	**1.4016**	**1.6543**	**0.0465**	**1.2924**	**1.3389**			**2,107.5364**	**0.5786**	**0.0000**	**2,119.6878**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.1748	3.6923	4.9821	7.7900e-003	0.0875	0.2463	0.3339	0.0174	0.2461	0.2634			786.1077	0.2037	0.0000	790.3846
2017	7.9347	6.6071	9.0851	0.0132	0.0730	0.4573	0.5303	0.0161	0.4572	0.4732			1,321.4288	0.3750	0.0000	1,329.3032
Total	**8.1094**	**10.2993**	**14.0672**	**0.0210**	**0.1605**	**0.7036**	**0.8641**	**0.0334**	**0.7032**	**0.7366**			**2,107.5364**	**0.5786**	**0.0000**	**2,119.6878**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**12.52**	**46.33**	**5.62**	**0.00**	**36.51**	**49.80**	**47.77**	**28.14**	**45.59**	**44.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	4.2848	14.2779	53.0040	0.1367	9.4343	0.2053	9.6396	2.5228	0.1890	2.7117			11,695.6505	0.4781		11,705.6910
Total	**6.1753**	**14.2779**	**53.0118**	**0.1367**	**9.4343**	**0.2053**	**9.6397**	**2.5228**	**0.1890**	**2.7117**			**11,695.6669**	**0.4782**	**0.0000**	**11,705.7084**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	4.2848	14.2779	53.0040	0.1367	9.4343	0.2053	9.6396	2.5228	0.1890	2.7117			11,695.6505	0.4781		11,705.6910
Total	**6.1753**	**14.2779**	**53.0118**	**0.1367**	**9.4343**	**0.2053**	**9.6397**	**2.5228**	**0.1890**	**2.7117**			**11,695.6669**	**0.4782**	**0.0000**	**11,705.7084**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Interior Demolition	Demolition	9/1/2016	9/30/2016	5	22	
2	Exterior Demolition	Demolition	2/1/2017	3/31/2017	5	43	
3	Grading	Grading	3/1/2017	4/28/2017	5	43	
4	Paving	Paving	5/1/2017	5/5/2017	5	5	
5	Architectural Coating	Architectural Coating	5/1/2017	8/1/2017	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Interior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Interior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Interior Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Exterior Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Exterior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Exterior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Exterior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	0	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42

Paving	Paving Equipment	0	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Interior Demolition	3	2.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Demolition	3	2.00	0.00	3.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	2.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Interior Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1167	0.0000	0.1167	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	0.7551	6.9796	5.0764	6.9800e-003		0.5200	0.5200		0.4799	0.4799			708.2949	0.2019		712.5351
Total	**0.7551**	**6.9796**	**5.0764**	**6.9800e-003**	**0.1167**	**0.5200**	**0.6367**	**0.0177**	**0.4799**	**0.4976**			**708.2949**	**0.2019**		**712.5351**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0136	0.2110	0.1677	5.4000e-004	0.0127	3.0300e-003	0.0157	3.4700e-003	2.7800e-003	6.2500e-003			54.6122	4.1000e-004		54.6208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	9.2700e-003	0.0124	0.1303	2.7000e-004	0.0224	2.1000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.2006	1.3400e-003		23.2287
Total	**0.0228**	**0.2235**	**0.2980**	**8.1000e-004**	**0.0350**	**3.2400e-003**	**0.0383**	**9.4000e-003**	**2.9700e-003**	**0.0124**			**77.8128**	**1.7500e-003**		**77.8495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0525	0.0000	0.0525	7.9500e-003	0.0000	7.9500e-003			0.0000			0.0000
Off-Road	0.1519	3.4688	4.6841	6.9800e-003		0.2431	0.2431		0.2431	0.2431			708.2949	0.2019		712.5351
Total	**0.1519**	**3.4688**	**4.6841**	**6.9800e-003**	**0.0525**	**0.2431**	**0.2956**	**7.9500e-003**	**0.2431**	**0.2510**			**708.2949**	**0.2019**		**712.5351**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0136	0.2110	0.1677	5.4000e-004	0.0127	3.0300e-003	0.0157	3.4700e-003	2.7800e-003	6.2500e-003			54.6122	4.1000e-004		54.6208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	9.2700e-003	0.0124	0.1303	2.7000e-004	0.0224	2.1000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.2006	1.3400e-003		23.2287
Total	**0.0228**	**0.2235**	**0.2980**	**8.1000e-004**	**0.0350**	**3.2400e-003**	**0.0383**	**9.4000e-003**	**2.9700e-003**	**0.0124**			**77.8128**	**1.7500e-003**		**77.8495**

3.3 Exterior Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0139	0.0000	0.0139	2.1100e-003	0.0000	2.1100e-003			0.0000			0.0000
Off-Road	0.7073	6.5555	5.0386	6.9700e-003		0.4762	0.4762		0.4395	0.4395			697.4702	0.2017		701.7055
Total	**0.7073**	**6.5555**	**5.0386**	**6.9700e-003**	**0.0139**	**0.4762**	**0.4901**	**2.1100e-003**	**0.4395**	**0.4417**			**697.4702**	**0.2017**		**701.7055**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2200e-003	0.0186	0.0155	5.0000e-005	1.2200e-003	2.7000e-004	1.4800e-003	3.3000e-004	2.4000e-004	5.8000e-004			5.1539	4.0000e-005		5.1547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**9.5300e-003**	**0.0298**	**0.1331**	**3.2000e-004**	**0.0236**	**4.7000e-004**	**0.0240**	**6.2600e-003**	**4.3000e-004**	**6.7000e-003**			**27.4846**	**1.2800e-003**		**27.5114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	9.5000e-004	0.0000	9.5000e-004			0.0000			0.0000
Off-Road	0.1519	3.4688	4.6841	6.9700e-003		0.2431	0.2431		0.2431	0.2431			697.4702	0.2017		701.7055
Total	**0.1519**	**3.4688**	**4.6841**	**6.9700e-003**	**6.2700e-003**	**0.2431**	**0.2493**	**9.5000e-004**	**0.2431**	**0.2440**			**697.4702**	**0.2017**		**701.7055**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2200e-003	0.0186	0.0155	5.0000e-005	1.2200e-003	2.7000e-004	1.4800e-003	3.3000e-004	2.4000e-004	5.8000e-004			5.1539	4.0000e-005		5.1547
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**9.5300e-003**	**0.0298**	**0.1331**	**3.2000e-004**	**0.0236**	**4.7000e-004**	**0.0240**	**6.2600e-003**	**4.3000e-004**	**6.7000e-003**			**27.4846**	**1.2800e-003**		**27.5114**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0371	0.0000	0.0371	4.0100e-003	0.0000	4.0100e-003			0.0000			0.0000
Off-Road	0.5544	5.3268	4.1892	5.4400e-003		0.4006	0.4006		0.3686	0.3686			556.9637	0.1707		560.5474
Total	**0.5544**	**5.3268**	**4.1892**	**5.4400e-003**	**0.0371**	**0.4006**	**0.4377**	**4.0100e-003**	**0.3686**	**0.3726**			**556.9637**	**0.1707**		**560.5474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.0800e-003	0.0620	0.0517	1.7000e-004	4.0500e-003	8.8000e-004	4.9300e-003	1.1100e-003	8.1000e-004	1.9200e-003			17.1796	1.3000e-004		17.1823
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**0.0124**	**0.0732**	**0.1693**	**4.4000e-004**	**0.0264**	**1.0800e-003**	**0.0275**	**7.0400e-003**	**1.0000e-003**	**8.0400e-003**			**39.5103**	**1.3700e-003**		**39.5390**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0167	0.0000	0.0167	1.8100e-003	0.0000	1.8100e-003			0.0000			0.0000
Off-Road	0.1329	3.0352	4.0986	5.4400e-003		0.2127	0.2127		0.2127	0.2127			556.9637	0.1707		560.5474
Total	**0.1329**	**3.0352**	**4.0986**	**5.4400e-003**	**0.0167**	**0.2127**	**0.2294**	**1.8100e-003**	**0.2127**	**0.2145**			**556.9637**	**0.1707**		**560.5474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.0800e-003	0.0620	0.0517	1.7000e-004	4.0500e-003	8.8000e-004	4.9300e-003	1.1100e-003	8.1000e-004	1.9200e-003			17.1796	1.3000e-004		17.1823
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**0.0124**	**0.0732**	**0.1693**	**4.4000e-004**	**0.0264**	**1.0800e-003**	**0.0275**	**7.0400e-003**	**1.0000e-003**	**8.0400e-003**			**39.5103**	**1.3700e-003**		**39.5390**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3609	3.3202	2.6251	3.6400e-003		0.2399	0.2399		0.2216	0.2216			356.1522	0.1015		358.2826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3609**	**3.3202**	**2.6251**	**3.6400e-003**		**0.2399**	**0.2399**		**0.2216**	**0.2216**			**356.1522**	**0.1015**		**358.2826**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**8.3100e-003**	**0.0112**	**0.1176**	**2.7000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**22.3307**	**1.2400e-003**		**22.3567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.6400e-003		0.1215	0.1215		0.1215	0.1215			356.1522	0.1015		358.2826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0760**	**1.7344**	**2.3421**	**3.6400e-003**		**0.1215**	**0.1215**		**0.1215**	**0.1215**			**356.1522**	**0.1015**		**358.2826**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**8.3100e-003**	**0.0112**	**0.1176**	**2.7000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**22.3307**	**1.2400e-003**		**22.3567**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.7827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733			281.4481	0.0297		282.0721
Total	**8.1150**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**			**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**8.3100e-003**	**0.0112**	**0.1176**	**2.7000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**22.3307**	**1.2400e-003**		**22.3567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.7827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951			281.4481	0.0297		282.0721
Total	**7.8421**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**			**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.3100e-003	0.0112	0.1176	2.7000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			22.3307	1.2400e-003		22.3567
Total	**8.3100e-003**	**0.0112**	**0.1176**	**2.7000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**22.3307**	**1.2400e-003**		**22.3567**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.2848	14.2779	53.0040	0.1367	9.4343	0.2053	9.6396	2.5228	0.1890	2.7117			11,695.650 5	0.4781		11,705.691 0
Unmitigated	4.2848	14.2779	53.0040	0.1367	9.4343	0.2053	9.6396	2.5228	0.1890	2.7117			11,695.650 5	0.4781		11,705.691 0

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	1,040.25	360.00	147.75	3,483,128	3,483,128
Total	1,040.25	360.00	147.75	3,483,128	3,483,128

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.532559	0.058242	0.178229	0.125155	0.038934	0.006273	0.016761	0.032323	0.002478	0.003154	0.003685	0.000544	0.001663

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Unmitigated	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.5000e-004	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Total	**1.8905**	**7.0000e-005**	**7.8000e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**			**0.0164**	**5.0000e-005**		**0.0174**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.5000e-004	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Total	**1.8905**	**7.0000e-005**	**7.8000e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**			**0.0164**	**5.0000e-005**		**0.0174**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Geffen Academy UCLA

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	75.00	1000sqft	1.92	75,000.00	729

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 33

Climate Zone 11 **Operational Year** 2017

Utility Company Los Angeles Department of Water & Power

CO2 Intensity (lb/MWhr) 982.4 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2014 CO2 IF

Land Use - Data needs and total final population

Construction Phase - Based off data needs and engineering judgement

Off-road Equipment -

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - 2 backhoes

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - cement mixer, 1 backhoe

Trips and VMT - PDF and assumptions

Demolition -

Grading - 50 cy exported

Architectural Coating - Defaults

Vehicle Trips - ADT= 1040

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating - VOC 100- no exterior paint

Energy Use - Existing use/future use difference negligible

Water And Wastewater - Existing use and future use difference negligible

Construction Off-road Equipment Mitigation - Tier 3 for all construction equipment

Energy Mitigation - 20 percent higher than Title 24 2013 codes

Waste Mitigation -

Operational Off-Road Equipment - Assumptions

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	37,500.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	67.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	8/8/2017	8/1/2017
tblConstructionPhase	PhaseEndDate	11/30/2016	3/31/2017
tblConstructionPhase	PhaseEndDate	5/31/2017	4/28/2017
tblConstructionPhase	PhaseStartDate	5/6/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	10/1/2016	2/1/2017
tblConstructionPhase	PhaseStartDate	4/1/2017	3/1/2017
tblConstructionPhase	PhaseStartDate	4/29/2017	5/1/2017
tblEnergyUse	LightingElect	2.98	0.00
tblEnergyUse	NT24E	1.59	0.00
tblEnergyUse	NT24NG	1.08	0.00
tblEnergyUse	T24E	2.13	0.00
tblEnergyUse	T24NG	9.81	0.00
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	MaterialExported	0.00	50.00
tblLandUse	LotAcreage	1.72	1.92
tblLandUse	Population	0.00	729.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	982.4
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	12.00	16.00
tblTripsAndVMT	HaulingTripNumber	6.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	6.00	2.00
tblVehicleTrips	ST_TR	4.37	4.80
tblVehicleTrips	SU_TR	1.79	1.97
tblVehicleTrips	WD_TR	12.89	13.87
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	2,490,348.00	0.00
tblWater	OutdoorWaterUseRate	6,403,752.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.7769	7.1947	5.3598	7.8100e-003	0.1517	0.5232	0.6750	0.0271	0.4829	0.5099			787.6160	0.2037	0.0000	791.8928
2017	8.4918	11.9804	9.5369	0.0132	0.1010	0.8783	0.9794	0.0194	0.8095	0.8290			1,324.1410	0.3750	0.0000	1,332.0154
Total	**9.2687**	**19.1750**	**14.8967**	**0.0210**	**0.2528**	**1.4016**	**1.6543**	**0.0465**	**1.2924**	**1.3389**			**2,111.7570**	**0.5786**	**0.0000**	**2,123.9082**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.1736	3.6839	4.9676	7.8100e-003	0.0875	0.2463	0.3338	0.0174	0.2460	0.2634			787.6160	0.2037	0.0000	791.8928
2017	7.9341	6.6021	9.0918	0.0132	0.0730	0.4573	0.5303	0.0161	0.4572	0.4732			1,324.1410	0.3750	0.0000	1,332.0154
Total	**8.1077**	**10.2860**	**14.0593**	**0.0210**	**0.1605**	**0.7036**	**0.8641**	**0.0334**	**0.7032**	**0.7366**			**2,111.7570**	**0.5786**	**0.0000**	**2,123.9082**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**12.53**	**46.36**	**5.62**	**0.00**	**36.51**	**49.80**	**47.77**	**28.14**	**45.59**	**44.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	4.1170	13.5279	53.9215	0.1432	9.4343	0.2047	9.6390	2.5228	0.1884	2.7112			12,228.1273	0.4778		12,238.1616
Total	**6.0076**	**13.5279**	**53.9293**	**0.1432**	**9.4343**	**0.2047**	**9.6390**	**2.5228**	**0.1884**	**2.7112**			**12,228.1437**	**0.4779**	**0.0000**	**12,238.1790**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	4.1170	13.5279	53.9215	0.1432	9.4343	0.2047	9.6390	2.5228	0.1884	2.7112			12,228.1273	0.4778		12,238.1616
Total	**6.0076**	**13.5279**	**53.9293**	**0.1432**	**9.4343**	**0.2047**	**9.6390**	**2.5228**	**0.1884**	**2.7112**			**12,228.1437**	**0.4779**	**0.0000**	**12,238.1790**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Interior Demolition	Demolition	9/1/2016	9/30/2016	5	22	
2	Exterior Demolition	Demolition	2/1/2017	3/31/2017	5	43	
3	Grading	Grading	3/1/2017	4/28/2017	5	43	
4	Paving	Paving	5/1/2017	5/5/2017	5	5	
5	Architectural Coating	Architectural Coating	5/1/2017	8/1/2017	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Interior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Interior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Interior Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Exterior Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Exterior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Exterior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Exterior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	0	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56

Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	0	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Interior Demolition	3	2.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Demolition	3	2.00	0.00	3.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	2.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Interior Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1167	0.0000	0.1167	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	0.7551	6.9796	5.0764	6.9800e-003		0.5200	0.5200		0.4799	0.4799			708.2949	0.2019		712.5351
Total	**0.7551**	**6.9796**	**5.0764**	**6.9800e-003**	**0.1167**	**0.5200**	**0.6367**	**0.0177**	**0.4799**	**0.4976**			**708.2949**	**0.2019**		**712.5351**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0128	0.2039	0.1447	5.4000e-004	0.0127	3.0200e-003	0.0157	3.4700e-003	2.7800e-003	6.2400e-003			54.7407	4.0000e-004		54.7492
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.9100e-003	0.0112	0.1387	2.9000e-004	0.0224	2.1000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			24.5804	1.3400e-003		24.6085
Total	**0.0217**	**0.2151**	**0.2834**	**8.3000e-004**	**0.0350**	**3.2300e-003**	**0.0383**	**9.4000e-003**	**2.9700e-003**	**0.0124**			**79.3211**	**1.7400e-003**		**79.3577**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0525	0.0000	0.0525	7.9500e-003	0.0000	7.9500e-003			0.0000			0.0000
Off-Road	0.1519	3.4688	4.6841	6.9800e-003		0.2431	0.2431		0.2431	0.2431			708.2949	0.2019		712.5351
Total	**0.1519**	**3.4688**	**4.6841**	**6.9800e-003**	**0.0525**	**0.2431**	**0.2956**	**7.9500e-003**	**0.2431**	**0.2510**			**708.2949**	**0.2019**		**712.5351**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day							lb/day			
Hauling	0.0128	0.2039	0.1447	5.4000e-004	0.0127	3.0200e-003	0.0157	3.4700e-003	2.7800e-003	6.2400e-003			54.7407	4.0000e-004		54.7492
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.9100e-003	0.0112	0.1387	2.9000e-004	0.0224	2.1000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			24.5804	1.3400e-003		24.6085
Total	**0.0217**	**0.2151**	**0.2834**	**8.3000e-004**	**0.0350**	**3.2300e-003**	**0.0383**	**9.4000e-003**	**2.9700e-003**	**0.0124**			**79.3211**	**1.7400e-003**		**79.3577**

3.3 Exterior Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day							lb/day			
Fugitive Dust					0.0139	0.0000	0.0139	2.1100e-003	0.0000	2.1100e-003			0.0000			0.0000
Off-Road	0.7073	6.5555	5.0386	6.9700e-003		0.4762	0.4762		0.4395	0.4395			697.4702	0.2017		701.7055
Total	**0.7073**	**6.5555**	**5.0386**	**6.9700e-003**	**0.0139**	**0.4762**	**0.4901**	**2.1100e-003**	**0.4395**	**0.4417**			**697.4702**	**0.2017**		**701.7055**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1600e-003	0.0180	0.0133	5.0000e-005	1.2200e-003	2.6000e-004	1.4800e-003	3.3000e-004	2.4000e-004	5.8000e-004			5.1660	4.0000e-005		5.1668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**9.1600e-003**	**0.0281**	**0.1390**	**3.4000e-004**	**0.0236**	**4.6000e-004**	**0.0240**	**6.2600e-003**	**4.3000e-004**	**6.7000e-003**			**28.8266**	**1.2800e-003**		**28.8533**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	9.5000e-004	0.0000	9.5000e-004			0.0000			0.0000
Off-Road	0.1519	3.4688	4.6841	6.9700e-003		0.2431	0.2431		0.2431	0.2431			697.4702	0.2017		701.7055
Total	**0.1519**	**3.4688**	**4.6841**	**6.9700e-003**	**6.2700e-003**	**0.2431**	**0.2493**	**9.5000e-004**	**0.2431**	**0.2440**			**697.4702**	**0.2017**		**701.7055**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1600e-003	0.0180	0.0133	5.0000e-005	1.2200e-003	2.6000e-004	1.4800e-003	3.3000e-004	2.4000e-004	5.8000e-004			5.1660	4.0000e-005		5.1668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**9.1600e-003**	**0.0281**	**0.1390**	**3.4000e-004**	**0.0236**	**4.6000e-004**	**0.0240**	**6.2600e-003**	**4.3000e-004**	**6.7000e-003**			**28.8266**	**1.2800e-003**		**28.8533**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0371	0.0000	0.0371	4.0100e-003	0.0000	4.0100e-003			0.0000			0.0000
Off-Road	0.5544	5.3268	4.1892	5.4400e-003		0.4006	0.4006		0.3686	0.3686			556.9637	0.1707		560.5474
Total	**0.5544**	**5.3268**	**4.1892**	**5.4400e-003**	**0.0371**	**0.4006**	**0.4377**	**4.0100e-003**	**0.3686**	**0.3726**			**556.9637**	**0.1707**		**560.5474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8700e-003	0.0599	0.0443	1.7000e-004	4.0500e-003	8.8000e-004	4.9300e-003	1.1100e-003	8.1000e-004	1.9200e-003			17.2201	1.3000e-004		17.2227
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**0.0119**	**0.0700**	**0.1700**	**4.6000e-004**	**0.0264**	**1.0800e-003**	**0.0275**	**7.0400e-003**	**1.0000e-003**	**8.0400e-003**			**40.8806**	**1.3700e-003**		**40.9092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0167	0.0000	0.0167	1.8100e-003	0.0000	1.8100e-003			0.0000			0.0000
Off-Road	0.1329	3.0352	4.0986	5.4400e-003		0.2127	0.2127		0.2127	0.2127			556.9637	0.1707		560.5474
Total	**0.1329**	**3.0352**	**4.0986**	**5.4400e-003**	**0.0167**	**0.2127**	**0.2294**	**1.8100e-003**	**0.2127**	**0.2145**			**556.9637**	**0.1707**		**560.5474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8700e-003	0.0599	0.0443	1.7000e-004	4.0500e-003	8.8000e-004	4.9300e-003	1.1100e-003	8.1000e-004	1.9200e-003			17.2201	1.3000e-004		17.2227
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**0.0119**	**0.0700**	**0.1700**	**4.6000e-004**	**0.0264**	**1.0800e-003**	**0.0275**	**7.0400e-003**	**1.0000e-003**	**8.0400e-003**			**40.8806**	**1.3700e-003**		**40.9092**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3609	3.3202	2.6251	3.6400e-003		0.2399	0.2399		0.2216	0.2216			356.1522	0.1015		358.2826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3609**	**3.3202**	**2.6251**	**3.6400e-003**		**0.2399**	**0.2399**		**0.2216**	**0.2216**			**356.1522**	**0.1015**		**358.2826**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**8.0000e-003**	**0.0101**	**0.1257**	**2.9000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**23.6606**	**1.2400e-003**		**23.6865**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.6400e-003		0.1215	0.1215		0.1215	0.1215			356.1522	0.1015		358.2826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0760**	**1.7344**	**2.3421**	**3.6400e-003**		**0.1215**	**0.1215**		**0.1215**	**0.1215**			**356.1522**	**0.1015**		**358.2826**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**8.0000e-003**	**0.0101**	**0.1257**	**2.9000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**23.6606**	**1.2400e-003**		**23.6865**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.7827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733			281.4481	0.0297		282.0721
Total	**8.1150**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**			**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**8.0000e-003**	**0.0101**	**0.1257**	**2.9000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**23.6606**	**1.2400e-003**		**23.6865**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.7827					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951			281.4481	0.0297		282.0721
Total	**7.8421**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**			**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	8.0000e-003	0.0101	0.1257	2.9000e-004	0.0224	2.0000e-004	0.0226	5.9300e-003	1.9000e-004	6.1200e-003			23.6606	1.2400e-003		23.6865
Total	**8.0000e-003**	**0.0101**	**0.1257**	**2.9000e-004**	**0.0224**	**2.0000e-004**	**0.0226**	**5.9300e-003**	**1.9000e-004**	**6.1200e-003**			**23.6606**	**1.2400e-003**		**23.6865**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1170	13.5279	53.9215	0.1432	9.4343	0.2047	9.6390	2.5228	0.1884	2.7112			12,228.127 3	0.4778		12,238.161 6
Unmitigated	4.1170	13.5279	53.9215	0.1432	9.4343	0.2047	9.6390	2.5228	0.1884	2.7112			12,228.127 3	0.4778		12,238.161 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	1,040.25	360.00	147.75	3,483,128	3,483,128
Total	1,040.25	360.00	147.75	3,483,128	3,483,128

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.532559	0.058242	0.178229	0.125155	0.038934	0.006273	0.016761	0.032323	0.002478	0.003154	0.003685	0.000544	0.001663

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Unmitigated	1.8905	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.5000e-004	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Total	**1.8905**	**7.0000e-005**	**7.8000e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**			**0.0164**	**5.0000e-005**		**0.0174**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4048					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.5000e-004	7.0000e-005	7.8000e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005			0.0164	5.0000e-005		0.0174
Total	**1.8905**	**7.0000e-005**	**7.8000e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**			**0.0164**	**5.0000e-005**		**0.0174**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Geffen Academy UCLA

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	75.00	1000sqft	1.92	75,000.00	729

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2017
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	982.4	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2014 CO2 IF

Land Use - Data needs and total final population

Construction Phase - Based off data needs and engineering judgement

Off-road Equipment -

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - 2 backhoes

Off-road Equipment - 2 backhoes, 1 dumper

Off-road Equipment - cement mixer, 1 backhoe

Trips and VMT - PDF and assumptions

Demolition -

Grading - 50 cy exported

Architectural Coating - Defaults

Vehicle Trips - ADT= 1040

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating - VOC 100- no exterior paint

Energy Use - Existing use/future use difference negligible

Water And Wastewater - Existing use and future use difference negligible

Construction Off-road Equipment Mitigation - Tier 3 for all construction equipment

Energy Mitigation - 20 percent higher than Title 24 2013 codes

Waste Mitigation -

Operational Off-Road Equipment - Assumptions

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	37,500.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	67.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	8/8/2017	8/1/2017
tblConstructionPhase	PhaseEndDate	11/30/2016	3/31/2017
tblConstructionPhase	PhaseEndDate	5/31/2017	4/28/2017
tblConstructionPhase	PhaseStartDate	5/6/2017	5/1/2017
tblConstructionPhase	PhaseStartDate	10/1/2016	2/1/2017
tblConstructionPhase	PhaseStartDate	4/1/2017	3/1/2017
tblConstructionPhase	PhaseStartDate	4/29/2017	5/1/2017
tblEnergyUse	LightingElect	2.98	0.00
tblEnergyUse	NT24E	1.59	0.00
tblEnergyUse	NT24NG	1.08	0.00
tblEnergyUse	T24E	2.13	0.00
tblEnergyUse	T24NG	9.81	0.00
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	MaterialExported	0.00	50.00
tblLandUse	LotAcreage	1.72	1.92
tblLandUse	Population	0.00	729.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	982.4
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripNumber	12.00	16.00
tblTripsAndVMT	HaulingTripNumber	6.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	8.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblTripsAndVMT	WorkerTripNumber	6.00	2.00
tblVehicleTrips	ST_TR	4.37	4.80
tblVehicleTrips	SU_TR	1.79	1.97
tblVehicleTrips	WD_TR	12.89	13.87
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	2,490,348.00	0.00
tblWater	OutdoorWaterUseRate	6,403,752.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	8.5500e-003	0.0793	0.0591	9.0000e-005	1.6600e-003	5.7600e-003	7.4200e-003	3.0000e-004	5.3100e-003	5.6100e-003			7.8491	2.0300e-003	0.0000	7.8917
2017	0.3006	0.3396	0.2784	4.0000e-004	2.9400e-003	0.0253	0.0282	6.2000e-004	0.0238	0.0244			35.8906	8.4900e-003	0.0000	36.0688
Total	**0.3092**	**0.4189**	**0.3375**	**4.9000e-004**	**4.6000e-003**	**0.0311**	**0.0357**	**9.2000e-004**	**0.0291**	**0.0300**			**43.7396**	**0.0105**	**0.0000**	**43.9605**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.9100e-003	0.0407	0.0548	9.0000e-005	9.6000e-004	2.7100e-003	3.6700e-003	1.9000e-004	2.7100e-003	2.9000e-003			7.8491	2.0300e-003	0.0000	7.8917
2017	0.2698	0.1923	0.2670	4.0000e-004	2.3400e-003	0.0133	0.0157	5.5000e-004	0.0133	0.0139			35.8905	8.4900e-003	0.0000	36.0688
Total	**0.2717**	**0.2330**	**0.3217**	**4.9000e-004**	**3.3000e-003**	**0.0160**	**0.0193**	**7.4000e-004**	**0.0160**	**0.0168**			**43.7396**	**0.0105**	**0.0000**	**43.9605**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**12.13**	**44.39**	**4.68**	**0.00**	**28.26**	**48.36**	**45.77**	**19.57**	**44.84**	**44.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3450	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.5842	2.0770	7.6257	0.0197	1.3202	0.0292	1.3494	0.3536	0.0269	0.3805			1,531.1590	0.0618	0.0000	1,532.4567
Waste						0.0000	0.0000		0.0000	0.0000			19.7916	1.1697	0.0000	44.3543
Water						0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.9292**	**2.0771**	**7.6266**	**0.0197**	**1.3202**	**0.0292**	**1.3494**	**0.3536**	**0.0269**	**0.3805**			**1,550.9525**	**1.2315**	**0.0000**	**1,576.8130**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3450	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Mobile	0.5842	2.0770	7.6257	0.0197	1.3202	0.0292	1.3494	0.3536	0.0269	0.3805			1,531.1590	0.0618	0.0000	1,532.4567
Waste						0.0000	0.0000		0.0000	0.0000			9.8958	0.5848	0.0000	22.1772
Water						0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**0.9292**	**2.0771**	**7.6266**	**0.0197**	**1.3202**	**0.0292**	**1.3494**	**0.3536**	**0.0269**	**0.3805**			**1,541.0567**	**0.6466**	**0.0000**	**1,554.6358**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	47.49	0.00	1.41

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Interior Demolition	Demolition	9/1/2016	9/30/2016	5	22	
2	Exterior Demolition	Demolition	2/1/2017	3/31/2017	5	43	
3	Grading	Grading	3/1/2017	4/28/2017	5	43	
4	Paving	Paving	5/1/2017	5/5/2017	5	5	
5	Architectural Coating	Architectural Coating	5/1/2017	8/1/2017	5	67	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 112,500; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Interior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Interior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Interior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Interior Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Exterior Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Exterior Demolition	Dumpers/Tenders	1	8.00	16	0.38
Exterior Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Exterior Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Grading	Graders	0	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	0	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Interior Demolition	3	2.00	0.00	16.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Demolition	3	2.00	0.00	3.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	2.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Interior Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2800e-003	0.0000	1.2800e-003	1.9000e-004	0.0000	1.9000e-004			0.0000	0.0000	0.0000	0.0000
Off-Road	8.3100e-003	0.0768	0.0558	8.0000e-005		5.7200e-003	5.7200e-003		5.2800e-003	5.2800e-003			7.0681	2.0100e-003	0.0000	7.1104
Total	**8.3100e-003**	**0.0768**	**0.0558**	**8.0000e-005**	**1.2800e-003**	**5.7200e-003**	**7.0000e-003**	**1.9000e-004**	**5.2800e-003**	**5.4700e-003**			**7.0681**	**2.0100e-003**	**0.0000**	**7.1104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	2.3600e-003	1.7900e-003	1.0000e-005	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005			0.5457	0.0000	0.0000	0.5458
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.4000e-004	1.4600e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005			0.2352	1.0000e-005	0.0000	0.2355
Total	**2.5000e-004**	**2.5000e-003**	**3.2500e-003**	**1.0000e-005**	**3.8000e-004**	**3.0000e-005**	**4.1000e-004**	**1.0000e-004**	**3.0000e-005**	**1.4000e-004**			**0.7810**	**1.0000e-005**	**0.0000**	**0.7813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-004	0.0000	5.8000e-004	9.0000e-005	0.0000	9.0000e-005			0.0000	0.0000	0.0000	0.0000
Off-Road	1.6700e-003	0.0382	0.0515	8.0000e-005		2.6700e-003	2.6700e-003		2.6700e-003	2.6700e-003			7.0681	2.0100e-003	0.0000	7.1104
Total	**1.6700e-003**	**0.0382**	**0.0515**	**8.0000e-005**	**5.8000e-004**	**2.6700e-003**	**3.2500e-003**	**9.0000e-005**	**2.6700e-003**	**2.7600e-003**			**7.0681**	**2.0100e-003**	**0.0000**	**7.1104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	2.3600e-003	1.7900e-003	1.0000e-005	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005			0.5457	0.0000	0.0000	0.5458
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.4000e-004	1.4600e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005			0.2352	1.0000e-005	0.0000	0.2355
Total	**2.5000e-004**	**2.5000e-003**	**3.2500e-003**	**1.0000e-005**	**3.8000e-004**	**3.0000e-005**	**4.1000e-004**	**1.0000e-004**	**3.0000e-005**	**1.4000e-004**			**0.7810**	**1.0000e-005**	**0.0000**	**0.7813**

3.3 Exterior Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-004	0.0000	3.0000e-004	5.0000e-005	0.0000	5.0000e-005			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1409	0.1083	1.5000e-004		0.0102	0.0102		9.4500e-003	9.4500e-003			13.6038	3.9300e-003	0.0000	13.6864
Total	**0.0152**	**0.1409**	**0.1083**	**1.5000e-004**	**3.0000e-004**	**0.0102**	**0.0105**	**5.0000e-005**	**9.4500e-003**	**9.5000e-003**			**13.6038**	**3.9300e-003**	**0.0000**	**13.6864**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	4.1000e-004	3.2000e-004	0.0000	3.0000e-005	1.0000e-005	3.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005			0.1007	0.0000	0.0000	0.1007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.5800e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4426	2.0000e-005	0.0000	0.4431
Total	**2.0000e-004**	**6.6000e-004**	**2.9000e-003**	**1.0000e-005**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**1.4000e-004**	**1.0000e-005**	**1.4000e-004**			**0.5432**	**2.0000e-005**	**0.0000**	**0.5438**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3000e-004	0.0000	1.3000e-004	2.0000e-005	0.0000	2.0000e-005			0.0000	0.0000	0.0000	0.0000
Off-Road	3.2700e-003	0.0746	0.1007	1.5000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003			13.6038	3.9300e-003	0.0000	13.6864
Total	**3.2700e-003**	**0.0746**	**0.1007**	**1.5000e-004**	**1.3000e-004**	**5.2300e-003**	**5.3600e-003**	**2.0000e-005**	**5.2300e-003**	**5.2500e-003**			**13.6038**	**3.9300e-003**	**0.0000**	**13.6864**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	4.1000e-004	3.2000e-004	0.0000	3.0000e-005	1.0000e-005	3.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005			0.1007	0.0000	0.0000	0.1007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.5800e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4426	2.0000e-005	0.0000	0.4431
Total	**2.0000e-004**	**6.6000e-004**	**2.9000e-003**	**1.0000e-005**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**1.4000e-004**	**1.0000e-005**	**1.4000e-004**			**0.5432**	**2.0000e-005**	**0.0000**	**0.5438**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0119	0.1145	0.0901	1.2000e-004		8.6100e-003	8.6100e-003		7.9200e-003	7.9200e-003			10.8633	3.3300e-003	0.0000	10.9332
Total	**0.0119**	**0.1145**	**0.0901**	**1.2000e-004**	**8.0000e-004**	**8.6100e-003**	**9.4100e-003**	**9.0000e-005**	**7.9200e-003**	**8.0100e-003**			**10.8633**	**3.3300e-003**	**0.0000**	**10.9332**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	1.3600e-003	1.0800e-003	0.0000	9.0000e-005	2.0000e-005	1.0000e-004	2.0000e-005	2.0000e-005	4.0000e-005			0.3355	0.0000	0.0000	0.3356
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.5800e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4426	2.0000e-005	0.0000	0.4431
Total	**2.6000e-004**	**1.6100e-003**	**3.6600e-003**	**1.0000e-005**	**5.6000e-004**	**2.0000e-005**	**5.8000e-004**	**1.5000e-004**	**2.0000e-005**	**1.7000e-004**			**0.7781**	**2.0000e-005**	**0.0000**	**0.7787**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005			0.0000	0.0000	0.0000	0.0000
Off-Road	2.8600e-003	0.0653	0.0881	1.2000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003			10.8633	3.3300e-003	0.0000	10.9332
Total	**2.8600e-003**	**0.0653**	**0.0881**	**1.2000e-004**	**3.6000e-004**	**4.5700e-003**	**4.9300e-003**	**4.0000e-005**	**4.5700e-003**	**4.6100e-003**			**10.8633**	**3.3300e-003**	**0.0000**	**10.9332**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	1.3600e-003	1.0800e-003	0.0000	9.0000e-005	2.0000e-005	1.0000e-004	2.0000e-005	2.0000e-005	4.0000e-005			0.3355	0.0000	0.0000	0.3356
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.5800e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4426	2.0000e-005	0.0000	0.4431
Total	**2.6000e-004**	**1.6100e-003**	**3.6600e-003**	**1.0000e-005**	**5.6000e-004**	**2.0000e-005**	**5.8000e-004**	**1.5000e-004**	**2.0000e-005**	**1.7000e-004**			**0.7781**	**2.0000e-005**	**0.0000**	**0.7787**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0000e-004	8.3000e-003	6.5600e-003	1.0000e-005		6.0000e-004	6.0000e-004		5.5000e-004	5.5000e-004			0.8077	2.3000e-004	0.0000	0.8126
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**9.0000e-004**	**8.3000e-003**	**6.5600e-003**	**1.0000e-005**		**6.0000e-004**	**6.0000e-004**		**5.5000e-004**	**5.5000e-004**			**0.8077**	**2.3000e-004**	**0.0000**	**0.8126**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.0000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005			0.0515	0.0000	0.0000	0.0515
Total	**2.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**			**0.0515**	**0.0000**	**0.0000**	**0.0515**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9000e-004	4.3400e-003	5.8600e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004			0.8077	2.3000e-004	0.0000	0.8126
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**1.9000e-004**	**4.3400e-003**	**5.8600e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**			**0.8077**	**2.3000e-004**	**0.0000**	**0.8126**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.0000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005			0.0515	0.0000	0.0000	0.0515
Total	**2.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**			**0.0515**	**0.0000**	**0.0000**	**0.0515**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2607					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.0732	0.0626	1.0000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003			8.5534	9.0000e-004	0.0000	8.5724
Total	**0.2719**	**0.0732**	**0.0626**	**1.0000e-004**		**5.8100e-003**	**5.8100e-003**		**5.8100e-003**	**5.8100e-003**			**8.5534**	**9.0000e-004**	**0.0000**	**8.5724**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.9000e-004	4.0300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004			0.6896	4.0000e-005	0.0000	0.6904
Total	**2.6000e-004**	**3.9000e-004**	**4.0300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**			**0.6896**	**4.0000e-005**	**0.0000**	**0.6904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2607					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	1.9900e-003	0.0455	0.0614	1.0000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003			8.5534	9.0000e-004	0.0000	8.5724
Total	**0.2627**	**0.0455**	**0.0614**	**1.0000e-004**		**3.1900e-003**	**3.1900e-003**		**3.1900e-003**	**3.1900e-003**			**8.5534**	**9.0000e-004**	**0.0000**	**8.5724**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.9000e-004	4.0300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004			0.6896	4.0000e-005	0.0000	0.6904
Total	**2.6000e-004**	**3.9000e-004**	**4.0300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**			**0.6896**	**4.0000e-005**	**0.0000**	**0.6904**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5842	2.0770	7.6257	0.0197	1.3202	0.0292	1.3494	0.3536	0.0269	0.3805			1,531.1590	0.0618	0.0000	1,532.4567
Unmitigated	0.5842	2.0770	7.6257	0.0197	1.3202	0.0292	1.3494	0.3536	0.0269	0.3805			1,531.1590	0.0618	0.0000	1,532.4567

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	1,040.25	360.00	147.75	3,483,128	3,483,128
Total	1,040.25	360.00	147.75	3,483,128	3,483,128

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.532559	0.058242	0.178229	0.125155	0.038934	0.006273	0.016761	0.032323	0.002478	0.003154	0.003685	0.000544	0.001663

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3450	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003
Unmitigated	0.3450	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2710					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003
Total	**0.3450**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.8600e-003**	**1.0000e-005**	**0.0000**	**1.9700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2710					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8600e-003	1.0000e-005	0.0000	1.9700e-003
Total	**0.3450**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.8600e-003**	**1.0000e-005**	**0.0000**	**1.9700e-003**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.8958	0.5848	0.0000	22.1772
Unmitigated	19.7916	1.1697	0.0000	44.3543

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	97.5	19.7916	1.1697	0.0000	44.3543
Total		**19.7916**	**1.1697**	**0.0000**	**44.3543**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	48.75	9.8958	0.5848	0.0000	22.1772
Total		**9.8958**	**0.5848**	**0.0000**	**22.1772**

May 2016 | Health Risk Assessment

GEFFEN ACADEMY AT UCLA

Prepared for:

UCLA, Capital Programs
Contact: Tracy Dudman, Senior Planner
1060 Veteran Avenue, Box 951365
Los Angeles, California 90095-1365
310.206.9255

Prepared by:

PlaceWorks
Contact: Steve Bush, PE
Dr. Cathleen M. Fitzgerald, PE
9841 Airport Boulevard, Suite 1010
Los Angeles, California 90045
310.670.9221
info@placeworks.com
www.placeworks.com

PSO-03.0

PLACEWORKS

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1. Introduction

The Regents of the University of California are proposing to construct the Geffen Academy at the University of California, Los Angeles (UCLA). The proposed middle school and high school (grades 6 through 12) would be located on the UCLA campus, at the existing Kinross Building at 11000 Kinross Avenue, Los Angeles, California. Because this is a privately funded school, the California Code of Regulations (CCR) Title 5 standards, which include preparation of a health risk assessment (HRA) to evaluate the impact of all stationary and mobile sources within a quarter-mile radius of the school site, do not apply. Although not required by State or local regulations, this HRA has been prepared to ensure that students and staff at the proposed school site would not be subject to adverse health impacts from air emissions.

The California Air Resources Board (CARB, 2005) and the California Air Pollution Control Officers Association (CAPCOA. 2009) strongly recommend that planning agencies consider proximity to emission sources when siting new "sensitive" land uses, such as residences, medical facilities, day care centers, and schools by conducting an HRA. The standards require that an HRA be conducted to evaluate emission sources within 1,000 feet of the site. Therefore, this health risk assessment (HRA) was conducted to evaluate all potential stationary and mobile sources in close proximity to the proposed school. To be conservative, a quarter-mile (1,320-foot) radius was assumed for the evaluation of emission sources, as per the CCR Title 5 requirements, rather than a 1,000-foot radius. The HRA included the following:

- Facilities within a quarter-mile (1,320-foot) radius of the project site that might reasonably emit hazardous or acutely hazardous air emissions were identified and evaluated.

- Emissions associated with vehicles and trucks traveling on highly trafficked roadways within quarter-mile radius of the project site were evaluated, including Wilshire Boulevard, Veteran Avenue, Gayley Avenue, Kinross Avenue, and Westwood Boulevard. Because the site is within 500 feet of busy traffic corridors, criteria air pollutants as well as toxic air contaminants (TACs) were evaluated to determine if air quality at the proposed site poses a short-term or long-term exposure risk to students and staff.

- Construction and operational emissions associated with the proposed 29-story hotel/condominium/apartment development (i.e. The Wilshire-Gayley) were evaluated. The Wilshire-Gayley is located outside of the campus boundary but will be located adjacent to the southeastern corner of the Geffen Academy project site.

- Air dispersion modeling, using the AERMOD computer model, was conducted to quantify maximum ground-level concentrations for students and staff at the project site. Meteorological data from the nearest South Coast Air Quality Management District (SCAQMD) monitoring station with similar meteorological conditions were used to represent local weather conditions and prevailing winds.

1. Introduction

- Cancer and non-cancer risks to students and staff attending and working at the project site were determined, based on the results of the AERMOD modeling. The assessment considered exposure through the inhalation pathway. Unit Risk Factors (URFs) and Cancer Potency Factors (CPFs) were used to determine carcinogenic risk and Recommended Exposure Limits (RELs) were used to determine non-carcinogenic risk.

- This health risk assessment report compares the calculated risks with thresholds established by the SCAQMD and Office of Environmental Health Hazard Assessment (OEHHA).

The assessment and dispersion modeling methodologies used in the preparation of this report included all relevant and appropriate procedures developed by the US Environmental Protection Agency (USEPA) and the latest guidance on conducting health risk assessments from OEHHA (2015). These methodologies and assumptions were used to ensure that the assessment effectively quantified school-based impacts associated with emission sources.

It should be noted that these health impacts were based on conservative (i.e., health protective) assumptions. The USEPA (2005) and OEHHA (2015) note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks do not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of risk and usually overestimate exposure and thus risk. For this school-based risk assessment, the following conservative assumptions were used:

- It was assumed that maximum exposed children and adults stood outside at the site for 8 hours per day, 180 days/year for 7 years (students) or for 11 hours per day 250 days/year for 25 years (staff). In reality, students and staff are exposed to outdoor pollutant concentration levels only during nutrition, lunch, and PE class and are exposed to reduced indoor pollutant concentrations for the remaining school hours. This would result in lower estimated risk values.

- The calculated risk for children from 2-16 years is multiplied by a factor of 3 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA, 2015).

- The construction emissions for The Wilshire-Gayley Development were estimated using the outdated URBEMIS2007 air emissions model. The current CARB and SCAQMD approved construction modeling software (CalEEMod, Version 2013.2.2) would result in reduced exhaust and fugitive dust particulate matter emissions due to state-wide improvements made to off-road equipment and diesel truck engines and improvements to the overall methodology (SCAQMD, 2011). Therefore, the calculated construction emissions from the 2008 Wilshire-Gayley DEIR are more conservative than emissions would be for the same construction project if they were to be re-calculated to using the currently approved model.

- The construction emissions for The Wilshire-Gayley Development estimated using the URBEMIS2007 model was for a construction duration beginning in 2009 and ending in 2011. To date, construction of this project has not yet started. For the construction emissions to overlap with operation of the Geffen Academy, Wilshire-Gayley construction would need to occur between 2017 and 2019. Due to state-wide improvements made to off-road equipment and diesel truck engines, the off-road equipment and hauling emission factors would be reduced for a construction project starting in 2017 as compared to 2009. Therefore, the calculated construction emissions from the 2008 DEIR are more conservative than if emissions from the construction project were to be re-calculated to occur during the operation of the Geffen Academy in 2017.

Based on this list of assumptions, the estimated risks provided in this HRA are conservative.

1. Introduction

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2. Project Description

The proposed Geffen Academy, which would be located on campus and operated by UCLA, would advance UCLA's mission of research, teaching, and service. The proposed project site is located at 11000 Kinross Avenue in Los Angeles, California. The project site is surrounded by Parking Lot 32 and Kinross Avenue to the north, a public alley (Midvale Alley) and the Gayley Center to the east, the Kinross South Building to the south, and Parking Lot 36 to the west. Wilshire Boulevard and Veteran Avenue are located farther to the south and west, respectively.

The Geffen Academy would provide an innovative college preparatory education for 6th through 12th grade students that would help UCLA recruit and retain top faculty. The Geffen Academy is proposed to open for the 2017-2018 school year, and it is assumed that the school would be open and staffed between 7:30 A.M. to 6:30 P.M. (i.e. 11 hours per day), Monday through Friday, with school and instructional hours extending from approximately 9:00 A.M. to 4:30 P.M. (i.e. approximately 8 hours per day). Classes would be held Monday through Friday; additional school activities could occur in the evening and/or on the weekend.

The project site and vicinity are depicted in Figure 1.

2. Project Description

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Figure 1 - Site Location

Project Boundary

0 2,000
Scale (Feet)

Base Map Source: Google Earth Pro, 2016

2. Project Description

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3. Source Identification

The health risk assessment evaluated the impact of potential long-term (chronic) exposure to air toxic emissions generated by vehicles traveling along Wilshire Boulevard, Veteran Avenue, Gayley Avenue, Kinross Avenue, and Westwood Boulevard. Due to the proximity of the project site to these roadways (within 500 feet), potential long-term (chronic) exposure to air toxic emissions and short-term (acute) health impacts from exposures to criteria pollutants (particulate matter, carbon monoxide, and nitrogen dioxide) were evaluated.

Properties within a quarter-mile radius (1,320 feet) were also surveyed using the SCAQMD Facility Information Detail (FIND) database, aerial photography, and a site reconnaissance to identify facilities that have the potential to generate hazardous and acutely hazardous air emissions. Additionally, information obtained through the SCAQMD Facility Information Detail (FIND) database was reviewed to assist in the identification of potential emission sources. Interviews of permitted and non-permitted facilities were conducted to obtain and confirm detailed site specific air emissions information. Lastly, construction and operational emissions associated with the proposed Wilshire-Gayley Development were included in the evaluation (PCR, 2008).

A summary of the emissions sources evaluated during this assessment is provided below in Table 1. The project site and emission sources are depicted in Figure 2.

3. Source Identification

Table 1 Emission Sources

Source	Address
1 California Pizza Kitchen	1001 Broxton Avenue, Los Angeles, CA 90024
2 LA City, Department of General Services	1036 Broxton Avenue, Los Angeles, CA 90024
3 London Cleaners	1073 Gayley Avenue, Los Angeles, CA 90024
4 El Pollo Loco	1081 Gayley Avenue, Los Angeles, CA 90024
5 Casden Glendon	1041 Glendon Avenue, Los Angeles, CA 90024
6 Center for Ambulatory Surgical Treatment	1090 Glendon Avenue, Los Angeles, CA 90024
7 Trizec Westwood Center	1100 Glendon Avenue, Los Angeles, CA 90024
8 UCLA Transit Operations Maintenance Yard	11075 Kinross Avenue, Los Angeles, CA 90024
9 BBQ Chicken	10970 Le Conte Avenue, Los Angeles, CA 90024
10 Verizon	1041 Tiverton Avenue, Los Angeles, CA 90024
11 UCLA Rehabilitation Services	1000 Veteran Avenue, Los Angeles, CA 90024
12 UCLA Science and Technology Research Building	1040 Veteran Avenue, Los Angeles, CA 90024
13 Regents of UC	924 Westwood Boulevard, Los Angeles, CA 90024
14 Weyburn Terrace	11000 Weyburn Place, Los Angeles, CA 90024
15 Westwood Place Investors	10866 Wilshire Boulevard, Los Angeles, CA 90024
16 Center West	10877 Wilshire Boulevard, Los Angeles, CA 90024
17 Palomino	10877 Wilshire Boulevard, Los Angeles, CA 90024
18 UCLA Health System	10880 Wilshire Boulevard, Los Angeles, CA 90024
19 Oxy Westwood	10889 Wilshire Boulevard, Los Angeles, CA 90024
20 UCLA Wilshire Center	10920 Wilshire Boulevard, Los Angeles, CA 90024
21 Muller Company	10921 Wilshire Boulevard, Los Angeles, CA 90024
22 The Tower	10940 Wilshire Boulevard, Los Angeles, CA 90024
23 Wilshire-Gayley	10951 Wilshire Boulevard, Los Angeles, CA 90024
24 EOP	10960 Wilshire Boulevard, Los Angeles, CA 90024
25 U.S. Government/General Services	11000 Wilshire Boulevard, Los Angeles, CA 90024
26 Wilshire Boulevard	Approximately 180 feet south of project
27 Veteran Avenue	Approximately 280 feet south of project
28 Gayley Avenue	Approximately 150 feet east of project
29 Kinross Avenue	Approximately 25 feet north of project
30 Westwood Boulevard	Approximately 450 feet east of project

Figure 2 - Emission Sources

(1) CPK	(9) BBQ Chicken	(17) Palomino Restaurant	(25) US Government Building
(2) LA City, DGS	(10) Verizon	(18) UCLA Health System	(26) Wilshire Boulevard
(3) London Cleaners	(11) UCLA Rehab	(19) Oxy Westwood	(27) Veteran Avenue
(4) El Pollo Loco	(12) UCLA STRB	(20) UCLA Wilshire Center	(28) Gayley Avenue
(5) Casden Glendon	(13) Regents of UC	(21) Muller Company	(29) Kinross Avenue
(6) Center of Amb. Surg. Svcs	(14) Weyburn Terrace	(22) The Tower	(30) Westwood Boulevard
(7) Trizec Westwood Center	(15) Westwood Place Investors	(23) Wilshire-Gayley	
(8) UCLA Transit Yard	(16) Center West	(24) EOP	

Project Boundary

1/4-Mile Radius

0 700
Scale (Feet)

Base Map Source: Google Earth Pro, 2016

3. Source Identification

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4. Source Characterization

4.1 STATIONARY SOURCES

Contaminant release information and associated chemical species were identified through a review of available documentation for each source referenced in Section 3. To the degree practical, all contaminant emissions generated from each source location were considered in the analysis. The limiting factor for the inclusion of a compound was the availability of published exposure factors and other toxicity data enabling risks to be quantified and, where appropriate, target organs identified. The compounds emitted from each stationary source are listed in Table 2.

Table 2 Compound Emitted from Stationary Sources

Source	Contaminant
1 California Pizza Kitchen	Acetaldehyde, Benzene, Formaldehyde, Naphthalene, Propionaldehyde, Styrene, Toluene
2 LA City, Department of General Services	Diesel Particulate Matter
3 London Cleaners	Perchloroethylene
4 El Pollo Loco	Acetaldehyde, Benzene, Formaldehyde, Naphthalene, Propionaldehyde, Styrene, Toluene
5 Casden Glendon	Diesel Particulate Matter
6 Center for Ambulatory Surgical Treatment	Diesel Particulate Matter
7 Trizec Westwood Center	Diesel Particulate Matter
8 UCLA Transit Operations Maintenance Yard	Acetaldehyde, Benzene, 1,3-Butadiene, Formaldehyde, Diesel Particulate Matter
9 BBQ Chicken	Acetaldehyde, Benzene, Formaldehyde, Naphthalene, Propionaldehyde, Styrene, Toluene
10 Verizon	Diesel Particulate Matter
11 UCLA Rehabilitation Services	Diesel Particulate Matter Acetaldehyde, Acrolein, Ammonia, Benzene, Ethylbenzene, Formaldehyde, Hexane, Naphthalene, Toluene, Xylene
12 UCLA Science and Technology Research Building	Diesel Particulate Matter
13 Regents of UC	Diesel Particulate Matter
14 Weyburn Terrace	Diesel Particulate Matter
15 Westwood Place Investors	Diesel Particulate Matter
16 Center West	Diesel Particulate Matter
17 Palomino	Acetaldehyde, Benzene, Formaldehyde, Naphthalene, Propionaldehyde, Styrene, Toluene
18 UCLA Health System	Diesel Particulate Matter
19 Oxy Westwood	Acetaldehyde, Acrolein, Ammonia, Benzene, Ethylbenzene, Formaldehyde, Hexane, Naphthalene, Toluene, Xylene

4. Source Characterization

Table 2 Compound Emitted from Stationary Sources

20 UCLA Wilshire Center	Diesel Particulate Matter
21 Muller Company	Diesel Particulate Matter
22 The Tower	Diesel Particulate Matter
23 Wilshire-Gayley	Diesel Particulate Matter Acetaldehyde, Acrolein, Ammonia, Benzene, Ethylbenzene, Formaldehyde, Hexane, Naphthalane, Toluene, Xylene
24 EOP	Diesel Particulate Matter
25 U.S. Government/General Services	Diesel Particulate Matter Acetaldehyde, Benzene, Formaldehyde, Naphthalane, Propionaldehyde, Styrene, Toluene

4.2 MOBILE SOURCES

In urban communities, vehicle emissions contribute significantly to localized concentrations of air contaminants. Typically, emissions generated from these sources depend on vehicle mix, the percentage of heavy duty diesel trucks, the rate at which pollutants are generated during the course of travel, and the number of vehicles traveling along the roadway network.

To produce a representative vehicle fleet distribution of gasoline fueled and diesel fueled vehicles, the assessment utilized an estimate of vehicle mix based on peak traffic and truck traffic reports from the Draft Traffic Impact Study (Crain and Associates, 2016) and the City of Los Angeles Department of Transportation (LADOT) traffic counts for highly trafficked surface streets within 500 feet of the project. Table 3 lists the identified peak hourly traffic volumes and diesel truck percentage considered in the assessment.

Table 3 Vehicle Fleet Mix Profile

Roadway	Peak Hourly Vehicle Traffic (Veh/hr)		Truck Percentage
	2016	2020	
Wilshire Boulevard (East of Veteran Avenue)	4,608	5,308	1.17
Veteran Avenue (North of Wilshire Boulevard)	2,152	2,702	1.07
Gayley Avenue (North of Wilshire Boulevard)	1,401	1,854	1.00
Kinross Avenue (East of Veteran Avenue)	1,091	1,549	0.46
Westwood Boulevard (North of Wilshire Boulevard)	1,653	1,837	1.21

Source: LADOT (2016). http://navigatela.lacity.org/navigatela/. Crain and Associates (2016).

To determine hourly traffic volumes, the assessment used data available from the LADOT traffic counts (LADOT, 2016). Additionally, the traffic data take into account projected traffic increases from the *2010 Congestion Management Plan* prepared by Los Angeles County Metropolitan Transportation Authority (MTA, 2010). To account for the emission standards representative of the California fleet, the Air Resources Board has developed the EMFAC2014 emission factor model. EMFAC2014 was used to identify pollutant emission rates for total organic gases (TOG), diesel particulate matter (DPM), carbon monoxide (CO) and nitrogen dioxide (NO_2). To quantify the toxic air contaminants (TACs) associated with the TOG fraction, the speciation profile provided by the Bay Area Air Quality Management District (2012) was used.

For particulate matter (PM_{10}), emissions were quantified as the sum of re-entrainment of paved roadway dust and tailpipe emissions. The predictive emission equation developed by the USEPA (AP-42, Section 13.2.1) was used to generate the entrained dust source strength.

A list of emitted compounds for the mobile-source category is presented in Table 4. Appendix B contains a graphical representation of each emitting source. Appendix C presents the emission rate calculations for each source considered in the assessment.

Table 4 Compounds Emitted from Mobile Sources

Source	Contaminant
Wilshire Boulevard, Veteran Avenue, Gayley Avenue, Kinross Avenue, and Westwood Boulevard (gasoline vehicles and diesel trucks)	Diesel Particulate Matter (DPM) Acetaldehyde, Acrolein, Benzene, 1,3-Butadiene, Ethylbenzene, Formaldehyde, Hexane, Methanol, Methyl Ethyl Ketone, Naphthalene, Propylene, Styrene, Toluene, Xylenes Particulate Matter (PM_{10}) Carbon Monoxide Nitrogen Dioxide

Note: EMFAC2014 generates emission factors for nitrogen oxides (NOx). The NO_2 conversion rate was derived from a report entitled Final Localized Significance Threshold Methodology (SCAQMD, 2008).

4.3 CONSTRUCTION EMISSIONS

In addition to stationary and mobile sources currently in operation, potential hazardous air pollutants emitted during construction of an adjacent EIR-certified project (The Wilshire-Gayley) were also evaluated. The Wilshire-Gayley Development was approved in 2010 (State Clearinghouse #2008081010), and involves construction of a 29-story hotel/condominium/apartment building with subterranean parking. Because the Geffen Academy was not a potential project at the time that the EIR was prepared, the impact of construction emissions on the future Geffen Academy were not considered in the certified EIR. As construction of this approved project could now potentially overlap with operation of the Geffen Academy, this HRA considers the impact of construction emissions generated by The Wilshire-Gayley Development was on students and staff at the proposed school.

For the approved Wilshire-Gayley Development, the construction emissions calculated in the Wilshire-Gayley Draft Environmental Impact Report (DEIR) for the regional air quality analysis were used (PCR, 2008). It should be noted that these health impacts were based on conservative (i.e., health protective) assumptions. With the inclusion of construction emissions from the 2008 Wilshire-Gayley DEIR, the following conservative assumptions were used:

- The construction emissions were estimated using the now outdated URBEMIS2007 air emissions model. The current CARB and SCAQMD approved construction modeling software (CalEEMod, Version

4. Source Characterization

2013.2.2) would result in reduced exhaust and fugitive dust particulate matter emissions due to state-wide improvements made to off-road equipment and diesel truck engines and improvements to the overall methodology (SCAQMD, 2011). Therefore, the calculated construction emissions from the 2008 Wilshire-Gayley DEIR are higher than emissions would be if they were to be re-calculated using the currently approved model.

- The construction emissions estimated using the URBEMIS2007 model was for a construction duration beginning in 2009 and ending in 2011. For the construction emissions to overlap with operation of the Geffen Academy, Wilshire-Gayley construction would need to occur after September 2017 when the Geffen Academy is expected to be operational. Due to improvements made to off-road equipment and diesel truck engines resulting from federal and State regulations, the off-road equipment and hauling emission factors would be lower for a construction project starting in 2017 as compared to 2009. Therefore, the calculated construction emissions from the 2008 Wilshire-Gayley DEIR are more conservative than emissions would be if they were to be re-calculated to occur during operation of the Geffen Academy in 2017.

Construction emissions were calculated as average daily emissions in pounds per day, using the construction schedule and emissions from the 2008 Wilshire-Gayley DEIR (PCR, 2008). DPM emissions were based on the exhaust PM_{10} construction emissions presented in pounds per day. Other evaluated criteria air pollutants (i.e. CO, NOx, PM_{10}) emissions were taken from the model output, which for PM_{10} includes exhaust PM_{10} as well as fugitive dust PM_{10}.

Because The Wilshire-Gayley project has not yet begun construction, this HRA assumes that this would occur after the Geffen Academy opens and would take place over 25 months (789 calendar days or 564 work days) from January 2017 through the end of February 2019. The average daily emission rates from construction equipment used during the proposed project were determined by dividing the annual average emissions for each construction year by the number of construction days per year for each calendar year of construction (i.e., 2017, 2018, and 2019). The construction emissions output and emission rate calculations are provided in Appendix C.

As a project design feature, the Geffen Academy would incorporate an air filtration system into design of the school. As part of the heating, ventilation, and air conditioning (HVAC) system, installed air filters with a Minimum Efficiency Rating Value (MERV) of 13 would reduce indoor concentrations of fine and coarse particulate matter. The project would commit to a future installation of air filters with a MERV of 13 or greater for the school in response to construction of the Wilshire-Gayley Development. MERV 13 filters are capable of removing approximately 90 percent of the particulate matter emissions, in the particle size range of 1 micron (μm) and larger, from air introduced into the HVAC system (Appendix F). As air filters with a MERV of 13 or greater are a planned design feature of the project should construction of the Wilshire-Gayley Development begin during school operation, the reduction in air emissions was accounted for in the analysis.

5. Air Dispersion Modeling

To assess the impact of emitted compounds on individuals who may work and/or attend classes at the proposed school facility, air quality modeling using the AERMOD atmospheric dispersion model was performed. The model is a steady state Gaussian plume model and is recommended by SCAQMD for estimating ground level impacts from point and fugitive sources in simple and complex terrain.

The model requires additional input parameters, including chemical emission data and local meteorology. Inputs for each emitting source were based on the characterizations referenced in Section 4. Meteorological data provided by SCAQMD for the West Los Angeles meteorological station (2008-2012) were used to represent local weather conditions and prevailing winds. According to the wind rose for the West Los Angeles Monitoring Station, presented in Appendix C, the prevailing wind direction in the area of the project site is to the north-northeast (NNE).

The modeling analysis also considered the spatial distribution of each emitting source in relation to the project site. To accommodate the model's Cartesian grid format, direction-dependent calculations were obtained by identifying the Universal Transverse Mercator coordinates for each source. In addition, digital elevation model (DEM) data for the area were obtained and included in the model runs to account for complex terrain.

For all modeling runs, a unit emission rate of 1 gram per second (g/s) was used. The unit emission rates were proportioned among the volume sources for mobile sources and over the poly-area sources for on-site construction emissions. The maximum AERMOD concentrations from the output files were then multiplied by the emission rates calculated in Appendix C to obtain the maximum ground-level and flag-pole level concentrations at the school site.

For mobile sources, two sets of volume sources were modeled in AERMOD. One set of volume sources representing the motor vehicles traveling along the mobile sources was used to characterize emissions of TOG, CO, NO_x, and PM_{10}. For this run, a release height of 0.60 meters was used (CARB, 2000). The second set of volume sources representing truck traffic was used to characterize emissions of DPM. For this set of sources, a release height of 4.15 m was used. Different emission factors were used to characterize TOG and DPM emissions from vehicle traffic traveling along mobile sources due to different exposure periods for adult staff and students. For the adult staff exposure scenario, a 25-year exposure period was used, as per the new OEHHA guidance for worker exposure. A 7-year exposure period was used for the student exposure scenario representing the school years for 6th through 12th grade. The PM_{10} emission factor was used as the surrogate for DPM.

An emission release height of 4.15 meters was used as representative of the stack exhaust height for off-road construction equipment, and an initial vertical dispersion parameter of 1.93 m was used, per CARB guidance (2000). To determine contaminant impacts during construction hours, the model's Hour-Day (HRDOW) scalar option was invoked to predict ground-level (for first floor occupants) and flag-pole level (for 2nd and 3rd floor occupants) concentrations for emissions generated between the weekday construction hours of 7:00 A.M. and 3:00 P.M. In addition, a scalar factor was applied to the risk calculations to account for the number of days school occupants are exposed to construction emissions per year.

The maximum exposed receptor (MER) concentrations used in the risk calculation spreadsheets are provided in Tables E1-E4, E8 and E11 of Appendix E. The AERMOD output for the emission sources is presented in Appendix D.

6. Risk Characterizations

6.1 CARCINOGENIC CHEMICAL RISK

Carcinogenic compounds are not considered to have "threshold" levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. The SCAQMD has established a maximum incremental cancer risk of 10 in a million (1.0E-05) for CEQA projects and the Office of Environmental Health Hazard Assessment (OEHHA) also sets a typical risk management level as 10 in a million (OEHHA, 2015). The maximum incremental cancer risk of 10 in a million is used as a "threshold" for the purposes of HRA evaluations.

Health risks associated with exposure to carcinogenic compounds at the proposed project site can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its cancer potency factor (CPF), a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It is an upper-limit estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a lifetime of 70 years.

For school-based HRAs, only the inhalation pathway is typically evaluated since many of the non-inhalation exposure pathways do not apply for school-based receptors (i.e. mother's milk, fish, drinking water, nd homegrown produce). Oral and dermal exposure pathways would not be applicable for this project since there will not be any athletic fields or other turf areas that could result in student or staff exposure. Additionally, according to OEHHA HRA guidance (2015) and CARB's Hotspots Analysis and Reporting Program (HARP), Risk Assessment Standalone Tool (CARB, 2016), none of the TACs evaluated in the HRA have OEHHA approved oral cancer slope factors or oral chronic reference exposure levels. Therefore, the oral exposure pathway is not applicable and a multi-pathway analysis was not conducted.

Recent guidance from OEHHA recommends a refinement to the standard point estimate approach with the use of age-specific breathing rates and age sensitivity factors (ASFs) to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day $(mg/kg/day)^{-1}$ to derive the cancer risk estimate. Therefore, to accommodate the unique exposures associated with the proposed school population, the following dose algorithm was used.

$$\mathrm{Dose}_{\mathrm{AIR,per\ age\ group}} = (\mathrm{C}_{\mathrm{air}} \times \mathrm{EF} \times [\frac{\mathrm{BR}}{\mathrm{BW}}] \times \mathrm{A} \times \mathrm{CF})$$

Where:

6. Risk Characterizations

$Dose_{AIR}$	=	dose by inhalation (mg/kg-day), per age group
C_{air}	=	concentration of contaminant in air (µg/m^3)
EF	=	exposure frequency (number of days/365 days)
BR/BW	=	daily breathing rate normalized to body weight (L/kg-day)
A	=	inhalation absorption factor (default = 1)
CF	=	conversion factor (1x10^{-6}, µg to mg, L to m^3)

The inhalation absorption factor (A) is a unitless factor that is only used if the cancer potency factor included a correction for absorption across the lung. For this assessment, the default value of 1 was used. To represent the unique characteristics of the school population, the assessment employed the USEPA's guidance to develop viable dose estimates based on reasonable maximum exposure, defined as the "highest exposure that is reasonably expected to occur" for a given receptor population. Lifetime risk values for the student population were adjusted to account for an exposure of 180 days per year for 7 years (6th grade through 12th grade). In addition, the calculated risk for students is multiplied by an ASF weighting factor of 3 (for children ages 5 to 16 years) to account for early life sensitivity to pollutant exposures (OEHHA, 2015). To assess staff-related risk, exposures were adjusted to account for an employment period of 250 days per year for 25 years. This timeline is considered appropriate for potential workplace exposures established by OEHHA (2015).

For construction analysis, the exposure duration spans the length of construction (e.g. 789 calendar days or 2.17 years). To calculate the overall cancer risk, the risk for each appropriate age group is calculated per the following equation:

$$\text{Cancer Risk}_{\text{AIR}} = \text{Dose}_{\text{AIR}} \times \text{CPF} \times \text{ASF} \times \frac{\text{ED}}{AT}$$

Where:

$Dose_{AIR}$	=	dose by inhalation (mg/kg-day), per age group
CPF	=	cancer potency factor, chemical-specific (mg/kg-day)$^{-1}$
ASF	=	age sensitivity factor, per age group
ED	=	exposure duration (years)
AT	=	averaging time period over which exposure duration is averaged (always 70 years)

The CPFs used in the assessment were obtained from OEHHA guidance. The cancer risk is calculated separately for the students and staff, because of age differences in sensitivity to carcinogens and age differences in intake rates. The final step converts the cancer risk in scientific notation to a whole number that expresses the cancer risk in "chances per million" by multiplying the cancer risk by a factor of 1x10^6 (i.e. 1 million).

CARB's Hotspots Analysis and Reporting Program (HARP), Risk Assessment Standalone Tool was used to calculate the cancer risk values for operational emission sources (CARB, 2016). The determined cancer risks attributed to each chemical exposure and summation of those risks are presented in Appendix E, Table E5, E6, and E9.

6.2 NON-CARCINOGENIC HAZARDS

An evaluation of the potential non-cancer effects of chronic and acute chemical exposures was also conducted. Under the point estimate approach, adverse health effects are evaluated by comparing the annual ground level concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment. For compounds not listed in the OEHHA database, RELs from the U.S. EPA Integrated Risk Information System (IRIS) were utilized.

To quantify non-carcinogenic impacts, the hazard index approach was used. The hazard index assumes that chronic or acute sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds one, a health hazard is presumed to exist.

CARB's HARP, Risk Assessment Standalone Tool was used to calculate the chronic and acute health risk values (CARB, 2016). The determined non-cancer hazard quotient for identified compounds generated from each source and a summation for each toxicological endpoint are presented in Appendix E, Tables E5-E7, and E10.

6.3 CRITERIA AIR POLLUTANTS

The State of California has promulgated ambient air quality standards for various pollutants. These standards were established to safeguard the public's health and welfare with specific emphasis on protecting those individuals susceptible to respiratory distress, such as asthmatics, the young, the elderly, and those with existing conditions that may be affected by increased pollutant concentrations. A list of criteria air pollutants considered in the assessment and their associated air quality standards are presented in Table 5.

Table 5 California Ambient Air Quality Standards

Pollutant	Standard	Health Effects
Carbon Monoxide (CO)	>9.0 ppm (8 hr avg.) >20.0 ppm (1 hr avg.)	1) Aggravation of angina pectoris and other aspects of coronary heart disease. 2) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease. 3) Impairment of central nervous system functions. 4) Possible increased risk to fetuses.
Nitrogen Dioxide (NO_2)	≥0.030 ppm (annual avg.) ≥0.18 ppm (1 hr avg.)	1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups. 2) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes.
Particulates (PM_{10})	>50 $\mu g/m^3$ (24 hr avg.) >20 $\mu g/m^3$ (annual avg.)	1) Excess deaths from short-term exposures and the exacerbation of symptoms in sensitive individuals with respiratory disease. 2) Excess seasonal declines in pulmonary function especially in children.

Notes: ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
Source: California Code of Regulations, Title 17, Section 70200.

6. Risk Characterizations

Pollutant emissions are considered to have a significant effect on the environment if they result in concentrations that create either a violation of an ambient air quality standard, contribute to an existing air quality violation, or expose sensitive receptors to significant pollutant concentrations. Should ambient air quality already exceed existing standards, SCAQMD has established significance criteria that identify incremental air concentrations for selected pollutants. According to SCAQMD's Localized Significance Threshold (LST) Methodology (2008), SCAQMD considers sensitive receptors to include residences, hospitals, or convalescent facilities where it is possible that an individual could be present for 24 hours per day. For school-based receptors, LSTs for 24-hour ambient air quality standards would not apply. However, LSTs for commercial receptors would apply for the annual average and shorter averaging periods, such as 1-hour and 8-hour averages, since a commercial (i.e. worker) receptor durations are typically no more than eight hours and or more applicable to school-based receptors.

Table 6 outlines the significance thresholds considered for sites that are within an air basin where criteria pollutants exceed air quality standards.

Table 6 Localized Significance Thresholds

Pollutant	Averaging Time	Significance Criteria
Carbon Monoxide (CO)	8 Hours 1 Hour	Project contributes to exceedance of 9.0 ppm Project contributes to exceedance of 20 ppm
Nitrogen Dioxide (NO_2)	Annual 1 Hour	Project contributes to exceedance of 0.03 ppm Project contributes to exceedance of 0.18 ppm
Particulates (PM_{10})	Annual	Project causes an incremental increase of 1.0 $\mu g/m^3$

Notes: ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
Source: SCAQMD, 2015. SCAQMD Air Quality Significance Thresholds accessed online at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

The nearest active air quality monitoring station to the project site is the Northwest Coastal Los Angeles County Monitoring Station. Background concentrations are based on the highest observed value for the most recent three-year period. PM_{10} data are not collected for the Northwest Coastal Los Angeles County Monitoring Station. Therefore, PM_{10} data from the nearest-representative monitoring station with available data (Southwest Coastal Los Angeles County Monitoring Station) was used. A summary of the monitoring station data is presented in Table 7.

Table 7 Northwest Coastal Los Angeles County Monitoring Station Summary

Pollutant/Averaging Time	Year			Maximum	CAAQS
	2014	2013	2012		
Carbon Monoxide (CO)					
1-Hour	2.0	NM	NM	2.0	20
8-Hour	1.3	1.3	1.4	1.4	9
Nitrogen Dioxide (NO_2)					
1-Hour	0.0639	0.0512	0.0613	0.0639	0.18
Annual	0.0133	0.0145	0.0137	0.0145	0.030
Particulates (PM_{10})					
Annual	22.0	20.8	19.8	22.0	20

Note: Particulates (PM_{10}) concentrations from the Southwest Coastal Los Angeles County Monitoring Station are expressed in micrograms per cubic meter ($\mu g/m^3$). All others are expressed in parts per million (ppm). NM – not monitored that particular year.
Source: SCAQMD, Historical Data by Year, http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year.

For carbon monoxide (CO) and nitrogen dioxide (NO_2), background concentrations are below the current air quality standards. Therefore, impacts are considered to be significant when pollutant concentrations, added to existing background levels, result in an exceedance of the CAAQS.

For particulate emissions, maximum background concentrations in the vicinity of the site exceed the California Ambient Air Quality Standard (CAAQS) for the annual average PM_{10} concentrations. Additionally for PM_{10}, the project site is within a non-attainment area for particulates (CARB, 2013). As a result, SCAQMD defines a significant impact as PM_{10} concentrations that exceed the specified localized significance threshold (LST) of 1.0 $\mu g/m^3$, for annually averaged concentrations.

Appendix E, Table E11, presents the criteria air pollutant ground level concentrations at the project site determined using AERMOD.

6.4 ACCIDENTAL RELEASES

Under the auspices of the California Accidental Release Prevention (CalARP) Program, should a stationary source use more than a threshold quantity of a regulated hazardous substance, a Risk Management Plan (RMP) which includes a risk assessment of accidental releases is required to be conducted pursuant to the provisions of the federal Accidental Release Prevention program (Title 40, Code of Federal Regulations, Part 68) Article 2, Chapter 6.95 of the Health and Safety Code.

A review of the available information collected during the source identification process (e.g., regulatory records review and interviews with business owner/operators) did not reveal the presence of any CalARP program facilities within 0.25 mile of the proposed site (Center of Effective Government, 2014). Therefore, this report did not warrant the need for the preparation of a RMP.

6. Risk Characterizations

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7. Conclusions

The following section summarizes the findings and conclusion for this HRA report. The results are separated into two scenarios. The first health risk scenario includes the long-term operation of all surrounding stationary sources and mobile sources, including operation of the proposed adjacent Wilshire-Gayley Development. This scenario assumed a maximum exposure scenario, i.e., students and staff are exposed to outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff).

The second scenario includes the short-term health risks to school staff and students should construction of the adjacent Wilshire-Gayley occur while the Geffen Academy is in operation. This scenario assumed students and staff are exposed to 2 hours per day of outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff) and the remaining hours per day indoors with the benefit of the air filtration with a planned MERV of 13 or greater. Because the actual schedule of outdoor activities for students or staff have not yet been determined, the 2 hour outdoor exposure was based on a Los Angeles Unified School District (LAUSD) HRA prepared by PlaceWorks for a high school in East Los Angeles that had an outdoor schedule of 30 minutes per day for lunch and 90 minutes per day for physical education (PE) class (PlaceWorks, 2014). This is conservative because the same group of students would not have PE every day, but may be close to actual outdoor exposure for the staff.

7.1 HEALTH RISKS – OPERATION OF SURROUNDING SOURCES

The results of the HRA for operation of all surrounding emission sources are provided in Table 8. The incremental cancer risk was calculated to be 1.3 per million for adult school staff and 0.9 per million for students. In comparison to the threshold level of 10 in a million, carcinogenic risks are well below the significance threshold value for both school staff and students.

For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for both school staff and students. Therefore, chronic non-carcinogenic hazards are below the significance threshold. Additionally, the acute non-carcinogenic hazards (1-hour) were below the significance thresholds (Table 8).

The results of the air dispersion modeling for criteria air pollutants are provided in Table 9. As shown in Table 9, the long-term (annual) particulate matter concentrations would not exceed the SCAQMD significance threshold for PM_{10}. Additionally, the annual average nitrogen dioxide concentration, when added to existing background levels, would not exceed the CAAQS. Lastly, for short-term (1-hour and 8-hour) criteria air pollutant concentrations, when added to existing background levels, would not exceed the CAAQS's for carbon monoxide and nitrogen dioxide.

7. Conclusions

Table 8 Health Risk Assessment Results – Operation of Surrounding Sources

Source	Cancer Risk (per million) Staff Exposure	Cancer Risk (per million) Student Exposure	Chronic Hazard Index	Acute Hazard Index
All Emission Sources[1]	1.3	0.9	0.009	0.041
SCAQMD Threshold	10	10	1.0	1.0
Exceeds Threshold	No	No	No	No

Source: Lakes AERMOD View, 9.1.0, 2015.
1 The determined health risks are for the scenario where The Wilshire-Gayley project is in operation.

Table 9 Criteria Air Pollutants Results – Operation of Surrounding Sources

	PM_{10} (Annual)			
MER Concentration (µg/m^3)	0.75			
SCAQMD Threshold	1.0			
Exceeds Threshold?	No			
	Carbon Monoxide (1-Hour)	Carbon Monoxide (8-Hour)	Nitrogen Dioxide (1-Hour)	Nitrogen Dioxide (Annual)
MER Concentration (ppm)	0.2	0.1	0.002	<0.001
Background Level (ppm)	2.0	1.4	0.064	0.013
Total (ppm)	2.2	1.5	0.066	0.013
CAAQS	20.0	9.0	0.18	0.03
Exceeds CAAQS?	No	No	No	No

Note: Maximum exposed receptor (MER).
Sources: Lakes AERMOD View, 9.1 (2015).

Based on a comparison to the carcinogenic and non-carcinogenic thresholds established by OEHHA and SCAQMD, hazardous air emissions generated from the stationary and mobile sources within a quarter-mile radius are not anticipated to pose an actual or potential endangerment to students and staff occupying the project site and no mitigation measures are required. Additionally, criteria air pollutant concentrations generated from surrounding roadways are not anticipated to exceed the CAAQS or the established SCAQMD localized significance thresholds.

7.2 HEALTH RISKS – INCLUDING OFF-SITE CONSTRUCTION

The results of the HRA that include construction of the adjacent Wilshire-Gayley Development and operation of all remaining surrounding emission sources are provided in Table 10. This scenario assumed a maximum exposure scenario, i.e., students and staff are exposed to 2 hours per day of outdoor pollutant concentrations from mobile and stationary sources during the entire school day (8 hours for students, 11 hours for staff) and the remaining hours per day indoors with the benefit of the air filtration with a planned MERV of 13 or greater. The incremental cancer risk was calculated to be 2.7 per million for adult school staff and 9.2 per million for students. In comparison to the threshold level of 10 in a million, carcinogenic risks are below the significance threshold value for both school staff and students.

For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for both school staff and students. Therefore, chronic non-carcinogenic hazards are below the significance threshold. Additionally, the acute non-carcinogenic hazards (1-hour) were below the significance thresholds (Table 10).

Table 10 Health Risk Assessment Results – Including Off-site Construction

Source	Cancer Risk (per million)		Chronic Hazard Index	Acute Hazard Index
	Staff Exposure	Student Exposure		
Construction Emissions[1]	2.2	8.9	0.24	n/a
All Operational Sources[2]	0.5	0.3	0.007	0.041
Total	2.7	9.2	0.24	0.041
SCAQMD Threshold	10	10	1.0	1.0
Exceeds Threshold?	No	No	No	No

Source: Lakes AERMOD View, 9.1.0, 2015.
1 The determined health risks from the construction of The Wilshire-Gayley project.
2 The determined health risks are for the remaining mobile and stationary sources in operation.

The results of the air dispersion modeling for criteria air pollutants are provided in Table 11. As shown in Table 11, the long-term (annual) particulate matter concentrations would not exceed the SCAQMD significance threshold for PM_{10}. The annual average nitrogen dioxide concentration, when added to existing background levels, would not exceed the CAAQS. Lastly, for short-term (1-hour and 8-hour) criteria air pollutant concentrations, when added to existing background levels, would not exceed the CAAQS's for carbon monoxide and nitrogen dioxide.

Table 11 Criteria Air Pollutants Results – Including Off-site Construction

	PM_{10} (Annual)			
MER Concentration (µg/m³)[1]	0.93			
SCAQMD Threshold	1.0			
Exceeds Threshold?	No			
	Carbon Monoxide (1-Hour)	Carbon Monoxide (8-Hour)	Nitrogen Dioxide (1-Hour)	Nitrogen Dioxide (Annual)
MER Concentration (ppm)[1]	0.8	0.3	0.042	0.001
Background Level (ppm)	2.0	1.4	0.064	0.013
Total (ppm)	2.8	1.7	0.11	0.014
CAAQS	20.0	9.0	0.18	0.03
Exceeds CAAQS?	No	No	No	No

Note: Maximum exposed receptor (MER).
Sources: Lakes AERMOD View, 9.1 (2015).
1 MER concentration includes construction emissions from The Wilshire-Gayley and mobile source emissions.

7. Conclusions

Based on a comparison to the carcinogenic and non-carcinogenic thresholds established by OEHHA and SCAQMD, hazardous air emissions generated from the stationary sources, mobile sources, and construction emissions within a quarter-mile radius are not anticipated to pose an actual or potential endangerment to students and staff and no mitigation measures are required. Additionally, criteria air pollutant concentrations generated from surrounding roadways and construction of The Wilshire-Gayley Development are not anticipated to exceed the CAAQS or the established SCAQMD localized significance thresholds.

8. References

Bay Area Air Quality Management District (BAAQMD). 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards.*

California Air Pollution Control Officers Association (CAPCOA). 2009. *Health Risk Assessments for Proposed Land Use Projects.*

California Air Resources Board (CARB). 2016. Hotspots Analysis and Report Program (HARP), Risk Assessment Standalone Tool (RAST), Version 2.

———. 2014. *EMFAC2014 - Calculating Emission Inventories for Vehicles in California.*

———. 2013. Area Designations Maps/State and National.

———. 2004. *Study of CNG and Diesel Transit Bus Emissions.* Presentation dated April 22, 2004.

———. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.*

The Center of Alternative Fuels, Engines, and Emissions (CAFEE). 2011. Report to CARB. *Testing of Volatile and Nonvolatile Emissions from Advanced Technology Natural Gas Vehicles.*

Center of Effective Government. 2014. The Right-to-Know Network accessed on March 22, 2016 at http://www.rtknet.org/db/rmp.

City of Los Angeles Department of Transportation (LADOT). 2016. Traffic Counts from Nagivate LA. Accessed April 4, 2016 at http://navigatela.lacity.org/navigatela/.

Crain and Associates. 2016. *Traffic Impact Study for the Proposed Geffen Academy Project on UCLA Southwest Campus.*

Los Angeles County Metropolitan Transportation Authority (MTA). 2010. *2010 Congestion Management Plan.*

Office of Environmental Health Hazard Assessment (OEHHA). 2016. Toxicity Criteria Database. http://oehha.ca.gov/risk/chemicaldb/index.asp. Accessed April 5, 2016.

______. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments.* Dated February, 2015.

PCR Services Corp (PCR). 2008. *Wilshire-Gayley Development Project Draft Environmental Impact Report.*

PlaceWorks, 2014. *Health Risk Assessment, Hilda Solis Learning Academy.* Prepared for Los Angeles Unified School District. Dated December 2014.

8. References

South Coast Air Quality Management District (SCAQMD). 2015. Air Quality Significance Thresholds. http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/. Accessed March 22, 2016.

———. 2014. Historical Data By Year. http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year. Accessed April 23, 2016.

———. 2011. *CalEEMod Technial Paper*. Prepared by SCAQMD, BAAQMD, SMAQMD, SJVAPCD, SBCAPCD, and SLOAPCD.

———. 2008-2012. *Meteorological Data Set for West Los Angeles Monitoring Station*.

———. 2008. *Final Localized Significance Threshold Methodology*..

United States Environmental Protection Agency (USEPA). 2005. *Guideline on Air Quality Models* (Revised). EPA-450/2-78-027R.

———. 2015. Technology Transfer Network, Clearinghouse for Inventories and Emission Factors. *Compilation of Air Pollutant Emission Factors*. http://www.epa.gov/ttnchie1/ap42. Accessed April 4, 2016.

University of West Virginia. 2008. *Evaluation of Exhaust After-Treatment Device Effectiveness in Reducing Regulated and Unregulated Emissions from Natural Gas Fueled Heavy Duty Transit Bus.*

Appendix A. Stationary Emission Sources

Appendix

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Stationary Emission Sources
Geffen Academy at UCLA
Health Risk Assessment

No.	FACILITY	AQMD ID	ADDRESS			CITY	ZIP	NOTES
1	California Pizza Kitchen	139107	1001	Broxton	Ave	Los Angeles	90024	Charbroiler
2	LA City, Dept Gen Services	136764	1036	Broxton	Ave	Los Angeles	90024	Generator
3	London Cleaners	53413	1073	Gayley	Ave	Los Angeles	90024	Dry Cleaning
4	El Pollo Loco	112060	1081	Gayley	Ave	Los Angeles	90024	Charbroiler
5	Casden Glendon	154724	1041	Glendon	Ave	Los Angeles	90024	Generator
6	Center for Ambulatory Surgical Treatment	134399	1090	Glendon	Ave	Los Angeles	90024	Generator
7	Trizec Westwood Center	148711	1100	Glendon	Ave	Los Angeles	90024	Generator
8	UCLA Transit Operations Maintenance Yard		11075	Kinross	Ave	Los Angeles	90024	CNG and Diesel Buses
9	BBQ Chicken	155394	10970	Le Conte	Ave	Los Angeles	90024	Charbroiler
10	Verizon	52207	1041	Tiverton	Ave	Los Angeles	90024	Generators (2)
11	UCLA Rehabilitation Services		1000	Veteran	Ave	Los Angeles	90024	Generator, Boilers (4)
12	UCLA Science and Technology Research Building		1040	Veteran	Ave	Los Angeles	90024	Generator
13	Regents of UC	175987	924	Westwood	Blvd	Los Angeles	90024	Diesel Fire Pump
14	Weyburn Terrace		11000	Weyburn	Pl	Los Angeles	90024	Generator
15	Westwood Place Investors	133365	10866	Wilshire	Blvd	Los Angeles	90024	Generator and diesel fire pump
16	Center West	68740	10877	Wilshire	Blvd	Los Angeles	90024	Generator and diesel fire pumps (2)
17	Palomino	116390	10877	Wilshire	Blvd	Los Angeles	90024	Charbroiler
18	UCLA Health System	169515	10880	Wilshire	Blvd	Los Angeles	90024	Generator
19	Oxy Westwood	96917	10889	Wilshire	Blvd	Los Angeles	90024	Boilers (2)
20	UCLA Wilshire Center	117825	10920	Wilshire	Blvd	Los Angeles	90024	Generator
21	Muller Company	119486	10921	Wilshire	Blvd	Los Angeles	90024	Generator
22	The Tower	129856	10940	Wilshire	Blvd	Los Angeles	90024	Generator and diesel fire pumps (2)
23	Wilshire-Gayley		10951	Wilshire	Blvd	Los Angeles	90024	Construction; Op: generator, boiler
24	EOP	119133	10960	Wilshire	Blvd	Los Angeles	90024	Generator
25	U.S. Govt/General Services	126559	11000	Wilshire	Blvd	Los Angeles	90024	Charbroiler, Generators (4)
Omitted Facilities								
	CJ Bakery	163768	1091	Broxton	Ave	Los Angeles	90024	Out-of-business
	FBI Garage	100793	1260	Sepulveda	Blvd	Los Angeles	90025	Over 1/4-mile away
	Thai Grill	109593	1118	Westwood	Blvd	Los Angeles	90024	Out-of-business
	Triyar Companies	109654	10850	Wilshire	Blvd	Los Angeles	90024	Equipment on roof over 100-ft; de minimis
	Wilshire Westwood Plaza	158702	10900	Wilshire	Blvd	Los Angeles	90024	Equipment on roof over 100-ft; de minimis
	Douglas Emmett	126728	10990	Wilshire	Blvd	Los Angeles	90024	Generator test during non-school hours; boiler on roof over 100-ft; de minimis

Appendix

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Appendix B. Graphical Representations of Emitting Sources

Appendix

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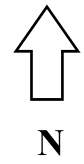
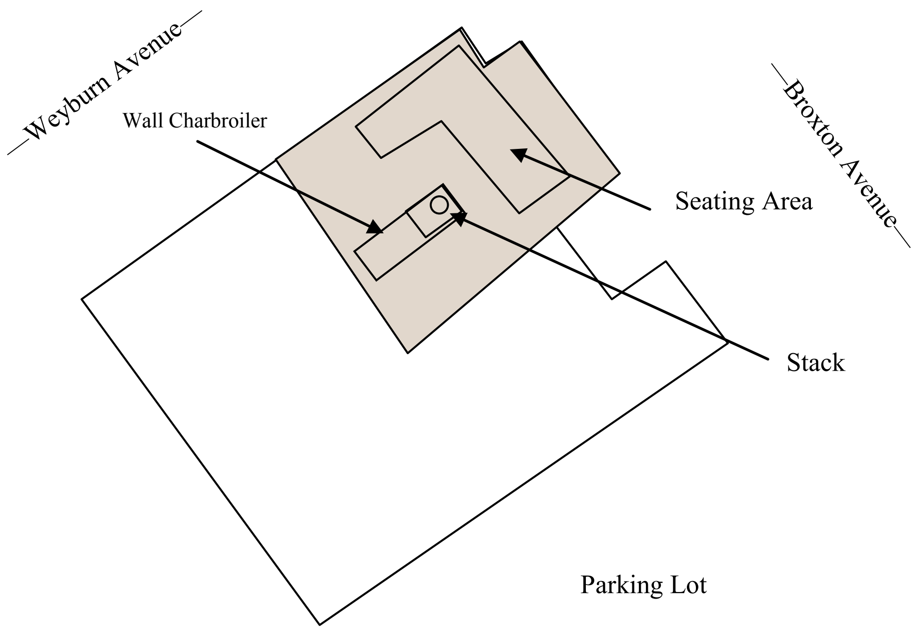
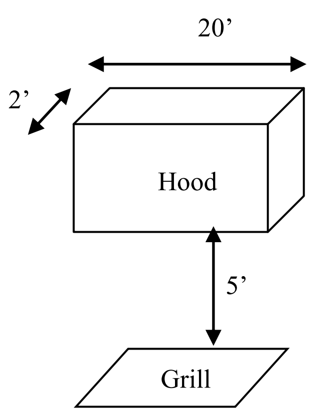
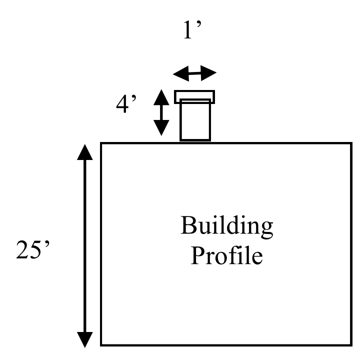
Source 1
California Pizza Kitchen
1001 Broxton Avenue
Los Angeles, CA 90024
Monday - Thursday: 11:00 AM - 9:30 PM
Friday - Saturday: 11:00 AM - 10:30 PM
Sunday: 11:00 AM - 9:30 PM



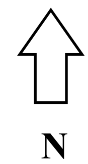
Chemical and Use Rate
Charbroiler, under-fired: Estimated 179 pounds of skinless chicken cooked per week



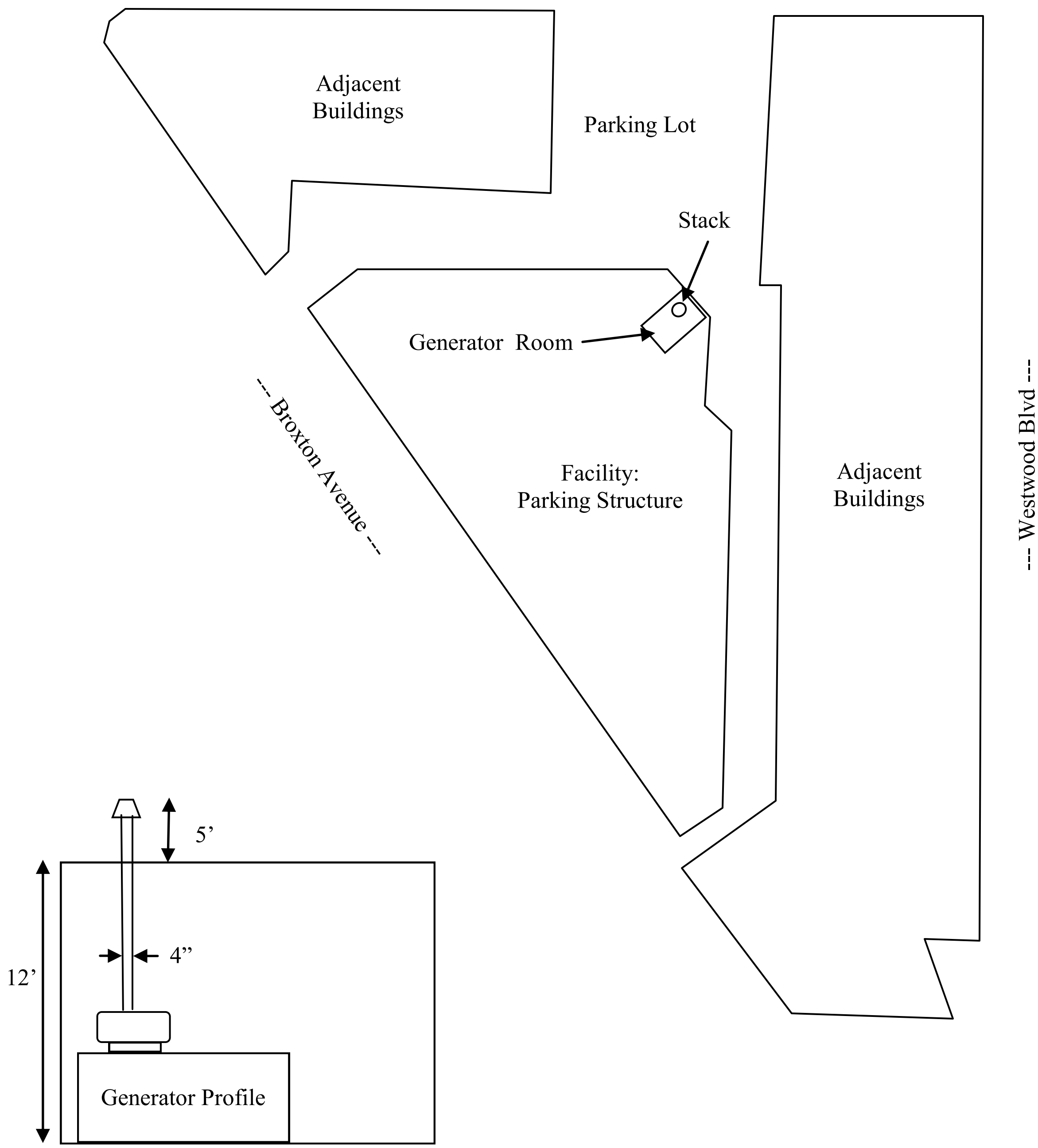




Source 2
Los Angeles City, Department of General Services
1036 Broxton Avenue
Los Angeles, CA 90024

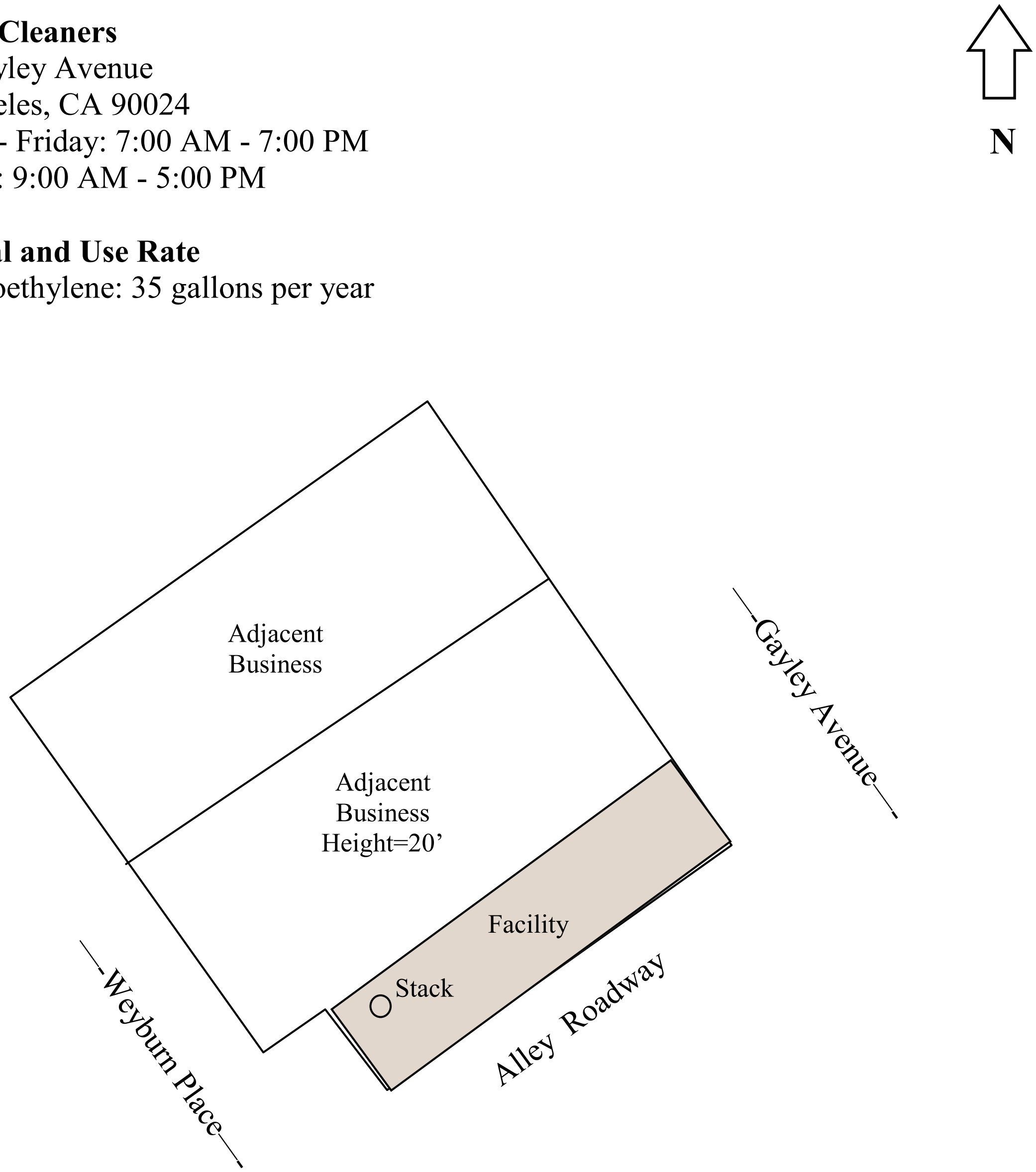


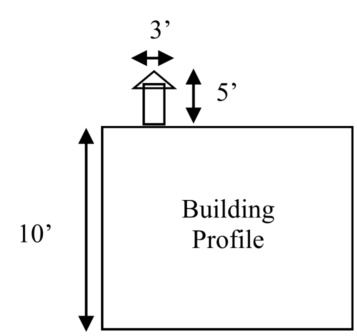
Chemical and Use Rate
Emergency Diesel Generator: 160 BHP (maximum maintenance and testing hours of 50 hours per year, from SCAQMD permit-to-operate F78574)



Source 3
London Cleaners
1073 Gayley Avenue
Los Angeles, CA 90024
Monday - Friday: 7:00 AM - 7:00 PM
Saturday: 9:00 AM - 5:00 PM

Chemical and Use Rate
Perchloroethylene: 35 gallons per year

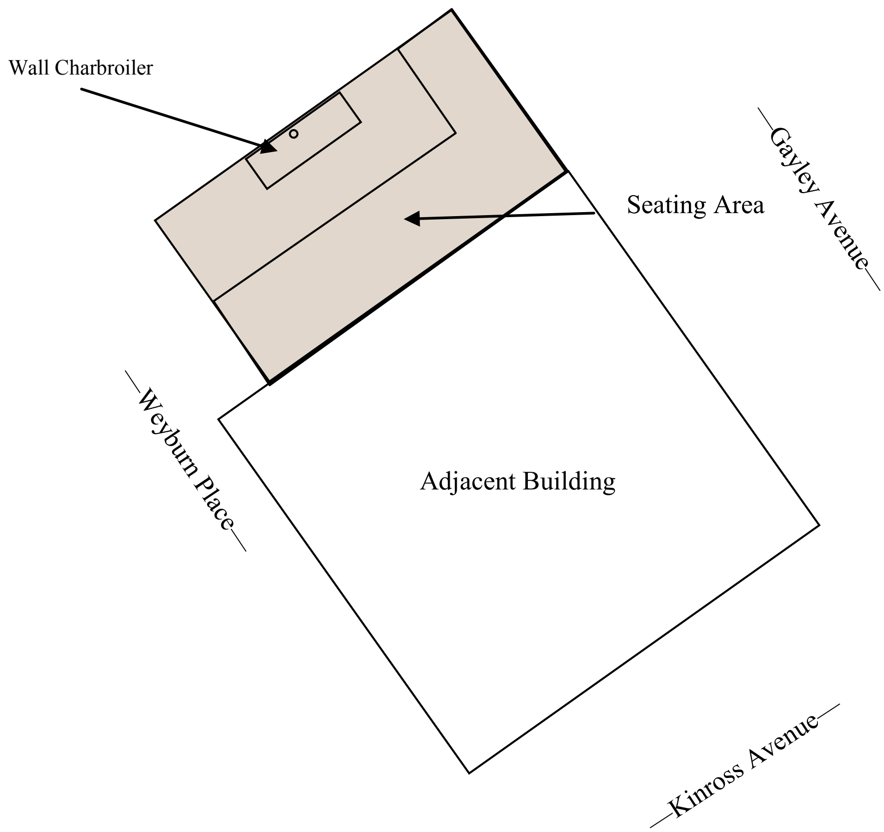


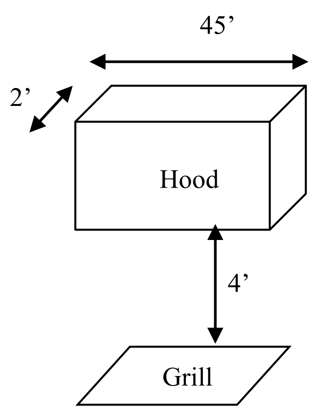


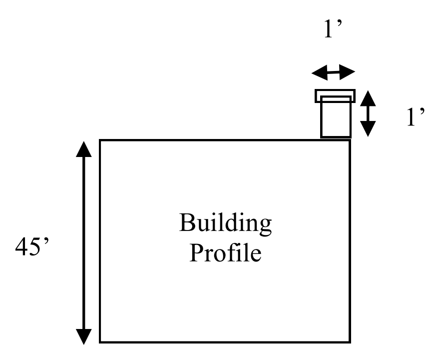
Source 4
El Pollo Loco
1081 Gayley Avenue
Los Angeles, CA 90024
Monday - Thursday: 10:00 AM - 10:00 PM
Friday - Saturday: 10:00 AM - 11:00 PM
Sunday: 10:00 AM - 10:00 PM

N

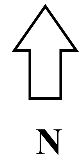
Chemical and Use Rate
Charbroiler, under-fired: Estimated 144 pounds of chicken with skin and 179 pounds of skinless chicken cooked per week



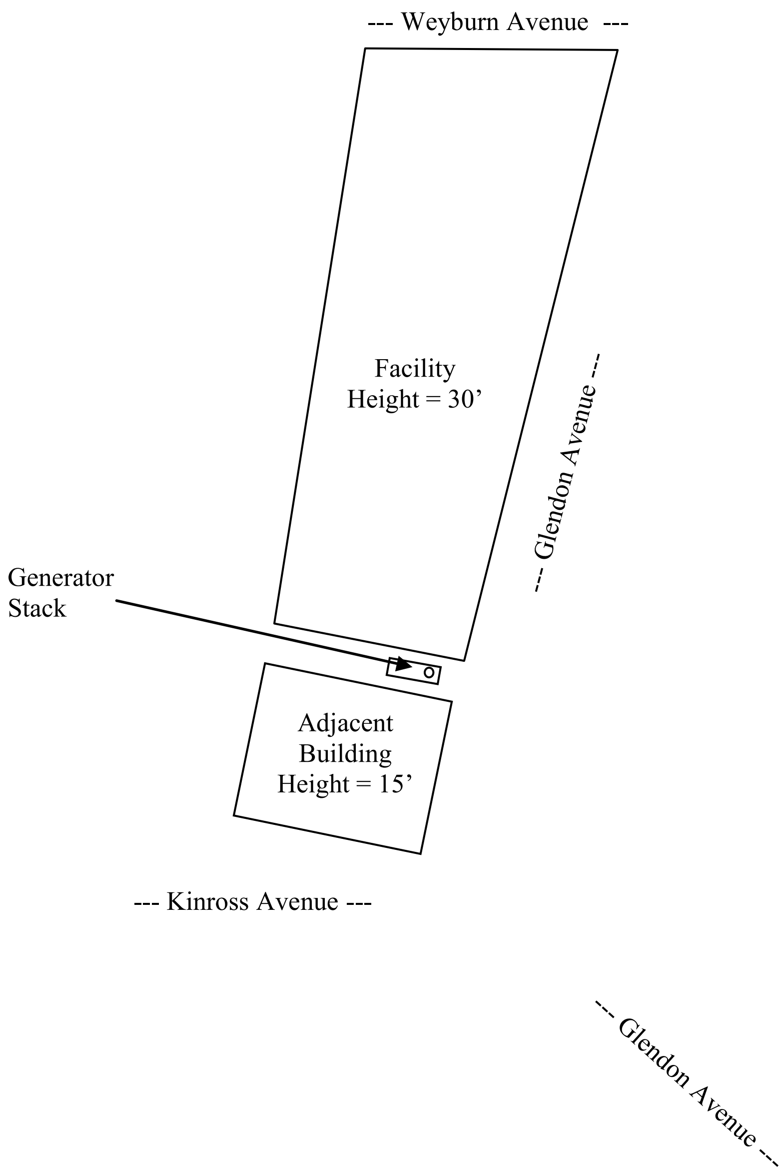


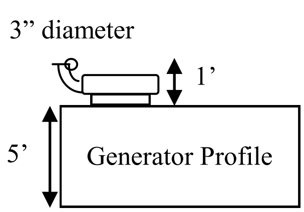


Source 5
Casden Glendon
1041 Glendon Avenue
Los Angeles, CA 90024



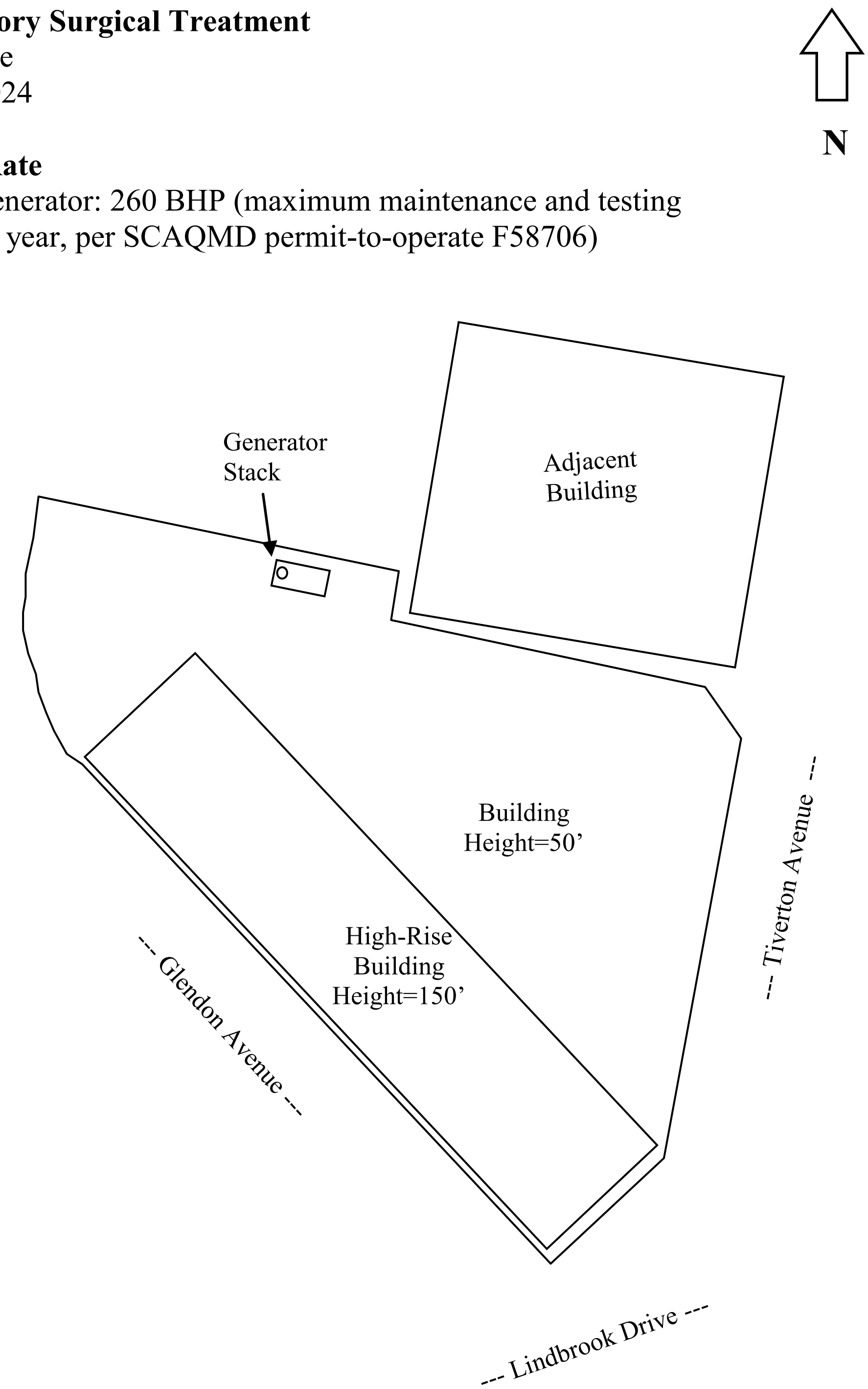
Chemical and Use Rate
Emergency Diesel Generator: 64 BHP (maximum maintenance and testing hours of 50 hours per year, per SCAQMD permit-to-operate F96007)

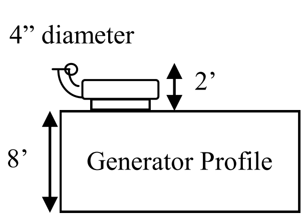




Source 6
Center for Ambulatory Surgical Treatment
1090 Glendon Avenue
Los Angeles, CA 90024

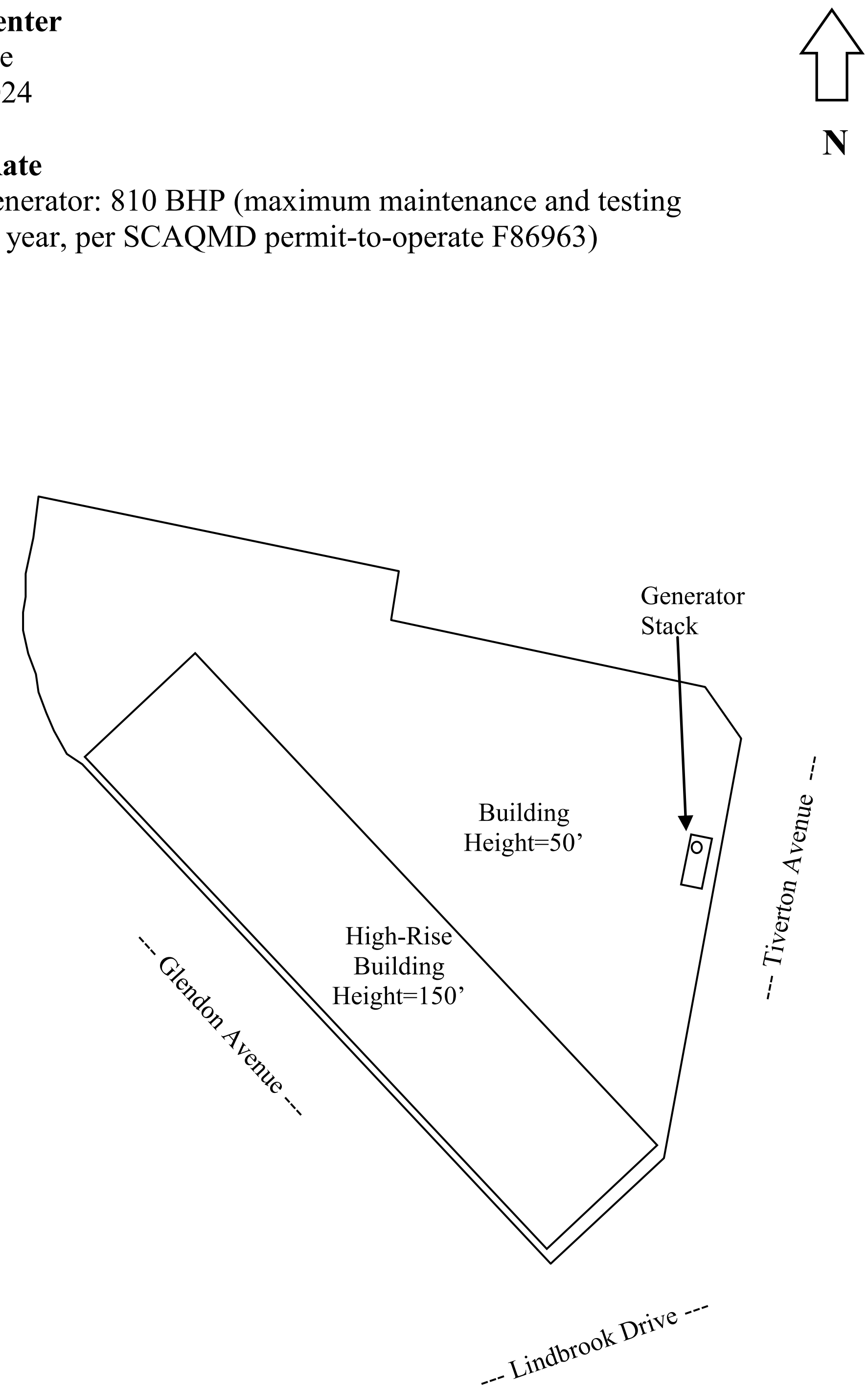
Chemical and Use Rate
Emergency Diesel Generator: 260 BHP (maximum maintenance and testing hours of 50 hours per year, per SCAQMD permit-to-operate F58706)

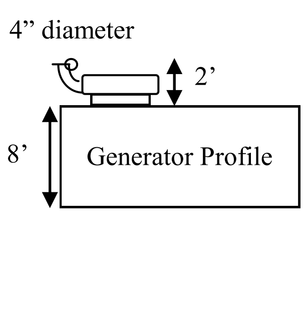




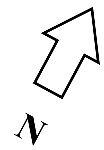
Source 7
Trizec Westwood Center
1100 Glendon Avenue
Los Angeles, CA 90024

Chemical and Use Rate
Emergency Diesel Generator: 810 BHP (maximum maintenance and testing hours of 20 hours per year, per SCAQMD permit-to-operate F86963)

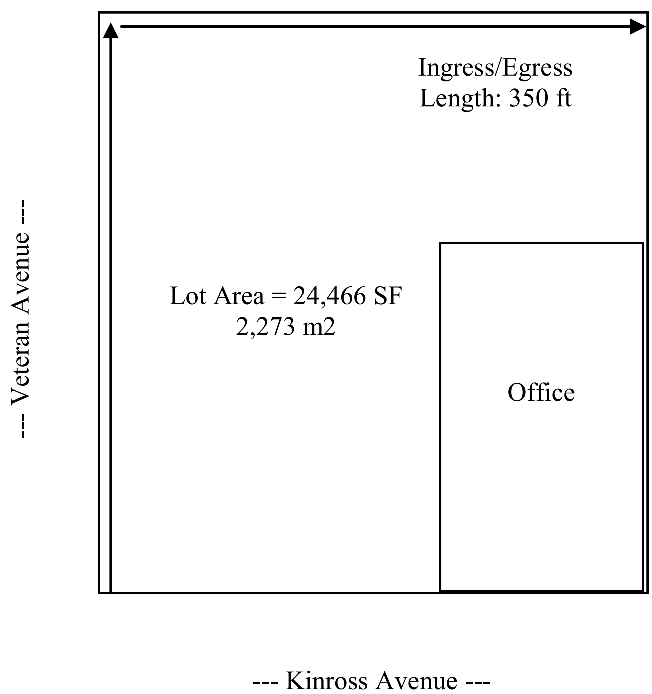




Source 8
UCLA Transit Operations Maintenance Yard
11075 Kinross Avenue
Los Angeles, CA 90024
Monday - Friday: 7:00 AM - 11:00 PM



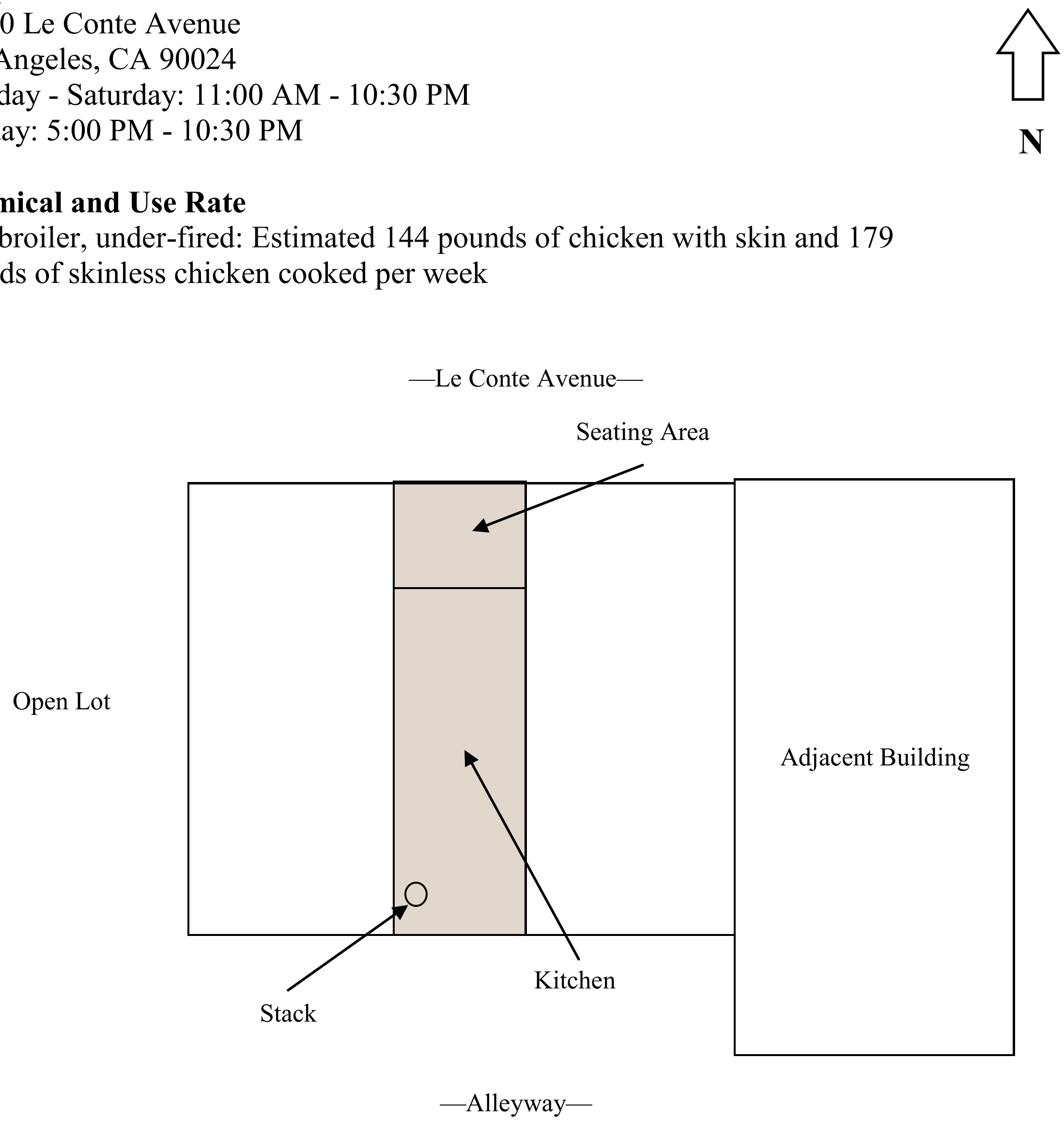
Chemical and Use Rate
CNG Buses: 125 buses per day

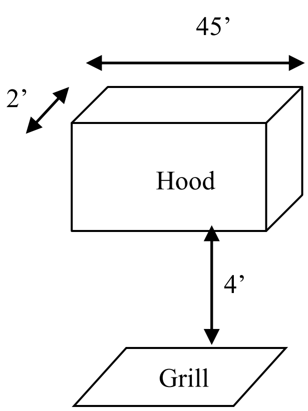


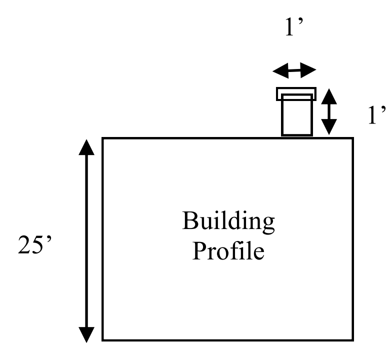
- Lot area is based upon Google Earth, Version 7.0.3.
- Release height of 4.15 m and initial vertical dimension (δy) of 1.93 m for buses is based upon California Air Resources Board's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (2000).

Source 9
BBQ Chicken
10970 Le Conte Avenue
Los Angeles, CA 90024
Monday - Saturday: 11:00 AM - 10:30 PM
Sunday: 5:00 PM - 10:30 PM

Chemical and Use Rate
Charbroiler, under-fired: Estimated 144 pounds of chicken with skin and 179 pounds of skinless chicken cooked per week

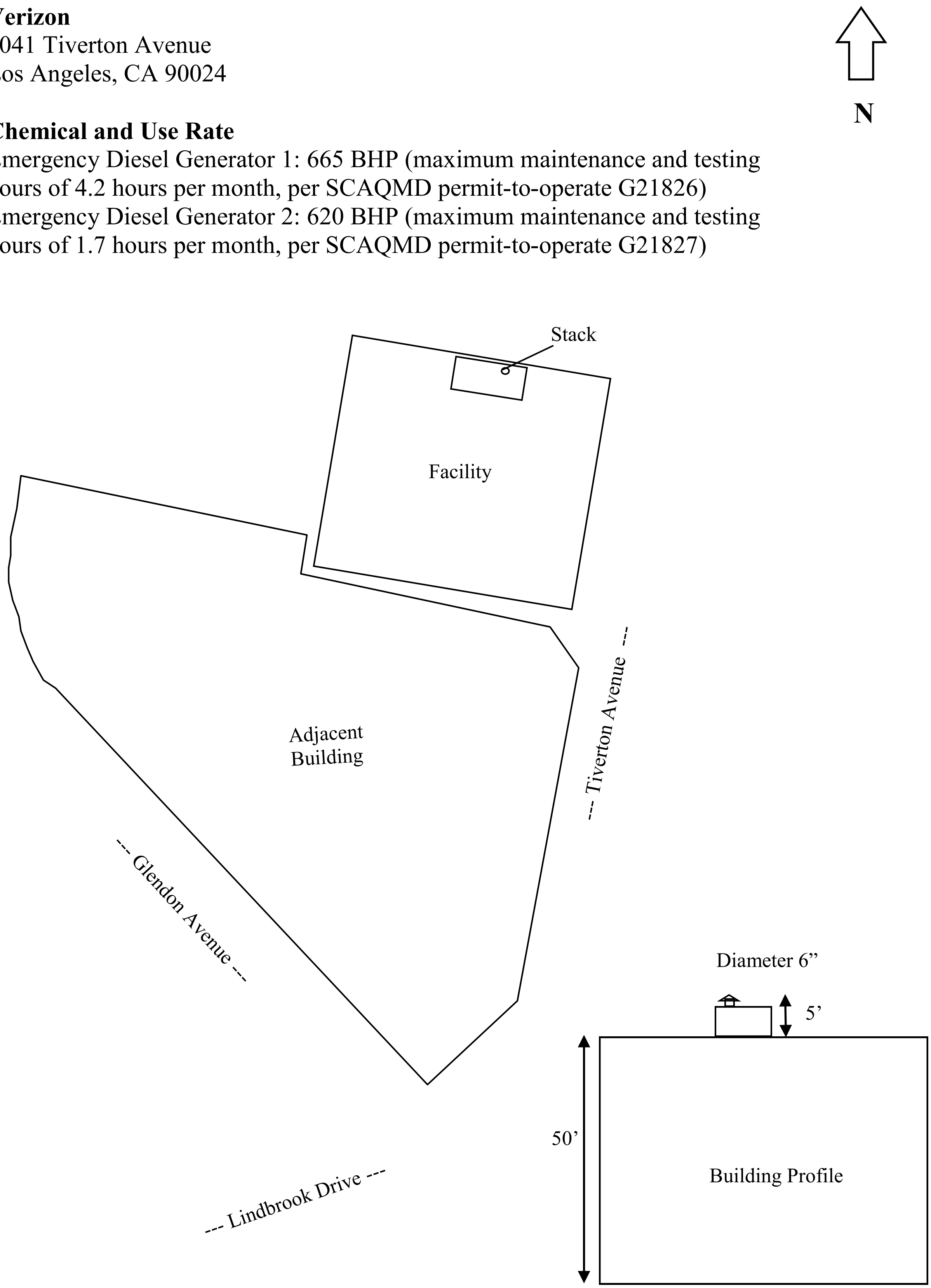




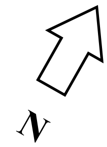


Source 10
Verizon
1041 Tiverton Avenue
Los Angeles, CA 90024

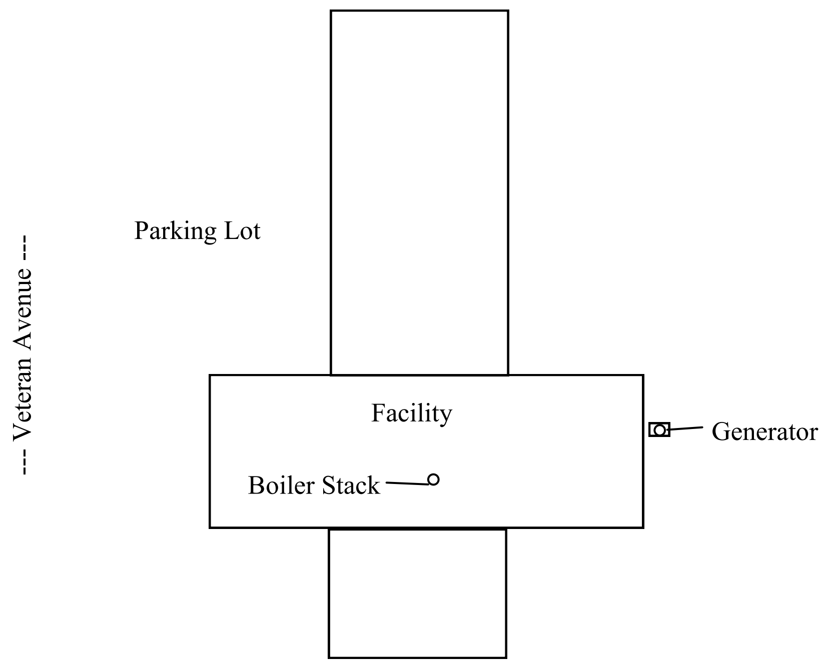
Chemical and Use Rate
Emergency Diesel Generator 1: 665 BHP (maximum maintenance and testing hours of 4.2 hours per month, per SCAQMD permit-to-operate G21826)
Emergency Diesel Generator 2: 620 BHP (maximum maintenance and testing hours of 1.7 hours per month, per SCAQMD permit-to-operate G21827)

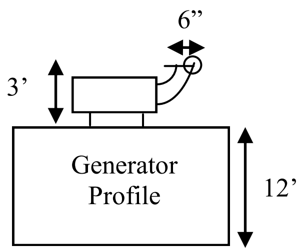


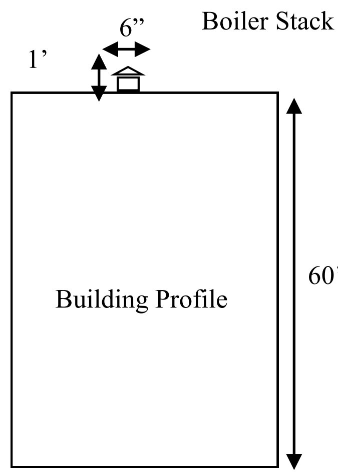
Source 11
UCLA Rehabilitation Services
1000 Veteran Avenue
Los Angeles, CA 90024
Monday - Sunday: 12:00 AM - 11:59 PM



Chemical and Use Rate
Diesel Generator: 635 brake horsepower (tested monthly for 45 minutes)
Natural Gas Boilers (2): 1.2 Million BTU per hour
Natural Gas Boilers (2): 1.0 Million BTU per hour

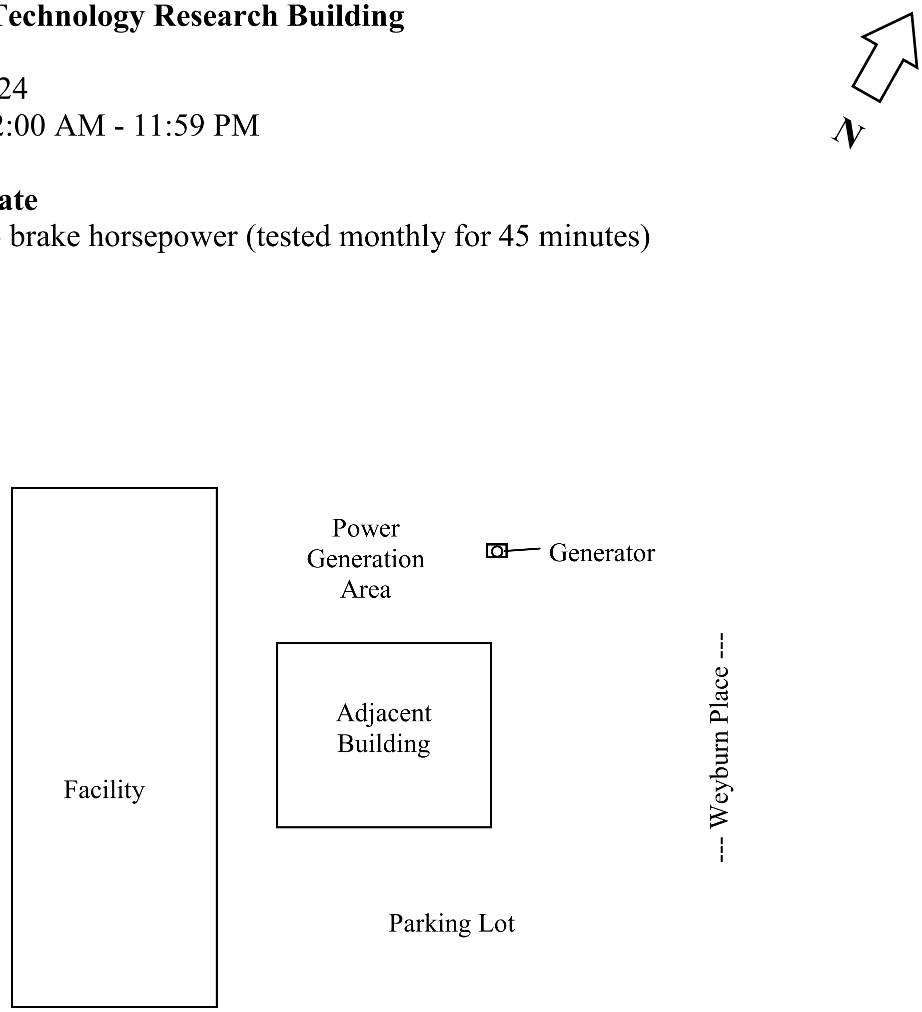


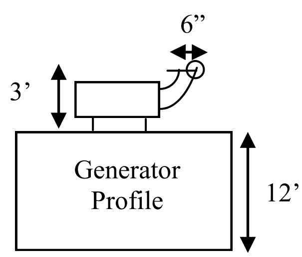




Source 12
UCLA Science and Technology Research Building
1040 Veteran Avenue
Los Angeles, CA 90024
Monday - Sunday: 12:00 AM - 11:59 PM

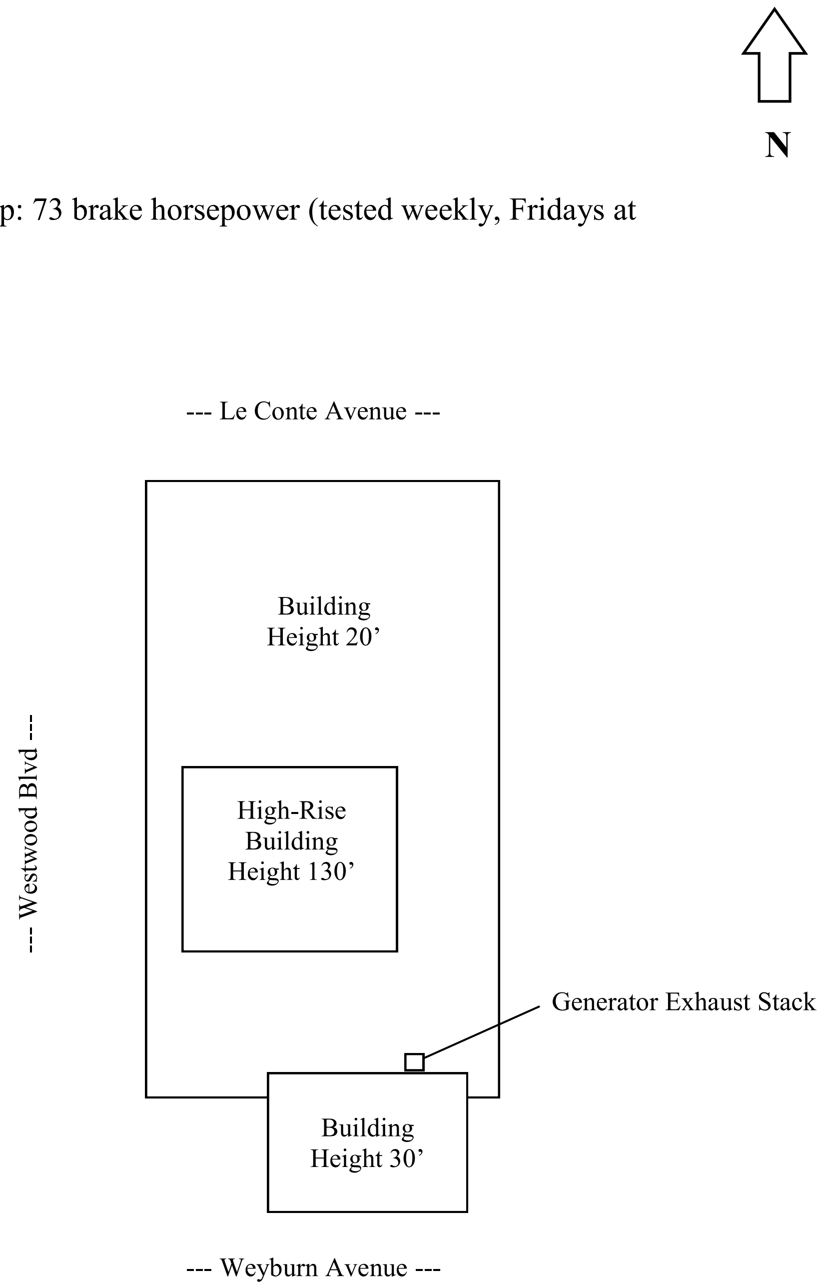
Chemical and Use Rate
Diesel Generator: 746 brake horsepower (tested monthly for 45 minutes)

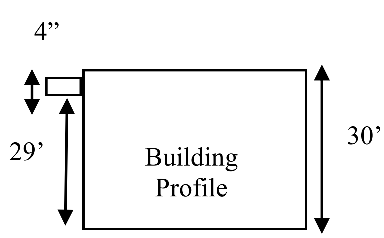




Source 13
Regents of UC
924 Westwood Boulevard
Los Angeles, CA 90024

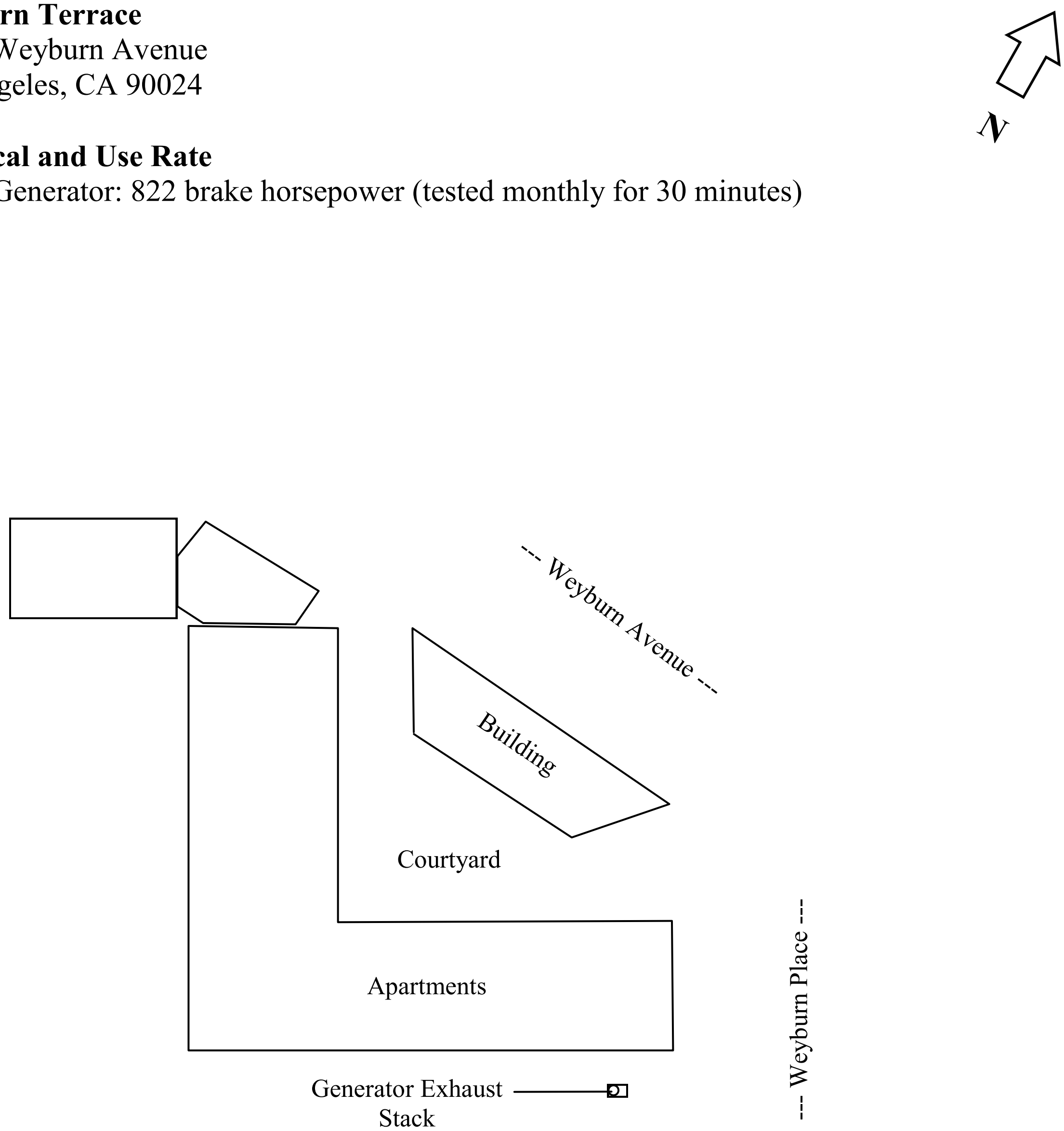
Chemical and Use Rate
Diesel Engine for Fire Pump: 73 brake horsepower (tested weekly, Fridays at 10AM for 30 mins)

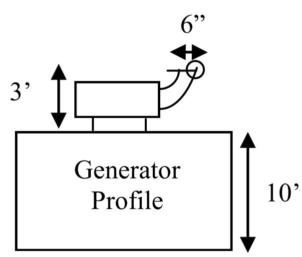




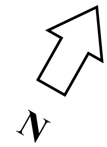
Source 14
Weyburn Terrace
11000 Weyburn Avenue
Los Angeles, CA 90024

Chemical and Use Rate
Diesel Generator: 822 brake horsepower (tested monthly for 30 minutes)

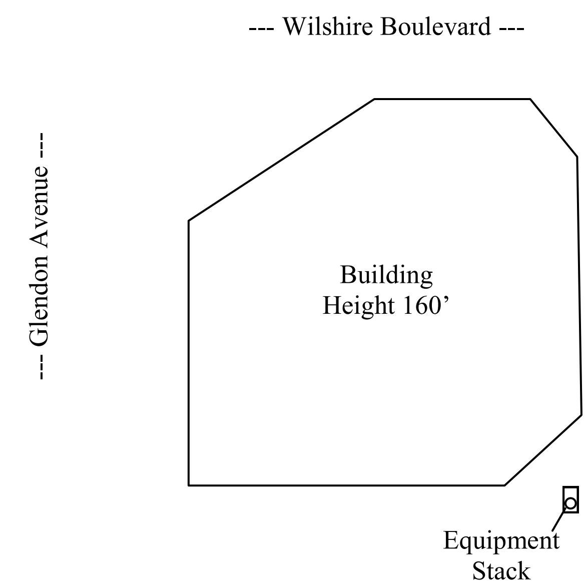


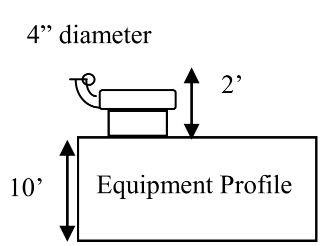


Source 15
Westwood Place Investors
10866 Wilshire Boulevard
Los Angeles, CA 90024

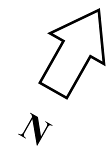


Chemical and Use Rate
Diesel Generator: 340 brake horsepower
Diesel Engine for Fire Pump: 340 brake horsepower
Testing Frequency: maximum maintenance and testing hours of 50 hours per year, per SCAQMD permit-to-operate R-F54053

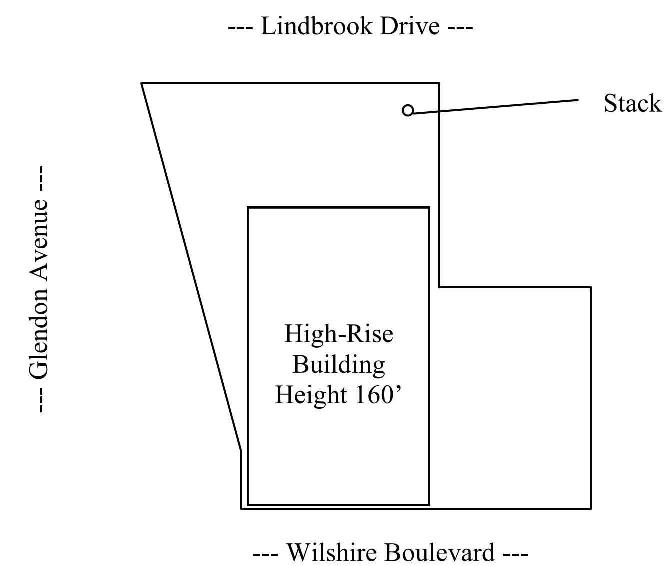


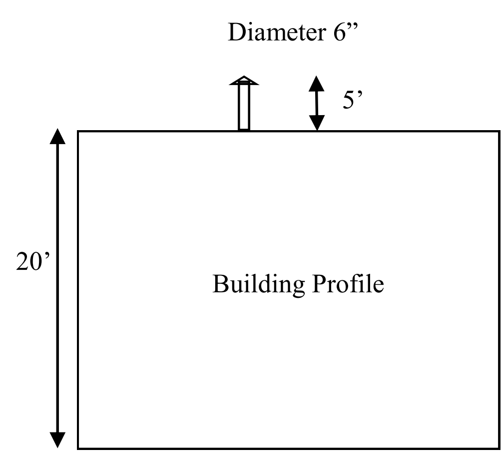


Source 16
Center West
10877 Wilshire Boulevard
Los Angeles, CA 90024

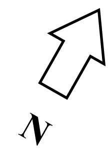


Chemical and Use Rate
Diesel Generator: 1,023 brake horsepower
Diesel Engine for Fire Pump (2): 250 brake horsepower
Testing Frequency: maximum maintenance and testing hours of 20 hours per year, per SCAQMD permit-to-operate R-D36738

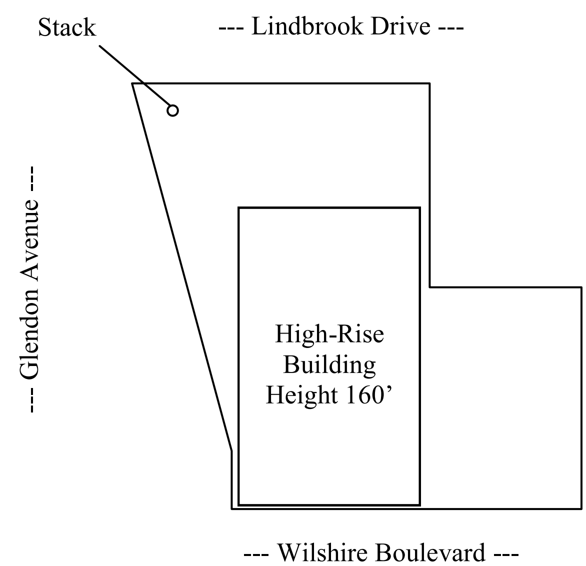


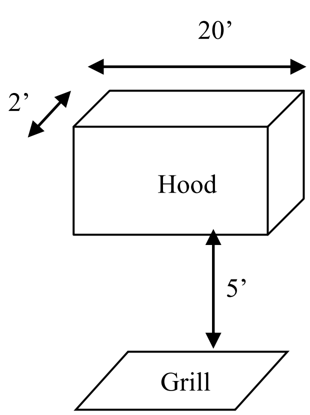


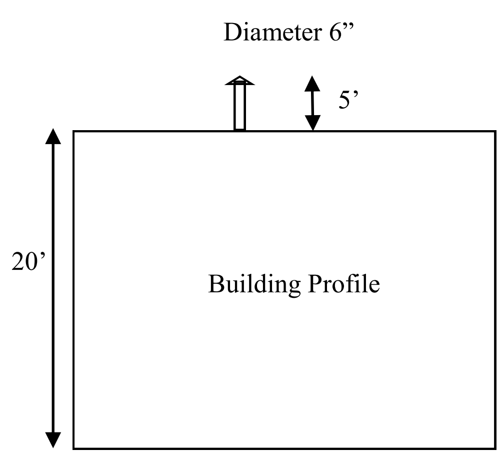
Source 17
Palomino
10877 Wilshire Boulevard
Los Angeles, CA 90024
Monday - Sunday: 11:00 AM - 10:00 PM



Chemical and Use Rate
Charbroiler, under-fired: estimated 144 pounds of chicken with skin and 180 pounds of steak cooked per week

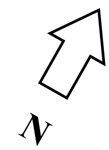


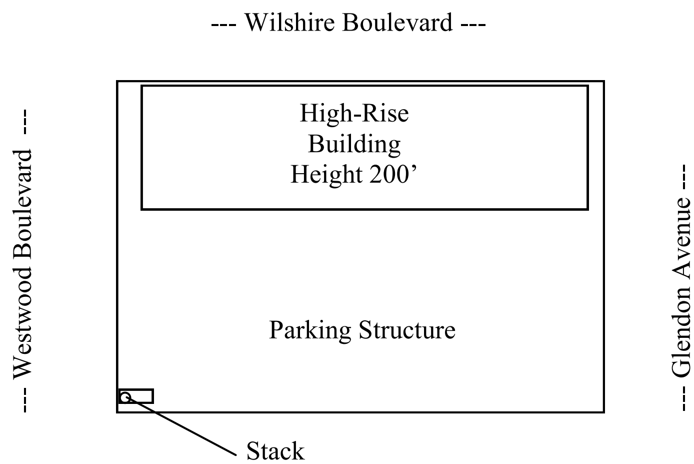


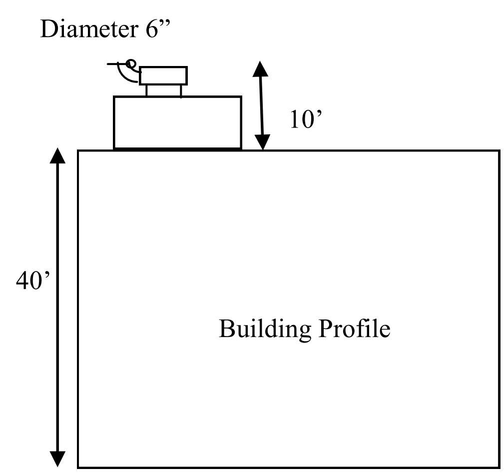


Source 18
UCLA Health System
10880 Wilshire Boulevard
Los Angeles, CA 90024

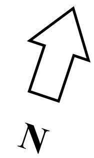
Chemical and Use Rate
Diesel Generators: 1,141 brake horsepower
Testing Frequency: maximum maintenance and testing hours of 50 hours per year, per SCAQMD permit-to-operate G15950



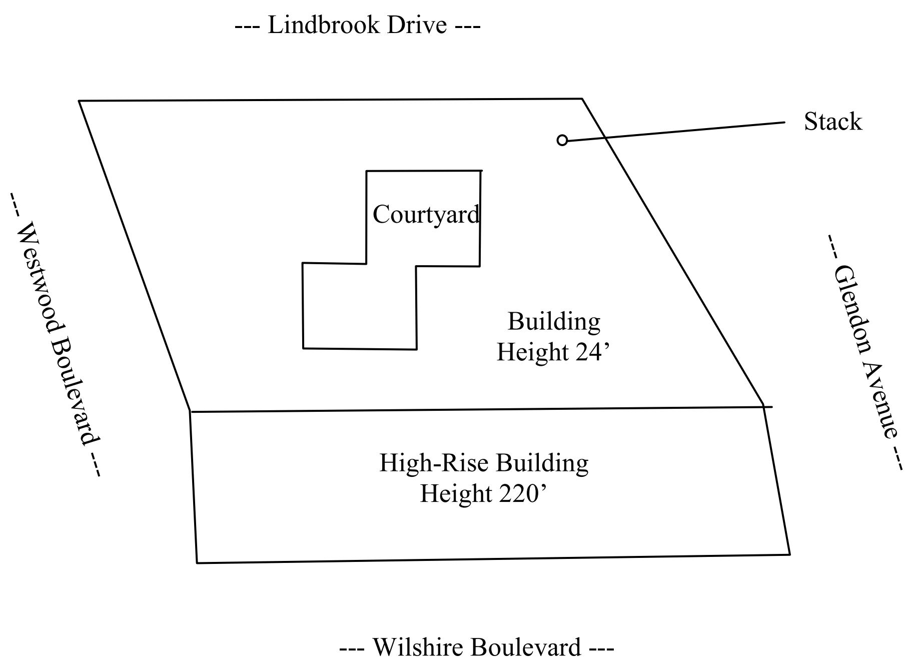


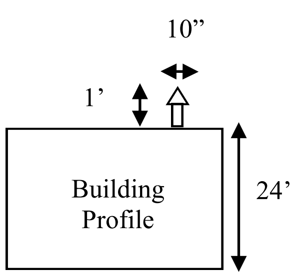


Source 19
Oxy Westwood
10899 Wilshire Blvd
Los Angeles, CA 90024
Monday - Sunday: 12:00 AM - 11:59 PM

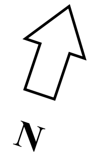


Chemical and Use Rate
Natural Gas Boilers (2): 750,000 BTU per hour

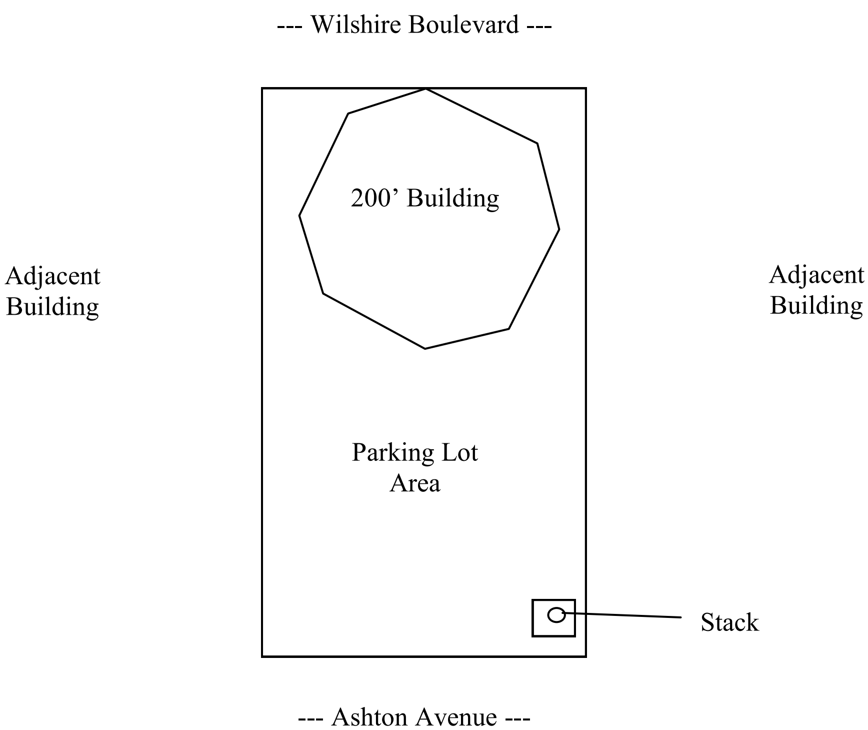


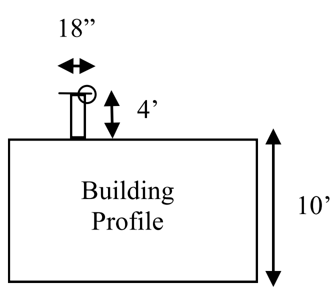


Source 20
UCLA Wilshire Center
10920 Wilshire Boulevard
Los Angeles, CA 90024



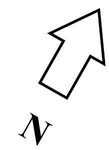
Chemical and Use Rate
Diesel Generator: 2,922 brake horsepower (tested monthly for 30 minutes)

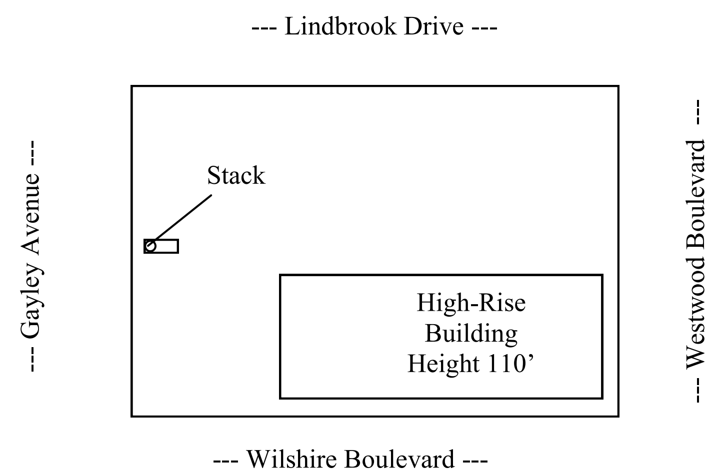


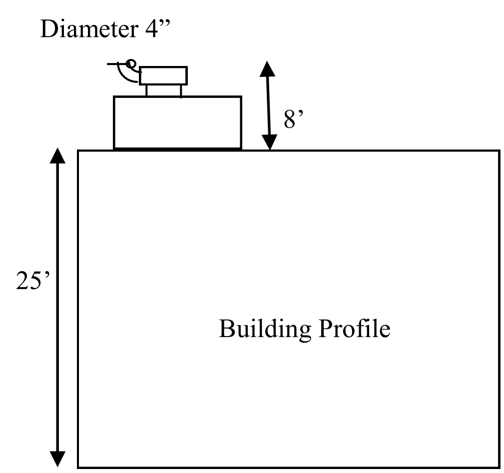


Source 21
Muller Company
10921 Wilshire Boulevard
Los Angeles, CA 90024

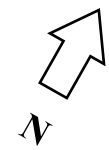
Chemical and Use Rate
Diesel Generators: 380 brake horsepower
Testing Frequency: maximum maintenance and testing hours of 20 hours per year, per SCAQMD permit-to-operate R-F20980



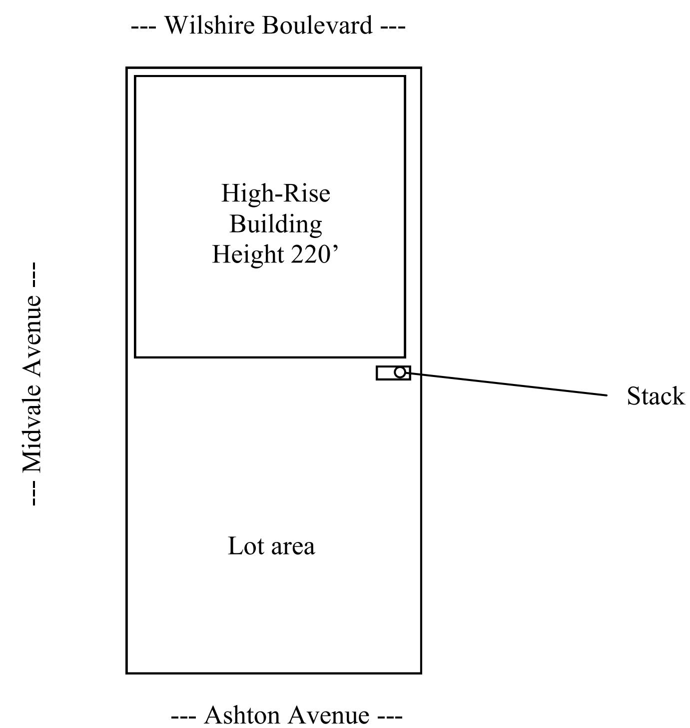


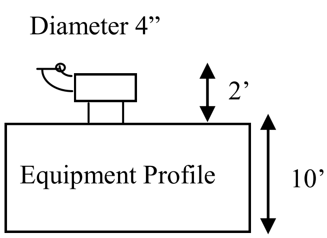


Source 22
The Tower
10940 Wilshire Boulevard
Los Angeles, CA 90024

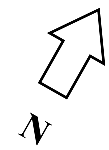


Chemical and Use Rate
Diesel Generators: 749 brake horsepower
Diesel Engines for Fire Pumps (2): 181 brake horsepower
Testing Frequency: maximum maintenance and testing hours of 20 hours per year, per SCAQMD permit-to-operate R-F45371



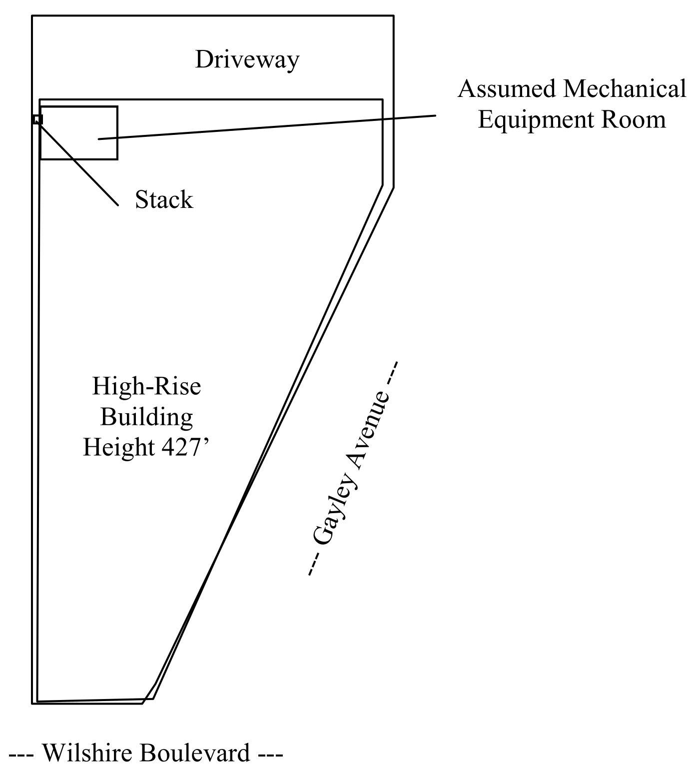


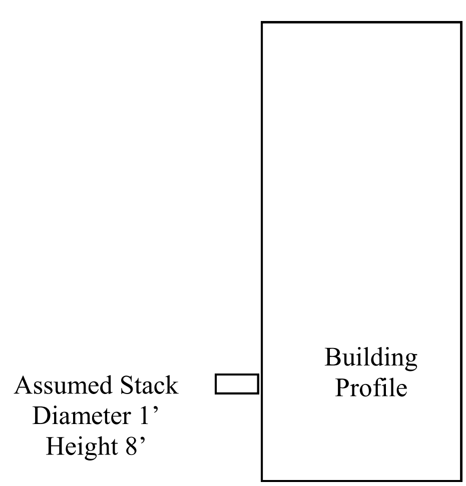
Source 23
Wilshire-Gayley
10951 Wilshire Boulevard
Los Angeles, CA 90024
Monday - Sunday: 12:00 AM to 11:59 PM



Chemical and Use Rate
Diesel generator emissions from Wilshire-Gayley Development Project DEIR (PCR Services Corp., 2008)
Natural gas combustion (boiler) emissions from Addendum to the Certified EIR for The Wilshire-Gayley (PCR Services Corp., 2014).

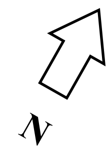
Construction Emissions
Emissions from Wilshire-Gayley Development Project DEIR (PCR Services Corp., 2008)

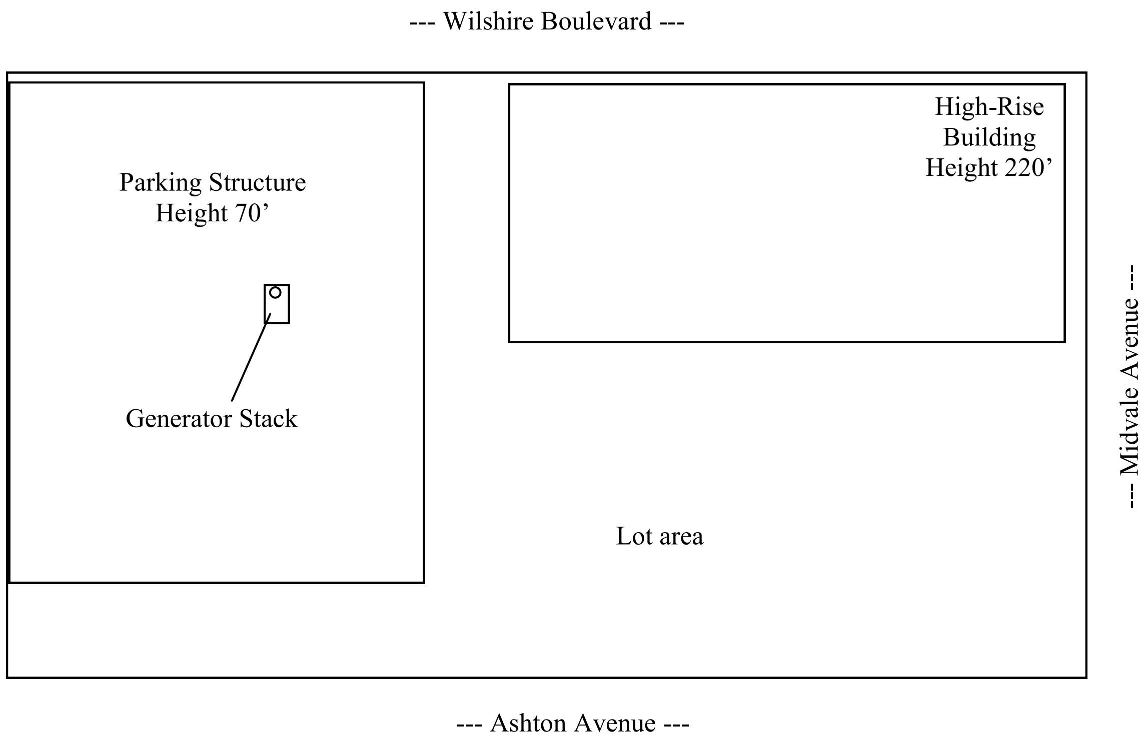


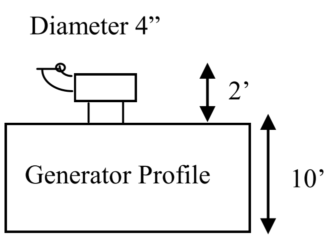


Source 24
EOP
10960 Wilshire Boulevard
Los Angeles, CA 90024
Monday - Sunday: 12:00 AM to 11:59 PM

Chemical and Use Rate
Diesel Generators: 1,337 brake horsepower (maximum maintenance and testing hours of 30 hours per year, per SCAQMD permit-to-operate F77529)

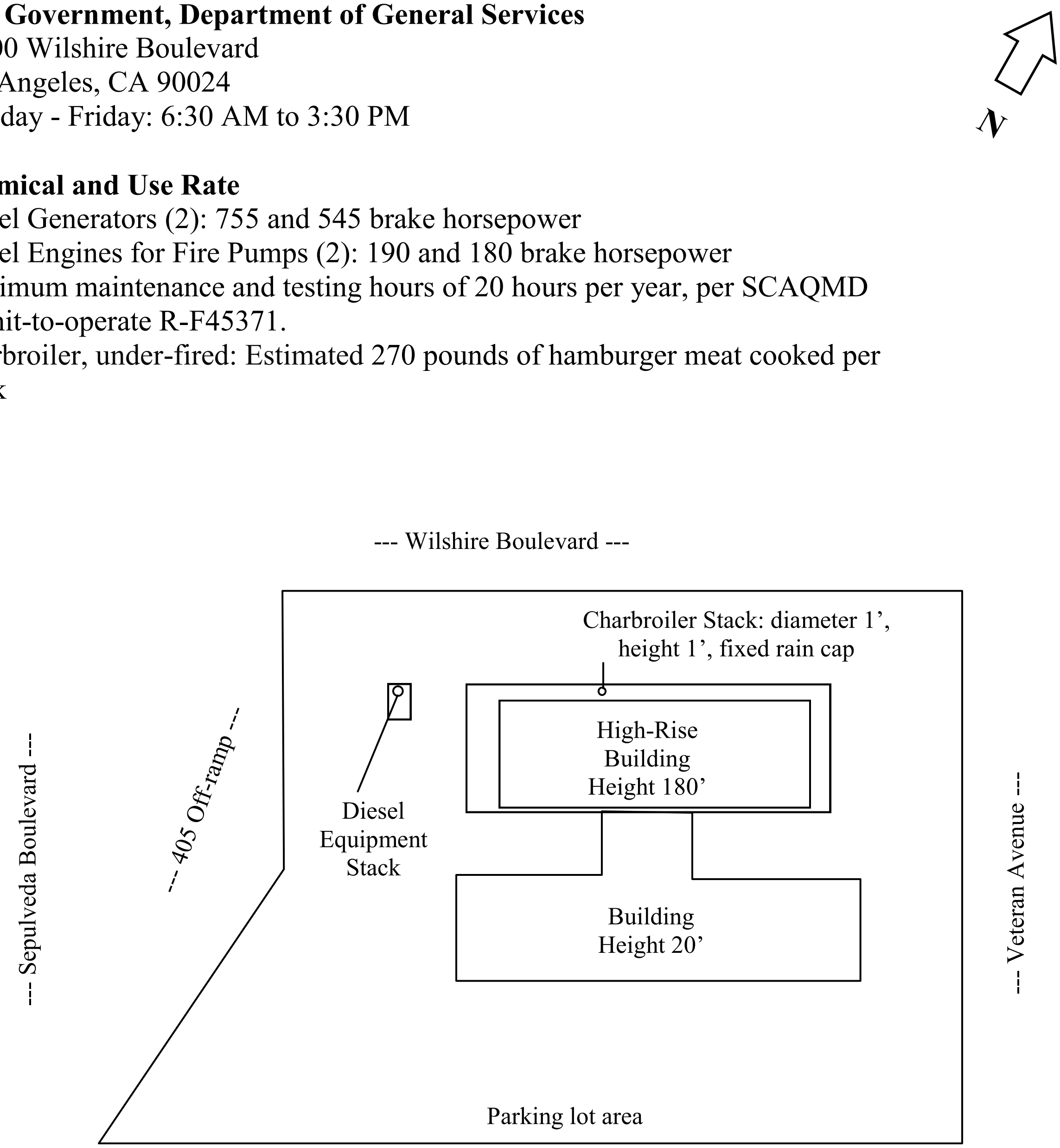


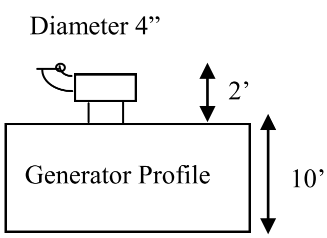


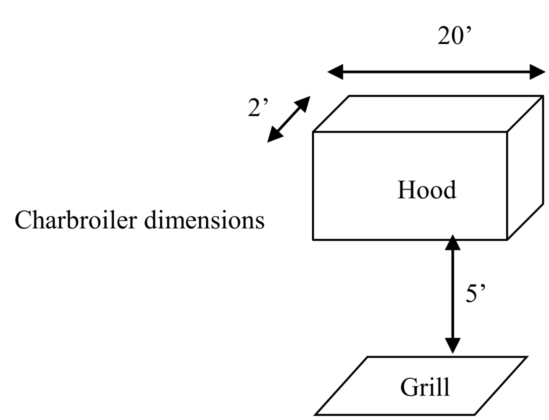


Source 25
U.S. Government, Department of General Services
11000 Wilshire Boulevard
Los Angeles, CA 90024
Monday - Friday: 6:30 AM to 3:30 PM

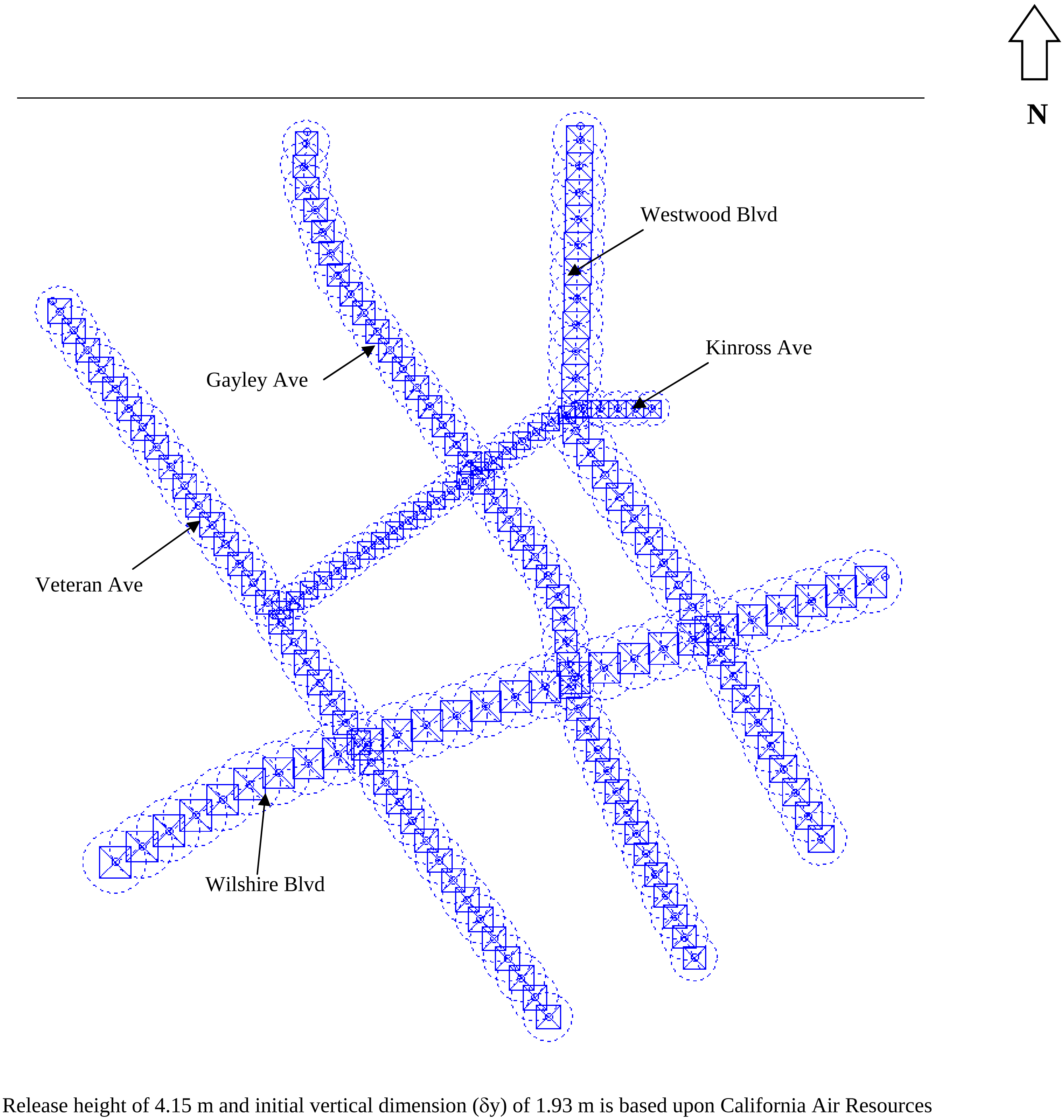
Chemical and Use Rate
Diesel Generators (2): 755 and 545 brake horsepower
Diesel Engines for Fire Pumps (2): 190 and 180 brake horsepower
Maximum maintenance and testing hours of 20 hours per year, per SCAQMD permit-to-operate R-F45371.
Charbroiler, under-fired: Estimated 270 pounds of hamburger meat cooked per week







Mobile Sources
Source 26: Wilshire Boulevard - Sources L0000001-27 (cars); Sources L0000323-349 (trucks)
Source 27: Veteran Avenue - Sources L0000028-64 (cars); Sources L0000350-386 (trucks)
Source 28: Gayley Avenue - Sources L0000065-105 (cars); Sources L0000387-427 (trucks)
Source 29: Kinross Avenue - Sources L0000106-131 (cars); Sources L0000428-453 (trucks)
Source 30: Westwood Boulevard - Sources L0000132-161 (cars); Sources L0000454-483 (trucks)



- Release height of 4.15 m and initial vertical dimension (δy) of 1.93 m is based upon California Air Resources Board's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (2000). Release of 0.6 m used for gasoline-fueled vehicles.

Appendix C. Emission Rate Calculations

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Source 1
California Pizza Kitchen
1001 Broxton Avenue
Los Angeles, CA 90024

Operation: Charbroiler, under-fired

	hours	days	weeks
Temporal Profile:	10.5	5	52
	11.5	2	52

Average Pounds per Day:

Poultry, skinless	179	lbs/week
	26	lbs/day

Emission Factors: [(1)]

ROG Emission Rate, Poultry	1.82	lbs/1000 lbs meat

Emissions:

ROG Emissions, Poultry	1.41	lbs/mo
	4.31E-03	lbs/hr
	5.44E-04	g/s

Speciation: [(2)]

		Compound Wt Fraction
ROG Emissions	Acetaldehyde	0.087
	Benzene	0.150
	Formaldehyde	0.120
	Naphthalene	0.023
	Propionaldehyde	0.023
	Styrene	0.057
	Toluene	0.059
	Other (NOS)	0.48
	Total	1.00

Point Source Specifications (vertical release, fixed rain cap):

Stack Flowrate	11,000	cfm
Stack Temperature	330	K
Stack Diameter	1.0	ft
Stack Height	29.0	ft

Note: ROG = reactive organic gases

(1) Emission rates are based upon *Methods for Developing a National Emission Inventory for Commercial Cooking Processes* (E.H. Pechan and Associates, Inc. for USEPA, 2003).

(2) Speciation information based upon *National Emissions Inventory for Commercial Cooking* (Roe, et. al., E.H. Penchan & Associates, Inc. for USEPA, 2004).

Source 2
Los Angeles City, Department of General Services
1036 Broxton Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: (1)

hours	days	weeks
1.0	1	52

Equipment Specifications:

Equipment Used (#)	1
Brake Horsepower (bhp)	160
PM10 Emission Factor (g/bhp-hr) (2)	0.14
Load Factor (% / 100)	1

Emissions: 0.0062 g/s

Point Source Specifications (vertical release, fixed cap): (2)

Stack Flowrate	1,028	cfm
Stack Temperature	572	F
Stack Diameter	4.0	in
Stack Height	17.0	ft

(1) Testing profile based on weekly testing of generator (50 hours per year, the maximum allowable from SCAQMD permit-to-operate, F78574).

(2) Generator PM emission factor and exhaust parameters for Generac Model 97A03148S (from SCAQMD Certified ICE-Emergency Genetors list).

Source 3
London Cleaners
1073 Gayley Avenue
Los Angeles, CA 90024

Operation: Drycleaning

	hours	days	weeks
Temporal Profile:	12	5	52
	9	1	52

Materials:

Perchloroethylene	35.0	gal/yr
Density	13.6	lbs/gal

Emissions:

Pound/Pound Used	0.95	
Control Efficiency [(1)]	0.66	
Perchloroethylene	153.2	lbs/yr
	0.043	lbs/hr
	5.38E-03	g/s

Point Source Specifications (vertical release, fixed cap):

Stack Flowrate [(2)]	100	cfm
Stack Temperature	45	F
Stack Diameter	3.0	ft
Stack Height	15.0	ft

(1) Emission reduction based on SCAQMD Rule 1421 reported control efficiency for cleaning and drying processes (December, 3, 2004).

(2) Flowrate based on average volumetric flow rate for temporary total enclosure (TTE) from SCAQMD's Final Report for Developing Additional Technologies to Monitor and Reduce Fugitive Perchloroethylene Emissions at Dry Cleaners (AVES, 2000).

Source 4
El Pollo Loco
1081 Gayley Avenue
Los Angeles, CA 90024

Operation: Charbroiler, under-fired

	hours	days	weeks
Temporal Profile:	12	5	52
	13	2	52

Average Pounds per Day:

Poultry, with skin	144	lbs/week
Poultry, skinless	179	lbs/week
	46	lbs/day

Emission Factors: [1]

ROG Emission Rate, Poultry	1.82	lbs/1000 lbs meat

Emissions:

ROG Emissions, Poultry	2.55	lbs/mo
	6.84E-03	lbs/hr
	8.61E-04	g/s

Speciation: [2]

		Compound Wt Fraction
ROG Emissions	Acetaldehyde	0.087
	Benzene	0.150
	Formaldehyde	0.120
	Naphthalene	0.023
	Propionaldehyde	0.023
	Styrene	0.057
	Toluene	0.059
	Other (NOS)	0.48
	Total	1.00

Point Source Specifications (vertical release, fixed rain cap):

Stack Flowrate	18,800	cfm
Stack Temperature	330	K
Stack Diameter	1.0	ft
Stack Height	46.0	ft

Note: ROG = reactive organic gases

(1) Emission rates are based upon *Methods for Developing a National Emission Inventory for Commercial Cooking Processes* (E.H. Pechan and Associates, Inc. for USEPA, 2003).

(2) Speciation information based upon *National Emissions Inventory for Commercial Cooking* (Roe, et. al., E.H. Penchan & Associates, Inc. for USEPA, 2004).

Source 5
Casden Glendon
1041 Glendon Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: (1)	hours	days	weeks
	1.0	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	64	
PM10 Emission Factor (g/bhp-hr) (2)	0.11	
Load Factor (% / 100)	1	
Emissions:	0.0020	g/s

Point Source Specifications (vertical release, hinged cap): (2)

Stack Flowrate	282	acfm
Stack Temperature	622	K
Stack Diameter	3.0	in
Stack Height	6.0	ft

(1) Testing profile based on weekly testing of generator (50 hours per year, the maximum allowable from SCAQMD permit-to-operate, F96007).

(2) Generator PM emission factor and exhaust parameters for John Deere Model 3029TF270D (from SCAQMD Certified ICE-Emergency Genetors list).

Source 6
Center for Ambulatory Surgical Treatment
1090 Glendon Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: [1]

hours	days	weeks
1.0	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	260	
PM10 Emission Factor (g/bhp-hr) [2]	0.11	
Load Factor (% / 100)	1	
Emissions:	0.0079	g/s

Point Source Specifications (vertical release, hinged cap): [2]

Stack Flowrate	1,541	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	60.0	ft

(1) Testing profile based on weekly testing of generator (50 hours per year, the maximum allowable from SCAQMD permit-to-operate, F96007).

(2) Generator PM emission factor and exhaust parameters for John Deere Model 6081T (from SCAQMD Certified ICE-Emergency Genetors list).

Source 7
Trizec Westwood Center
1100 Glendon Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: (1)

hours	days	weeks
0.38	1	52

Equipment Specifications:

Equipment Used (#)	1
Brake Horsepower (bhp)	810
PM10 Emission Factor (g/bhp-hr) (2)	0.14
Load Factor (% / 100)	1

Emissions: 0.032 g/s

Point Source Specifications (vertical release, hinged cap): (2)

Stack Flowrate	4,111	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	60.0	ft

(1) Testing profile based on weekly testing of generator (20 hours per year, the maximum allowable from SCAQMD permit-to-operate, F86963).

(2) Generator PM emission factor and exhaust parameters for Detroit Model 8123-7405 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 8a
UCLA Transit Operations Maintenance Yard
11075 Kinross Avenue
Los Angeles, CA 90024

Operation: CNG Buses

	hours	days	weeks
Temporal Profile:	16	5	52
	0	0	0

Truck Activity:

CNG Buses/Day	321
Miles Traveled/Trip (Ingress/Egress)	0.13
Idling Duration (min)	15

Running Emission:	Emission Factor (g/mi) [(1)]	Compound Emissions (g/s)		Hydrocarbon Wt Fractions [(2)]
Acetaldehyde	9.50E-02	7.02E-05		7.11E-05
Benzene	3.00E-03	2.22E-06		8.06E-05
1,3-Butadiene	1.80E-03	1.33E-06		6.63E-07
Formaldehyde	7.82E-01	5.78E-04		2.12E-02
Total	0.882	6.52E-04	g/s	

Idling Emissions:	Emission Factor (g/hr)	Compound Emissions (g/s)		Compound Wt Fractions
Total Hydrocarbons [(3)]	21.8			
Acetaldehyde	1.55E-03	2.15E-06		5.57E-02
Benzene	1.75E-03	2.44E-06		3.59E-03
1,3-Butadiene	1.44E-05	2.01E-08		1.04E-03
Formaldehyde	4.62E-01	6.44E-04		9.40E-01
Total		6.48E-04	g/s	
Combined Emissions		1.30E-03	g/s	

(1) Running emission factors from CARB's *Study of CNG and Diesel Transit Bus Emissions* (2004).

(2) Speciation from *Evaluation of Exhaust After-Treatment Device Effectiveness in Reducing Regulated and Unregulated Emissions from Natural Gas Fueled Heavy Duty Transit Bus (Padmavathy, University of West Virginia, 2008).*

(3) Idling emission factor from The Center of Alternative Fuels, Engines, and Emissions (CAFEE) study reported to CARB Testing of Volatile and Nonvolatile Emissions from Advanced Technology Natural Gas Vehicles (2011).

Source 8b
UCLA Transit Operations Maintenance Yard
11075 Kinross Avenue
Los Angeles, CA 90024

Operation: Diesel Buses

	hours	days	weeks
Temporal Profile:	16	5	52
	0	0	0

Truck Activity:

Diesel Buses	12	Buses/Day
Miles Traveled/Trip (Ingress/Egress)	0.13	miles
Idling Duration	15	min

Running Emissions:

School Buses	Student	Staff
Emission Factor (g/mi) (1)	0.1480	0.0622
Running Emissions (g/sec)	4.09E-06	1.72E-06

Idling Emissions:

School Buses	Student	Staff
Emission Factor (g/hr) (2)	0.1100	0.0444
Idling Emissions (g/sec)	5.73E-06	2.31E-06

Combined Emissions (g/sec)	9.82E-06	4.03E-06

(1) For DPM, average PM10 running emission factors for school buses obtained from CARB (EMFAC2014) for analysis years 2017-2041. Based upon an average lot travel speed of 5 mph (see Average Emission Factors worksheet).

(2) For DPM, average PM10 idling emission factors for school buses obtained from CARB (EMFAC2014) for analysis years 2017-2041 (see Average Emission Factors worksheet).

Average Emission Factors
School Exposure Durations
School Bus

Average Emission Factors

Adjusting the EMFAC2014 emission factors to account for reductions over the exposure duration.

Risk Year	Modeling Year	Running Emission Factors (g/mi) PM10 Diesel Fueled - 5 mph SBUS	Idling Emission Factors (g/hr) PM10 Diesel Fueled SBUS
1	2017	0.2613	0.2141
2	2018	0.1590	0.1200
3	2019	0.1467	0.1069
4	2020	0.1349	0.0964
5	2021	0.1232	0.0866
6	2022	0.1115	0.0774
7	2023	0.0997	0.0688
8	2024	0.0882	0.0607
9	2025	0.0770	0.0529
10	2026	0.0661	0.0454
11	2027	0.0558	0.0384
12	2028	0.0462	0.0319
13	2029	0.0375	0.0260
14	2030	0.0299	0.0209
15	2031	0.0235	0.0165
16	2032	0.0183	0.0127
17	2033	0.0143	0.0095
18	2034	0.0115	0.0069
19	2035	0.0097	0.0049
20	2036	0.0085	0.0035
21	2037	0.0075	0.0025
22	2038	0.0068	0.0020
23	2039	0.0062	0.0016
24	2040	0.0057	0.0014
25	2041	0.0054	0.0014
7-year average [1]		0.1480	0.1100
25-year average [2]		**0.0622**	**0.0444**

[1] Represent the 7-year average emission factors (2017-2023) for the student scenario (grades 6-12).
[2] Represent the 25-year average emission factors (2017-2041) for the staff/worker scenario.

Diesel buses modeled using SBUS emission factors (EMFAC 2014)

Source 9
BBQ Chicken
10970 Le Conte Avenue
Los Angeles, CA 90024

Operation: Charbroiler, under-fired

	hours	days	weeks
Temporal Profile:	11.5	6	52
	5.5	1	52

Average Pounds per Day:

Poultry, with skin	144	lbs/week
Poultry, skinless	179	lbs/week
	46	lbs/day

Emission Factors: (1)

ROG Emission Rate, Poultry	1.82	lbs/1000 lbs meat

Emissions:

ROG Emissions, Poultry	2.55	lbs/mo
	7.89E-03	lbs/hr
	9.94E-04	g/s

Speciation: (2)

		Compound Wt Fraction
ROG Emissions	Acetaldehyde	0.087
	Benzene	0.150
	Formaldehyde	0.120
	Naphthalene	0.023
	Propionaldehyde	0.023
	Styrene	0.057
	Toluene	0.059
	Other (NOS)	0.48
	Total	1.00

Point Source Specifications (vertical release, fixed rain cap):

Stack Flowrate	18,800	cfm
Stack Temperature	330	K
Stack Diameter	1.0	ft
Stack Height	21.0	ft

Note: ROG = reactive organic gases

(1) Emission rates are based upon *Methods for Developing a National Emission Inventory for Commercial Cooking Processes (E.H. Pechan and Associates, Inc. for USEPA, 2003).*

(2) Speciation information based upon *National Emissions Inventory for Commercial Cooking* (Roe, et. al., E.H. Penchan & Associates, Inc. for USEPA, 2004).

Source 10
Verizon
1041 Tiverton Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generators

Generator Testing Profile:

	hours	days	weeks
Gen1 (1)	1.0	1	52

Equipment Specifications:

Gen1	Equipment Used (#)	1
	Brake Horsepower (bhp)	665
	PM10 Emission Factor (g/bhp-hr) (2)	0.086
	Load Factor (% / 100)	1
Gen2	Equipment Used (#)	1
	Brake Horsepower (bhp)	620
	PM10 Emission Factor (g/bhp-hr) (2)	0.086
	Load Factor (% / 100)	1

Emissions: 0.031 g/s

Point Source Specifications (vertical release, hinged cap): (2)

Stack Flowrate	3,597	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	55.0	ft

(1) Testing profile based on weekly testing of generator (4.2 hours per month, the maximum allowable from SCAQMD permit-to-operate, G21826).

(3) Generator PM emission factor and exhaust parameters for Catepillar Model 3412 (from SCAQMD Certified ICE-Emergency Genetors list). A single representative stack used to evaluate this facility.

Source 11a
UCLA Rehabilitation Services
1000 Veteran Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: [1]

	hours	days	weeks
	0.75	1	12
Adjusted for AERMOD	0.17	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	635	
PM10 Emission Factor (g/bhp-hr) [2]	0.133	
Load Factor (% / 100)	1	
Emissions:	0.023	g/s

Point Source Specifications (vertical release, hinged cap): [2]

Stack Flowrate	3,083	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	15.0	ft

(1) Testing profile based on montly testing of generator, ran 45 minutes in the evening (assumed 5PM).
(2) Generator PM emission factor and exhaust parameters for Detroit Model 6063-HK35 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 11b
UCLA Rehabilitation Services
1000 Veteran Avenue
Los Angeles, CA 90024

Operation: Natural Gas Combustion - Boilers

	hours	days	weeks
Temporal Profile:	24	7	52
	0	0	0

Equipment Rating: [(1)]

BTU/Hour	1,200,000
Number	2
BTU/Hour	1,000,000
Number	2

Emissions:	Emission Factors: [(2)] lb/mmcf gas	lb/mmbtu	Compound Emissions	Adjusted Wt Fraction
Acetaldehyde	4.30E-03	4.22E-06	1.85E-05	2.37E-04
Acrolein	2.70E-03	2.65E-06	1.16E-05	1.49E-04
Ammonia	1.80E+01	1.76E-02	7.76E-02	9.94E-01
Benzene	8.00E-03	7.84E-06	3.45E-05	4.42E-04
Ethylbenzene	9.50E-03	9.31E-06	4.10E-05	5.25E-04
Formaldehyde	1.70E-02	1.67E-05	7.33E-05	9.39E-04
n-Hexane	6.30E-03	6.18E-06	2.72E-05	3.48E-04
Naphthalene	3.00E-04	2.94E-07	1.29E-06	1.66E-05
Toluene	3.66E-02	3.59E-05	1.58E-04	2.02E-03
Xylene	2.72E-02	2.67E-05	1.17E-04	1.50E-03
Total			7.81E-02	lb/hr
			9.84E-03	g/s

Point Source Specifications (vertical release with fixed rain cap):

Stack Temperature	400	F
Stack Flowrate	1,832	cfm
Stack Diameter	6.0	inches
Stack Height	61	ft

(1) Information provided by UCLA.
(2) Emission factors (pounds per million standard cubic feet of fuel burned) and btu/scf conversion (1,020 btu/scf) based upon SCAQMD Supplemental Instruction - Reporting Procedures for AB2588 Facilities (2014). Appendix B, Table B-1: Default Emission Factors for Natural Gas Combustion (< 10 MMBTU/HR).

Source 12
UCLA Science and Technology Research Building
1040 Veteran Avenue
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: [1]

	hours	days	weeks
	0.75	1	12
Adjusted for AERMOD	0.17	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	746	
PM10 Emission Factor (g/bhp-hr) [2]	0.085	
Load Factor (% / 100)	1	
Emissions:	0.018	g/s

Point Source Specifications (vertical release, hinged cap): [2]

Stack Flowrate	1,688	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	15.0	ft

(1) Testing profile based on montly testing of generator, ran 45 minutes in the evening (assumed 5PM).
(2) Generator PM emission factor and exhaust parameters for Catepillar Model 3412 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 13
Regents of UC
924 Westwood Boulevard
Los Angeles, CA 90024

Operation: Diesel Engine for Fire Pump

Generator Testing Profile: [1]

hours	days	weeks
0.50	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	73	
PM10 Emission Factor (g/bhp-hr) [2]	0.085	
Load Factor (% / 100)	1	
Emissions:	0.0017	g/s

Point Source Specifications (horizontal release): [2]

Stack Flowrate	282	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	29.0	ft

(1) Testing profile based on weekly testing of generator; ran for 30 minutes Friday mornings.
(2) Generator PM emission factor and exhaust parameters for Clarke MD-4 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 14
Weyburn Terrace
11000 Weyburn Place
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: (1)

	hours	days	weeks
	0.50	1	12
Adjusted for AERMOD	0.12	1	52

Equipment Specifications:

Equipment Used (#)	1
Brake Horsepower (bhp)	822
PM10 Emission Factor (g/bhp-hr) (2)	0.14
Load Factor (% / 100)	1

Emissions: 0.032 g/s

Point Source Specifications (vertical release, hinged cap): (2)

Stack Flowrate	4,111	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	13.0	ft

(1) Testing profile based on montly testing of generator.
(2) Generator PM emission factor and exhaust parameters for MTU Detroit Model 12V1600G70S (from SCAQMD Certified ICE-Emergency Genetors list).

Source 15
Westwood Place Investors
10866 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator and Diesel Engine for Fire Pump

Generator Testing Profile: [1]

hours	days	weeks
1.0	1	52

Equipment Specifications:

Gen	Equipment Used (#)	1
	Brake Horsepower (bhp)	340
	PM10 Emission Factor (g/bhp-hr) [2]	0.1
	Load Factor (% / 100)	1
Fire Pump	Equipment Used (#)	1
	Brake Horsepower (bhp)	340
	PM10 Emission Factor (g/bhp-hr) [3]	0.12
	Load Factor (% / 100)	1

Emissions: 0.021 g/s

Point Source Specifications (vertical release, hinged cap): [4]

Stack Flowrate	1,541	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	12.0	ft

(1) Testing profile based on weekly testing of generator (50 hours per year, the maximum allowable from SCAQMD permit-to-operate, R-F54053).

(2) Generator PM emission factor and exhaust parameters for Catepillar Model 3406 (from SCAQMD Certified ICE-Emergency Genetors list).

(3) Generator PM emission factor and exhaust parameters for Cummins Model NT-855F3 (from SCAQMD Certified ICE-Emergency Genetors list).

(4) A single representative stack used for the evaluation.

Source 16
Center West
10877 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator and Diesel Engine for Fire Pumps

Generator Testing Profile: (1)

hours	days	weeks
0.38	1	52

Equipment Specifications:

Gen	Equipment Used (#)	1
	Brake Horsepower (bhp)	1,023
	PM10 Emission Factor (g/bhp-hr) (2)	0.06
	Load Factor (% / 100)	1
Fire Pump	Equipment Used (#)	2
	Brake Horsepower (bhp)	250
	PM10 Emission Factor (g/bhp-hr) (3)	0.13
	Load Factor (% / 100)	1
Emissions:		0.035 g/s

Point Source Specifications (vertical release, hinged cap): (4)

Stack Flowrate	5,138	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	25.0	ft

(1) Testing profile based on weekly testing of generator (20 hours per year, the maximum allowable from SCAQMD permit-to-operate, R-D36738).

(2) Generator PM emission factor and exhaust parameters for Catepillar Model 3508 (from SCAQMD Certified ICE-Emergency Genetors list).

(3) Generator PM emission factor and exhaust parameters for Cummins Model NT-855F3 (from SCAQMD Certified ICE-Emergency Genetors list).

(4) A single representative stack used for the evaluation.

Source 17
Palomino
10877 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Charbroiler, under-fired

	hours	days	weeks
Temporal Profile:	11	7	52
	0	0	0

Average Pounds per Day:		
Poultry, with skin	144	lbs/week
Steak	180	lbs/week
	46	lbs/day
Emission Factors: [1]		
ROG Emission Rate, Poultry	1.82	lbs/1000 lbs meat
ROG Emission Rate, Steak	0.86	lbs/1000 lbs meat
Emissions:		
ROG Emissions, Poultry	2.55	lbs/mo
	7.66E-03	lbs/hr
ROG Emissions, Steak	1.21	lbs/mo
	3.62E-03	lbs/hr
Combined Emissions	1.13E-02	lbs/hr
	1.42E-03	g/s

		Compound Wt Fraction
Speciation: [2]		
ROG Emissions	Acetaldehyde	0.087
	Benzene	0.150
	Formaldehyde	0.120
	Naphthalene	0.023
	Propionaldehyde	0.023
	Styrene	0.057
	Toluene	0.059
	Other (NOS)	0.48
	Total	1.00

Point Source Specifications (vertical release, fixed rain cap):

Stack Flowrate	11,000	cfm
Stack Temperature	330	K
Stack Diameter	6.0	inches
Stack Height	25.0	ft

Note: ROG = reactive organic gases

(1) Emission rates are based upon *Methods for Developing a National Emission Inventory for Commercial Cooking Processes* (E.H. Pechan and Associates, Inc. for USEPA, 2003).

(2) Speciation information based upon *National Emissions Inventory for Commercial Cooking* (Roe, et. al., E.H. Penchan & Associates, Inc. for USEPA, 2004).

Source 18
UCLA Health System
10880 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: [(1)]

hours	days	weeks
1.0	1	52

Equipment Specifications:

Equipment Used (#)	1
Brake Horsepower (bhp)	1,141
PM10 Emission Factor (g/bhp-hr) [(2)]	0.06
Load Factor (% / 100)	1

Emissions:	0.019	g/s

Point Source Specifications (vertical release, hinged cap): [(2)]

Stack Flowrate	5,652	acfm
Stack Temperature	622	K
Stack Diameter	6.0	in
Stack Height	50.0	ft

(1) Testing profile based on weekly testing of generator (50 hours per year, the maximum allowable from SCAQMD permit-to-operate, G15950).

(2) Generator PM emission factor and exhaust parameters for Caterpillar Model C-27 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 19
Oxy Building
10899 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Natural Gas Combustion - Boilers

	hours	days	weeks
Temporal Profile:	24	7	52
	0	0	0

Equipment Rating: (1)

BTU/Hour	750,000
Number	2

Emissions:	Emission Factors: (2) lb/mmcf gas	lb/mmbtu	Compound Emissions	Adjusted Wt Fraction
Acetaldehyde	4.30E-03	4.22E-06	6.32E-06	2.37E-04
Acrolein	2.70E-03	2.65E-06	3.97E-06	1.49E-04
Ammonia	1.80E+01	1.76E-02	2.65E-02	9.94E-01
Benzene	8.00E-03	7.84E-06	1.18E-05	4.42E-04
Ethylbenzene	9.50E-03	9.31E-06	1.40E-05	5.25E-04
Formaldehyde	1.70E-02	1.67E-05	2.50E-05	9.39E-04
n-Hexane	6.30E-03	6.18E-06	9.26E-06	3.48E-04
Naphthalene	3.00E-04	2.94E-07	4.41E-07	1.66E-05
Toluene	3.66E-02	3.59E-05	5.38E-05	2.02E-03
Xylene	2.72E-02	2.67E-05	4.00E-05	1.50E-03
Total			2.66E-02	lb/hr
			3.36E-03	g/s

Point Source Specifications (vertical release with fixed rain cap):

Stack Temperature	400	F
Stack Flowrate	624	cfm
Stack Diameter	10.0	inch
Stack Height	25	ft

(1) Equipment informaton provided by UCLA.
(2) Emission factors (pounds per million standard cubic feet of fuel burned) and btu/scf conversion (1,020 btu/scf) based upon SCAQMD Supplemental Instruction - Reporting Procedures for AB2588 Facilities (2014). Appendix B, Table B-1: Default Emission Factors for Natural Gas Combustion (< 10 MMBTU/HR).

Source 20
UCLA Wilshire Center
10920 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile:

	hours	days	weeks
	0.50	1	12
Adjusted for AERMOD	0.12	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	2,922	
PM10 Emission Factor (g/bhp-hr) [(2)]	0.07	
Load Factor (% / 100)	1	
Emissions:	0.057	g/s

Point Source Specifications (vertical release, hinged cap): [(1)]

Stack Flowrate	15,503	acfm
Stack Temperature	477	C
Stack Diameter	18.0	in
Stack Height	14.0	ft

(1) Generator PM emission factor and exhaust parameters for Cummins Model QSK60-G6 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 21
Muller Company
10921 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: [1]

hours	days	weeks
0.38	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	380	
PM10 Emission Factor (g/bhp-hr) [2]	0.12	
Load Factor (% / 100)	1	
Emissions:	0.013	g/s

Point Source Specifications (vertical release, hinged cap): [2]

Stack Flowrate	2,055	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	33.0	ft

(1) Testing profile based on weekly testing of generator (20 hours per year, the maximum allowable from SCAQMD permit-to-operate, R-F20980).

(2) Generator PM emission factor and exhaust parameters for Cummins Model LTA10-G1 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 22
The Tower
10940 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator and Diesel Engine for Fire Pumps

Generator Testing Profile: (1)

hours	days	weeks
0.38	1	52

Equipment Specifications:

Gen	Equipment Used (#)	1	
	Brake Horsepower (bhp)	749	
	PM10 Emission Factor (g/bhp-hr) (2)	0.085	
	Load Factor (% / 100)	1	
Fire Pump	Equipment Used (#)	2	
	Brake Horsepower (bhp)	181	
	PM10 Emission Factor (g/bhp-hr) (3)	0.13	
	Load Factor (% / 100)	1	
Emissions:		0.031	g/s

Point Source Specifications (vertical release, hinged cap): (4)

Stack Flowrate	3,854	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	12.0	ft

(1) Testing profile based on weekly testing of generator (20 hours per year, the maximum allowable from SCAQMD permit-to-operate, R-F45371).

(2) Generator PM emission factor and exhaust parameters for Caterpillar Model 3412 (from SCAQMD Certified ICE-Emergency Genetors list).

(3) Generator PM emission factor and exhaust parameters for Caterpillar Model 3208 (from SCAQMD Certified ICE-Emergency Genetors list).

(4) A single representative stack used for the evaluation.

Construction Emissions Summary

Information from Wilshire-Gayley Development Project DEIR, 2008, PCR Services Corp.; using URBEMIS2007 to model emissions.

	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2017 Onsite		6.19	40.05	20.43	0.00	1.51	2.63	4.14	0.31	2.42	2.74
2017 Offsite		2.08	24.82	14.16	0.03	0.11	1.08	1.20	0.04	0.99	1.03
2018 Onsite		6.01	34.41	19.72	0.00	0.00	2.36	2.36	0.00	2.17	2.17
2018 Offsite		1.25	12.66	13.92	0.02	0.09	0.55	0.66	0.03	0.50	0.54
2019 Onsite		4.92	24.90	16.30	0.00	0.00	1.72	1.72	0.00	1.58	1.58
2019 Offsite		0.69	4.22	14.46	0.02	0.09	0.19	0.29	0.03	0.17	0.21

Demolition - 1 month - 2017

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust						5.67	0.00	5.67	1.18	0.00	1.18
Off-Road		1.97	16.01	7.06	0.00	0.00	0.92	0.92	0.00	0.84	0.84
Hauling		0.52	6.52	2.63	0.01	0.03	0.28	0.31	0.01	0.26	0.27
Vendor											
Worker		0.06	0.11	1.74	0.00	0.01	0.01	0.01	0.00	0.00	0.01
Total		2.55	22.64	11.43	0.01	5.71	1.21	6.91	1.19	1.10	2.30
TOTAL ONSITE		1.97	16.01	7.06	0.00	5.67	0.92	6.59	1.18	0.84	2.02
TOTAL OFFSITE		0.58	6.63	4.37	0.01	0.04	0.29	0.32	0.01	0.26	0.28

Mass Grading - 2 months - 2017

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust						6.22	0.00	6.22	1.30	0.00	1.30
Off-Road		4.17	34.51	14.82	0.00	0.00	1.79	1.79	0.00	1.65	1.65
Hauling		3.99	50.56	20.41	0.06	0.20	2.20	2.40	0.07	2.02	2.09
Vendor											
Worker		0.08	0.14	2.32	0.00	0.01	0.01	0.02	0.00	0.01	0.01
Total		8.24	85.21	37.55	0.06	6.43	4.00	10.43	1.37	3.68	5.05
TOTAL ONSITE		4.17	34.51	14.82	0.00	6.22	1.79	8.01	1.30	1.65	2.95
TOTAL OFFSITE		4.07	50.70	22.73	0.06	0.21	2.21	2.42	0.07	2.03	2.10

Fine Grading - 9 months - 2017

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust											
Off-Road		7.11	43.99	23.17	0.00	0.00	3.01	3.01	0.00	2.77	2.77
Hauling		1.65	20.87	8.43	0.02	0.08	0.91	0.99	0.03	0.83	0.86
Vendor											
Worker		0.16	0.30	4.94	0.01	0.02	0.01	0.04	0.01	0.01	0.02
Total		8.92	65.16	36.54	0.03	0.10	3.93	4.04	0.04	3.61	3.65
TOTAL ONSITE		7.11	43.99	23.17	0.00	0.00	3.01	3.01	0.00	2.77	2.77
TOTAL OFFSITE		1.81	21.17	13.37	0.03	0.10	0.92	1.03	0.04	0.84	0.88

Fine Grading - 6 months - 2018

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust											
Off-Road		7.11	43.99	23.17	0.00	0.00	3.01	3.01	0.00	2.77	2.77
Hauling		1.65	20.87	8.43	0.02	0.08	0.91	0.99	0.03	0.83	0.86
Vendor											
Worker		0.16	0.30	4.94	0.01	0.02	0.01	0.04	0.01	0.01	0.02
Total		8.92	65.16	36.54	0.03	0.10	3.93	4.04	0.04	3.61	3.65
TOTAL ONSITE		7.11	43.99	23.17	0.00	0.00	3.01	3.01	0.00	2.77	2.77
TOTAL OFFSITE		1.81	21.17	13.37	0.03	0.10	0.92	1.03	0.04	0.84	0.88

Building Construction - 6 months - 2018

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust											
Off-Road		4.92	24.90	16.30	0.00	0.00	1.72	1.72	0.00	1.58	1.58
Hauling											
Vendor		0.33	3.54	2.87	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Worker		0.36	0.68	11.59	0.01	0.07	0.04	0.11	0.02	0.03	0.06
Total		5.61	29.12	30.76	0.02	0.09	1.91	2.01	0.03	1.75	1.79
TOTAL ONSITE		4.92	24.90	16.30	0.00	0.00	1.72	1.72	0.00	1.58	1.58
TOTAL OFFSITE		0.69	4.22	14.46	0.02	0.09	0.19	0.29	0.03	0.17	0.21

Building Construction - 2 months - 2019

Category	lbs/day	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road		4.92	24.90	16.30	0.00	0.00	1.72	1.72	0.00	1.58	1.58
Hauling											
Vendor		0.33	3.54	2.87	0.01	0.02	0.15	0.18	0.01	0.14	0.15
Worker		0.36	0.68	11.59	0.01	0.07	0.04	0.11	0.02	0.03	0.06
Total		5.61	29.12	30.76	0.02	0.09	1.91	2.01	0.03	1.75	1.79
TOTAL ONSITE		4.92	24.90	16.30	0.00	0.00	1.72	1.72	0.00	1.58	1.58
TOTAL OFFSITE		0.69	4.22	14.46	0.02	0.09	0.19	0.29	0.03	0.17	0.21

Source 23a
The Wilshire-Gayley
10951-10955 Wilshire Boulevard
Los Angeles, CA 90024

Construction Emissions

	Construction Duration	hours	days	weeks	
Temporal Profile:	26 months 2017-2019	8	5	52	7AM - 3PM M-F
	Assumed to overlap with School Buildout	7	1	52	8AM-3PM Sat

Onsite Construction Emissions		**DPM [1]**	**PM_{10} [2]**	**$PM_{2.5}$ [2]**	**NO_x**	**CO**
2017 Onsite Emissions	Average Daily Emissions (lbs/day)	2.63	4.14	2.74	40.05	20.43
	Average Daily Emissions (lbs/hr)	3.36E-01	5.28E-01	3.49E-01	5.11E+00	2.61E+00
	Emission Rate (g/s)	**4.23E-02**	**6.66E-02**	**4.40E-02**	**6.44E-01**	**3.29E-01**
2018 Onsite Emissions	Average Daily Emissions (lbs/day)	2.36	2.36	2.17	34.41	19.72
	Average Daily Emissions (lbs/hr)	3.02E-01	3.02E-01	2.77E-01	4.39E+00	2.52E+00
	Emission Rate (g/s)	**3.80E-02**	3.80E-02	3.49E-02	5.53E-01	3.17E-01
2019 Onsite Emissions	Average Daily Emissions (lbs/day)	1.72	1.72	1.58	24.90	16.30
	Average Daily Emissions (lbs/hr)	2.20E-01	2.20E-01	2.02E-01	3.18E+00	2.08E+00
	Emission Rate (g/s)	**2.77E-02**	2.77E-02	2.54E-02	4.01E-01	2.62E-01

Note: Emissions assumed to be evenly distributed over entire construction phase area.

Offsite Construction Emissions		**DPM [1]**	**PM_{10} [2]**	**$PM_{2.5}$ [2]**	**NO_x**	**CO**
2017 Offsite Emissions	Haul Length Daily Emissions (lbs/day)	1.08	1.20	1.03	24.82	14.16
	Hauling Emissions w/in 1/4-mile (lbs/day) [3]	1.99E-02	2.21E-02	1.90E-02	4.57E-01	2.60E-01
	Emission Rate (lbs/hr)	2.54E-03	2.82E-03	2.42E-03	5.83E-02	3.33E-02
	Emission Rate (g/s)	**3.20E-04**	**3.55E-04**	**3.05E-04**	**7.35E-03**	4.19E-03
2018 Offsite Emissions	Haul Length Daily Emissions (lbs/day)	0.55	0.66	0.54	12.66	13.92
	Hauling Emissions w/in 1/4-mile (lbs/day) [3]	1.02E-02	1.21E-02	1.00E-02	2.33E-01	2.56E-01
	Emission Rate (lbs/hr)	1.30E-03	1.55E-03	1.28E-03	2.97E-02	3.27E-02
	Emission Rate (g/s)	**1.64E-04**	1.95E-04	1.61E-04	3.75E-03	4.12E-03
2019 Offsite Emissions	Haul Length Daily Emissions (lbs/day)	0.19	0.29	0.21	4.22	14.46
	Hauling Emissions w/in 1/4-mile (lbs/day) [3]	3.50E-03	5.34E-03	3.86E-03	7.76E-02	2.66E-01
	Emission Rate (lbs/hr)	4.46E-04	6.81E-04	4.93E-04	9.91E-03	3.40E-02
	Emission Rate (g/s)	**5.62E-05**	8.58E-05	6.22E-05	1.25E-03	**4.28E-03**

Note: Emissions evenly distributed over 23 modeled volume sources.

Year	Total calendar days per year	Scalar [4]
2017	365	1.00
2018	365	1.00
2019	59	0.16

Default Hauling Length (miles)	20
Haul Length within 1/4-mile of Site (mile)	0.37

[1] DPM emissions taken as exhaust PM_{10} emissions from model daily emissions.
[2] PM_{10} and $PM_{2.5}$ emissions taken as total PM (exhaust and fugitive dust) emissions from model daily emissions.

[3] Emissions from model offsite daily emissions, which is based on haul truck trip distance of 20 miles to evaluate emissions from the **0.37-**mile route within a 1/4-mile of the project site.
[4] Scalars determined for each year of construction to adjust receptor exposures to the exposure durations for each construction year (see App E - Risk Calculations).

Source 23b
The Wilshire-Gayley
10951-10955 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Temporal Profile:	hours	days	weeks
	24	7	52

Emissions: [1]

	0.210	lbs/day
	0.0088	lbs/hr
	0.0011	g/s

Point Source Specifications (vertical release, hinged cap): [2]

Stack Flowrate	3,180	acfm
Stack Temperature	865	F
Stack Diameter	1.0	ft
Stack Height	8.0	ft

(1) Diesel generator emissions from Wilshire-Gayley Development Project DEIR, 2008, PCR Services Corp., using URBEMIS2007 to model emissions. Generator emissions assumed to be stationary source PM10 emissions.

(2) Since the exhaust parameters are not known for this future facility, the stack diameter is based on similar facility evaluated (Source 21, Oxy Westwood) and the equipment is assumed to be on the ground floor.

Source 23c
The Wilshire-Gayley
10951-10955 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Natural Gas Combustion - Boilers

	hours	days	weeks
Temporal Profile:	24	7	52
	0	0	0

Emissions: [1]

lbs/day	0.2687
lbs/hr	1.12E-02

Speciation:		Emission Factors: [2] lb/mmcf gas	lb/mmbtu	Compound Emissions	Adjusted Wt Fraction
	Acetaldehyde	4.30E-03	4.22E-06	2.66E-06	2.37E-04
	Acrolein	2.70E-03	2.65E-06	1.67E-06	1.49E-04
	Ammonia	1.80E+01	1.76E-02	1.11E-02	9.94E-01
	Benzene	8.00E-03	7.84E-06	4.95E-06	4.42E-04
	Ethylbenzene	9.50E-03	9.31E-06	5.88E-06	5.25E-04
	Formaldehyde	1.70E-02	1.67E-05	1.05E-05	9.39E-04
	n-Hexane	6.30E-03	6.18E-06	3.90E-06	3.48E-04
	Naphthalene	3.00E-04	2.94E-07	1.86E-07	1.66E-05
	Toluene	3.66E-02	3.59E-05	2.26E-05	2.02E-03
	Xylene	2.72E-02	2.67E-05	1.68E-05	1.50E-03
	Total			1.12E-02	lb/hr
				1.41E-03	g/s

Point Source Specifications (vertical release with fixed rain cap): [3]

Stack Temperature	400	F
Stack Flowrate	624	cfm
Stack Diameter	1.0	ft
Stack Height	8.0	ft

(1) Natural gas combustion emissions taken from Addendum to the Certified EIR for The Wilshire-Gayley (PCR Services Corp., 2014). Emissions calculated using CalEEMod, version 2013.2.2.

(2) Emission factors (pounds per million standard cubic feet of fuel burned) and btu/scf conversion (1,020 btu/scf) based upon SCAQMD Supplemental Instruction - Reporting Procedures for AB2588 Facilities (2014). Appendix B, Table B-1: Default Emission Factors for Natural Gas Combustion (< 10 MMBTU/HR).

(3) Since the exhaust parameters are not known for this future facility, the stack diameter is based on similar facility evaluated (Source 21, Oxy Westwood) and the equipment is assumed to be on the ground floor.

Source 24
EOP
10960 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator

Generator Testing Profile: (1)

hours	days	weeks
0.58	1	52

Equipment Specifications:

Equipment Used (#)	1	
Brake Horsepower (bhp)	1,337	
PM10 Emission Factor (g/bhp-hr) (2)	0.058	
Load Factor (% / 100)	1	
Emissions:	0.022	g/s

Point Source Specifications (vertical release, hinged cap): (2)

Stack Flowrate	6,680	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	82.0	ft

(1) Testing profile based on weekly testing of generator (30 hours per year, the maximum allowable from SCAQMD permit-to-operate, F77529).

(2) Generator PM emission factor and exhaust parameters for Caterpillar Model 3508 (from SCAQMD Certified ICE-Emergency Genetors list).

Source 25a
U.S. Government, Department of General Services
11000 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Emergency Diesel Generator and Diesel Engine for Fire Pumps

Generator Testing Profile: [1]	hours	days	weeks
	1.0	1	52

Equipment Specifications:

Gen1	Equipment Used (#)	1
	Brake Horsepower (bhp)	755
	PM10 Emission Factor (g/bhp-hr) [2]	0.075
	Load Factor (% / 100)	1
Gen2	Equipment Used (#)	1
	Brake Horsepower (bhp)	545
	PM10 Emission Factor (g/bhp-hr) [3]	0.06
	Load Factor (% / 100)	1
FirePump1	Equipment Used (#)	1
	Brake Horsepower (bhp)	190
	PM10 Emission Factor (g/bhp-hr) [4]	0.093
	Load Factor (% / 100)	1
FirePump2	Equipment Used (#)	1
	Brake Horsepower (bhp)	180
	PM10 Emission Factor (g/bhp-hr) [5]	0.093
	Load Factor (% / 100)	1

Emissions: 0.034 g/s

Point Source Specifications (vertical release, hinged cap): [6]

Stack Flowrate	3,854	acfm
Stack Temperature	622	K
Stack Diameter	4.0	in
Stack Height	12.0	ft

(1) Testing profile based on weekly testing of generator (20 hours per year, the maximum allowable from SCAQMD permit-to-operate, R-F45371).

(2) Generator PM emission factor and exhaust parameters for Cummins Model VT12-635-GS (from SCAQMD Certified ICE-Emergency Genetors list).

(3) Generator PM emission factor and exhaust parameters for Cummins Model QSX15-G9 (from SCAQMD Certified ICE-Emergency Genetors list).

(4) Generator PM emission factor and exhaust parameters for Clarke Detroit Model DDFP-08GT4371 (from SCAQMD Certified ICE-Emergency Genetors list).

(5) Generator PM emission factor and exhaust parameters for Detroit Model VMFP-T6HR (from SCAQMD Certified ICE-Emergency Genetors list).

(6) A single representative stack used for the evaluation.

Source 25b
U.S. Government, Department of General Services
11000 Wilshire Boulevard
Los Angeles, CA 90024

Operation: Charbroiler, under-fired

	hours	days	weeks
Temporal Profile:	9	5	52
	0	0	0

Average Pounds per Day:

Hamburger	270	lbs/week
	54	lbs/day

Emission Factors: (1)

ROG Emission Rate, Hamburger	3.94	lbs/1000 lbs meat

Emissions:

ROG Emissions, Poultry	4.61	lbs/mo
	2.36E-02	lbs/hr
	2.98E-03	g/s

Speciation: (2)

		Compound Wt Fraction
ROG Emissions	Acetaldehyde	0.087
	Benzene	0.150
	Formaldehyde	0.120
	Naphthalene	0.023
	Propionaldehyde	0.023
	Styrene	0.057
	Toluene	0.059
	Other (NOS)	0.48
	Total	1.00

Point Source Specifications (vertical release, fixed rain cap):

Stack Flowrate	11,000	cfm
Stack Temperature	330	K
Stack Diameter	1.0	ft
Stack Height	1.0	ft

Note: ROG = reactive organic gases

(1) Emission rates are based upon *Methods for Developing a National Emission Inventory for Commercial Cooking Processes* (E.H. Pechan and Associates, Inc. for USEPA, 2003).

(2) Speciation information based upon *National Emissions Inventory for Commercial Cooking* (Roe, et. al., E.H. Penchan & Associates, Inc. for USEPA, 2004).

Vehicle Mix Worksheet - Wilshire Boulevard

Table A: Traffic Volumes

Route	Intersection	Data Year	Peak Hour Traffic (veh/hr)	Truck Percentage (%)	Annual Increase in Traffic (%)	Data Year	Peak Hour Traffic (veh/hr)
Wilshire Boulevard	Veteran Avenue	2016	4,608	1.17%	1.5%	2020	5,308

Sources:

Traffic data and truck percentage from 2016 traffic counts by the applicants traffic engineer and the City of LA DOT 24-hour counts.

Annual traffic increase based on projected growth rate of 1.5% per year from *2010 Congestion Management Program* , Los Angeles County Metropolitan Transportation Authority.

Table B: Highway Parameters

Link/Segment	Link length (m)	Width of roadway (m)	Source Separation (m)	Roadway Configuration	Intersectin	Speed
Wilshire Boulevard	816	30.5	30.5	At-Grade	Veteran Avenue	35 mph

Table C: Segment Volumes

Link/Segment	Period Length (years)	Hourly All Vehicles	Hourly TOG Vehicles	Hourly Diesel Vehicles [6]
2017 [1]	3	**4,608**	**4,554**	54
2020 [2]	5	5,308	5,246	62
2025 [3]	5	5,707	5,640	67
2030 [3]	5	6,136	6,064	72
2035 [3]	5	6,597	6,520	77
2040 [3]	2	7,093	7,010	83
25-year weighted average [4]	25	5,870	**5,801**	**69**
7-year weighted average [5]	7	5,008	**4,949**	**59**

1 2017 traffic based on provided existing traffic counts by applicant.

2 2020 traffic based on projected 2020 traffic plus project counts, proved by applicant.

3 Increases in AADT based on projected traffic increase of 1.5% per year from 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority.

4 Represents the 25-year (staff) weighted average traffic volumes, accounting for annual increases in projected traffic.

5 Represents the 7-year (students) weighted average traffic volumes, accounting for annual increases in projected traffic.

6 Truck percentage of 1.17%, provided by applicant, used to represent the diesel vehicle traffic along roadway segment.

Vehicle Mix Worksheet - Veteran Avenue

Table A: Traffic Volumes

Route	Intersection	Data Year	Peak Hour Traffic (veh/hr)	Truck Percentage (%)	Annual Increase in Traffic (%)	Data Year	Peak Hour Traffic (veh/hr)
Veteran Avenue	Wilshire Boulevard	2016	2,152	1.07%	1.5%	2020	2,702

Sources:

Traffic data and truck percentage from 2016 traffic counts by the applicants traffic engineer and the City of LA DOT 24-hour counts.

Annual traffic increase based on projected growth rate of 1.5% per year from *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority.

Table B: Highway Parameters

Link/Segment	Link length (m)	Width of roadway (m)	Source Separation (m)	Roadway Configuration	Intersectin	Speed
Veteran Avenue	858	23.4	23.4	At-Grade	Wilshire Boulevard	35 mph

Table C: Segment Volumes

Link/Segment	Period Length (years)	Hourly All Vehicles	Hourly TOG Vehicles	Hourly Diesel Vehicles [6]
2017 [1]	3	**2,152**	**2,129**	23
2020 [2]	5	2,702	2,673	29
2025 [3]	5	2,905	2,874	31
2030 [3]	5	3,123	3,090	33
2035 [3]	5	3,358	3,322	36
2040 [3]	2	3,611	3,572	39
25-year weighted average [4]	25	2,965	**2,933**	**32**
7-year weighted average [5]	7	2,466	**2,440**	**26**

1 2017 traffic based on provided existing traffic counts by applicant.

2 2020 traffic based on projected 2020 traffic plus project counts, proved by applicant.

3 Increases in AADT based on projected traffic increase of 1.5% per year from 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority.

4 Represents the 25-year (staff) weighted average traffic volumes, accounting for annual increases in projected traffic.

5 Represents the 7-year (students) weighted average traffic volumes, accounting for annual increases in projected traffic.

6 Truck percentage of 1.07%, provided by applicant, used to represent the diesel vehicle traffic along roadway segment.

Vehicle Mix Worksheet - Gayley Avenue

Table A: Traffic Volumes

Route	Intersection	Data Year	Peak Hour Traffic (veh/hr)	Truck Percentage (%)	Annual Increase in Traffic (%)	Data Year	Peak Hour Traffic (veh/hr)
Gayley Ave	Wilshire Boulevard	2016	1,401	1.00%	1.5%	2020	1,854

Sources:

Traffic data and truck percentage from 2016 traffic counts by the applicants traffic engineer and the City of LA DOT 24-hour counts.

Annual traffic increase based on projected growth rate of 1.5% per year from *2010 Congestion Management Program* , Los Angeles County Metropolitan Transportation Authority.

Table B: Highway Parameters

Link/Segment	Link length (m)	Width of roadway (m)	Source Separation (m)	Roadway Configuration	Intersectin	Speed
Gayley Ave	923	22.5	22.5	At-Grade	Wilshire Boulevard	35 mph

Table C: Segment Volumes

Link/Segment	Period Length (years)	Hourly All Vehicles	Hourly TOG Vehicles	Hourly Diesel Vehicles [6]
2017 [1]	3	**1,401**	**1,387**	14
2020 [2]	5	1,854	1,835	19
2025 [3]	5	1,993	1,973	20
2030 [3]	5	2,143	2,122	21
2035 [3]	5	2,304	2,281	23
2040 [3]	2	2,477	2,453	25
25-year weighted average [4]	25	2,025	**2,005**	**20**
7-year weighted average [5]	7	1,660	**1,643**	**17**

1 2017 traffic based on provided existing traffic counts by applicant.

2 2020 traffic based on projected 2020 traffic plus project counts, proved by applicant.

3 Increases in AADT based on projected traffic increase of 1.5% per year from 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority.

4 Represents the 25-year (staff) weighted average traffic volumes, accounting for annual increases in projected traffic.

5 Represents the 7-year (students) weighted average traffic volumes, accounting for annual increases in projected traffic.

6 Truck percentage of 1.0%, provided by applicant, used to represent the diesel vehicle traffic along roadway segment.

Vehicle Mix Worksheet - Kinross Avenue

Table A: Traffic Volumes

Route	Intersection	Data Year	Peak Hour Traffic (veh/hr)	Truck Percentage (%)	Annual Increase in Traffic (%)	Data Year	Peak Hour Traffic (veh/hr)
Kinross Avenue	Veteran Avenue	2016	1,091	0.46%	1.5%	2020	1,549

Sources:

Traffic data and truck percentage from 2016 traffic counts by the applicants traffic engineer and the City of LA DOT 24-hour counts.

Annual traffic increase based on projected growth rate of 1.5% per year from *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority.

Table B: Highway Parameters

Link/Segment	Link length (m)	Width of roadway (m)	Source Separation (m)	Roadway Configuration	Intersectin	Speed
Kinross Avenue	447	17.0	17.0	At-Grade	Veteran Avenue	35 mph

Table C: Segment Volumes

Link/Segment	Period Length (years)	Hourly All Vehicles	Hourly TOG Vehicles	Hourly Diesel Vehicles [6]
2017 [1]	3	**1,091**	**1,086**	5
2020 [2]	5	1,549	1,542	7
2025 [3]	5	1,665	1,658	8
2030 [3]	5	1,791	1,782	8
2035 [3]	5	1,925	1,916	9
2040 [3]	2	2,070	2,060	10
25-year weighted average [4]	25	1,683	**1,675**	**8**
7-year weighted average [5]	7	1,353	**1,346**	**6**

1 2017 traffic based on provided existing traffic counts by applicant.

2 2020 traffic based on projected 2020 traffic plus project counts, proved by applicant.

3 Increases in AADT based on projected traffic increase of 1.5% per year from 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority.

4 Represents the 25-year (staff) weighted average traffic volumes, accounting for annual increases in projected traffic.

5 Represents the 7-year (students) weighted average traffic volumes, accounting for annual increases in projected traffic.

6 Truck percentage of 0.46%, provided by applicant, used to represent the diesel vehicle traffic along roadway segment.

Vehicle Mix Worksheet - Westwood Blvd

Table A: Traffic Volumes

Route	Intersection	Data Year	Peak Hour Traffic (veh/hr)	Truck Percentage (%)	Annual Increase in Traffic (%)	Data Year	Peak Hour Traffic (veh/hr)
Westwood Boulevard	Wilshire Boulevard	2016	1,653	1.21%	1.5%	2020	1,837

Sources:

Traffic data and truck percentage from 2016 traffic counts by the applicants traffic engineer and the City of LA DOT 24-hour counts.

Annual traffic increase based on projected growth rate of 1.5% per year from *2010 Congestion Management Program* , Los Angeles County Metropolitan Transportation Authority.

Table B: Highway Parameters

Link/Segment	Link length (m)	Width of roadway (m)	Source Separation (m)	Roadway Configuration	Intersectin	Speed
Westwood Boulevard	772	26.0	26.0	At-Grade	Wilshire Boulevard	35 mph

Table C: Segment Volumes

Link/Segment	Period Length (years)	Hourly All Vehicles	Hourly TOG Vehicles	Hourly Diesel Vehicles [6]
2017 [1]	3	**1,653**	**1,633**	20
2020 [2]	5	1,837	1,815	22
2025 [3]	5	1,975	1,951	24
2030 [3]	5	2,124	2,098	26
2035 [3]	5	2,283	2,256	28
2040 [3]	2	2,455	2,425	30
25-year weighted average [4]	25	2,038	**2,014**	**25**
7-year weighted average [5]	7	1,758	**1,737**	**21**

1 2017 traffic based on provided existing traffic counts by applicant.

2 2020 traffic based on projected 2020 traffic plus project counts, proved by applicant.

3 Increases in AADT based on projected traffic increase of 1.5% per year from 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority.

4 Represents the 25-year (staff) weighted average traffic volumes, accounting for annual increases in projected traffic.

5 Represents the 7-year (students) weighted average traffic volumes, accounting for annual increases in projected traffic.

6 Truck percentage of 1.21%, provided by applicant, used to represent the diesel vehicle traffic along roadway segment.

Average Emission Factors
for School Based Receptors

Weighting Emission Factors

Adjusting the EMFAC2014 emission factors to account for reductions in factors over the exposure duration.

Risk Year	Modeling Year	Period	WF	Weighting Factor Period	Weighting Factor Factor	35 mph - Emission Factors (g/mi) TAC's TOG-gas	35 mph - Emission Factors (g/mi) TAC's PM10-dsl
1	2017	1	0.040	2017-2019	0.120	**0.0584**	0.0471
2	2018	1	0.040				
3	2019	1	0.040				
4	2020	1	0.040	2020-2024	0.200	0.0430	0.0241
5	2021	1	0.040				
6	2022	1	0.040				
7	2023	1	0.040				
8	2024	1	0.040				
9	2025	1	0.040	2025-2029	0.200	0.0321	0.0071
10	2026	1	0.040				
11	2027	1	0.040				
12	2028	1	0.040				
13	2029	1	0.040				
14	2030	1	0.040	2030-2034	0.200	0.0272	0.0055
15	2031	1	0.040				
16	2032	1	0.040				
17	2033	1	0.040				
18	2034	1	0.040				
19	2035	1	0.040	2035-2039	0.200	0.0242	0.0048
20	2036	1	0.040				
21	2037	1	0.040				
22	2038	1	0.040				
23	2039	1	0.040				
24	2040	1	0.040	2040-2041	0.080	0.0227	0.0045
25	2041	1	0.040				
25-year average[1]		25	1.0		1.0	**0.0341**	**0.0143**
7-year average[2]		7				**0.0496**	**0.0340**

[1] Represent the 25-year (staff) weighted average emission factors for each TAC and vehicle speed.

[2] Represent the 7-year (6-12th grade) weighted average emission factors for each TAC and vehicle speed.

WF - period weighting factor

On-Road Mobile Sources
Emission Rate Computation

TOG Emissions

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

1 Wilshire Boulevard

Link Length (meters)	816
Chronic - Long-term Emissions	
Hourly Volume/Baseline (VPH) - Staff	5,801
Emission Factor (gr/mi) - Staff	0.0341
Hourly Emission Rate (gr/sec) - Staff	**2.79E-02**
Hourly Volume/Baseline (VPH) - Students	4,949
Emission Factor (gr/mi) - Students	0.0496
Hourly Emission Rate (gr/sec) - Students	**3.46E-02**
Acute - Short-term Emissions	
Hourly Volume/Baseline (VPH) - 2017	4,554
Emission Factor (gr/mi) - 2017	0.0584
Hourly Emission Rate (gr/sec) - 2017	**3.75E-02**

2 Veteran Avenue

Link Length (meters)	858
Chronic - Long-term Emissions	
Hourly Volume/Baseline (VPH) - Staff	2,933
Emission Factor (gr/mi) - Staff	0.0341
Hourly Emission Rate (gr/sec) - Staff	**1.48E-02**
Hourly Volume/Baseline (VPH) - Students	2,440
Emission Factor (gr/mi) - Students	0.0496
Hourly Emission Rate (gr/sec) - Students	**1.79E-02**
Acute - Short-term Emissions	
Hourly Volume/Baseline (VPH) - 2017	2,129
Emission Factor (gr/mi) - 2017	0.0584
Hourly Emission Rate (gr/sec) - 2017	**1.84E-02**

On-Road Mobile Sources
Emission Rate Computation

TOG Emissions

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

3 Gayley Avenue

Link Length (meters)	923
Chronic - Long-term Emissions	
Hourly Volume/Baseline (VPH) - Staff	2,005
Emission Factor (gr/mi) - Staff	0.0341
Hourly Emission Rate (gr/sec) - Staff	**1.09E-02**
Hourly Volume/Baseline (VPH) - Students	1,643
Emission Factor (gr/mi) - Students	0.0496
Hourly Emission Rate (gr/sec) - Students	**1.30E-02**
Acute - Short-term Emissions	
Hourly Volume/Baseline (VPH) - 2017	1,387
Emission Factor (gr/mi) - 2017	0.0584
Hourly Emission Rate (gr/sec) - 2017	**1.29E-02**

4 Kinross Avenue

Link Length (meters)	447
Chronic - Long-term Emissions	
Hourly Volume/Baseline (VPH) - Staff	1,675
Emission Factor (gr/mi) - Staff	0.0341
Hourly Emission Rate (gr/sec) - Staff	**4.41E-03**
Hourly Volume/Baseline (VPH) - Students	1,346
Emission Factor (gr/mi) - Students	0.0496
Hourly Emission Rate (gr/sec) - Students	**5.15E-03**
Acute - Short-term Emissions	
Hourly Volume/Baseline (VPH) - 2017	1,086
Emission Factor (gr/mi) - 2017	0.0584
Hourly Emission Rate (gr/sec) - 2017	**4.89E-03**

5 Westwood Boulevard

Link Length (meters)	772
Chronic - Long-term Emissions	
Hourly Volume/Baseline (VPH) - Staff	2,014
Emission Factor (gr/mi) - Staff	0.0341
Hourly Emission Rate (gr/sec) - Staff	**9.16E-03**
Hourly Volume/Baseline (VPH) - Students	1,737
Emission Factor (gr/mi) - Students	0.0496
Hourly Emission Rate (gr/sec) - Students	**1.15E-02**
Acute - Short-term Emissions	
Hourly Volume/Baseline (VPH) - 2017	1,633
Emission Factor (gr/mi) - 2017	0.0584
Hourly Emission Rate (gr/sec) - 2017	**1.27E-02**

On-Road Mobile Sources
Emission Rate Computation

DPM Emissions

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

1	**Wilshire Boulevard**	
	Link Length (meters)	816
	Hourly Volume/Baseline (VPH) - Staff	69
	Emission Factor (gr/mi) - Staff	0.0143
	Hourly Emission Rate (gr/sec) - Staff	**1.39E-04**
	Hourly Volume/Baseline (VPH) - Students	59
	Emission Factor (gr/mi) - Students	0.0340
	Hourly Emission Rate (gr/sec) - Students	**2.80E-04**
2	**Veteran Avenue**	
	Link Length (meters)	858
	Hourly Volume/Baseline (VPH) - Staff	32
	Emission Factor (gr/mi) - Staff	0.0143
	Hourly Emission Rate (gr/sec) - Staff	**6.73E-05**
	Hourly Volume/Baseline (VPH) - Students	26
	Emission Factor (gr/mi) - Students	0.0340
	Hourly Emission Rate (gr/sec) - Students	**1.33E-04**
3	**Gayley Avenue**	
	Link Length (meters)	923
	Hourly Volume/Baseline (VPH) - Staff	20
	Emission Factor (gr/mi) - Staff	0.0143
	Hourly Emission Rate (gr/sec) - Staff	**4.62E-05**
	Hourly Volume/Baseline (VPH) - Students	17
	Emission Factor (gr/mi) - Students	0.0340
	Hourly Emission Rate (gr/sec) - Students	**8.99E-05**
4	**Kinross Avenue**	
	Link Length (meters)	447
	Hourly Volume/Baseline (VPH) - Staff	8
	Emission Factor (gr/mi) - Staff	0.0143
	Hourly Emission Rate (gr/sec) - Staff	**8.55E-06**
	Hourly Volume/Baseline (VPH) - Students	6
	Emission Factor (gr/mi) - Students	0.0340
	Hourly Emission Rate (gr/sec) - Students	**1.63E-05**
5	**Westwood Boulevard**	
	Link Length (meters)	772
	Hourly Volume/Baseline (VPH) - Staff	25
	Emission Factor (gr/mi) - Staff	0.0143
	Hourly Emission Rate (gr/sec) - Staff	**4.71E-05**
	Hourly Volume/Baseline (VPH) - Students	21
	Emission Factor (gr/mi) - Students	0.0340
	Hourly Emission Rate (gr/sec) - Students	**9.63E-05**

On-Road Mobile Souces
Emission Rate Computation

Particulate (PM10) Emissions

For PM10 Reentrainment: Emission Factor (gr/mile) = (Particulate PM10 Base Emission Factor) x (Road Surface Silt Loading) $^{0.91}$ *x (Gross Vehicle Weight)* $^{1.02}$

Particulate PM10 Base Emission Factor (gr/mi)	1.00
Road Surface Silt Loading (gr/m2)	0.02
Gross Vehicle Weight (tons)	2.4
PM10 Reentrainment Emission Factor (gr/mi)	0.069

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

1 Wilshire Boulevard

Link Length (meters)	816
Peak Hour Volume/Baseline (VPH) - 2017	4,608
PM10 Vehicular Emission Factor (gr/mi) - 2017	0.0041
Peak Hour Pollutant Reentrainment Emission Rate (gr/sec)	4.51E-02
Peak Hour Pollutant Emission Rate (gr/sec)	2.66E-03
Peak Hour Pollutant Emission Rate Total (gr/sec)	**4.77E-02**

2 Veteran Avenue

Link Length (meters)	858
Peak Hour Volume/Baseline (VPH) - 2017	2,152
PM10 Vehicular Emission Factor (gr/mi) - 2017	0.0041
Peak Hour Pollutant Reentrainment Emission Rate (gr/sec)	2.21E-02
Peak Hour Pollutant Emission Rate (gr/sec)	1.31E-03
Peak Hour Pollutant Emission Rate Total (gr/sec)	**2.34E-02**

3 Gayley Avenue

Link Length (meters)	923
Peak Hour Volume/Baseline (VPH) - 2017	1,401
PM10 Vehicular Emission Factor (gr/mi) - 2017	0.0041
Peak Hour Pollutant Reentrainment Emission Rate (gr/sec)	1.55E-02
Peak Hour Pollutant Emission Rate (gr/sec)	9.15E-04
Peak Hour Pollutant Emission Rate Total (gr/sec)	**1.64E-02**

4 Kinross Avenue

Link Length (meters)	447
Peak Hour Volume/Baseline (VPH) - 2017	1,091
PM10 Vehicular Emission Factor (gr/mi) - 2017	0.0041
Peak Hour Pollutant Reentrainment Emission Rate (gr/sec)	5.84E-03
Peak Hour Pollutant Emission Rate (gr/sec)	3.45E-04
Peak Hour Pollutant Emission Rate Total (gr/sec)	**6.19E-03**

5 Westwood Boulevard

Link Length (meters)	772
Peak Hour Volume/Baseline (VPH) - 2017	1,653
PM10 Vehicular Emission Factor (gr/mi) - 2017	0.0041
Peak Hour Pollutant Reentrainment Emission Rate (gr/sec)	1.53E-02
Peak Hour Pollutant Emission Rate (gr/sec)	9.03E-04
Peak Hour Pollutant Emission Rate Total (gr/sec)	**1.62E-02**

On-Road Mobile Sources
Emission Rate Computation

CO Emissions

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

1 Wilshire Boulevard

Link Length (meters)	816
Peak Hour Volume/Baseline (VPH) - 2017	4,608
Emission Factor (gr/mi) - 2017	1.4221
Peak Hour Emission Rate (gr/sec) - 2017	**9.23E-01**

2 Veteran Avenue

Link Length (meters)	858
Peak Hour Volume/Baseline (VPH) - 2017	2,152
Emission Factor (gr/mi) - 2017	1.4221
Peak Hour Emission Rate (gr/sec) - 2017	**4.53E-01**

3 Gayley Avenue

Link Length (meters)	923
Peak Hour Volume/Baseline (VPH) - 2017	1,401
Emission Factor (gr/mi) - 2017	1.4221
Peak Hour Emission Rate (gr/sec) - 2017	**3.17E-01**

4 Kinross Avenue

Link Length (meters)	447
Peak Hour Volume/Baseline (VPH) - 2017	1,091
Emission Factor (gr/mi) - 2017	1.4221
Peak Hour Emission Rate (gr/sec) - 2017	**1.20E-01**

5 Westwood Boulevard

Link Length (meters)	772
Peak Hour Volume/Baseline (VPH) - 2017	1,653
Emission Factor (gr/mi) - 2017	1.4221
Peak Hour Emission Rate (gr/sec) - 2017	**3.13E-01**

On-Road Mobile Sources
Emission Rate Computation

NOx Emissions

Emission Rate (gr/sec) = ((Emission Factor x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

1 Wilshire Boulevard

Link Length (meters)	816
Peak Hour Volume/Baseline (VPH) - 2017	4,608
Emission Factor (gr/mi) - 2017	0.3385
Peak Hour Emission Rate (gr/sec) - 2017	**2.20E-01**

2 Veteran Avenue

Link Length (meters)	858
Peak Hour Volume/Baseline (VPH) - 2017	2,152
Emission Factor (gr/mi) - 2017	0.3385
Peak Hour Emission Rate (gr/sec) - 2017	**1.08E-01**

3 Gayley Avenue

Link Length (meters)	923
Peak Hour Volume/Baseline (VPH) - 2017	1,401
Emission Factor (gr/mi) - 2017	0.3385
Peak Hour Emission Rate (gr/sec) - 2017	**7.56E-02**

4 Kinross Avenue

Link Length (meters)	447
Peak Hour Volume/Baseline (VPH) - 2017	1,091
Emission Factor (gr/mi) - 2017	0.3385
Peak Hour Emission Rate (gr/sec) - 2017	**2.85E-02**

5 Westwood Boulevard

Link Length (meters)	772
Peak Hour Volume/Baseline (VPH) - 2017	1,653
Emission Factor (gr/mi) - 2017	0.3385
Peak Hour Emission Rate (gr/sec) - 2017	**7.46E-02**

City of Los Angeles Department of Transportation - Wilshire Bl W/O Veteran Av - 2/9/12				Normalizing Factors HROFDAY Scalars			
	All Vehicles						
Hour	Westbound	Eastbound	Total Veh	Hour	Vehicles	Staff [1]	Students [2]
0	1,107	517	1,624	1	0.242	0.000	0.000
1	629	328	957	2	0.143	0.000	0.000
2	584	208	792	3	0.118	0.000	0.000
3	242	151	393	4	0.059	0.000	0.000
4	241	399	640	5	0.095	0.000	0.000
5	545	1,634	2,179	6	0.325	0.000	0.000
6	1,383	2,791	4,174	7	0.622	0.000	0.000
7	3,150	3,477	6,627	8	0.988	0.494	0.000
8	**3,023**	**3,685**	**6,708**	**9**	**1.000**	**1.000**	**0.000**
9	2,560	3,335	5,895	10	0.879	0.879	0.879
10	2,572	3,281	5,853	11	0.873	0.873	0.873
11	2,804	2,994	5,798	12	0.864	0.864	0.864
12	2,972	2,989	5,961	13	0.889	0.889	0.889
13	2,473	2,074	4,547	14	0.678	0.678	0.678
14	2,756	2,554	5,310	15	0.792	0.792	0.792
15	2,877	2,179	5,056	16	0.754	0.754	0.754
16	2,706	1,999	4,705	17	0.701	0.701	0.351
17	2,883	2,031	4,914	18	0.733	0.733	0.000
18	2,944	2,279	5,223	19	0.779	0.389	0.000
19	3,048	2,406	5,454	20	0.813	0.000	0.000
20	2,823	2,020	4,843	21	0.722	0.000	0.000
21	2,886	1,669	4,555	22	0.679	0.000	0.000
22	2,228	1,346	3,574	23	0.533	0.000	0.000
23	1,923	825	2,748	24	0.410	0.000	0.000
Max	3,150	3,685	6,708				

[1] Staff Hours: 7:30 AM - 6:30 PM (Hour 8-19)

[2] Student Hours: 9:00 AM - 4:30 PM (Hour 10-17)

Peak Hour (Data): Hour 8 (8AM - 9AM)
Peak Hour (AERMOD): Hour 9 (8AM - 9AM)

City of Los Angeles Department of Transportation - Veteran Av at Wilshire Bl - 10/15/08				Normalizing Factors HROFDAY Scalars			
	All Vehicles						
Hour	Northbound	Southbound	Total Veh	Hour	Vehicles	Staff [1]	Students [2]
0	66	221	287	1	0.104	0.000	0.000
1	43	123	166	2	0.060	0.000	0.000
2	24	77	101	3	0.036	0.000	0.000
3	12	31	43	4	0.016	0.000	0.000
4	18	28	46	5	0.017	0.000	0.000
5	56	85	141	6	0.051	0.000	0.000
6	186	265	451	7	0.163	0.000	0.000
7	615	793	1,408	8	0.509	0.254	0.000
8	932	874	1,806	9	0.652	0.652	0.000
9	784	826	1,610	10	0.582	0.582	0.582
10	648	754	1,402	11	0.507	0.507	0.507
11	603	801	1,404	12	0.507	0.507	0.507
12	627	1,001	1,628	13	0.588	0.588	0.588
13	738	1,014	1,752	14	0.633	0.633	0.633
14	798	1,141	1,939	15	0.701	0.701	0.701
15	806	1,341	2,147	16	0.776	0.776	0.776
16	841	1,472	2,313	17	0.836	0.836	0.418
17	**1,054**	**1,714**	**2,768**	**18**	**1.000**	**1.000**	**0.000**
18	867	1,339	2,206	19	0.797	0.398	0.000
19	602	1,150	1,752	20	0.633	0.000	0.000
20	356	833	1,189	21	0.430	0.000	0.000
21	282	790	1,072	22	0.387	0.000	0.000
22	228	783	1,011	23	0.365	0.000	0.000
23	92	448	540	24	0.195	0.000	0.000
Max	1,054	1,714	2,768				

[1] Staff Hours: 7:30 AM - 6:30 PM (Hour 8-19)

[2] Student Hours: 9:00 AM - 4:30 PM (Hour 10-17)

Peak Hour (Data): Hour 17 (5PM - 6PM)

Peak Hour (AERMOD): Hour 18 (5PM - 6PM)

City of Los Angeles Department of Transportation - Gayley Av at Wilshire Bl - 10/26/09				Normalizing Factors HROFDAY Scalars			
	All Vehicles						
Hour	Northbound	Southbound	Total Veh	Hour	Vehicles	Staff [1]	Students [2]
0	100	227	327	1	0.181	0.000	0.000
1	57	121	178	2	0.099	0.000	0.000
2	36	102	138	3	0.076	0.000	0.000
3	40	38	78	4	0.043	0.000	0.000
4	85	32	117	5	0.065	0.000	0.000
5	249	74	323	6	0.179	0.000	0.000
6	670	169	839	7	0.465	0.000	0.000
7	813	408	1,221	8	0.676	0.338	0.000
8	950	403	1,353	9	0.749	0.749	0.000
9	870	501	1,371	10	0.759	0.759	0.759
10	804	494	1,298	11	0.719	0.719	0.719
11	789	610	1,399	12	0.775	0.775	0.775
12	845	720	1,565	13	0.867	0.867	0.867
13	760	692	1,452	14	0.804	0.804	0.804
14	671	801	1,472	15	0.815	0.815	0.815
15	647	813	1,460	16	0.808	0.808	0.808
16	661	878	1,539	17	0.852	0.852	0.426
17	**794**	**1,012**	**1,806**	**18**	**1.000**	**1.000**	**0.000**
18	835	876	1,711	19	0.947	0.474	0.000
19	577	829	1,406	20	0.779	0.000	0.000
20	437	670	1,107	21	0.613	0.000	0.000
21	416	733	1,149	22	0.636	0.000	0.000
22	304	611	915	23	0.507	0.000	0.000
23	164	393	557	24	0.308	0.000	0.000
Max	950	1,012	1,806				

[1] Staff Hours: 7:30 AM - 6:30 PM (Hour 8-19)

[2] Student Hours: 9:00 AM - 4:30 PM (Hour 10-17)

Peak Hour (Data): Hour 17 (5PM - 6PM)

Peak Hour (AERMOD): Hour 18 (5PM - 6PM)

City of Los Angeles Department of Transportation - Kinross Av at Veteran Av - 10/27/05				Normalizing Factors HROFDAY Scalars			
	All Vehicles						
Hour	Northbound	Southbound	Total Veh	Hour	Vehicles	Staff [1]	Students [2]
0	74	32	106	1	0.111	0.000	0.000
1	52	21	73	2	0.077	0.000	0.000
2	45	18	63	3	0.066	0.000	0.000
3	15	7	22	4	0.023	0.000	0.000
4	10	4	14	5	0.015	0.000	0.000
5	11	58	69	6	0.073	0.000	0.000
6	43	171	214	7	0.225	0.000	0.000
7	98	377	475	8	0.499	0.250	0.000
8	156	553	709	9	0.746	0.746	0.000
9	141	471	612	10	0.644	0.644	0.644
10	163	332	495	11	0.521	0.521	0.521
11	226	302	528	12	0.555	0.555	0.555
12	289	261	550	13	0.578	0.578	0.578
13	293	258	551	14	0.579	0.579	0.579
14	418	218	636	15	0.669	0.669	0.669
15	515	196	711	16	0.748	0.748	0.748
16	608	198	806	17	0.848	0.848	0.424
17	**716**	**235**	**951**	**18**	**1.000**	**1.000**	**0.000**
18	567	274	841	19	0.884	0.442	0.000
19	445	210	655	20	0.689	0.000	0.000
20	356	98	454	21	0.477	0.000	0.000
21	276	109	385	22	0.405	0.000	0.000
22	350	91	441	23	0.464	0.000	0.000
23	153	54	207	24	0.218	0.000	0.000
Max	716	553	951				

[1] Staff Hours: 7:30 AM - 6:30 PM (Hour 8-19)

[2] Student Hours: 9:00 AM - 4:30 PM (Hour 10-17)

Peak Hour (Data): Hour 17 (5PM - 6PM)

Peak Hour (AERMOD): Hour 18 (5PM - 6PM)

City of Los Angeles Department of Transportation - Westwood Bl at Wilshire Bl - 9/16/02				Normalizing Factors HROFDAY Scalars			
	All Vehicles						
Hour	Northbound	Southbound	Total Veh	Hour	Vehicles	Staff [1]	Students [2]
0	102	194	296	1	0.152	0.000	0.000
1	54	129	183	2	0.094	0.000	0.000
2	40	111	151	3	0.077	0.000	0.000
3	19	38	57	4	0.029	0.000	0.000
4	25	31	56	5	0.029	0.000	0.000
5	91	90	181	6	0.093	0.000	0.000
6	312	201	513	7	0.263	0.000	0.000
7	614	459	1,073	8	0.549	0.275	0.000
8	827	513	1,340	9	0.686	0.686	0.000
9	767	604	1,371	10	0.702	0.702	0.702
10	703	709	1,412	11	0.723	0.723	0.723
11	710	823	1,533	12	0.785	0.785	0.785
12	783	941	1,724	13	0.883	0.883	0.883
13	687	946	1,633	14	0.836	0.836	0.836
14	787	1,051	1,838	15	0.941	0.941	0.941
15	823	1,076	1,899	16	0.972	0.972	0.972
16	826	1,052	1,878	17	0.962	0.962	0.481
17	**865**	**1,088**	**1,953**	**18**	**1.000**	**1.000**	**0.000**
18	852	876	1,728	19	0.885	0.442	0.000
19	587	806	1,393	20	0.713	0.000	0.000
20	538	726	1,264	21	0.647	0.000	0.000
21	487	628	1,115	22	0.571	0.000	0.000
22	391	512	903	23	0.462	0.000	0.000
23	178	411	589	24	0.302	0.000	0.000
Max	865	1,088	1,953				

[1] Staff Hours: 7:30 AM - 6:30 PM (Hour 8-19)

[2] Student Hours: 9:00 AM - 4:30 PM (Hour 10-17)

Peak Hour (Data): Hour 17 (5PM - 6PM)
Peak Hour (AERMOD): Hour 18 (5PM - 6PM)

Initial Sigma Computation

Vertical Sigma Calculations - At-Grade or Above Grade Roadway

Initial Horizontal Dispersion Parameter (Sigma Y)
SY = (source separation distance)/2.15

Initial Vertical Dispersion Parameter (Sigma Z)
$SZ = (1.8 + 0.11(TR)) \times (60/30)^{0.2}$
TR = W2/U

Where:
W2 = traveled way half width (m)
U = average wind speed (m/s)

Wilshire Boulevard

Width of Traveled Way (m)	31
Average Wind Speed (m/s)	2.00
Source Separation Distance (m)	31

SY = **14.20**
SZ = **3.03**

Veteran Avenue

Width of Traveled Way (m)	23
Average Wind Speed (m/s)	2.00
Source Separation Distance (m)	23

SY = **10.86**
SZ = **2.81**

Gayley Avenue

Width of Traveled Way (m)	23
Average Wind Speed (m/s)	2.00
Source Separation Distance (m)	23

SY = **10.47**
SZ = **2.78**

Kinross Avenue

Width of Traveled Way (m)	17
Average Wind Speed (m/s)	2.00
Source Separation Distance (m)	17

SY = **7.91**
SZ = **2.60**

Westwood Boulevard

Width of Traveled Way (m)	26
Average Wind Speed (m/s)	2.00
Source Separation Distance (m)	26

SY = **12.09**
SZ = **2.89**

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2017
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)

35 mph - Freeway Running Emission Rates

	TOG	PM10	PM2.5	CO	NOx
Gas	**0.0584**				
DSL		**0.0471**			
Total		**0.0041**	**0.0039**	**1.4221**	**0.3385**

		35 MPH											
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted	PM2.5 (g/mi)	PM2.5 Weighted	CO (g/mi)	CO Weighted	NOx (g/mi)	NOx Weighted
HHDT	GAS		6487	0.761858	4942	0.000784	5	0.00073	5	35.14468	227970	3.489042	22632
HHDT	DSL	0.414	536422	0.322557	173027	0.035506	19046	0.03397	18222	0.984978	528364	5.789943	3105855
LDA	GAS		14452915	0.03126	451803	0.001755	25359	0.00162	23344	1.027919	14856426	0.08737	1262755
LDA	DSL	0.091	117659	0.041497	4883	0.024583	2892	0.02352	2767	0.280533	33007	0.195627	23017
LDT1	GAS		1249051	0.095837	119706	0.003743	4675	0.00345	4308	2.71852	3395570	0.253452	316575
LDT1	DSL	0.001	1663	0.19135	318	0.126643	211	0.12116	201	0.918481	1527	1.131933	1882
LDT2	GAS		5303708	0.040334	213921	0.001731	9180	0.00159	8452	1.346945	7143801	0.147338	781440
LDT2	DSL	0.006	8025	0.018858	151	0.006705	54	0.00642	51	0.129953	1043	0.068418	549
LHDT1	GAS		247163	0.108291	26765	0.001543	381	0.00142	351	1.918195	474107	0.429239	106092
LHDT1	DSL	0.105	136336	0.107148	14608	0.021845	2978	0.02090	2849	0.462422	63045	2.724315	371421
LHDT2	GAS		55020	0.058086	3196	0.001108	61	0.00102	56	1.070976	58925	0.305226	16793
LHDT2	DSL	0.049	63585	0.087781	5582	0.018337	1166	0.01754	1116	0.36196	23015	1.97496	125578
MCY	GAS		126566	2.683574	339650	0.001661	210	0.00156	197	18.31109	2317566	1.101404	139401
MDV	GAS		3367176	0.081248	273576	0.001942	6538	0.00179	6032	2.195515	7392685	0.257346	866531
MDV	DSL	0.036	46373	0.018169	843	0.00863	400	0.00826	383	0.195242	9054	0.064966	3013
MH	GAS		18482	0.320502	5924	0.002657	49	0.00247	46	6.940156	128271	0.81451	15054
MH	DSL	0.003	3815	0.094729	361	0.105252	401	0.10070	384	0.406729	1551	4.849352	18498
MHDT	GAS		64111	0.190734	12228	0.001066	68	0.00098	63	4.036815	258805	0.897891	57565
MHDT	DSL	0.254	328808	0.221088	72695	0.09343	30720	0.08939	29391	0.637597	209647	3.741683	1230296
OBUS	GAS		24731	0.087604	2167	0.000676	17	0.00062	15	1.872821	46316	0.46965	11615
OBUS	DSL	0.020	26195	0.171522	4493	0.035368	926	0.03384	886	0.514795	13485	4.878242	127784
SBUS	GAS		7857	0.124435	978	0.00102	8	0.00094	7	2.783617	21871	0.652778	5129
SBUS	DSL	0.016	20507	0.128356	2632	0.05756	1180	0.05507	1129	0.383645	7868	7.611536	156092
UBUS	GAS		2143	0.872965	1870	0.001701	4	0.00157	3	7.92987	16991	1.7555	3761
UBUS	DSL	0.005	6944	2.159066	14993	0.161895	1124	0.15489	1076	8.653906	60096	15.35963	106663
	Gas Total		24925410		1456726		46556		42881		34044753		3591520
	DSL Total	1.00	1296332		294587		61100		58457		3246253		5284470

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)

35 mph - Freeway Running Emission Rates

	TOG	PM10
Gas	**0.0430**	
DSL		**0.0241**

		35 MPH						
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted
HHDT	GAS		6812	0.556832	3793	0.000748	5
HHDT	DSL	0.406	583151	0.288555	168271	0.019169	11178
LDA	GAS		14630697	0.019479	284993	0.001723	25216
LDA	DSL	0.100	144355	0.029695	4287	0.016548	2389
LDT1	GAS		1255668	0.056356	70765	0.003055	3836
LDT1	DSL	0.001	1413	0.163948	232	0.108371	153
LDT2	GAS		5562000	0.024761	137718	0.001699	9452
LDT2	DSL	0.007	10278	0.017086	176	0.005545	57
LHDT1	GAS		196779	0.08381	16492	0.001369	269
LHDT1	DSL	0.102	146786	0.08816	12941	0.018243	2678
LHDT2	GAS		50374	0.033737	1699	0.000981	49
LHDT2	DSL	0.050	71635	0.069587	4985	0.01487	1065
MCY	GAS		139673	2.615532	365319	0.001853	259
MDV	GAS		3339093	0.058036	193789	0.001879	6273
MDV	DSL	0.043	61844	0.016102	996	0.007079	438
MH	GAS		17038	0.177047	3017	0.001766	30
MH	DSL	0.003	3826	0.081408	311	0.08275	317
MHDT	GAS		61947	0.111084	6881	0.00093	58
MHDT	DSL	0.250	358495	0.116982	41938	0.040661	14577
OBUS	GAS		25148	0.054975	1382	0.000778	20
OBUS	DSL	0.020	28741	0.129036	3709	0.01803	518
SBUS	GAS		9319	0.078167	728	0.000859	8
SBUS	DSL	0.014	20524	0.087966	1805	0.028961	594
UBUS	GAS		2269	0.628073	1425	0.001341	3
UBUS	DSL	0.004	5544	1.969084	10917	0.128236	711

	Fleet Mix Percentage	VMT (Mi/day)	TOG Weighted	PM10 Weighted
Gas Total		25296817	1088003	45478
DSL Total	1.00	1436592	250567	34675

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)
35 mph - Freeway Running Emission Rates

	TOG	PM10
Gas	**0.0321**	
DSL		**0.0071**

		35 MPH						
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted
HHDT	GAS		7851	0.427797	3358	0.000908	7
HHDT	DSL	0.403	666980	0.224718	149883	0.006527	4353
LDA	GAS		14210773	0.012418	176465	0.001657	23553
LDA	DSL	0.103	170545	0.014586	2488	0.007252	1237
LDT1	GAS		1270477	0.032969	41887	0.002358	2995
LDT1	DSL	0.001	1114	0.117113	130	0.076711	85
LDT2	GAS		5923078	0.015907	94219	0.001672	9903
LDT2	DSL	0.008	12539	0.016048	201	0.004876	61
LHDT1	GAS		148840	0.046381	6903	0.0012	179
LHDT1	DSL	0.098	162896	0.06682	10885	0.01355	2207
LHDT2	GAS		47481	0.014593	693	0.000955	45
LHDT2	DSL	0.050	82622	0.053315	4405	0.011356	938
MCY	GAS		150741	2.557951	385587	0.002017	304
MDV	GAS		3288967	0.027916	91814	0.00169	5557
MDV	DSL	0.048	78881	0.010483	827	0.004036	318
MH	GAS		16418	0.06637	1090	0.00122	20
MH	DSL	0.002	4020	0.064713	260	0.053975	217
MHDT	GAS		63487	0.042849	2720	0.00095	60
MHDT	DSL	0.252	416419	0.04541	18910	0.003299	1374
OBUS	GAS		26759	0.026887	719	0.00093	25
OBUS	DSL	0.020	33459	0.069812	2336	0.00442	148
SBUS	GAS		11529	0.038787	447	0.000817	9
SBUS	DSL	0.012	20552	0.07775	1598	0.020104	413
UBUS	GAS		2525	0.371862	939	0.001208	3
UBUS	DSL	0.003	4389	1.527456	6704	0.093964	412
Gas Total			25168924		806841		42661
DSL Total		1.00	1654417		198626		11765

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)

35 mph - Freeway Running Emission Rates

	TOG	PM10
Gas	**0.0272**	
DSL		**0.0055**

		35 MPH					
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted
HHDT	GAS		8430	0.414173	3492	0.001018	9
HHDT	DSL	0.408	728664	0.224146	163327	0.006065	4420
LDA	GAS		13929776	0.008791	122460	0.001277	17782
LDA	DSL	0.102	181579	0.006976	1267	0.002101	381
LDT1	GAS		1293471	0.019821	25637	0.001688	2183
LDT1	DSL	0.000	797	0.039848	32	0.018727	15
LDT2	GAS		6176776	0.011355	70135	0.001313	8111
LDT2	DSL	0.008	13429	0.015387	207	0.004401	59
LHDT1	GAS		122711	0.021674	2660	0.001112	136
LHDT1	DSL	0.097	173121	0.055146	9547	0.010317	1786
LHDT2	GAS		46231	0.007528	348	0.001011	47
LHDT2	DSL	0.050	88934	0.046552	4140	0.009398	836
MCY	GAS		156518	2.533458	396531	0.002102	329
MDV	GAS		3320097	0.018162	60300	0.001357	4507
MDV	DSL	0.049	88181	0.007489	660	0.002191	193
MH	GAS		16146	0.02246	363	0.001051	17
MH	DSL	0.002	4092	0.053066	217	0.033689	138
MHDT	GAS		64289	0.021298	1369	0.001014	65
MHDT	DSL	0.250	445459	0.045483	20261	0.003247	1446
OBUS	GAS		27333	0.017097	467	0.001018	28
OBUS	DSL	0.020	36071	0.067311	2428	0.00426	154
SBUS	GAS		13313	0.01813	241	0.000873	12
SBUS	DSL	0.012	20578	0.064078	1319	0.011741	242
UBUS	GAS		2653	0.063819	169	0.001036	3
UBUS	DSL	0.002	3566	1.148087	4094	0.045779	163
	Gas Total		25177745		684173		33229
	DSL Total	1.00	1784472		207499		9833

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)

35 mph - Freeway Running Emission Rates

	TOG	PM10
Gas	**0.0242**	
DSL		**0.0048**

		35 MPH					
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted
HHDT	GAS		8860	0.423672	3754	0.001063	9
HHDT	DSL	0.414	788479	0.221364	174541	0.005728	4516
LDA	GAS		13777198	0.006423	88495	0.000951	13096
LDA	DSL	0.098	187017	0.005288	989	0.00119	223
LDT1	GAS		1307657	0.010561	13810	0.001107	1447
LDT1	DSL	0.000	756	0.022147	17	0.008418	6
LDT2	GAS		6296054	0.008452	53216	0.000969	6102
LDT2	DSL	0.007	13762	0.015347	211	0.00439	60
LHDT1	GAS		113117	0.009431	1067	0.001049	119
LHDT1	DSL	0.096	183200	0.049583	9084	0.008237	1509
LHDT2	GAS		47193	0.004981	235	0.001049	50
LHDT2	DSL	0.049	94119	0.044445	4183	0.008258	777
MCY	GAS		160066	2.522486	403763	0.002148	344
MDV	GAS		3377096	0.013105	44258	0.001038	3505
MDV	DSL	0.049	93224	0.006236	581	0.001501	140
MH	GAS		16560	0.015744	261	0.001039	17
MH	DSL	0.002	4275	0.047509	203	0.023537	101
MHDT	GAS		66410	0.015002	996	0.001053	70
MHDT	DSL	0.250	476655	0.044942	21422	0.003171	1511
OBUS	GAS		28238	0.01423	402	0.001058	30
OBUS	DSL	0.021	39044	0.062953	2458	0.003935	154
SBUS	GAS		14639	0.011675	171	0.000965	14
SBUS	DSL	0.011	20596	0.051025	1051	0.005506	113
UBUS	GAS		2802	0.034201	96	0.001032	3
UBUS	DSL	0.002	3256	0.882578	2874	0.013475	44
Gas Total			25215891		610523		24805
DSL Total		1.00	1904381		217613		9154

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

EMISSION FACTOR CALCULATIONS
EMFAC 2014

EMFAC2014 (v1.0.7) Emission Rates
Region Type: County
Region: Los Angeles
Calendar Year: 2040
Season: Annual
Vehicle Classification: EMFAC2007 Categories

TOTAL EMISSION RATES (g/mi)

35 mph - Freeway Running Emission Rates

	TOG	PM10
Gas	**0.0227**	
DSL		**0.0045**

		35 MPH					
		Fleet Mix Percentage	VMT (Mi/day)	TOG (g/mi)	TOG Weighted	PM10 (g/mi)	PM10 Weighted
HHDT	GAS		9023	0.430844	3887	0.001076	10
HHDT	DSL	0.423	849187	0.218969	185945	0.005657	4804
LDA	GAS		13759286	0.005251	72249	0.000744	10233
LDA	DSL	0.095	190014	0.004694	892	0.000864	164
LDT1	GAS		1326945	0.007076	9390	0.000837	1111
LDT1	DSL	0.000	756	0.018531	14	0.006314	5
LDT2	GAS		6370960	0.006799	43314	0.000744	4740
LDT2	DSL	0.007	13975	0.015352	215	0.004398	61
LHDT1	GAS		108831	0.005169	563	0.001047	114
LHDT1	DSL	0.094	188516	0.046839	8830	0.006971	1314
LHDT2	GAS		47654	0.004326	206	0.001069	51
LHDT2	DSL	0.048	96217	0.043851	4219	0.007581	729
MCY	GAS		163045	2.517817	410516	0.002172	354
MDV	GAS		3434178	0.009984	34288	0.000821	2820
MDV	DSL	0.048	96231	0.005556	535	0.001108	107
MH	GAS		16846	0.012786	215	0.001053	18
MH	DSL	0.002	4380	0.0453	198	0.019281	84
MHDT	GAS		67337	0.013033	878	0.00107	72
MHDT	DSL	0.251	502980	0.044318	22291	0.003106	1562
OBUS	GAS		28624	0.013507	387	0.001072	31
OBUS	DSL	0.021	41456	0.063114	2616	0.00394	163
SBUS	GAS		15445	0.011612	179	0.001043	16
SBUS	DSL	0.010	20603	0.0428	882	0.003033	62
UBUS	GAS		2894	0.020056	58	0.001049	3
UBUS	DSL	0.002	3144	0.745044	2343	0.005983	19
Gas Total			25351068		576131		19572
DSL Total		1.00	2007459		228980		9076

Note: Total Emission Rate (g/mi)=Sum of Weighted Emission Rates(g/day)/Sum of VMTs(mi/day)

U C L A, CALIFORNIA

Period of Record General Climate Summary - Temperature

Station:(049152) U C L A														
From Year=1933 To Year=2012														
	Monthly Averages			Daily Extremes				Monthly Extremes				Max. Temp.		Mi Ter
	Max.	Min.	Mean	High	Date	Low	Date	Highest Mean	Year	Lowest Mean	Year	>= 90 F	<= 32 F	<= 32 F
	F	F	F	F	dd/yyyy or yyyymmdd	F	dd/yyyy or yyyymmdd	F	-	F	-	# Days	# Days	# Days
January	66.0	49.6	57.8	91	18/1971	30	22/1937	65.8	2003	46.4	1937	0.0	0.0	0.1
February	66.3	49.8	58.1	91	03/1995	33	15/1942	64.3	1954	52.4	1939	0.0	0.0	0.0
March	66.7	50.0	58.4	94	26/1988	34	25/1936	63.4	1988	52.9	1935	0.1	0.0	0.0
April	68.6	52.2	60.4	103	06/1989	37	18/1933	65.3	1992	54.0	1975	0.5	0.0	0.0
May	69.9	54.8	62.3	98	20/1942	43	11/1933	68.3	1997	58.1	1975	0.5	0.0	0.0
June	72.6	57.6	65.1	108	26/1990	44	11/1950	70.7	1981	60.8	1975	0.5	0.0	0.0
July	77.2	60.7	69.0	103	10/1959	51	04/1941	74.9	2006	64.7	1962	0.9	0.0	0.0
August	78.4	61.6	70.0	99	09/1935	50	30/1933	74.4	1998	65.5	1975	1.3	0.0	0.0
September	78.2	60.9	69.5	109	20/1939	47	28/1945	77.2	1984	62.4	1933	2.7	0.0	0.0
October	75.2	58.0	66.6	103	03/1958	40	29/1971	73.1	1965	61.5	1955	2.0	0.0	0.0
November	71.3	54.0	62.7	99	03/2010	33	17/1958	67.9	1949	58.0	1994	0.6	0.0	0.0
December	66.7	50.5	58.6	94	03/1958	25	25/1941	64.5	1963	52.8	1971	0.1	0.0	0.1
Annual	71.4	55.0	63.2	109	19390920	25	19411225	66.0	1997	60.4	1975	9.0	0.0	0.1
Winter	66.3	50.0	58.2	94	19581203	25	19411225	61.9	1964	51.5	1949	0.1	0.0	0.1
Spring	68.4	52.3	60.4	103	19890406	34	19360325	64.7	1997	55.5	1975	1.1	0.0	0.0
Summer	76.0	60.0	68.0	108	19900626	44	19500611	71.6	2006	64.1	1975	2.6	0.0	0.0
Fall	74.9	57.6	66.3	109	19390920	33	19581117	70.6	1963	63.4	1973	5.2	0.0	0.0

Table updated on Oct 31, 2012
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May

Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

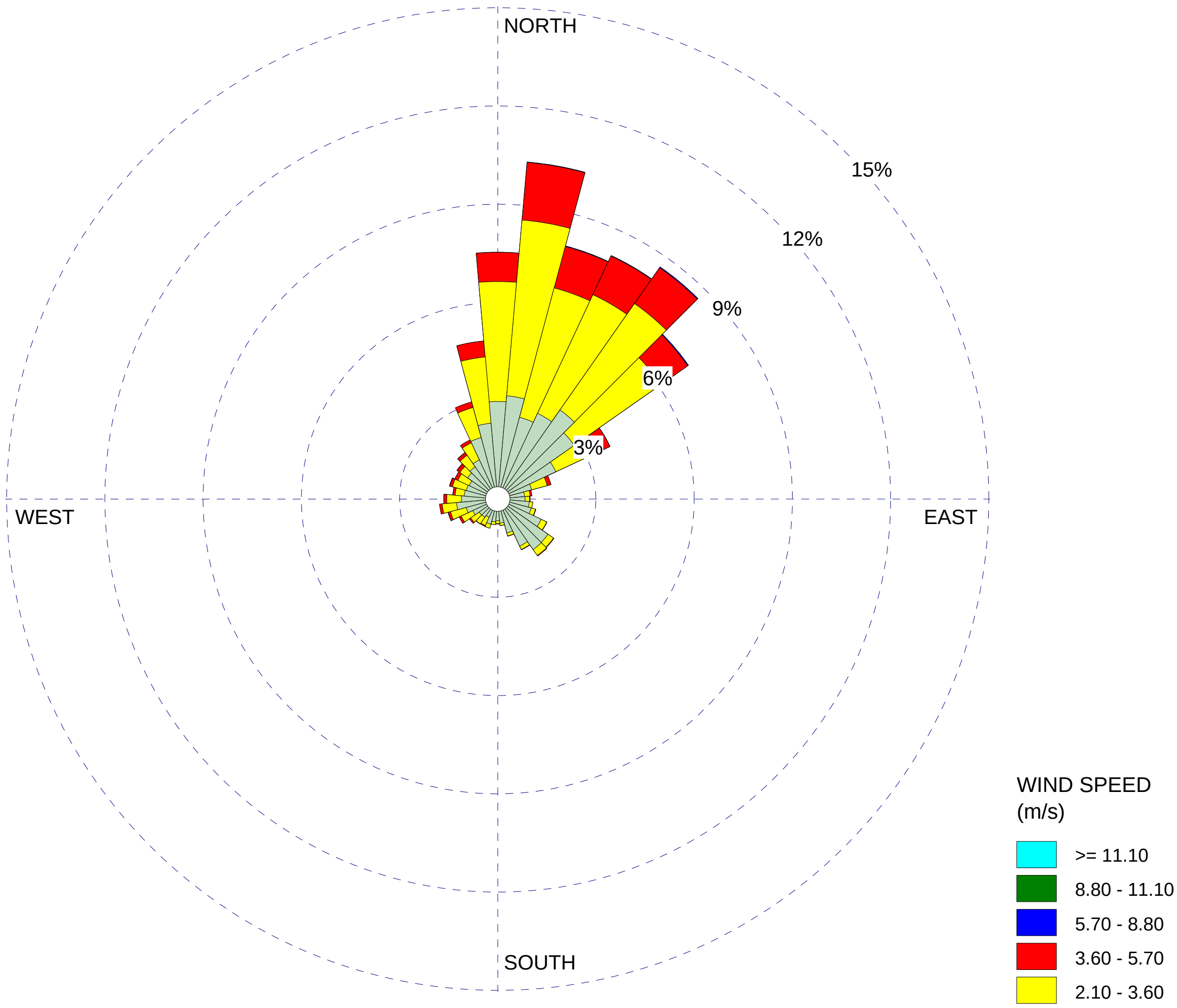
Western Regional Climate Center, wrcc@dri.edu

WIND ROSE PLOT:

West LA Monitoring Station
2008-2012

DISPLAY:

Wind Speed
Flow Vector (blowing to)



COMMENTS:

DATA PERIOD:

Start Date: 1/1/2008 - 07:00
End Date: 12/31/2012 - 19:00

COMPANY NAME:

MODELER:

CALM WINDS:

0.21%

TOTAL COUNT:

23395 hrs.

AVG. WIND SPEED:

2.00 m/s

DATE:

3/7/2016

PROJECT NO.:

PSO-03.0

WRPLOT View - Lakes Environmental Software

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Appendix D. AERMOD Output Files

Appendix

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Model Output
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 1

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	116.36432	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	2/22/2010, 18
PERIOD		0.49147	ug/m^3	366461.11	3769718.05	97.38	3.05	97.38	

Concentration - Source Group: 10

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	31.06856	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	1/21/2008, 11
PERIOD		0.01240	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	

Concentration - Source Group: 11A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	14.92943	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	10/25/2010, 18
PERIOD		0.00169	ug/m^3	366461.11	3769718.05	97.38	6.10	97.38	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 11B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	81.18084	ug/m^3	366451.11	3769698.05	97.35	6.10	97.35	1/26/2012, 18
PERIOD		0.96020	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 12

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	7.36916	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	3/23/2009, 18
PERIOD		0.00204	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	

Concentration - Source Group: 13

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	17.51842	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	5/9/2008, 11
PERIOD		0.00270	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 14

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2.12311	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	2/15/2010, 11
PERIOD		0.00133	ug/m^3	366431.40	3769704.40	97.87	0.00	97.87	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 15

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	23.28224	ug/m^3	366480.82	3769620.89	95.20	0.00	95.20	12/13/2010, 11
PERIOD		0.01028	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 16

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	12.68425	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	12/13/2010, 11
PERIOD		0.00442	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	

Concentration - Source Group: 17

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	285.77772	ug/m^3	366511.11	3769668.05	95.81	0.00	95.81	12/19/2011, 17
PERIOD		0.54551	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	

Concentration - Source Group: 18

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	24.18176	ug/m^3	366500.94	3769639.64	95.34	0.00	95.34	10/19/2009, 11
PERIOD		0.01068	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 19

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	378.18526	ug/m^3	366501.11	3769648.05	95.53	6.10	95.53	12/30/2009, 18
PERIOD		1.30145	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Concentration - Source Group: 2

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	19.67650	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	12/12/2011, 11
PERIOD		0.01035	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 20

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	7.08880	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	10/12/2009, 11
PERIOD		0.00223	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 21

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	55.59613	ug/m^3	366491.11	3769698.05	96.47	0.00	96.47	11/22/2010, 11
PERIOD		0.04400	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Model Output
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 22

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	47.59325	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	10/12/2009, 11
PERIOD		0.02007	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 23A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	418.12682	ug/m^3	366481.11	3769698.05	96.66	0.00	96.66	1/14/2010, 17
PERIOD		8.35384	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	

Concentration - Source Group: 23B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	1028.79603	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	5/3/2010, 9
PERIOD		33.41236	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	

Concentration - Source Group: 24

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	18.68334	ug/m^3	366480.82	3769620.89	95.20	0.00	95.20	1/14/2008, 11
PERIOD		0.03349	ug/m^3	366491.39	3769630.09	95.26	0.00	95.26	

Model Output
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 25A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	39.96909	ug/m^3	366449.12	3769639.98	96.09	0.00	96.09	6/28/2010, 11
PERIOD		0.01501	ug/m^3	366449.12	3769639.98	96.09	0.00	96.09	

Concentration - Source Group: 25B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	314.34442	ug/m^3	366480.82	3769620.89	95.20	0.00	95.20	10/4/2011, 18
PERIOD		11.37402	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 3

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	4888.43696	ug/m^3	366471.11	3769718.05	97.08	0.00	97.08	2/9/2009, 18
PERIOD		17.01087	ug/m^3	366471.11	3769718.05	97.08	0.00	97.08	

Concentration - Source Group: 4

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	315.21472	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	11/7/2008, 18
PERIOD		2.37197	ug/m^3	366461.11	3769718.05	97.38	0.00	97.38	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 5

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	76.20430	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	12/7/2009, 11
PERIOD		0.02464	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 6

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	37.82583	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	1/21/2008, 11
PERIOD		0.01444	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	

Concentration - Source Group: 7

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	11.75755	ug/m^3	366511.11	3769668.05	95.81	3.05	95.81	1/21/2008, 11
PERIOD		0.00457	ug/m^3	366511.11	3769668.05	95.81	3.05	95.81	

Concentration - Source Group: 8

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	1174.71246	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	11/22/2011, 18
PERIOD		12.52837	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Staff

Concentration - Source Group: 9

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	147.16722	ug/m^3	366461.11	3769718.05	97.38	6.10	97.38	11/14/2008, 18
PERIOD		0.21004	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)


```
                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for    28 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

**Model Allows User-Specified Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Used.
        7. Option for Capped & Horiz Stacks Selected With:
               10 Capped Stack(s); and      3 Horizontal Stack(s)

**Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates PERIOD Averages

**This Run Includes:     28 Source(s);      28 Source Group(s); and     143 Receptor(s)

               with:     27 POINT(s), including
                         10 POINTCAP(s) and      3 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)


**Model Set To Continue RUNning After the Setup Testing.
```

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**The AERMET Input Meteorological Data Version Date:  14134

**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.8 MB of RAM.

**Detailed Error/Message File:   geffen.err
**File for Summary of Results:   geffen.sum
```

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
1	0	0.10000E+01	366439.5	3769994.9	101.6	8.84	330.00	71.15	0.31	YES	YES	CAP	HRDOW
2	0	0.10000E+01	366546.4	3769982.5	101.0	5.18	573.15	61.06	0.10	YES	YES	CAP	HRDOW7
3	0	0.10000E+01	366430.9	3769815.9	98.3	4.57	280.37	0.07	0.91	YES	YES	CAP	HRDOW
4	0	0.10000E+01	366446.6	3769811.0	98.1	14.02	330.00	121.60	0.31	YES	YES	CAP	HRDOW
5	0	0.10000E+01	366675.9	3769892.4	100.6	1.83	622.00	29.18	0.08	YES	YES	NO	HRDOW7
6	0	0.10000E+01	366743.6	3769855.0	100.6	18.29	622.00	159.48	0.08	YES	YES	NO	HRDOW7
7	0	0.10000E+01	366791.2	3769824.7	100.0	18.29	622.00	425.44	0.08	YES	YES	NO	HRDOW7
9	0	0.10000E+01	366390.9	3770125.4	104.1	6.40	330.00	121.60	0.31	YES	YES	CAP	HRDOW
10	0	0.10000E+01	366786.2	3769882.8	102.8	16.76	622.00	93.06	0.15	YES	YES	CAP	HRDOW7
11A	0	0.10000E+01	366290.7	3769843.7	102.5	4.57	622.00	79.76	0.15	YES	YES	NO	HRDOW7
11B	0	0.10000E+01	366263.8	3769819.5	101.8	18.59	477.59	47.40	0.15	YES	YES	CAP	HRDOW
12	0	0.10000E+01	366344.4	3769886.0	101.5	4.57	622.00	43.67	0.15	YES	YES	NO	HRDOW7
13	0	0.10000E+01	366651.4	3770070.0	103.9	8.84	622.00	16.75	0.10	YES	YES	HOR	HRDOW7
14	0	0.10000E+01	366347.2	3769889.0	101.5	3.96	622.00	106.36	0.15	YES	YES	NO	HRDOW7
15	0	0.10000E+01	366924.8	3769602.8	99.6	3.66	622.00	91.53	0.10	YES	YES	NO	HRDOW7
16	0	0.10000E+01	366848.2	3769746.4	98.5	7.62	622.00	132.93	0.15	YES	YES	NO	HRDOW7
17	0	0.10000E+01	366811.1	3769740.3	97.6	7.62	330.00	284.59	0.15	YES	YES	CAP	HRDOW
18	0	0.10000E+01	366808.1	3769535.8	95.3	15.24	622.00	146.23	0.15	YES	YES	NO	HRDOW7
19	0	0.10000E+01	366769.5	3769721.5	96.7	7.62	477.59	5.82	0.25	YES	YES	CAP	HRDOW
20	0	0.10000E+01	366719.3	3769506.8	91.5	4.27	750.15	44.57	0.46	YES	YES	NO	HRDOW7
21	0	0.10000E+01	366607.1	3769632.0	94.0	10.06	622.00	122.06	0.10	YES	YES	NO	HRDOW7
22	0	0.10000E+01	366657.6	3769516.1	91.5	3.66	622.00	228.91	0.10	YES	YES	NO	HRDOW7
23A	0	0.10000E+01	366534.2	3769645.2	95.0	2.44	735.93	20.57	0.31	YES	YES	HOR	HRDOW
23B	0	0.10000E+01	366534.2	3769645.2	95.0	2.44	477.59	4.04	0.31	YES	YES	HOR	HRDOW
24	0	0.10000E+01	366506.0	3769481.3	92.7	24.99	622.00	396.75	0.10	YES	YES	NO	HRDOW7
25A	0	0.10000E+01	366214.4	3769351.3	94.7	3.66	622.00	228.91	0.10	YES	YES	NO	HRDOW7
25B	0	0.10000E+01	366275.5	3769394.0	94.1	0.31	330.00	71.15	0.31	YES	YES	CAP	HRDOW

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
8	0	0.43990E-03	366307.9	3769658.7	96.7	4.15	6	1.93	YES	HRDOW

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
1	1 ,
10	10 ,
2	2 ,
3	3 ,
4	4 ,
5	5 ,
6	6 ,
7	7 ,
8	8 ,
9	9 ,
11A	11A ,
11B	11B ,
12	12 ,
13	13 ,
14	14 ,
15	15 ,
16	16 ,
17	17 ,
18	18 ,
19	19 ,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
20	20 ,
21	21 ,
22	22 ,
23A	23A ,
23B	23B ,
24	24 ,
25A	25A ,
25B	25B ,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)


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                                                   *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID   URBAN POP                                            SOURCE IDs
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             3884000.   1          , 2           , 3           , 4           , 5           , 6           , 7           ,
8           ,
            9          , 10          , 11A         , 11B         , 12          , 13          , 14          , 15          ,

            16         , 17          , 18          , 19          , 20          , 21          , 22          , 23A         ,

            23B        , 24          , 25A         , 25B         ,
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**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	7.6,	43.7,	43.6,	-28.1,	-0.2,	2	7.6,	42.4,	43.6,	-28.0,	-1.2,
3	7.6,	39.8,	42.2,	-27.0,	-2.3,	4	7.6,	36.0,	39.6,	-25.2,	-3.3,
5	7.6,	31.1,	35.8,	-22.6,	-4.2,	6	7.6,	31.1,	35.8,	-21.8,	-4.9,
7	7.6,	36.0,	39.6,	-22.8,	-5.5,	8	7.6,	39.8,	42.3,	-23.1,	-6.0,
9	7.6,	42.4,	43.6,	-22.7,	-6.2,	10	7.6,	43.6,	43.7,	-21.7,	-6.3,
11	7.6,	43.6,	42.4,	-19.9,	-6.2,	12	7.6,	42.2,	39.8,	-17.6,	-5.8,
13	7.6,	39.6,	36.0,	-14.7,	-5.4,	14	7.6,	35.8,	31.1,	-11.4,	-4.7,
15	7.6,	35.8,	31.1,	-10.6,	-3.9,	16	7.6,	39.6,	36.0,	-12.5,	-3.0,
17	7.6,	42.3,	39.8,	-13.9,	-2.0,	18	7.6,	43.6,	42.4,	-15.0,	-0.9,
19	7.6,	43.7,	43.6,	-15.5,	0.2,	20	7.6,	42.4,	43.6,	-15.6,	1.2,
21	7.6,	39.8,	42.2,	-15.3,	2.3,	22	7.6,	36.0,	39.6,	-14.4,	3.3,
23	7.6,	31.1,	35.8,	-13.2,	4.2,	24	7.6,	31.1,	35.8,	-14.0,	4.9,
25	7.6,	36.0,	39.6,	-16.8,	5.5,	26	7.6,	39.8,	42.3,	-19.1,	6.0,
27	7.6,	42.4,	43.6,	-20.9,	6.2,	28	7.6,	43.6,	43.7,	-22.0,	6.3,
29	7.6,	43.6,	42.4,	-22.4,	6.2,	30	7.6,	42.2,	39.8,	-22.2,	5.8,
31	7.6,	39.6,	36.0,	-21.3,	5.4,	32	7.6,	35.8,	31.1,	-19.7,	4.7,
33	7.6,	35.8,	31.1,	-20.5,	3.9,	34	7.6,	39.6,	36.0,	-23.5,	3.0,
35	7.6,	42.3,	39.8,	-25.9,	2.0,	36	7.6,	43.6,	42.4,	-27.4,	0.9,

SOURCE ID: 2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	3.7,	69.5,	78.4,	-71.8,	18.5,	2	3.7,	78.7,	76.2,	-68.8,	11.7,
3	3.7,	85.5,	71.6,	-63.8,	4.4,	4	3.7,	89.7,	64.9,	-56.8,	-2.9,
5	3.7,	91.2,	56.2,	-48.1,	-10.2,	6	3.7,	90.1,	54.1,	-46.2,	-17.0,
7	3.7,	88.9,	57.7,	-50.4,	-23.1,	8	3.7,	85.1,	59.6,	-52.9,	-28.6,
9	3.7,	78.8,	59.7,	-53.9,	-33.2,	10	3.7,	78.4,	69.5,	-53.3,	-32.6,
11	3.7,	76.2,	78.7,	-51.0,	-30.7,	12	3.7,	71.6,	85.5,	-47.2,	-28.0,
13	3.7,	64.9,	89.7,	-41.9,	-24.4,	14	3.7,	56.2,	91.2,	-35.4,	-20.0,
15	3.7,	54.1,	90.1,	-28.1,	-19.2,	16	3.7,	57.7,	88.9,	-21.3,	-21.5,
17	3.7,	59.6,	85.1,	-14.0,	-23.2,	18	3.7,	59.7,	78.8,	-6.2,	-24.1,
19	3.7,	69.5,	78.4,	-6.6,	-18.5,	20	3.7,	78.7,	76.2,	-7.3,	-11.7,
21	39.6,	44.3,	48.3,	-173.0,	34.9,	22	39.6,	47.1,	48.4,	-176.8,	8.6,
23	39.6,	48.4,	47.1,	-175.3,	-18.1,	24	3.7,	90.1,	54.1,	-7.8,	17.0,
25	3.7,	88.9,	57.7,	-7.3,	23.1,	26	3.7,	85.1,	59.6,	-6.6,	28.6,
27	3.7,	78.8,	59.7,	-5.7,	33.2,	28	3.7,	78.4,	69.5,	-16.2,	32.6,
29	3.7,	76.2,	78.7,	-27.7,	30.7,	30	3.7,	71.6,	85.5,	-38.3,	28.0,
31	3.7,	64.9,	89.7,	-47.8,	24.4,	32	3.7,	56.2,	91.2,	-55.8,	20.0,
33	3.7,	54.1,	90.1,	-62.1,	19.2,	34	3.7,	57.7,	88.9,	-67.5,	21.5,
35	3.7,	59.6,	85.1,	-71.1,	23.2,	36	3.7,	59.7,	78.8,	-72.5,	24.1,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	13.7,	30.4,	29.0,	-21.7,	-20.0,	2	13.7,	28.6,	30.6,	-18.9,	-20.9,
3	3.0,	15.5,	26.7,	-4.3,	-4.2,	4	3.0,	11.4,	27.1,	-3.9,	-2.5,
5	3.0,	7.0,	26.6,	-3.3,	-0.8,	6	3.0,	9.7,	26.9,	-3.5,	0.9,
7	13.7,	19.2,	30.2,	-1.4,	-16.2,	8	13.7,	23.2,	31.2,	0.7,	-13.6,
9	13.7,	26.5,	31.2,	2.8,	-10.6,	10	13.7,	29.0,	30.4,	4.8,	-7.2,
11	13.7,	30.6,	28.6,	6.7,	-3.6,	12	13.7,	31.3,	25.9,	8.3,	0.1,
13	13.7,	31.1,	22.4,	9.7,	3.8,	14	13.7,	29.9,	18.3,	10.8,	7.3,
15	13.7,	28.2,	14.6,	11.1,	10.7,	16	13.7,	30.2,	19.2,	6.7,	13.7,
17	13.7,	31.2,	23.2,	2.0,	16.3,	18	13.7,	31.2,	26.5,	-2.7,	18.4,
19	13.7,	30.4,	29.0,	-7.3,	20.0,	20	13.7,	28.6,	30.6,	-11.7,	20.9,
21	3.0,	15.5,	26.7,	-22.4,	4.2,	22	3.0,	11.4,	27.1,	-23.2,	2.5,
23	3.0,	7.0,	26.6,	-23.2,	0.8,	24	3.0,	9.7,	26.9,	-23.4,	-0.9,
25	13.7,	19.2,	30.2,	-28.8,	16.2,	26	13.7,	23.2,	31.2,	-31.9,	13.6,
27	13.7,	26.5,	31.2,	-34.1,	10.6,	28	13.7,	29.0,	30.4,	-35.2,	7.2,
29	13.7,	30.6,	28.6,	-35.2,	3.6,	30	13.7,	31.3,	25.9,	-34.2,	-0.1,
31	13.7,	31.1,	22.4,	-32.1,	-3.8,	32	130.2,	41.3,	67.7,	-262.0,	14.3,
33	130.2,	37.0,	69.8,	-263.4,	-22.8,	34	13.7,	30.2,	19.2,	-25.8,	-13.7,
35	13.7,	31.2,	23.2,	-25.2,	-16.3,	36	13.7,	31.2,	26.5,	-23.8,	-18.4,

SOURCE ID: 4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	13.7,	30.4,	29.0,	-19.7,	-3.7,	2	13.7,	28.6,	30.6,	-19.8,	-4.5,
3	13.7,	25.9,	31.3,	-19.2,	-5.2,	4	13.7,	22.4,	31.1,	-18.2,	-5.8,
5	13.7,	18.3,	29.9,	-16.5,	-6.1,	6	13.7,	14.6,	28.2,	-14.6,	-6.3,
7	13.7,	19.2,	30.2,	-14.5,	-6.3,	8	13.7,	23.2,	31.2,	-13.9,	-6.1,
9	13.7,	26.5,	31.2,	-12.9,	-5.7,	10	13.7,	29.0,	30.4,	-11.5,	-5.2,
11	13.7,	30.6,	28.6,	-9.8,	-4.4,	12	13.7,	31.3,	25.9,	-7.7,	-3.6,
13	13.7,	31.1,	22.4,	-5.4,	-2.6,	14	13.7,	29.9,	18.3,	-3.0,	-1.6,
15	13.7,	28.2,	14.6,	-1.0,	-0.5,	16	13.7,	30.2,	19.2,	-3.3,	0.6,
17	13.7,	31.2,	23.2,	-5.5,	1.7,	18	13.7,	31.2,	26.5,	-7.5,	2.7,
19	13.7,	30.4,	29.0,	-9.3,	3.7,	20	13.7,	28.6,	30.6,	-10.9,	4.5,
21	13.7,	25.9,	31.3,	-12.1,	5.2,	22	13.7,	22.4,	31.1,	-12.9,	5.8,
23	13.7,	18.3,	29.9,	-13.4,	6.1,	24	13.7,	14.6,	28.2,	-13.6,	6.3,
25	13.7,	19.2,	30.2,	-15.7,	6.3,	26	13.7,	23.2,	31.2,	-17.3,	6.1,
27	13.7,	26.5,	31.2,	-18.4,	5.7,	28	13.7,	29.0,	30.4,	-18.9,	5.2,
29	67.1,	67.0,	81.6,	-405.5,	26.6,	30	67.1,	76.0,	74.4,	-401.0,	-37.1,
31	13.7,	31.1,	22.4,	-17.0,	2.6,	32	130.2,	40.2,	67.7,	-248.2,	23.2,
33	130.2,	37.0,	69.8,	-251.4,	-11.7,	34	13.7,	30.2,	19.2,	-15.9,	-0.6,
35	13.7,	31.2,	23.2,	-17.7,	-1.7,	36	13.7,	31.2,	26.5,	-19.0,	-2.7,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 5

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	27.1,	125.2,	3.1,	1.4,	2	130.2,	58.1,	67.5,	-316.7,	21.7,
3	130.2,	63.2,	60.5,	-311.0,	-30.1,	4	9.1,	85.7,	119.8,	-3.8,	34.1,
5	9.1,	100.7,	110.6,	-5.9,	43.3,	6	9.1,	112.7,	98.0,	-7.8,	51.2,
7	9.1,	121.3,	82.3,	-9.6,	57.6,	8	9.1,	126.1,	64.2,	-11.0,	62.2,
9	9.1,	127.2,	44.2,	-12.1,	64.9,	10	9.1,	125.2,	27.1,	-15.0,	65.7,
11	45.7,	54.1,	94.6,	57.3,	-40.6,	12	45.7,	39.5,	96.0,	62.0,	-21.8,
13	9.1,	119.8,	85.7,	-76.9,	56.2,	14	45.7,	33.3,	95.8,	63.0,	17.1,
15	45.7,	48.4,	95.5,	58.4,	36.1,	16	9.1,	82.3,	121.3,	-118.2,	31.6,
17	9.1,	64.2,	126.1,	-125.3,	21.1,	18	9.1,	44.2,	127.2,	-128.5,	10.0,
19	9.1,	27.1,	125.2,	-128.3,	-1.4,	20	9.1,	48.3,	127.3,	-128.1,	-12.8,
21	9.1,	68.0,	125.5,	-124.0,	-23.8,	22	9.1,	85.7,	119.8,	-116.1,	-34.1,
23	9.1,	100.7,	110.6,	-104.7,	-43.3,	24	9.1,	112.7,	98.0,	-90.1,	-51.2,
25	9.1,	121.3,	82.3,	-72.8,	-57.6,	26	9.1,	126.1,	64.2,	-53.2,	-62.2,
27	15.2,	111.1,	92.7,	-126.5,	57.4,	28	15.2,	104.2,	101.5,	-141.2,	39.6,
29	45.7,	54.1,	94.6,	-151.9,	40.6,	30	45.7,	39.5,	96.0,	-158.1,	21.8,
31	48.8,	49.4,	58.4,	-282.0,	29.1,	32	67.1,	86.9,	53.5,	-270.9,	68.7,
33	67.1,	88.5,	40.4,	-272.6,	25.3,	34	67.1,	87.4,	26.2,	-266.0,	-18.9,
35	67.1,	87.8,	29.1,	-260.3,	-62.6,	36	9.1,	44.2,	127.2,	1.3,	-10.0,

SOURCE ID: 6

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-212.4,	-69.6,	2	45.7,	94.6,	54.1,	-55.6,	-28.1,
3	130.2,	63.2,	60.5,	-312.4,	47.3,	4	130.2,	66.5,	51.7,	-310.8,	-5.0,
5	130.2,	67.3,	41.3,	-299.7,	-57.1,	6	45.7,	95.5,	48.4,	-28.0,	-39.9,
7	45.7,	92.4,	62.1,	-27.8,	-39.9,	8	45.7,	86.5,	73.9,	-26.8,	-38.8,
9	45.7,	78.0,	83.4,	-25.0,	-36.4,	10	45.7,	67.0,	90.4,	-22.5,	-33.0,
11	45.7,	54.1,	94.6,	-19.2,	-28.5,	12	45.7,	39.5,	96.0,	-15.4,	-23.2,
13	45.7,	23.7,	94.5,	-11.1,	-17.2,	14	45.7,	33.3,	95.8,	-9.3,	-10.7,
15	45.7,	48.4,	95.5,	-7.9,	-3.8,	16	45.7,	62.1,	92.4,	-6.3,	3.2,
17	45.7,	73.9,	86.5,	-4.5,	10.1,	18	45.7,	83.4,	78.0,	-2.5,	16.7,
19	45.7,	90.4,	67.0,	-0.5,	22.7,	20	45.7,	94.6,	54.1,	1.5,	28.1,
21	45.7,	96.0,	39.5,	3.5,	32.6,	22	45.7,	94.5,	23.7,	5.3,	36.2,
23	45.7,	95.8,	33.3,	-6.0,	38.6,	24	45.7,	95.5,	48.4,	-20.4,	39.9,
25	45.7,	92.4,	62.1,	-34.2,	39.9,	26	45.7,	86.5,	73.9,	-47.0,	38.8,
27	45.7,	78.0,	83.4,	-58.4,	36.4,	28	45.7,	67.0,	90.4,	-67.9,	33.0,
29	45.7,	54.1,	94.6,	-75.5,	28.5,	30	45.7,	39.5,	96.0,	-80.7,	23.2,
31	48.8,	49.4,	58.4,	-206.0,	43.9,	32	48.8,	148.8,	66.5,	-211.6,	65.5,
33	67.1,	88.5,	40.4,	-206.2,	65.2,	34	67.1,	87.4,	26.2,	-207.6,	31.9,
35	67.1,	87.8,	29.1,	-211.7,	-2.4,	36	67.1,	88.4,	43.2,	-215.3,	-36.6,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 7

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-190.9,	-17.6,	2	67.1,	81.6,	67.0,	-190.9,	-45.6,
3	67.1,	172.6,	102.0,	-351.5,	48.9,	4	130.2,	66.5,	51.7,	-318.2,	50.9,
5	130.2,	67.7,	41.3,	-316.7,	-3.3,	6	130.2,	67.7,	37.0,	-312.2,	-56.0,
7	45.7,	92.4,	62.1,	-62.2,	4.7,	8	45.7,	86.5,	73.9,	-68.4,	-0.8,
9	45.7,	78.0,	83.4,	-72.6,	-6.2,	10	45.7,	67.0,	90.4,	-74.5,	-11.5,
11	45.7,	54.1,	94.6,	-74.2,	-16.4,	12	45.7,	39.5,	96.0,	-71.7,	-20.8,
13	15.2,	55.8,	58.1,	-67.4,	23.2,	14	48.8,	148.8,	66.5,	91.4,	-82.5,
15	45.7,	48.4,	95.5,	-57.8,	-29.9,	16	45.7,	62.1,	92.4,	-50.9,	-31.2,
17	48.8,	135.5,	76.7,	97.0,	-15.4,	18	48.8,	133.2,	97.7,	87.4,	11.4,
19	48.8,	126.8,	115.7,	75.2,	37.8,	20	67.1,	81.6,	67.0,	123.9,	45.6,
21	45.7,	96.0,	39.5,	1.1,	-23.7,	22	45.7,	94.5,	23.7,	12.8,	-19.7,
23	45.7,	95.8,	33.3,	11.0,	-15.1,	24	45.7,	95.5,	48.4,	5.6,	-10.1,
25	45.7,	92.4,	62.1,	0.1,	-4.7,	26	45.7,	86.5,	73.9,	-5.4,	0.8,
27	45.7,	78.0,	83.4,	-10.8,	6.2,	28	45.7,	67.0,	90.4,	-15.9,	11.5,
29	45.7,	54.1,	94.6,	-20.4,	16.4,	30	45.7,	39.5,	96.0,	-24.4,	20.8,
31	15.2,	55.8,	58.1,	9.3,	-23.2,	32	48.8,	149.9,	92.2,	-257.1,	86.2,
33	48.8,	152.8,	70.8,	-259.0,	48.1,	34	67.1,	87.4,	26.2,	-162.9,	66.2,
35	67.1,	87.8,	29.1,	-173.6,	39.2,	36	67.1,	88.4,	43.2,	-185.1,	11.0,

SOURCE ID: 9

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	7.6,	27.6,	23.3,	-6.7,	-0.2,	2	7.6,	29.7,	26.6,	-8.4,	0.7,
3	7.6,	31.0,	29.0,	-9.8,	1.6,	4	7.6,	31.3,	30.6,	-11.0,	2.3,
5	7.6,	30.6,	31.3,	-11.8,	3.1,	6	7.6,	29.0,	31.0,	-12.2,	3.7,
7	7.6,	26.6,	29.7,	-12.3,	4.2,	8	7.6,	23.3,	27.6,	-12.0,	4.6,
9	7.6,	19.3,	24.6,	-11.3,	4.8,	10	7.6,	23.3,	27.6,	-13.6,	4.9,
11	7.6,	26.6,	29.7,	-15.6,	4.9,	12	7.6,	29.0,	31.0,	-17.0,	4.7,
13	7.6,	30.6,	31.3,	-18.0,	4.3,	14	7.6,	31.3,	30.6,	-18.4,	3.9,
15	7.6,	31.0,	29.0,	-18.2,	3.3,	16	7.6,	29.7,	26.6,	-17.5,	2.6,
17	7.6,	27.6,	23.3,	-16.2,	1.8,	18	7.6,	24.6,	19.3,	-14.5,	1.0,
19	7.6,	27.6,	23.3,	-16.6,	0.2,	20	7.6,	29.7,	26.6,	-18.2,	-0.7,
21	7.6,	31.0,	29.0,	-19.2,	-1.6,	22	7.6,	31.3,	30.6,	-19.7,	-2.3,
23	7.6,	30.6,	31.3,	-19.5,	-3.1,	24	7.6,	29.0,	31.0,	-18.8,	-3.7,
25	7.6,	26.6,	29.7,	-17.5,	-4.2,	26	7.6,	23.3,	27.6,	-15.6,	-4.6,
27	7.6,	19.3,	24.6,	-13.3,	-4.8,	28	7.6,	23.3,	27.6,	-13.9,	-4.9,
29	7.6,	26.6,	29.7,	-14.2,	-4.9,	30	7.6,	29.0,	31.0,	-13.9,	-4.7,
31	7.6,	30.6,	31.3,	-13.3,	-4.3,	32	7.6,	31.3,	30.6,	-12.2,	-3.9,
33	7.6,	31.0,	29.0,	-10.8,	-3.3,	34	7.6,	29.7,	26.6,	-9.1,	-2.6,
35	7.6,	27.6,	23.3,	-7.1,	-1.8,	36	7.6,	24.6,	19.3,	-4.8,	-1.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 10

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-247.1,	-32.5,	2	67.1,	81.6,	67.0,	-243.7,	-70.1,
3	67.1,	172.6,	102.0,	-399.3,	15.6,	4	130.2,	66.5,	51.7,	-359.5,	9.8,
5	130.2,	67.5,	41.3,	-350.2,	-51.0,	6	45.7,	95.5,	48.4,	-78.8,	-42.6,
7	45.7,	92.4,	62.1,	-77.4,	-51.5,	8	45.7,	86.5,	73.9,	-73.6,	-58.7,
9	15.2,	46.8,	51.4,	-35.3,	-15.6,	10	15.2,	39.8,	45.5,	-29.4,	-17.0,
11	15.2,	45.5,	50.4,	-28.8,	-17.9,	12	15.2,	51.4,	55.1,	-28.0,	-18.2,
13	15.2,	55.8,	58.1,	-26.4,	-18.0,	14	15.2,	58.5,	59.4,	-23.9,	-17.3,
15	15.2,	59.4,	58.8,	-20.7,	-16.0,	16	45.7,	62.1,	92.4,	5.3,	-46.3,
17	45.7,	73.9,	86.5,	15.5,	-36.7,	18	45.7,	83.4,	78.0,	25.2,	-25.9,
19	45.7,	90.4,	67.0,	34.2,	-14.4,	20	45.7,	94.6,	54.1,	42.2,	-2.4,
21	45.7,	96.0,	39.5,	48.8,	9.6,	22	45.7,	94.5,	23.7,	54.0,	21.4,
23	45.7,	95.8,	33.3,	44.5,	32.5,	24	45.7,	95.5,	48.4,	30.4,	42.6,
25	45.7,	92.4,	62.1,	15.3,	51.5,	26	45.7,	86.5,	73.9,	-0.2,	58.7,
27	15.2,	46.8,	51.4,	-16.2,	15.6,	28	15.2,	39.8,	45.5,	-16.1,	17.0,
29	15.2,	45.5,	50.4,	-21.5,	17.9,	30	15.2,	51.4,	55.1,	-27.1,	18.2,
31	15.2,	55.8,	58.1,	-31.7,	18.0,	32	15.2,	58.5,	59.4,	-35.5,	17.3,
33	48.8,	146.1,	59.1,	-213.5,	87.2,	34	61.0,	108.8,	104.9,	-297.9,	70.7,
35	67.1,	87.8,	29.1,	-231.6,	44.4,	36	67.1,	88.4,	43.2,	-243.1,	6.0,

SOURCE ID: 11A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	82.6,	79.9,	-50.8,	37.3,	2	18.3,	88.7,	74.5,	-56.3,	35.3,
3	18.3,	93.1,	67.3,	-60.4,	31.7,	4	18.3,	94.8,	63.4,	-62.7,	27.1,
5	18.3,	93.5,	61.5,	-63.1,	21.7,	6	18.3,	90.8,	61.1,	-65.0,	15.2,
7	18.3,	92.2,	63.7,	-65.7,	8.9,	8	18.3,	90.8,	69.5,	-69.5,	2.3,
9	18.3,	86.7,	77.2,	-75.2,	-4.4,	10	18.3,	79.9,	82.6,	-78.6,	-10.9,
11	18.3,	74.5,	88.7,	-79.6,	-19.0,	12	18.3,	67.3,	93.1,	-78.2,	-26.8,
13	18.3,	63.4,	94.8,	-74.5,	-31.0,	14	18.3,	61.5,	93.5,	-68.4,	-32.4,
15	18.3,	61.1,	90.8,	-60.6,	-34.5,	16	18.3,	63.7,	92.2,	-55.0,	-33.9,
17	18.3,	69.5,	90.8,	-47.7,	-34.8,	18	18.3,	77.2,	86.7,	-39.0,	-36.6,
19	18.3,	82.6,	79.9,	-29.0,	-37.3,	20	18.3,	88.7,	74.5,	-18.2,	-35.3,
21	18.3,	93.1,	67.3,	-6.9,	-31.7,	22	18.3,	94.8,	63.4,	-0.7,	-27.1,
23	18.3,	93.5,	61.5,	1.7,	-21.7,	24	18.3,	90.8,	61.1,	4.0,	-15.2,
25	18.3,	92.2,	63.7,	2.0,	-8.9,	26	18.3,	90.8,	69.5,	-0.0,	-2.3,
27	18.3,	86.7,	77.2,	-2.0,	4.4,	28	18.3,	79.9,	82.6,	-4.0,	10.9,
29	18.3,	74.5,	88.7,	-9.0,	19.0,	30	18.3,	67.3,	93.1,	-14.9,	26.8,
31	18.3,	63.4,	94.8,	-20.3,	31.0,	32	18.3,	61.5,	93.5,	-25.1,	32.4,
33	18.3,	61.1,	90.8,	-30.2,	34.5,	34	18.3,	63.7,	92.2,	-37.2,	33.9,
35	18.3,	69.5,	90.8,	-43.1,	34.8,	36	18.3,	77.2,	86.7,	-47.7,	36.6,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 11B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	82.6,	79.9,	-22.3,	15.1,	2	18.3,	88.7,	74.5,	-24.3,	18.3,
3	18.3,	93.1,	67.3,	-26.0,	20.5,	4	18.3,	94.8,	63.4,	-26.9,	22.0,
5	18.3,	93.5,	61.5,	-27.0,	22.9,	6	18.3,	90.8,	61.1,	-29.7,	22.7,
7	18.3,	92.2,	63.7,	-32.2,	22.4,	8	18.3,	90.8,	69.5,	-38.9,	21.4,
9	18.3,	86.7,	77.2,	-48.4,	19.8,	10	18.3,	79.9,	82.6,	-56.4,	17.6,
11	18.3,	74.5,	88.7,	-62.7,	12.9,	12	18.3,	67.3,	93.1,	-67.1,	7.6,
13	18.3,	63.4,	94.8,	-69.4,	4.8,	14	18.3,	61.5,	93.5,	-69.7,	3.7,
15	18.3,	61.1,	90.8,	-68.1,	0.9,	16	18.3,	63.7,	92.2,	-68.5,	-0.3,
17	18.3,	69.5,	90.8,	-66.9,	-4.1,	18	18.3,	77.2,	86.7,	-63.1,	-9.7,
19	18.3,	82.6,	79.9,	-57.5,	-15.1,	20	18.3,	88.7,	74.5,	-50.1,	-18.3,
21	18.3,	93.1,	67.3,	-41.2,	-20.5,	22	18.3,	94.8,	63.4,	-36.5,	-22.0,
23	18.3,	93.5,	61.5,	-34.4,	-22.9,	24	18.3,	90.8,	61.1,	-31.4,	-22.7,
25	18.3,	92.2,	63.7,	-31.5,	-22.4,	26	18.3,	90.8,	69.5,	-30.7,	-21.4,
27	18.3,	86.7,	77.2,	-28.9,	-19.8,	28	18.3,	79.9,	82.6,	-26.2,	-17.6,
29	18.3,	74.5,	88.7,	-26.0,	-12.9,	30	67.1,	102.0,	172.6,	-491.5,	32.3,
31	18.3,	63.4,	94.8,	-25.4,	-4.8,	32	18.3,	61.5,	93.5,	-23.9,	-3.7,
33	18.3,	61.1,	90.8,	-22.7,	-0.9,	34	18.3,	63.7,	92.2,	-23.7,	0.3,
35	18.3,	69.5,	90.8,	-24.0,	4.1,	36	18.3,	77.2,	86.7,	-23.5,	9.7,

SOURCE ID: 12

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	18.3,	94.8,	63.4,	-129.7,	41.0,
5	18.3,	93.5,	61.5,	-131.5,	23.8,	6	18.3,	90.8,	61.1,	-132.7,	5.4,
7	18.3,	92.2,	63.7,	-130.7,	-12.5,	8	18.3,	90.8,	69.5,	-129.8,	-30.1,
9	18.3,	86.7,	77.2,	-129.0,	-46.7,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	0.0,	0.0,	0.0,	0.0,	0.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	0.0,	0.0,	0.0,	0.0,	0.0,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 13

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	39.6,	34.8,	43.7,	1.5,	4.5,	2	39.6,	40.2,	46.7,	-1.1,	8.5,
3	39.6,	44.3,	48.3,	-3.7,	12.3,	4	39.6,	47.1,	48.4,	-6.2,	15.6,
5	39.6,	48.4,	47.1,	-8.5,	18.5,	6	39.6,	48.3,	44.3,	-10.6,	20.8,
7	39.6,	46.7,	40.2,	-12.3,	22.5,	8	39.6,	43.7,	34.8,	-13.7,	23.5,
9	39.6,	39.4,	28.4,	-14.6,	23.8,	10	39.6,	43.7,	34.8,	-21.9,	23.4,
11	39.6,	46.7,	40.2,	-28.6,	22.2,	12	39.6,	48.3,	44.3,	-34.4,	20.4,
13	39.6,	48.4,	47.1,	-39.2,	18.0,	14	39.6,	47.1,	48.4,	-42.7,	15.0,
15	39.6,	44.3,	48.3,	-45.0,	11.6,	16	39.6,	40.2,	46.7,	-45.9,	7.8,
17	39.6,	34.8,	43.7,	-45.4,	3.7,	18	39.6,	28.4,	39.4,	-43.5,	-0.4,
19	39.6,	34.8,	43.7,	-45.3,	-4.5,	20	39.6,	40.2,	46.7,	-45.6,	-8.5,
21	39.6,	44.3,	48.3,	-44.6,	-12.3,	22	39.6,	47.1,	48.4,	-42.2,	-15.6,
23	39.6,	48.4,	47.1,	-38.5,	-18.5,	24	39.6,	48.3,	44.3,	-33.7,	-20.8,
25	39.6,	46.7,	40.2,	-27.9,	-22.5,	26	39.6,	43.7,	34.8,	-21.2,	-23.5,
27	39.6,	39.4,	28.4,	-13.8,	-23.8,	28	39.6,	43.7,	34.8,	-12.9,	-23.4,
29	39.6,	46.7,	40.2,	-11.6,	-22.2,	30	39.6,	48.3,	44.3,	-9.9,	-20.4,
31	39.6,	48.4,	47.1,	-7.9,	-18.0,	32	39.6,	47.1,	48.4,	-5.7,	-15.0,
33	45.7,	48.4,	95.5,	-320.0,	31.5,	34	45.7,	62.1,	92.4,	-319.8,	-16.3,
35	39.6,	34.8,	43.7,	1.7,	-3.7,	36	39.6,	28.4,	39.4,	4.1,	0.4,

SOURCE ID: 14

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	18.3,	94.8,	63.4,	-133.7,	41.2,
5	18.3,	93.5,	61.5,	-135.5,	23.3,	6	18.3,	90.8,	61.1,	-136.6,	4.2,
7	18.3,	92.2,	63.7,	-134.3,	-14.4,	8	18.3,	90.8,	69.5,	-133.0,	-32.5,
9	18.3,	86.7,	77.2,	-131.7,	-49.7,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	0.0,	0.0,	0.0,	0.0,	0.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	0.0,	0.0,	0.0,	0.0,	0.0,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

SOURCE ID: 15

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	48.8,	148.7,	98.4,	-54.7,	65.1,	2	48.8,	139.5,	116.0,	-75.1,	63.3,
3	48.8,	126.1,	130.7,	-93.4,	59.5,	4	48.8,	110.8,	142.5,	-108.7,	53.0,
5	61.0,	135.1,	91.1,	-120.8,	97.0,	6	61.0,	121.8,	98.4,	-140.2,	82.2,
7	67.1,	172.4,	74.0,	-352.9,	99.4,	8	67.1,	164.4,	101.3,	-378.1,	45.4,
9	130.2,	75.2,	42.7,	-391.9,	28.1,	10	130.2,	72.4,	51.1,	-393.8,	-34.3,
11	67.1,	67.0,	81.6,	-196.7,	5.5,	12	67.1,	76.0,	74.4,	-191.7,	-21.6,
13	67.1,	82.7,	64.9,	-180.8,	-48.1,	14	67.1,	86.9,	53.5,	-164.5,	-73.1,
15	48.8,	152.8,	70.8,	-70.8,	-52.8,	16	48.8,	151.1,	47.2,	-48.4,	-58.1,
17	48.8,	153.2,	54.7,	-45.3,	-62.8,	18	48.8,	153.3,	77.7,	-45.2,	-65.0,
19	48.8,	148.7,	98.4,	-43.7,	-65.1,	20	48.8,	139.5,	116.0,	-40.9,	-63.3,
21	48.8,	126.1,	130.7,	-37.4,	-59.5,	22	48.8,	110.8,	142.5,	-33.8,	-53.0,
23	61.0,	135.1,	91.1,	29.7,	-97.0,	24	61.0,	121.8,	98.4,	41.8,	-82.2,
25	48.8,	47.2,	151.1,	-17.4,	-24.8,	26	61.0,	106.7,	123.4,	52.8,	-43.9,
27	61.0,	112.6,	136.2,	52.6,	-23.8,	28	61.0,	115.1,	144.9,	50.8,	-2.9,
29	67.1,	67.0,	81.6,	115.1,	-5.5,	30	67.1,	76.0,	74.4,	117.3,	21.6,
31	67.1,	82.7,	64.9,	115.9,	48.1,	32	67.1,	86.9,	53.5,	111.0,	73.1,
33	48.8,	152.8,	70.8,	0.0,	52.8,	34	48.8,	151.1,	47.2,	1.2,	58.1,
35	48.8,	153.2,	54.7,	-9.4,	62.8,	36	48.8,	153.3,	77.7,	-32.5,	65.0,

SOURCE ID: 16

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-123.6,	52.1,	2	67.1,	81.6,	67.0,	-136.7,	34.8,
3	67.1,	74.4,	76.0,	-145.7,	16.3,	4	67.1,	178.4,	78.4,	-321.5,	89.0,
5	67.1,	178.7,	52.5,	-321.2,	37.8,	6	130.2,	69.8,	37.0,	-322.3,	40.3,
7	130.2,	73.8,	38.3,	-330.0,	-12.5,	8	130.2,	74.9,	38.5,	-327.6,	-65.0,
9	48.8,	59.4,	36.7,	-15.7,	-38.7,	10	48.8,	59.5,	44.3,	-12.8,	-37.7,
11	48.8,	57.9,	50.6,	-9.5,	-35.5,	12	48.8,	54.5,	55.3,	-6.0,	-32.2,
13	48.8,	49.4,	58.4,	-2.2,	-27.9,	14	48.8,	149.9,	92.2,	68.3,	-79.4,
15	48.8,	152.8,	70.8,	91.9,	-58.2,	16	61.0,	108.8,	104.9,	43.7,	-82.3,
17	61.0,	123.4,	106.7,	57.5,	-63.9,	18	67.1,	88.4,	43.2,	63.5,	-68.0,
19	67.1,	86.3,	55.9,	67.7,	-52.1,	20	67.1,	81.6,	67.0,	69.7,	-34.8,
21	67.1,	74.4,	76.0,	69.7,	-16.3,	22	67.1,	64.9,	82.7,	67.5,	2.6,
23	61.0,	135.1,	91.1,	63.3,	62.3,	24	61.0,	121.8,	98.4,	47.3,	80.4,
25	48.8,	56.8,	26.1,	-2.3,	37.3,	26	48.8,	57.4,	27.9,	-9.9,	38.6,
27	48.8,	59.4,	36.7,	-21.0,	38.7,	28	48.8,	59.5,	44.3,	-31.5,	37.7,
29	48.8,	57.9,	50.6,	-41.1,	35.5,	30	48.8,	54.5,	55.3,	-49.3,	32.2,
31	48.8,	49.4,	58.4,	-56.1,	27.9,	32	48.8,	149.9,	92.2,	-160.5,	79.4,
33	48.8,	152.8,	70.8,	-162.7,	58.2,	34	61.0,	108.8,	104.9,	-148.6,	82.3,
35	61.0,	123.4,	106.7,	-164.1,	63.9,	36	67.1,	88.4,	43.2,	-106.7,	68.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 17

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-111.2,	16.7,	2	67.1,	81.6,	67.0,	-118.3,	2.0,
3	67.1,	74.4,	76.0,	-121.9,	-12.8,	4	67.1,	178.4,	78.4,	-293.1,	64.5,
5	67.1,	178.7,	52.5,	-288.9,	18.6,	6	130.2,	69.8,	37.0,	-287.2,	27.1,
7	130.2,	73.8,	38.3,	-293.1,	-19.4,	8	130.2,	74.8,	38.5,	-290.0,	-65.4,
9	48.8,	59.4,	36.7,	21.4,	-32.6,	10	48.8,	59.5,	44.3,	22.7,	-25.2,
11	48.8,	57.9,	50.6,	23.2,	-17.1,	12	48.8,	54.5,	55.3,	23.1,	-8.4,
13	48.8,	142.5,	110.8,	67.0,	-69.8,	14	67.1,	86.9,	53.5,	13.9,	-74.5,
15	67.1,	88.5,	40.4,	32.8,	-66.3,	16	67.1,	87.4,	26.2,	50.6,	-56.1,
17	67.1,	87.8,	29.1,	57.9,	-44.2,	18	67.1,	88.4,	43.2,	57.4,	-30.9,
19	67.1,	86.3,	55.9,	55.2,	-16.7,	20	67.1,	81.6,	67.0,	51.3,	-2.0,
21	67.1,	74.4,	76.0,	45.9,	12.8,	22	67.1,	64.9,	82.7,	39.0,	27.1,
23	61.0,	135.1,	91.1,	31.0,	81.5,	24	48.8,	59.1,	35.0,	-35.6,	48.1,
25	48.8,	56.8,	26.1,	-39.2,	44.3,	26	48.8,	57.4,	27.9,	-47.4,	39.0,
27	48.8,	59.4,	36.7,	-58.1,	32.6,	28	48.8,	59.5,	44.3,	-67.0,	25.2,
29	48.8,	57.9,	50.6,	-73.8,	17.1,	30	48.8,	54.5,	55.3,	-78.4,	8.4,
31	48.8,	142.5,	110.8,	-177.9,	69.8,	32	67.1,	86.9,	53.5,	-67.4,	74.5,
33	67.1,	88.5,	40.4,	-73.2,	66.3,	34	67.1,	87.4,	26.2,	-76.8,	56.1,
35	67.1,	87.8,	29.1,	-87.0,	44.2,	36	67.1,	88.4,	43.2,	-100.6,	30.9,

SOURCE ID: 18

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	90.8,	49.2,	2	67.1,	81.6,	67.0,	74.9,	69.1,
3	61.0,	149.0,	109.7,	23.0,	49.6,	4	61.0,	144.2,	102.0,	17.6,	62.4,
5	61.0,	135.1,	91.1,	11.7,	73.2,	6	61.0,	121.8,	98.4,	-5.6,	81.9,
7	12.2,	77.7,	90.2,	-8.4,	32.6,	8	67.1,	164.4,	101.3,	-251.5,	91.1,
9	67.1,	152.0,	125.4,	-275.2,	56.7,	10	130.2,	70.8,	51.1,	-290.4,	51.9,
11	130.2,	67.5,	58.1,	-296.9,	7.1,	12	130.2,	60.5,	63.2,	-294.3,	-38.0,
13	61.0,	102.0,	144.2,	-134.5,	68.6,	14	67.1,	86.9,	53.5,	-140.8,	59.3,
15	67.1,	88.5,	40.4,	-142.8,	38.6,	16	67.1,	87.4,	26.2,	-140.5,	16.7,
17	67.1,	87.8,	29.1,	-143.0,	-5.6,	18	67.1,	88.4,	43.2,	-147.1,	-27.9,
19	67.1,	86.3,	55.9,	-146.7,	-49.2,	20	67.1,	81.6,	67.0,	-141.9,	-69.1,
21	61.0,	149.0,	109.7,	-132.8,	-49.6,	22	61.0,	144.2,	102.0,	-119.6,	-62.4,
23	61.0,	135.1,	91.1,	-102.8,	-73.2,	24	61.0,	121.8,	98.4,	-92.8,	-81.9,
25	12.2,	77.7,	90.2,	-81.8,	-32.6,	26	12.2,	89.3,	93.8,	-80.1,	-38.5,
27	12.2,	101.1,	102.4,	-77.6,	-43.2,	28	12.2,	109.9,	108.8,	-72.6,	-46.6,
29	61.0,	114.2,	149.2,	-39.3,	-84.8,	30	67.1,	102.0,	172.6,	121.7,	58.7,
31	61.0,	102.0,	144.2,	-9.8,	-68.6,	32	67.1,	86.9,	53.5,	87.3,	-59.3,
33	67.1,	88.5,	40.4,	102.4,	-38.6,	34	67.1,	87.4,	26.2,	114.4,	-16.7,
35	67.1,	87.8,	29.1,	113.9,	5.6,	36	67.1,	88.4,	43.2,	103.9,	27.9,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 19

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-85.5,	-21.0,	2	67.1,	81.6,	67.0,	-86.5,	-30.7,
3	67.1,	74.4,	76.0,	-84.8,	-39.4,	4	67.1,	178.4,	78.4,	-251.9,	44.7,
5	130.2,	67.7,	41.3,	-233.7,	61.8,	6	130.2,	69.8,	37.0,	-241.8,	22.5,
7	130.2,	73.8,	38.3,	-247.5,	-16.0,	8	130.2,	75.1,	38.5,	-245.8,	-54.1,
9	48.8,	59.4,	36.7,	63.0,	-13.9,	10	61.0,	115.1,	144.9,	-22.2,	-87.1,
11	67.1,	67.0,	81.6,	-10.1,	-53.0,	12	67.1,	76.0,	74.4,	2.2,	-46.8,
13	67.1,	82.7,	64.9,	14.5,	-39.3,	14	67.1,	86.9,	53.5,	26.3,	-30.5,
15	67.1,	88.5,	40.4,	37.3,	-20.9,	16	67.1,	87.4,	26.2,	47.2,	-10.6,
17	67.1,	87.8,	29.1,	46.6,	0.1,	18	67.1,	88.4,	43.2,	38.7,	10.7,
19	67.1,	86.3,	55.9,	29.5,	21.0,	20	67.1,	81.6,	67.0,	19.5,	30.7,
21	67.1,	74.4,	76.0,	8.8,	39.4,	22	67.1,	64.9,	82.7,	-2.1,	46.9,
23	61.0,	135.1,	91.1,	-12.9,	93.8,	24	48.8,	59.1,	35.0,	-81.0,	52.7,
25	48.8,	56.8,	26.1,	-84.7,	40.9,	26	48.8,	57.4,	27.9,	-91.7,	27.8,
27	48.8,	59.4,	36.7,	-99.7,	13.9,	28	61.0,	115.1,	144.9,	-122.8,	87.1,
29	67.1,	67.0,	81.6,	-71.5,	53.0,	30	67.1,	76.0,	74.4,	-76.6,	46.8,
31	67.1,	82.7,	64.9,	-79.4,	39.3,	32	67.1,	86.9,	53.5,	-79.8,	30.5,
33	67.1,	88.5,	40.4,	-77.8,	20.9,	34	67.1,	87.4,	26.2,	-73.4,	10.6,
35	67.1,	87.8,	29.1,	-75.8,	-0.1,	36	67.1,	88.4,	43.2,	-81.8,	-10.7,

SOURCE ID: 20

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	61.0,	144.9,	115.1,	75.5,	-62.4,	2	67.1,	81.6,	67.0,	132.5,	-4.4,
3	67.1,	74.4,	76.0,	126.2,	24.5,	4	67.1,	64.9,	82.7,	116.1,	52.7,
5	61.0,	135.1,	91.1,	98.3,	38.4,	6	61.0,	121.8,	98.4,	85.7,	62.6,
7	67.1,	172.4,	74.0,	-127.0,	119.3,	8	67.1,	164.4,	101.3,	-159.1,	104.2,
9	67.1,	152.0,	125.4,	-186.4,	85.7,	10	67.1,	139.2,	145.7,	-208.1,	62.5,
11	130.2,	60.1,	58.1,	-223.4,	64.7,	12	130.2,	60.1,	63.2,	-232.0,	31.5,
13	130.2,	51.7,	66.5,	-233.5,	-2.6,	14	130.2,	41.3,	67.7,	-227.9,	-36.6,
15	33.5,	58.5,	29.7,	-150.3,	6.2,	16	33.5,	57.1,	20.5,	-144.7,	-17.4,
17	33.5,	57.5,	22.4,	-140.6,	-40.4,	18	67.1,	88.4,	43.2,	-176.1,	60.9,
19	67.1,	86.3,	55.9,	-190.7,	33.1,	20	67.1,	81.6,	67.0,	-199.5,	4.4,
21	67.1,	74.4,	76.0,	-202.2,	-24.5,	22	67.1,	64.9,	82.7,	-198.9,	-52.7,
23	61.0,	135.1,	91.1,	-189.4,	-38.4,	24	61.0,	121.8,	98.4,	-184.1,	-62.6,
25	67.1,	172.4,	74.0,	52.9,	-119.3,	26	67.1,	164.4,	101.3,	57.8,	-104.2,
27	67.1,	152.0,	125.4,	61.0,	-85.7,	28	67.1,	139.2,	145.7,	62.3,	-62.5,
29	67.1,	122.4,	161.6,	61.8,	-37.2,	30	67.1,	102.0,	172.6,	59.3,	-10.8,
31	67.1,	46.7,	53.6,	55.1,	31.8,	32	3.0,	8.6,	9.4,	-4.2,	1.5,
33	3.0,	7.6,	8.7,	-4.1,	1.5,	34	3.0,	6.3,	7.7,	-3.8,	1.6,
35	3.0,	7.6,	8.7,	-4.6,	1.5,	36	67.1,	88.4,	43.2,	132.9,	-60.9,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 21

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.2,	50.2,	2	130.2,	58.1,	67.5,	-48.4,	46.1,
3	130.2,	63.2,	60.5,	-51.1,	40.5,	4	130.2,	66.5,	51.7,	-52.3,	33.7,
5	130.2,	67.7,	41.3,	-51.8,	25.9,	6	130.2,	69.8,	37.0,	-56.4,	18.8,
7	130.2,	73.8,	38.3,	-64.3,	12.5,	8	130.2,	75.6,	38.5,	-70.3,	5.8,
9	130.2,	75.2,	42.7,	-74.2,	-1.2,	10	130.2,	72.4,	51.1,	-75.8,	-8.0,
11	130.2,	67.5,	58.1,	-75.1,	-14.7,	12	130.2,	60.5,	63.2,	-72.1,	-20.9,
13	130.2,	51.7,	66.5,	-67.0,	-26.4,	14	130.2,	41.3,	67.7,	-59.8,	-31.2,
15	67.1,	40.0,	47.5,	75.4,	-25.1,	16	33.5,	57.1,	20.5,	11.4,	45.2,
17	67.1,	41.1,	43.5,	77.3,	10.4,	18	67.1,	46.6,	43.3,	72.2,	27.9,
19	130.2,	51.1,	72.4,	-28.2,	-50.2,	20	130.2,	58.1,	67.5,	-19.1,	-46.1,
21	130.2,	63.2,	60.5,	-9.4,	-40.5,	22	130.2,	66.5,	51.7,	0.6,	-33.7,
23	130.2,	67.7,	41.3,	10.5,	-25.9,	24	130.2,	69.8,	37.0,	19.4,	-18.8,
25	130.2,	73.8,	38.3,	26.0,	-12.5,	26	130.2,	75.6,	38.5,	31.9,	-5.8,
27	130.2,	75.2,	42.7,	31.5,	1.2,	28	130.2,	72.4,	51.1,	24.7,	8.0,
29	130.2,	67.5,	58.1,	17.0,	14.7,	30	130.2,	60.5,	63.2,	8.9,	20.9,
31	130.2,	51.7,	66.5,	0.5,	26.4,	32	130.2,	41.3,	67.7,	-7.9,	31.2,
33	67.1,	40.0,	47.5,	-122.8,	25.1,	34	67.1,	35.6,	42.9,	-123.0,	8.1,
35	67.1,	41.1,	43.5,	-120.8,	-10.4,	36	67.1,	46.6,	43.3,	-115.6,	-27.9,

SOURCE ID: 22

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	50.8,	46.1,	-5.6,	25.4,	2	61.0,	149.2,	114.2,	97.6,	-99.3,
3	67.1,	172.6,	102.0,	-17.5,	87.6,	4	67.1,	178.4,	78.4,	-22.7,	91.0,
5	67.1,	178.7,	52.5,	-27.2,	91.7,	6	67.1,	176.6,	51.2,	-42.2,	91.1,
7	67.1,	172.4,	74.0,	-72.2,	89.4,	8	67.1,	164.4,	101.3,	-100.0,	84.3,
9	67.1,	152.0,	125.4,	-124.8,	76.3,	10	67.1,	139.2,	145.7,	-145.7,	64.0,
11	67.1,	122.4,	161.6,	-162.3,	49.5,	12	130.2,	49.5,	63.2,	-173.9,	54.2,
13	130.2,	49.5,	66.5,	-180.2,	29.9,	14	130.2,	41.3,	67.7,	-181.1,	4.6,
15	130.2,	37.0,	69.8,	-179.4,	-23.7,	16	67.1,	35.6,	42.9,	-46.1,	-15.9,
17	67.1,	41.1,	43.5,	-45.6,	-19.3,	18	67.1,	46.6,	43.3,	-43.7,	-22.7,
19	67.1,	50.8,	46.1,	-40.4,	-25.4,	20	67.1,	81.6,	67.0,	-211.8,	65.5,
21	67.1,	74.4,	76.0,	-225.0,	33.6,	22	67.1,	178.4,	78.4,	-55.7,	-91.0,
23	67.1,	178.7,	52.5,	-25.2,	-91.7,	24	67.1,	176.6,	51.2,	-9.0,	-91.1,
25	67.1,	172.4,	74.0,	-1.9,	-89.4,	26	67.1,	164.4,	101.3,	-1.3,	-84.3,
27	67.1,	152.0,	125.4,	-0.7,	-76.3,	28	67.1,	139.2,	145.7,	-0.0,	-64.0,
29	67.1,	122.4,	161.6,	0.6,	-49.5,	30	130.2,	49.5,	63.2,	110.6,	-54.2,
31	67.1,	46.7,	53.6,	1.8,	-0.6,	32	67.1,	44.0,	51.3,	2.4,	5.2,
33	67.1,	40.0,	47.5,	2.8,	11.0,	34	67.1,	35.6,	42.9,	3.2,	15.9,
35	67.1,	41.1,	43.5,	2.1,	19.3,	36	67.1,	46.6,	43.3,	0.3,	22.7,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 23A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.5,	-23.8,	2	130.2,	58.1,	67.5,	-35.8,	-26.9,
3	130.2,	63.2,	60.5,	-26.0,	-29.2,	4	130.2,	66.5,	51.7,	-15.5,	-30.5,
5	130.2,	67.7,	41.3,	-4.4,	-31.0,	6	130.2,	69.8,	37.0,	0.2,	-29.0,
7	130.2,	73.8,	38.3,	-0.3,	-24.8,	8	130.2,	75.6,	38.5,	-0.8,	-19.8,
9	130.2,	75.2,	42.7,	-1.3,	-14.3,	10	130.2,	72.4,	51.1,	-1.8,	-8.3,
11	130.2,	67.5,	58.1,	-2.1,	-2.1,	12	130.2,	60.5,	63.2,	-2.4,	4.2,
13	130.2,	51.7,	66.5,	-2.7,	10.4,	14	130.2,	41.3,	67.7,	-2.9,	16.2,
15	130.2,	37.0,	69.8,	-5.9,	18.7,	16	130.2,	38.3,	73.8,	-12.1,	18.8,
17	130.2,	38.5,	75.6,	-18.0,	18.4,	18	130.2,	42.7,	75.2,	-23.3,	20.0,
19	130.2,	51.1,	72.4,	-27.9,	23.8,	20	130.2,	58.1,	67.5,	-31.7,	26.9,
21	130.2,	63.2,	60.5,	-34.5,	29.2,	22	130.2,	66.5,	51.7,	-36.2,	30.5,
23	130.2,	67.7,	41.3,	-36.9,	31.0,	24	130.2,	69.8,	37.0,	-37.2,	29.0,
25	130.2,	73.8,	38.3,	-38.0,	24.8,	26	130.2,	75.6,	38.5,	-37.6,	19.8,
27	130.2,	75.2,	42.7,	-41.4,	14.3,	28	130.2,	72.4,	51.1,	-49.4,	8.3,
29	130.2,	67.5,	58.1,	-55.9,	2.1,	30	130.2,	60.5,	63.2,	-60.8,	-4.2,
31	130.2,	51.7,	66.5,	-63.8,	-10.4,	32	130.2,	41.3,	67.7,	-64.8,	-16.2,
33	130.2,	37.0,	69.8,	-63.9,	-18.7,	34	130.2,	38.3,	73.8,	-61.7,	-18.8,
35	130.2,	38.5,	75.6,	-57.6,	-18.4,	36	130.2,	42.7,	75.2,	-51.9,	-20.0,

SOURCE ID: 23B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.5,	-23.8,	2	130.2,	58.1,	67.5,	-35.8,	-26.9,
3	130.2,	63.2,	60.5,	-26.0,	-29.2,	4	130.2,	66.5,	51.7,	-15.5,	-30.5,
5	130.2,	67.7,	41.3,	-4.4,	-31.0,	6	130.2,	69.8,	37.0,	0.2,	-29.0,
7	130.2,	73.8,	38.3,	-0.3,	-24.8,	8	130.2,	75.6,	38.5,	-0.8,	-19.8,
9	130.2,	75.2,	42.7,	-1.3,	-14.3,	10	130.2,	72.4,	51.1,	-1.8,	-8.3,
11	130.2,	67.5,	58.1,	-2.1,	-2.1,	12	130.2,	60.5,	63.2,	-2.4,	4.2,
13	130.2,	51.7,	66.5,	-2.7,	10.4,	14	130.2,	41.3,	67.7,	-2.9,	16.2,
15	130.2,	37.0,	69.8,	-5.9,	18.7,	16	130.2,	38.3,	73.8,	-12.1,	18.8,
17	130.2,	38.5,	75.6,	-18.0,	18.4,	18	130.2,	42.7,	75.2,	-23.3,	20.0,
19	130.2,	51.1,	72.4,	-27.9,	23.8,	20	130.2,	58.1,	67.5,	-31.7,	26.9,
21	130.2,	63.2,	60.5,	-34.5,	29.2,	22	130.2,	66.5,	51.7,	-36.2,	30.5,
23	130.2,	67.7,	41.3,	-36.9,	31.0,	24	130.2,	69.8,	37.0,	-37.2,	29.0,
25	130.2,	73.8,	38.3,	-38.0,	24.8,	26	130.2,	75.6,	38.5,	-37.6,	19.8,
27	130.2,	75.2,	42.7,	-41.4,	14.3,	28	130.2,	72.4,	51.1,	-49.4,	8.3,
29	130.2,	67.5,	58.1,	-55.9,	2.1,	30	130.2,	60.5,	63.2,	-60.8,	-4.2,
31	130.2,	51.7,	66.5,	-63.8,	-10.4,	32	130.2,	41.3,	67.7,	-64.8,	-16.2,
33	130.2,	37.0,	69.8,	-63.9,	-18.7,	34	130.2,	38.3,	73.8,	-61.7,	-18.8,
35	130.2,	38.5,	75.6,	-57.6,	-18.4,	36	130.2,	42.7,	75.2,	-51.9,	-20.0,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 24

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	21.3,	88.0,	93.8,	-50.9,	10.1,	2	21.3,	93.3,	96.0,	-53.7,	9.2,
3	67.1,	172.6,	102.0,	88.5,	-26.4,	4	130.2,	63.7,	51.7,	128.2,	53.1,
5	67.1,	178.7,	52.5,	111.3,	20.9,	6	67.1,	176.6,	51.2,	106.5,	45.4,
7	67.1,	172.4,	74.0,	82.2,	70.2,	8	67.1,	164.4,	101.3,	55.4,	92.2,
9	21.3,	88.8,	80.0,	-50.6,	-2.2,	10	21.3,	93.8,	88.0,	-54.1,	-4.0,
11	21.3,	96.0,	93.3,	-55.9,	-5.7,	12	21.3,	95.2,	95.9,	-56.0,	-7.2,
13	21.3,	91.5,	95.5,	-54.5,	-8.5,	14	21.3,	85.1,	92.2,	-51.2,	-9.6,
15	21.3,	76.1,	86.1,	-46.4,	-10.3,	16	21.3,	64.7,	77.4,	-40.2,	-10.7,
17	21.3,	69.5,	81.1,	-40.2,	-10.9,	18	21.3,	80.0,	88.8,	-42.2,	-10.6,
19	130.2,	51.1,	72.4,	-194.2,	23.2,	20	130.2,	58.1,	67.5,	-195.3,	-2.6,
21	130.2,	63.2,	60.5,	-190.5,	-28.3,	22	130.2,	63.7,	51.7,	-179.9,	-53.1,
23	67.1,	178.7,	52.5,	-163.8,	-20.9,	24	67.1,	176.6,	51.2,	-157.8,	-45.4,
25	67.1,	172.4,	74.0,	-156.3,	-70.2,	26	67.1,	164.4,	101.3,	-156.7,	-92.2,
27	21.3,	88.8,	80.0,	-29.4,	2.2,	28	21.3,	93.8,	88.0,	-33.9,	4.0,
29	21.3,	96.0,	93.3,	-37.4,	5.7,	30	21.3,	95.2,	95.9,	-39.8,	7.2,
31	21.3,	91.5,	95.5,	-41.0,	8.5,	32	21.3,	85.1,	92.2,	-40.9,	9.6,
33	21.3,	76.1,	86.1,	-39.6,	10.3,	34	21.3,	64.7,	77.4,	-37.1,	10.7,
35	21.3,	69.5,	81.1,	-40.9,	10.9,	36	21.3,	80.0,	88.8,	-46.6,	10.6,

SOURCE ID: 25A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	54.9,	77.9,	92.7,	15.9,	-65.1,
3	54.9,	65.4,	98.4,	23.4,	-53.3,	4	54.9,	51.0,	101.1,	30.2,	-39.9,
5	54.9,	35.0,	100.7,	36.1,	-25.3,	6	54.9,	28.3,	99.7,	39.7,	-9.9,
7	54.9,	44.8,	101.3,	39.2,	5.8,	8	54.9,	59.9,	99.8,	37.6,	21.3,
9	54.9,	73.1,	95.3,	34.8,	36.2,	10	54.9,	84.2,	87.9,	31.0,	50.0,
11	54.9,	92.7,	77.9,	26.2,	62.2,	12	54.9,	98.4,	65.4,	20.6,	72.6,
13	6.1,	167.8,	149.4,	1.0,	61.9,	14	6.1,	161.1,	127.6,	-2.3,	78.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	54.9,	77.9,	92.7,	-108.6,	65.1,
21	54.9,	65.4,	98.4,	-121.8,	53.3,	22	54.9,	51.0,	101.1,	-131.3,	39.9,
23	54.9,	35.0,	100.7,	-136.8,	25.3,	24	54.9,	28.3,	99.7,	-139.4,	9.9,
25	54.9,	44.8,	101.3,	-140.5,	-5.8,	26	54.9,	59.9,	99.8,	-137.4,	-21.3,
27	54.9,	73.1,	95.3,	-130.1,	-36.2,	28	54.9,	84.2,	87.9,	-118.9,	-50.0,
29	54.9,	92.7,	77.9,	-104.0,	-62.2,	30	54.9,	98.4,	65.4,	-86.0,	-72.6,
31	6.1,	167.8,	149.4,	-150.3,	-61.9,	32	6.1,	161.1,	127.6,	-125.3,	-78.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

SOURCE ID: 25B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	54.9,	87.9,	84.2,	-44.8,	-22.2,	2	54.9,	77.9,	92.7,	-45.1,	-22.3,
3	54.9,	65.4,	98.4,	-44.1,	-21.8,	4	54.9,	51.0,	101.1,	-41.8,	-20.6,
5	54.9,	35.0,	100.7,	-38.1,	-18.7,	6	54.9,	28.3,	99.7,	-34.6,	-16.3,
7	54.9,	44.8,	101.3,	-32.8,	-13.4,	8	54.9,	59.9,	99.8,	-30.0,	-10.1,
9	54.9,	73.1,	95.3,	-26.3,	-6.5,	10	54.9,	84.2,	87.9,	-21.8,	-2.7,
11	54.9,	92.7,	77.9,	-16.6,	1.2,	12	54.9,	98.4,	65.4,	-10.9,	5.1,
13	54.9,	101.1,	51.0,	-4.9,	8.8,	14	54.9,	100.7,	35.0,	1.2,	12.2,
15	54.9,	99.7,	28.3,	2.2,	15.3,	16	54.9,	101.3,	44.8,	-9.0,	17.9,
17	54.9,	99.8,	59.9,	-19.8,	19.9,	18	54.9,	95.3,	73.1,	-30.1,	21.4,
19	54.9,	87.9,	84.2,	-39.4,	22.2,	20	54.9,	77.9,	92.7,	-47.6,	22.3,
21	54.9,	65.4,	98.4,	-54.3,	21.8,	22	54.9,	51.0,	101.1,	-59.3,	20.6,
23	54.9,	35.0,	100.7,	-62.6,	18.7,	24	54.9,	28.3,	99.7,	-65.1,	16.3,
25	54.9,	44.8,	101.3,	-68.5,	13.4,	26	54.9,	59.9,	99.8,	-69.9,	10.1,
27	54.9,	73.1,	95.3,	-69.1,	6.5,	28	54.9,	84.2,	87.9,	-66.2,	2.7,
29	54.9,	92.7,	77.9,	-61.3,	-1.2,	30	54.9,	98.4,	65.4,	-54.5,	-5.1,
31	54.9,	101.1,	51.0,	-46.1,	-8.8,	32	54.9,	100.7,	35.0,	-36.2,	-12.2,
33	54.9,	99.7,	28.3,	-30.5,	-15.3,	34	54.9,	101.3,	44.8,	-35.8,	-17.9,
35	54.9,	99.8,	59.9,	-40.0,	-19.9,	36	54.9,	95.3,	73.1,	-43.1,	-21.4,

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Staff                             ***        13:44:43
                                                                                                                    PAGE  14
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 1           ; SOURCE TYPE = POINTCAP :
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .5000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .1000E+01   18  .1000E+01   19  .5000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 3           ; SOURCE TYPE = POINTCAP :
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .5000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .1000E+01   18  .1000E+01   19  .5000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
```

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 4 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 8 ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** AERMOD - VERSION 15181 *** *** Geffen Acad at UCLA *** 04/19/16
*** AERMET - VERSION 14134 *** *** Operation - Stationary Sources - Staff *** 13:44:43
PAGE 18

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 9 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 11B ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Staff                             ***        13:44:43
                                                                                                                    PAGE  20
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 17           ; SOURCE TYPE = POINTCAP :
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .5000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .1000E+01   18  .1000E+01   19  .5000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 19           ; SOURCE TYPE = POINTCAP :
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .5000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .1000E+01   18  .1000E+01   19  .5000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
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Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 23A ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 23B ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 25B ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.1000E+01	18	.1000E+01	19	.5000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 2 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 5 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 6 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 7 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC   ELEV   FLGPOL   BETA   URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 10   ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 11A ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.1700E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 12 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.1700E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 13 ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.5000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 14 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1200E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 15 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 16 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
						DAY OF WEEK = MONDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = TUESDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = WEDNESDY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = THURSDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = FRIDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SATURDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SUNDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 18 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 20 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1200E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 21 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 22 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 24 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.5800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 25A ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 366481.1, 3769638.0,      95.5,     95.5,      0.0);         ( 366491.1, 3769638.0,      95.4,     95.4,      0.0);
( 366481.1, 3769648.0,      95.8,     95.8,      0.0);         ( 366491.1, 3769648.0,      95.6,     95.6,      0.0);
( 366501.1, 3769648.0,      95.5,     95.5,      0.0);         ( 366481.1, 3769658.0,      96.0,     96.0,      0.0);
( 366491.1, 3769658.0,      95.9,     95.9,      0.0);         ( 366501.1, 3769658.0,      95.8,     95.8,      0.0);
( 366511.1, 3769658.0,      95.6,     95.6,      0.0);         ( 366521.1, 3769658.0,      95.5,     95.5,      0.0);
( 366471.1, 3769668.0,      96.5,     96.5,      0.0);         ( 366481.1, 3769668.0,      96.3,     96.3,      0.0);
( 366491.1, 3769668.0,      96.1,     96.1,      0.0);         ( 366501.1, 3769668.0,      96.0,     96.0,      0.0);
( 366511.1, 3769668.0,      95.8,     95.8,      0.0);         ( 366461.1, 3769678.0,      96.8,     96.8,      0.0);
( 366471.1, 3769678.0,      96.7,     96.7,      0.0);         ( 366481.1, 3769678.0,      96.5,     96.5,      0.0);
( 366491.1, 3769678.0,      96.3,     96.3,      0.0);         ( 366501.1, 3769678.0,      96.2,     96.2,      0.0);
( 366451.1, 3769688.0,      97.2,     97.2,      0.0);         ( 366461.1, 3769688.0,      97.0,     97.0,      0.0);
( 366471.1, 3769688.0,      96.8,     96.8,      0.0);         ( 366481.1, 3769688.0,      96.6,     96.6,      0.0);
( 366491.1, 3769688.0,      96.4,     96.4,      0.0);         ( 366501.1, 3769688.0,      96.2,     96.2,      0.0);
( 366451.1, 3769698.0,      97.3,     97.3,      0.0);         ( 366461.1, 3769698.0,      97.1,     97.1,      0.0);
( 366471.1, 3769698.0,      96.9,     96.9,      0.0);         ( 366481.1, 3769698.0,      96.7,     96.7,      0.0);
( 366491.1, 3769698.0,      96.5,     96.5,      0.0);         ( 366451.1, 3769708.0,      97.5,     97.5,      0.0);
( 366461.1, 3769708.0,      97.3,     97.3,      0.0);         ( 366471.1, 3769708.0,      97.0,     97.0,      0.0);
( 366481.1, 3769708.0,      96.7,     96.7,      0.0);         ( 366461.1, 3769718.0,      97.4,     97.4,      0.0);
( 366471.1, 3769718.0,      97.1,     97.1,      0.0);         ( 366481.1, 3769638.0,      95.5,     95.5,      3.0);
( 366491.1, 3769638.0,      95.4,     95.4,      3.0);         ( 366481.1, 3769648.0,      95.8,     95.8,      3.0);
( 366491.1, 3769648.0,      95.6,     95.6,      3.0);         ( 366501.1, 3769648.0,      95.5,     95.5,      3.0);
( 366481.1, 3769658.0,      96.0,     96.0,      3.0);         ( 366491.1, 3769658.0,      95.9,     95.9,      3.0);
( 366501.1, 3769658.0,      95.8,     95.8,      3.0);         ( 366511.1, 3769658.0,      95.6,     95.6,      3.0);
( 366521.1, 3769658.0,      95.5,     95.5,      3.0);         ( 366471.1, 3769668.0,      96.5,     96.5,      3.0);
( 366481.1, 3769668.0,      96.3,     96.3,      3.0);         ( 366491.1, 3769668.0,      96.1,     96.1,      3.0);
( 366501.1, 3769668.0,      96.0,     96.0,      3.0);         ( 366511.1, 3769668.0,      95.8,     95.8,      3.0);
( 366461.1, 3769678.0,      96.8,     96.8,      3.0);         ( 366471.1, 3769678.0,      96.7,     96.7,      3.0);
( 366481.1, 3769678.0,      96.5,     96.5,      3.0);         ( 366491.1, 3769678.0,      96.3,     96.3,      3.0);
( 366501.1, 3769678.0,      96.2,     96.2,      3.0);         ( 366451.1, 3769688.0,      97.2,     97.2,      3.0);
( 366461.1, 3769688.0,      97.0,     97.0,      3.0);         ( 366471.1, 3769688.0,      96.8,     96.8,      3.0);
( 366481.1, 3769688.0,      96.6,     96.6,      3.0);         ( 366491.1, 3769688.0,      96.4,     96.4,      3.0);
( 366501.1, 3769688.0,      96.2,     96.2,      3.0);         ( 366451.1, 3769698.0,      97.3,     97.3,      3.0);
( 366461.1, 3769698.0,      97.1,     97.1,      3.0);         ( 366471.1, 3769698.0,      96.9,     96.9,      3.0);
( 366481.1, 3769698.0,      96.7,     96.7,      3.0);         ( 366491.1, 3769698.0,      96.5,     96.5,      3.0);
( 366451.1, 3769708.0,      97.5,     97.5,      3.0);         ( 366461.1, 3769708.0,      97.3,     97.3,      3.0);
( 366471.1, 3769708.0,      97.0,     97.0,      3.0);         ( 366481.1, 3769708.0,      96.7,     96.7,      3.0);
( 366461.1, 3769718.0,      97.4,     97.4,      3.0);         ( 366471.1, 3769718.0,      97.1,     97.1,      3.0);
( 366481.1, 3769638.0,      95.5,     95.5,      6.1);         ( 366491.1, 3769638.0,      95.4,     95.4,      6.1);
( 366481.1, 3769648.0,      95.8,     95.8,      6.1);         ( 366491.1, 3769648.0,      95.6,     95.6,      6.1);
( 366501.1, 3769648.0,      95.5,     95.5,      6.1);         ( 366481.1, 3769658.0,      96.0,     96.0,      6.1);
( 366491.1, 3769658.0,      95.9,     95.9,      6.1);         ( 366501.1, 3769658.0,      95.8,     95.8,      6.1);
( 366511.1, 3769658.0,      95.6,     95.6,      6.1);         ( 366521.1, 3769658.0,      95.5,     95.5,      6.1);
```

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,      96.5,      96.5,       6.1);
( 366491.1, 3769668.0,      96.1,      96.1,       6.1);
( 366511.1, 3769668.0,      95.8,      95.8,       6.1);
( 366471.1, 3769678.0,      96.7,      96.7,       6.1);
( 366491.1, 3769678.0,      96.3,      96.3,       6.1);
( 366451.1, 3769688.0,      97.2,      97.2,       6.1);
( 366471.1, 3769688.0,      96.8,      96.8,       6.1);
( 366491.1, 3769688.0,      96.4,      96.4,       6.1);
( 366451.1, 3769698.0,      97.3,      97.3,       6.1);
( 366471.1, 3769698.0,      96.9,      96.9,       6.1);
( 366491.1, 3769698.0,      96.5,      96.5,       6.1);
( 366461.1, 3769708.0,      97.3,      97.3,       6.1);
( 366481.1, 3769708.0,      96.7,      96.7,       6.1);
( 366471.1, 3769718.0,      97.1,      97.1,       6.1);
( 366420.8, 3769692.8,      97.7,      97.7,       0.0);
( 366431.1, 3769693.8,      97.6,      97.6,       0.0);
( 366421.2, 3769678.5,      97.4,      97.4,       0.0);
( 366442.0, 3769680.2,      97.1,      97.1,       0.0);
( 366460.7, 3769667.6,      96.6,      96.6,       0.0);
( 366442.0, 3769667.6,      96.9,      96.9,       0.0);
( 366470.6, 3769658.0,      96.2,      96.2,       0.0);
( 366449.8, 3769658.0,      96.5,      96.5,       0.0);
( 366520.4, 3769648.8,      95.3,      95.3,       0.0);
( 366500.9, 3769639.6,      95.3,      95.3,       0.0);
( 366480.5, 3769629.4,      95.4,      95.4,       0.0);
( 366470.6, 3769639.6,      95.7,      95.7,       0.0);
( 366469.6, 3769616.5,      95.2,      95.2,       0.0);
( 366460.4, 3769629.8,      95.7,      95.7,       0.0);
( 366459.3, 3769648.8,      96.1,      96.1,       0.0);
( 366449.1, 3769640.0,      96.1,      96.1,       0.0);
( 366481.1, 3769668.0,      96.3,      96.3,       6.1);
( 366501.1, 3769668.0,      96.0,      96.0,       6.1);
( 366461.1, 3769678.0,      96.8,      96.8,       6.1);
( 366481.1, 3769678.0,      96.5,      96.5,       6.1);
( 366501.1, 3769678.0,      96.2,      96.2,       6.1);
( 366461.1, 3769688.0,      97.0,      97.0,       6.1);
( 366481.1, 3769688.0,      96.6,      96.6,       6.1);
( 366501.1, 3769688.0,      96.2,      96.2,       6.1);
( 366461.1, 3769698.0,      97.1,      97.1,       6.1);
( 366481.1, 3769698.0,      96.7,      96.7,       6.1);
( 366451.1, 3769708.0,      97.5,      97.5,       6.1);
( 366471.1, 3769708.0,      97.0,      97.0,       6.1);
( 366461.1, 3769718.0,      97.4,      97.4,       6.1);
( 366412.3, 3769692.5,      97.8,      97.8,       0.0);
( 366431.4, 3769704.4,      97.9,      97.9,       0.0);
( 366441.3, 3769691.1,      97.4,      97.4,       0.0);
( 366430.7, 3769680.2,      97.3,      97.3,       0.0);
( 366450.8, 3769679.5,      97.0,      97.0,       0.0);
( 366450.5, 3769667.2,      96.7,      96.7,       0.0);
( 366430.7, 3769667.6,      97.0,      97.0,       0.0);
( 366461.1, 3769658.0,      96.3,      96.3,       0.0);
( 366441.3, 3769658.7,      96.7,      96.7,       0.0);
( 366511.2, 3769650.2,      95.4,      95.4,       0.0);
( 366491.4, 3769630.1,      95.3,      95.3,       0.0);
( 366470.9, 3769648.2,      95.9,      95.9,       0.0);
( 366469.9, 3769629.4,      95.5,      95.5,       0.0);
( 366480.8, 3769620.9,      95.2,      95.2,       0.0);
( 366460.4, 3769639.6,      95.9,      95.9,       0.0);
( 366449.1, 3769648.2,      96.3,      96.3,       0.0);
```

Model Input - Stationary Sources for Staff
Unit Emission Rates (1 g/s)


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**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL     BETA      URBAN

                                                  *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                   (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                        *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                                (METERS/SEC)

                                                   1.54,    3.09,    5.14,    8.23,   10.80,
```

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\!MET Files\SCAQMD Met Files\wsla8.sfc Met Version: 14134
Profile file: C:\!MET Files\SCAQMD Met Files\wsla8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
1	1ST HIGHEST VALUE IS	0.49147	AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	
	2ND HIGHEST VALUE IS	0.49085	AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
	3RD HIGHEST VALUE IS	0.48960	AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.48516	AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
	5TH HIGHEST VALUE IS	0.47630	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.47576	AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.46570	AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.46142	AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC	
	9TH HIGHEST VALUE IS	0.46107	AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.45999	AT (	366461.11,	3769708.05,	97.27,	97.27,	3.05)	DC	
10	1ST HIGHEST VALUE IS	0.01240	AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC	
	2ND HIGHEST VALUE IS	0.01235	AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	
	3RD HIGHEST VALUE IS	0.01233	AT (	366491.11,	3769698.05,	96.47,	96.47,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.01229	AT (	366491.11,	3769698.05,	96.47,	96.47,	3.05)	DC	
	5TH HIGHEST VALUE IS	0.01227	AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.01221	AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.01190	AT (	366491.11,	3769688.05,	96.40,	96.40,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.01190	AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.01187	AT (	366501.11,	3769678.05,	96.16,	96.16,	6.10)	DC	
	10TH HIGHEST VALUE IS	0.01187	AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC	
2	1ST HIGHEST VALUE IS	0.01035	AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
	2ND HIGHEST VALUE IS	0.01026	AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.01015	AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	
	4TH HIGHEST VALUE IS	0.01007	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.00986	AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
	6TH HIGHEST VALUE IS	0.00962	AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC	
	7TH HIGHEST VALUE IS	0.00961	AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.00954	AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.00946	AT (	366471.11,	3769708.05,	96.99,	96.99,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.00939	AT (	366471.11,	3769708.05,	96.99,	96.99,	0.00)	DC	
3	1ST HIGHEST VALUE IS	17.01087	AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	2ND HIGHEST VALUE IS	16.96503	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	3RD HIGHEST VALUE IS	16.37246	AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
	4TH HIGHEST VALUE IS	16.14179	AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	

	5TH HIGHEST VALUE IS	15.06186 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	6TH HIGHEST VALUE IS	14.43407 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	7TH HIGHEST VALUE IS	14.25298 AT (	366471.11,	3769708.05,	96.99,	96.99,	0.00)	DC
	8TH HIGHEST VALUE IS	14.22484 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	9TH HIGHEST VALUE IS	14.16232 AT (	366461.11,	3769708.05,	97.27,	97.27,	0.00)	DC
	10TH HIGHEST VALUE IS	14.14702 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
4	1ST HIGHEST VALUE IS	2.37197 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	2ND HIGHEST VALUE IS	2.34344 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	3RD HIGHEST VALUE IS	2.28970 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	4TH HIGHEST VALUE IS	2.28946 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	5TH HIGHEST VALUE IS	2.20131 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	6TH HIGHEST VALUE IS	2.19182 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	7TH HIGHEST VALUE IS	2.04719 AT (	366461.11,	3769708.05,	97.27,	97.27,	0.00)	DC
	8TH HIGHEST VALUE IS	2.04692 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	9TH HIGHEST VALUE IS	2.03970 AT (	366471.11,	3769708.05,	96.99,	96.99,	0.00)	DC
	10TH HIGHEST VALUE IS	2.00708 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
5	1ST HIGHEST VALUE IS	0.02464 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	2ND HIGHEST VALUE IS	0.02435 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	3RD HIGHEST VALUE IS	0.02404 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	4TH HIGHEST VALUE IS	0.02384 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	5TH HIGHEST VALUE IS	0.02359 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	6TH HIGHEST VALUE IS	0.02321 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	7TH HIGHEST VALUE IS	0.02279 AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC
	8TH HIGHEST VALUE IS	0.02252 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	9TH HIGHEST VALUE IS	0.02231 AT (	366471.11,	3769708.05,	96.99,	96.99,	3.05)	DC
	10TH HIGHEST VALUE IS	0.02230 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC
6	1ST HIGHEST VALUE IS	0.01444 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	2ND HIGHEST VALUE IS	0.01433 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	3RD HIGHEST VALUE IS	0.01427 AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC
	4TH HIGHEST VALUE IS	0.01418 AT (	366501.11,	3769678.05,	96.16,	96.16,	3.05)	DC
	5TH HIGHEST VALUE IS	0.01418 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	6TH HIGHEST VALUE IS	0.01413 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	7TH HIGHEST VALUE IS	0.01409 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	8TH HIGHEST VALUE IS	0.01408 AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC
	9TH HIGHEST VALUE IS	0.01408 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	10TH HIGHEST VALUE IS	0.01408 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
7	1ST HIGHEST VALUE IS	0.00457 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	2ND HIGHEST VALUE IS	0.00457 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00456 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	4TH HIGHEST VALUE IS	0.00454 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00453 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	6TH HIGHEST VALUE IS	0.00453 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00453 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	8TH HIGHEST VALUE IS	0.00452 AT (	366501.11,	3769678.05,	96.16,	96.16,	3.05)	DC
	9TH HIGHEST VALUE IS	0.00452 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00451 AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE						NETWORK GRID-ID
8	1ST HIGHEST VALUE IS	12.52837 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	10.73292 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	3RD HIGHEST VALUE IS	9.80087 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	4TH HIGHEST VALUE IS	9.43319 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	5TH HIGHEST VALUE IS	9.09536 AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC	
	6TH HIGHEST VALUE IS	8.21463 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC	
	7TH HIGHEST VALUE IS	7.60963 AT (	366441.29,	3769691.11,	97.39,	97.39,	0.00)	DC	
	8TH HIGHEST VALUE IS	7.42474 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC	
	9TH HIGHEST VALUE IS	7.42227 AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	10TH HIGHEST VALUE IS	7.02394 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC	
9	1ST HIGHEST VALUE IS	0.21004 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
	2ND HIGHEST VALUE IS	0.20566 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
	3RD HIGHEST VALUE IS	0.20562 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
	4TH HIGHEST VALUE IS	0.20131 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.20130 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC	
	6TH HIGHEST VALUE IS	0.20130 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	
	7TH HIGHEST VALUE IS	0.19782 AT (	366471.11,	3769708.05,	96.99,	96.99,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.19739 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.19701 AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.19362 AT (	366471.11,	3769708.05,	96.99,	96.99,	3.05)	DC	
11A	1ST HIGHEST VALUE IS	0.00169 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
	2ND HIGHEST VALUE IS	0.00169 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
	3RD HIGHEST VALUE IS	0.00165 AT (	366471.11,	3769708.05,	96.99,	96.99,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.00165 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC	
	5TH HIGHEST VALUE IS	0.00163 AT (	366461.11,	3769708.05,	97.27,	97.27,	6.10)	DC	
	6TH HIGHEST VALUE IS	0.00162 AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC	
	7TH HIGHEST VALUE IS	0.00161 AT (	366491.11,	3769698.05,	96.47,	96.47,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.00160 AT (	366481.11,	3769698.05,	96.66,	96.66,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.00159 AT (	366471.11,	3769698.05,	96.89,	96.89,	6.10)	DC	
	10TH HIGHEST VALUE IS	0.00157 AT (	366461.11,	3769698.05,	97.12,	97.12,	6.10)	DC	
11B	1ST HIGHEST VALUE IS	0.96020 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.91676 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.90084 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.86559 AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC	

	5TH HIGHEST VALUE IS	0.85173 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC
	6TH HIGHEST VALUE IS	0.82907 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	7TH HIGHEST VALUE IS	0.82191 AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC
	8TH HIGHEST VALUE IS	0.81833 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC
	9TH HIGHEST VALUE IS	0.80590 AT (	366441.29,	3769691.11,	97.39,	97.39,	0.00)	DC
12	1ST HIGHEST VALUE IS	0.00204 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	2ND HIGHEST VALUE IS	0.00202 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	3RD HIGHEST VALUE IS	0.00201 AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC
	4TH HIGHEST VALUE IS	0.00199 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	5TH HIGHEST VALUE IS	0.00199 AT (	366501.11,	3769678.05,	96.16,	96.16,	6.10)	DC
	6TH HIGHEST VALUE IS	0.00197 AT (	366501.11,	3769668.05,	95.97,	95.97,	6.10)	DC
	7TH HIGHEST VALUE IS	0.00197 AT (	366491.11,	3769698.05,	96.47,	96.47,	6.10)	DC
	8TH HIGHEST VALUE IS	0.00195 AT (	366501.11,	3769658.05,	95.75,	95.75,	6.10)	DC
	9TH HIGHEST VALUE IS	0.00194 AT (	366491.11,	3769688.05,	96.40,	96.40,	6.10)	DC
	10TH HIGHEST VALUE IS	0.00193 AT (	366501.11,	3769648.05,	95.53,	95.53,	6.10)	DC
13	1ST HIGHEST VALUE IS	0.00270 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	2ND HIGHEST VALUE IS	0.00270 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00269 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00264 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	5TH HIGHEST VALUE IS	0.00264 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	6TH HIGHEST VALUE IS	0.00263 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00261 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC
	8TH HIGHEST VALUE IS	0.00261 AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC
	9TH HIGHEST VALUE IS	0.00260 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00257 AT (	366471.11,	3769708.05,	96.99,	96.99,	6.10)	DC
14	1ST HIGHEST VALUE IS	0.00133 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00132 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00130 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	4TH HIGHEST VALUE IS	0.00129 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00128 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00128 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	7TH HIGHEST VALUE IS	0.00126 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	8TH HIGHEST VALUE IS	0.00126 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00126 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	10TH HIGHEST VALUE IS	0.00125 AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC
15	1ST HIGHEST VALUE IS	0.01028 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00996 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00994 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00987 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	5TH HIGHEST VALUE IS	0.00975 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00955 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00949 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC
	8TH HIGHEST VALUE IS	0.00946 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00939 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	10TH HIGHEST VALUE IS	0.00936 AT (	366501.11,	3769648.05,	95.53,	95.53,	3.05)	DC

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
16	1ST HIGHEST VALUE IS	0.00442 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	2ND HIGHEST VALUE IS	0.00440 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.00434 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.00434 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.00419 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	6TH HIGHEST VALUE IS	0.00416 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.00414 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.00411 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.00409 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.00407 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
17	1ST HIGHEST VALUE IS	0.54551 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	2ND HIGHEST VALUE IS	0.54353 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.54083 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.52503 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	5TH HIGHEST VALUE IS	0.51612 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	6TH HIGHEST VALUE IS	0.51595 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.51262 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.50981 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.50748 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.49734 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
18	1ST HIGHEST VALUE IS	0.01068 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.01066 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.01038 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	4TH HIGHEST VALUE IS	0.01017 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.01016 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	6TH HIGHEST VALUE IS	0.01014 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.01009 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.00989 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	9TH HIGHEST VALUE IS	0.00980 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.00969 AT (	366501.11,	3769658.05,	95.75,	95.75,	0.00)	DC	
19	1ST HIGHEST VALUE IS	1.30145 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	2ND HIGHEST VALUE IS	1.26949 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	3RD HIGHEST VALUE IS	1.26156 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	4TH HIGHEST VALUE IS	1.24743 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC	

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            5TH HIGHEST VALUE IS      1.24055 AT (  366521.11,  3769658.05,     95.45,     95.45,     3.05)  DC
            6TH HIGHEST VALUE IS      1.23584 AT (  366511.11,  3769658.05,     95.60,     95.60,     0.00)  DC
            7TH HIGHEST VALUE IS      1.21911 AT (  366501.11,  3769678.05,     96.16,     96.16,     0.00)  DC
            8TH HIGHEST VALUE IS      1.21290 AT (  366511.16,  3769650.20,     95.44,     95.44,     0.00)  DC
            9TH HIGHEST VALUE IS      1.19437 AT (  366491.11,  3769698.05,     96.47,     96.47,     0.00)  DC
           10TH HIGHEST VALUE IS      1.19242 AT (  366501.11,  3769668.05,     95.97,     95.97,     0.00)  DC

 20         1ST HIGHEST VALUE IS      0.00223 AT (  366500.94,  3769639.64,     95.34,     95.34,     0.00)  DC
            2ND HIGHEST VALUE IS      0.00223 AT (  366520.36,  3769648.84,     95.29,     95.29,     0.00)  DC
            3RD HIGHEST VALUE IS      0.00222 AT (  366491.39,  3769630.09,     95.26,     95.26,     0.00)  DC
            4TH HIGHEST VALUE IS      0.00218 AT (  366491.11,  3769638.05,     95.43,     95.43,     0.00)  DC
            5TH HIGHEST VALUE IS      0.00217 AT (  366511.16,  3769650.20,     95.44,     95.44,     0.00)  DC
            6TH HIGHEST VALUE IS      0.00215 AT (  366491.11,  3769638.05,     95.43,     95.43,     3.05)  DC
            7TH HIGHEST VALUE IS      0.00215 AT (  366501.11,  3769648.05,     95.53,     95.53,     0.00)  DC
            8TH HIGHEST VALUE IS      0.00213 AT (  366480.82,  3769620.89,     95.20,     95.20,     0.00)  DC
            9TH HIGHEST VALUE IS      0.00213 AT (  366480.48,  3769629.41,     95.38,     95.38,     0.00)  DC
           10TH HIGHEST VALUE IS      0.00213 AT (  366501.11,  3769648.05,     95.53,     95.53,     3.05)  DC

 21         1ST HIGHEST VALUE IS      0.04400 AT (  366520.36,  3769648.84,     95.29,     95.29,     0.00)  DC
            2ND HIGHEST VALUE IS      0.04211 AT (  366521.11,  3769658.05,     95.45,     95.45,     0.00)  DC
            3RD HIGHEST VALUE IS      0.04113 AT (  366521.11,  3769658.05,     95.45,     95.45,     3.05)  DC
            4TH HIGHEST VALUE IS      0.04067 AT (  366521.11,  3769658.05,     95.45,     95.45,     6.10)  DC
            5TH HIGHEST VALUE IS      0.03743 AT (  366511.16,  3769650.20,     95.44,     95.44,     0.00)  DC
            6TH HIGHEST VALUE IS      0.03526 AT (  366511.11,  3769658.05,     95.60,     95.60,     0.00)  DC
            7TH HIGHEST VALUE IS      0.03512 AT (  366500.94,  3769639.64,     95.34,     95.34,     0.00)  DC
            8TH HIGHEST VALUE IS      0.03417 AT (  366511.11,  3769658.05,     95.60,     95.60,     3.05)  DC
            9TH HIGHEST VALUE IS      0.03361 AT (  366511.11,  3769658.05,     95.60,     95.60,     6.10)  DC
           10TH HIGHEST VALUE IS      0.03339 AT (  366501.11,  3769648.05,     95.53,     95.53,     0.00)  DC

 22         1ST HIGHEST VALUE IS      0.02007 AT (  366520.36,  3769648.84,     95.29,     95.29,     0.00)  DC
            2ND HIGHEST VALUE IS      0.01937 AT (  366521.11,  3769658.05,     95.45,     95.45,     0.00)  DC
            3RD HIGHEST VALUE IS      0.01921 AT (  366521.11,  3769658.05,     95.45,     95.45,     3.05)  DC
            4TH HIGHEST VALUE IS      0.01901 AT (  366521.11,  3769658.05,     95.45,     95.45,     6.10)  DC
            5TH HIGHEST VALUE IS      0.01841 AT (  366511.16,  3769650.20,     95.44,     95.44,     0.00)  DC
            6TH HIGHEST VALUE IS      0.01758 AT (  366511.11,  3769658.05,     95.60,     95.60,     0.00)  DC
            7TH HIGHEST VALUE IS      0.01743 AT (  366511.11,  3769658.05,     95.60,     95.60,     3.05)  DC
            8TH HIGHEST VALUE IS      0.01731 AT (  366500.94,  3769639.64,     95.34,     95.34,     0.00)  DC
            9TH HIGHEST VALUE IS      0.01724 AT (  366511.11,  3769658.05,     95.60,     95.60,     6.10)  DC
           10TH HIGHEST VALUE IS      0.01686 AT (  366501.11,  3769648.05,     95.53,     95.53,     0.00)  DC

 23A        1ST HIGHEST VALUE IS      8.35384 AT (  366521.11,  3769658.05,     95.45,     95.45,     6.10)  DC
            2ND HIGHEST VALUE IS      7.03182 AT (  366521.11,  3769658.05,     95.45,     95.45,     3.05)  DC
            3RD HIGHEST VALUE IS      6.59514 AT (  366521.11,  3769658.05,     95.45,     95.45,     0.00)  DC
            4TH HIGHEST VALUE IS      5.86467 AT (  366520.36,  3769648.84,     95.29,     95.29,     0.00)  DC
            5TH HIGHEST VALUE IS      4.60009 AT (  366511.11,  3769658.05,     95.60,     95.60,     6.10)  DC
            6TH HIGHEST VALUE IS      3.99941 AT (  366511.11,  3769668.05,     95.81,     95.81,     6.10)  DC
            7TH HIGHEST VALUE IS      3.83881 AT (  366501.11,  3769648.05,     95.53,     95.53,     6.10)  DC
            8TH HIGHEST VALUE IS      3.74998 AT (  366511.11,  3769658.05,     95.60,     95.60,     3.05)  DC
            9TH HIGHEST VALUE IS      3.67820 AT (  366511.11,  3769668.05,     95.81,     95.81,     3.05)  DC
           10TH HIGHEST VALUE IS      3.54684 AT (  366511.11,  3769668.05,     95.81,     95.81,     0.00)  DC
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**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
23B	1ST HIGHEST VALUE IS	33.41236	AT	(366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	2ND HIGHEST VALUE IS	21.48076	AT	(366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	3RD HIGHEST VALUE IS	21.35779	AT	(366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	4TH HIGHEST VALUE IS	19.75828	AT	(366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	5TH HIGHEST VALUE IS	19.34175	AT	(366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
	6TH HIGHEST VALUE IS	18.50482	AT	(366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC	
	7TH HIGHEST VALUE IS	16.67631	AT	(366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	8TH HIGHEST VALUE IS	16.22660	AT	(366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	9TH HIGHEST VALUE IS	16.19468	AT	(366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	10TH HIGHEST VALUE IS	15.71120	AT	(366501.11,	3769648.05,	95.53,	95.53,	6.10)	DC	
24	1ST HIGHEST VALUE IS	0.03349	AT	(366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.03333	AT	(366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.03284	AT	(366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.03237	AT	(366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.03230	AT	(366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.03194	AT	(366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.03191	AT	(366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
	8TH HIGHEST VALUE IS	0.03190	AT	(366491.11,	3769638.05,	95.43,	95.43,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.03187	AT	(366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.03182	AT	(366501.11,	3769648.05,	95.53,	95.53,	3.05)	DC	
25A	1ST HIGHEST VALUE IS	0.01501	AT	(366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.01494	AT	(366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.01487	AT	(366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.01484	AT	(366441.29,	3769658.73,	96.66,	96.66,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.01472	AT	(366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.01454	AT	(366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.01448	AT	(366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.01444	AT	(366460.37,	3769639.64,	95.91,	95.91,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.01432	AT	(366449.81,	3769658.04,	96.52,	96.52,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.01423	AT	(366441.97,	3769667.59,	96.86,	96.86,	0.00)	DC	
25B	1ST HIGHEST VALUE IS	11.37402	AT	(366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	11.20408	AT	(366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	3RD HIGHEST VALUE IS	10.95167	AT	(366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	4TH HIGHEST VALUE IS	10.86297	AT	(366469.92,	3769629.41,	95.52,	95.52,	0.00)	DC	

```
         5TH HIGHEST VALUE IS      10.74880 AT (  366460.37,  3769639.64,    95.91,    95.91,    0.00)  DC
         6TH HIGHEST VALUE IS      10.71572 AT (  366480.82,  3769620.89,    95.20,    95.20,    0.00)  DC
         7TH HIGHEST VALUE IS      10.68310 AT (  366449.12,  3769648.16,    96.30,    96.30,    0.00)  DC
         8TH HIGHEST VALUE IS      10.43621 AT (  366470.60,  3769639.64,    95.74,    95.74,    0.00)  DC
         9TH HIGHEST VALUE IS      10.39449 AT (  366441.29,  3769658.73,    96.66,    96.66,    0.00)  DC
        10TH HIGHEST VALUE IS      10.36464 AT (  366480.48,  3769629.41,    95.38,    95.38,    0.00)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	OF TYPE	NETWORK GRID-ID
1	HIGH	1ST HIGH VALUE IS	116.36432	ON 10022218: AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC	
10	HIGH	1ST HIGH VALUE IS	31.06856	ON 08012111: AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC	
2	HIGH	1ST HIGH VALUE IS	19.67650	ON 11121211: AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
3	HIGH	1ST HIGH VALUE IS	4888.43696	ON 09020918: AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
4	HIGH	1ST HIGH VALUE IS	315.21472	ON 08110718: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
5	HIGH	1ST HIGH VALUE IS	76.20430	ON 09120711: AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
6	HIGH	1ST HIGH VALUE IS	37.82583	ON 08012111: AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	
7	HIGH	1ST HIGH VALUE IS	11.75755	ON 08012111: AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
8	HIGH	1ST HIGH VALUE IS	1174.71246	ON 11112218: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
9	HIGH	1ST HIGH VALUE IS	147.16722	ON 08111418: AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
11A	HIGH	1ST HIGH VALUE IS	14.92943	ON 10102518: AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
11B	HIGH	1ST HIGH VALUE IS	81.18084	ON 12012618: AT (	366451.11,	3769698.05,	97.35,	97.35,	6.10)	DC	
12	HIGH	1ST HIGH VALUE IS	7.36916	ON 09032318: AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
13	HIGH	1ST HIGH VALUE IS	17.51842	ON 08050911: AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
14	HIGH	1ST HIGH VALUE IS	2.12311	ON 10021511: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
15	HIGH	1ST HIGH VALUE IS	23.28224	ON 10121311: AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
16	HIGH	1ST HIGH VALUE IS	12.68425	ON 10121311: AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
17	HIGH	1ST HIGH VALUE IS	285.77772	ON 11121917: AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
18	HIGH	1ST HIGH VALUE IS	24.18176	ON 09101911: AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	

19	HIGH	1ST HIGH VALUE IS	378.18526	ON 09123018:	AT (	366501.11,	3769648.05,	95.53,	95.53,	6.10)	DC
20	HIGH	1ST HIGH VALUE IS	7.08880	ON 09101211:	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
21	HIGH	1ST HIGH VALUE IS	55.59613	ON 10112211:	AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC
22	HIGH	1ST HIGH VALUE IS	47.59325	ON 09101211:	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
23A	HIGH	1ST HIGH VALUE IS	418.12682	ON 10011417:	AT (	366481.11,	3769698.05,	96.66,	96.66,	0.00)	DC
23B	HIGH	1ST HIGH VALUE IS	1028.79603	ON 10050309:	AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
24	HIGH	1ST HIGH VALUE IS	18.68334	ON 08011411:	AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC
25A	HIGH	1ST HIGH VALUE IS	39.96909	ON 10062811:	AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC
25B	HIGH	1ST HIGH VALUE IS	314.34442	ON 11100418:	AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Staff                             ***        13:44:43
                                                                                                                    PAGE 167
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of          18 Warning Message(s)
A Total of        1558 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of         115 Calm Hours Identified

A Total of        1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
SO W320      95        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320      96        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320      98        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     100        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     101        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     106        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     107        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     108        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     112        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     113        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     114        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     115        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     116        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     119        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     120        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     123        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     124        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     125        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 1

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	69.53797	ug/m^3	366461.11	3769718.05	97.38	6.10	97.38	3/23/2011, 16
PERIOD		0.28752	ug/m^3	366461.11	3769718.05	97.38	3.05	97.38	

Concentration - Source Group: 10

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	31.06856	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	1/21/2008, 11
PERIOD		0.01240	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	

Concentration - Source Group: 11A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.00000	ug/m^3	366481.11	3769638.05	95.55	0.00	95.55	
PERIOD		0.00000	ug/m^3	366481.11	3769638.05	95.55	0.00	95.55	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 11B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	49.56813	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	11/8/2010, 16
PERIOD		0.58286	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 12

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.00000	ug/m^3	366481.11	3769638.05	95.55	0.00	95.55	
PERIOD		0.00000	ug/m^3	366481.11	3769638.05	95.55	0.00	95.55	

Concentration - Source Group: 13

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	17.51842	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	5/9/2008, 11
PERIOD		0.00270	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 14

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2.12311	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	2/15/2010, 11
PERIOD		0.00133	ug/m^3	366431.40	3769704.40	97.87	0.00	97.87	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 15

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	23.28224	ug/m^3	366480.82	3769620.89	95.20	0.00	95.20	12/13/2010, 11
PERIOD		0.01028	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 16

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	12.68425	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	12/13/2010, 11
PERIOD		0.00442	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	

Concentration - Source Group: 17

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	142.88886	ug/m^3	366511.11	3769668.05	95.81	0.00	95.81	12/19/2011, 17
PERIOD		0.33941	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Concentration - Source Group: 18

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	24.18176	ug/m^3	366500.94	3769639.64	95.34	0.00	95.34	10/19/2009, 11
PERIOD		0.01068	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 19

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	139.55296	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	2/5/2010, 16
PERIOD		0.57871	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Concentration - Source Group: 2

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	19.67650	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	12/12/2011, 11
PERIOD		0.01035	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 20

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	7.08880	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	10/12/2009, 11
PERIOD		0.00223	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 21

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	55.59613	ug/m^3	366491.11	3769698.05	96.47	0.00	96.47	11/22/2010, 11
PERIOD		0.04400	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Model Output
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 22

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	47.59325	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	10/12/2009, 11
PERIOD		0.02007	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: 23A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	275.76907	ug/m^3	366491.11	3769688.05	96.40	0.00	96.40	11/29/2012, 16
PERIOD		5.66007	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	

Concentration - Source Group: 23B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	999.58896	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	11/7/2008, 11
PERIOD		23.24892	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	

Concentration - Source Group: 24

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	18.68334	ug/m^3	366480.82	3769620.89	95.20	0.00	95.20	1/14/2008, 11
PERIOD		0.03349	ug/m^3	366491.39	3769630.09	95.26	0.00	95.26	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 25A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	39.96909	ug/m^3	366449.12	3769639.98	96.09	0.00	96.09	6/28/2010, 11
PERIOD		0.01501	ug/m^3	366449.12	3769639.98	96.09	0.00	96.09	

Concentration - Source Group: 25B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	216.88688	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	2/15/2012, 11
PERIOD		7.80768	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 3

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2124.01534	ug/m^3	366461.11	3769718.05	97.38	0.00	97.38	12/15/2011, 17
PERIOD		5.52853	ug/m^3	366461.11	3769718.05	97.38	0.00	97.38	

Concentration - Source Group: 4

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	170.67611	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	6/3/2009, 11
PERIOD		1.44704	ug/m^3	366461.11	3769718.05	97.38	0.00	97.38	

Model Output
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 5

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	76.20430	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	12/7/2009, 11
PERIOD		0.02464	ug/m^3	366471.11	3769718.05	97.08	3.05	97.08	

Concentration - Source Group: 6

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	37.82583	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	1/21/2008, 11
PERIOD		0.01444	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	

Concentration - Source Group: 7

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	11.75755	ug/m^3	366511.11	3769668.05	95.81	3.05	95.81	1/21/2008, 11
PERIOD		0.00457	ug/m^3	366511.11	3769668.05	95.81	3.05	95.81	

Concentration - Source Group: 8

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	541.52516	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	12/20/2012, 17
PERIOD		4.23628	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Results Summary

Geffen Acad at UCLA
Operation - Stationary Sources - Students

Concentration - Source Group: 9

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	60.86735	ug/m^3	366461.11	3769718.05	97.38	6.10	97.38	12/15/2011, 17
PERIOD		0.10438	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                  ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Students                            ***        13:29:35
                                                                                                                      PAGE   1
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                                          ***      MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for    28 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

**Model Allows User-Specified Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Used.
        7. Option for Capped & Horiz Stacks Selected With:
               10 Capped Stack(s); and      3 Horizontal Stack(s)

**Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates PERIOD Averages

**This Run Includes:     28 Source(s);      28 Source Group(s); and     143 Receptor(s)

               with:     27 POINT(s), including
                         10 POINTCAP(s) and      3 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)


**Model Set To Continue RUNning After the Setup Testing.
```

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**The AERMET Input Meteorological Data Version Date:  14134

**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.8 MB of RAM.

**Detailed Error/Message File:   geffenstudents.err
**File for Summary of Results:   geffenstudents.sum
```

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
1	0	0.10000E+01	366439.5	3769994.9	101.6	8.84	330.00	71.15	0.31	YES	YES	CAP	HRDOW
2	0	0.10000E+01	366546.4	3769982.5	101.0	5.18	573.15	61.06	0.10	YES	YES	CAP	HRDOW7
3	0	0.10000E+01	366430.9	3769815.9	98.3	4.57	280.37	0.07	0.91	YES	YES	CAP	HRDOW
4	0	0.10000E+01	366446.6	3769811.0	98.1	14.02	330.00	121.60	0.31	YES	YES	CAP	HRDOW
5	0	0.10000E+01	366675.9	3769892.4	100.6	1.83	622.00	29.18	0.08	YES	YES	NO	HRDOW7
6	0	0.10000E+01	366743.6	3769855.0	100.6	18.29	622.00	159.48	0.08	YES	YES	NO	HRDOW7
7	0	0.10000E+01	366791.2	3769824.7	100.0	18.29	622.00	425.44	0.08	YES	YES	NO	HRDOW7
9	0	0.10000E+01	366390.9	3770125.4	104.1	6.40	330.00	121.60	0.31	YES	YES	CAP	HRDOW
10	0	0.10000E+01	366786.2	3769882.8	102.8	16.76	622.00	93.06	0.15	YES	YES	CAP	HRDOW7
11A	0	0.10000E+01	366290.7	3769843.7	102.5	4.57	622.00	79.76	0.15	YES	YES	NO	HRDOW7
11B	0	0.10000E+01	366263.8	3769819.5	101.8	18.59	477.59	47.40	0.15	YES	YES	CAP	HRDOW
12	0	0.10000E+01	366344.4	3769886.0	101.5	4.57	622.00	43.67	0.15	YES	YES	NO	HRDOW7
13	0	0.10000E+01	366651.4	3770070.0	103.9	8.84	622.00	16.75	0.10	YES	YES	HOR	HRDOW7
14	0	0.10000E+01	366347.2	3769889.0	101.5	3.96	622.00	106.36	0.15	YES	YES	NO	HRDOW7
15	0	0.10000E+01	366924.8	3769602.8	99.6	3.66	622.00	91.53	0.10	YES	YES	NO	HRDOW7
16	0	0.10000E+01	366848.2	3769746.4	98.5	7.62	622.00	132.93	0.15	YES	YES	NO	HRDOW7
17	0	0.10000E+01	366811.1	3769740.3	97.6	7.62	330.00	284.59	0.15	YES	YES	CAP	HRDOW
18	0	0.10000E+01	366808.1	3769535.8	95.3	15.24	622.00	146.23	0.15	YES	YES	NO	HRDOW7
19	0	0.10000E+01	366769.5	3769721.5	96.7	7.62	477.59	5.82	0.25	YES	YES	CAP	HRDOW
20	0	0.10000E+01	366719.3	3769506.8	91.5	4.27	750.15	44.57	0.46	YES	YES	NO	HRDOW7
21	0	0.10000E+01	366607.1	3769632.0	94.0	10.06	622.00	122.06	0.10	YES	YES	NO	HRDOW7
22	0	0.10000E+01	366657.6	3769516.1	91.5	3.66	622.00	228.91	0.10	YES	YES	NO	HRDOW7
23A	0	0.10000E+01	366534.2	3769645.2	95.0	2.44	735.93	20.57	0.31	YES	YES	HOR	HRDOW
23B	0	0.10000E+01	366534.2	3769645.2	95.0	2.44	477.59	4.04	0.31	YES	YES	HOR	HRDOW
24	0	0.10000E+01	366506.0	3769481.3	92.7	24.99	622.00	396.75	0.10	YES	YES	NO	HRDOW7
25A	0	0.10000E+01	366214.4	3769351.3	94.7	3.66	622.00	228.91	0.10	YES	YES	NO	HRDOW7
25B	0	0.10000E+01	366275.5	3769394.0	94.1	0.31	330.00	71.15	0.31	YES	YES	CAP	HRDOW

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
8	0	0.43990E-03	366307.9	3769658.7	96.7	4.15	6	1.93	YES	HRDOW

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)


```
                                        *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID                                             SOURCE IDs
-----------                                             ----------

 1          1           ,

 10         10          ,

 2          2           ,

 3          3           ,

 4          4           ,

 5          5           ,

 6          6           ,

 7          7           ,

 8          8           ,

 9          9           ,

 11A        11A         ,

 11B        11B         ,

 12         12          ,

 13         13          ,

 14         14          ,

 15         15          ,

 16         16          ,

 17         17          ,

 18         18          ,

 19         19          ,
```

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

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                                            *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID                                             SOURCE IDs
-----------                                             ----------

 20          20          ,

 21          21          ,

 22          22          ,

 23A         23A         ,

 23B         23B         ,

 24          24          ,

 25A         25A         ,

 25B         25B         ,
```

```
                                            *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID   URBAN POP                                            SOURCE IDs
 --------   ---------                                            ----------


             3884000.   1           , 2           , 3           , 4           , 5           , 6           , 7           ,
8           ,

            9           , 10          , 11A         , 11B         , 12          , 13          , 14          , 15          ,

            16          , 17          , 18          , 19          , 20          , 21          , 22          , 23A         ,

            23B         , 24          , 25A         , 25B         ,
```

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	7.6,	43.7,	43.6,	-28.1,	-0.2,	2	7.6,	42.4,	43.6,	-28.0,	-1.2,
3	7.6,	39.8,	42.2,	-27.0,	-2.3,	4	7.6,	36.0,	39.6,	-25.2,	-3.3,
5	7.6,	31.1,	35.8,	-22.6,	-4.2,	6	7.6,	31.1,	35.8,	-21.8,	-4.9,
7	7.6,	36.0,	39.6,	-22.8,	-5.5,	8	7.6,	39.8,	42.3,	-23.1,	-6.0,
9	7.6,	42.4,	43.6,	-22.7,	-6.2,	10	7.6,	43.6,	43.7,	-21.7,	-6.3,
11	7.6,	43.6,	42.4,	-19.9,	-6.2,	12	7.6,	42.2,	39.8,	-17.6,	-5.8,
13	7.6,	39.6,	36.0,	-14.7,	-5.4,	14	7.6,	35.8,	31.1,	-11.4,	-4.7,
15	7.6,	35.8,	31.1,	-10.6,	-3.9,	16	7.6,	39.6,	36.0,	-12.5,	-3.0,
17	7.6,	42.3,	39.8,	-13.9,	-2.0,	18	7.6,	43.6,	42.4,	-15.0,	-0.9,
19	7.6,	43.7,	43.6,	-15.5,	0.2,	20	7.6,	42.4,	43.6,	-15.6,	1.2,
21	7.6,	39.8,	42.2,	-15.3,	2.3,	22	7.6,	36.0,	39.6,	-14.4,	3.3,
23	7.6,	31.1,	35.8,	-13.2,	4.2,	24	7.6,	31.1,	35.8,	-14.0,	4.9,
25	7.6,	36.0,	39.6,	-16.8,	5.5,	26	7.6,	39.8,	42.3,	-19.1,	6.0,
27	7.6,	42.4,	43.6,	-20.9,	6.2,	28	7.6,	43.6,	43.7,	-22.0,	6.3,
29	7.6,	43.6,	42.4,	-22.4,	6.2,	30	7.6,	42.2,	39.8,	-22.2,	5.8,
31	7.6,	39.6,	36.0,	-21.3,	5.4,	32	7.6,	35.8,	31.1,	-19.7,	4.7,
33	7.6,	35.8,	31.1,	-20.5,	3.9,	34	7.6,	39.6,	36.0,	-23.5,	3.0,
35	7.6,	42.3,	39.8,	-25.9,	2.0,	36	7.6,	43.6,	42.4,	-27.4,	0.9,

SOURCE ID: 2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	3.7,	69.5,	78.4,	-71.8,	18.5,	2	3.7,	78.7,	76.2,	-68.8,	11.7,
3	3.7,	85.5,	71.6,	-63.8,	4.4,	4	3.7,	89.7,	64.9,	-56.8,	-2.9,
5	3.7,	91.2,	56.2,	-48.1,	-10.2,	6	3.7,	90.1,	54.1,	-46.2,	-17.0,
7	3.7,	88.9,	57.7,	-50.4,	-23.1,	8	3.7,	85.1,	59.6,	-52.9,	-28.6,
9	3.7,	78.8,	59.7,	-53.9,	-33.2,	10	3.7,	78.4,	69.5,	-53.3,	-32.6,
11	3.7,	76.2,	78.7,	-51.0,	-30.7,	12	3.7,	71.6,	85.5,	-47.2,	-28.0,
13	3.7,	64.9,	89.7,	-41.9,	-24.4,	14	3.7,	56.2,	91.2,	-35.4,	-20.0,
15	3.7,	54.1,	90.1,	-28.1,	-19.2,	16	3.7,	57.7,	88.9,	-21.3,	-21.5,
17	3.7,	59.6,	85.1,	-14.0,	-23.2,	18	3.7,	59.7,	78.8,	-6.2,	-24.1,
19	3.7,	69.5,	78.4,	-6.6,	-18.5,	20	3.7,	78.7,	76.2,	-7.3,	-11.7,
21	39.6,	44.3,	48.3,	-173.0,	34.9,	22	39.6,	47.1,	48.4,	-176.8,	8.6,
23	39.6,	48.4,	47.1,	-175.3,	-18.1,	24	3.7,	90.1,	54.1,	-7.8,	17.0,
25	3.7,	88.9,	57.7,	-7.3,	23.1,	26	3.7,	85.1,	59.6,	-6.6,	28.6,
27	3.7,	78.8,	59.7,	-5.7,	33.2,	28	3.7,	78.4,	69.5,	-16.2,	32.6,
29	3.7,	76.2,	78.7,	-27.7,	30.7,	30	3.7,	71.6,	85.5,	-38.3,	28.0,
31	3.7,	64.9,	89.7,	-47.8,	24.4,	32	3.7,	56.2,	91.2,	-55.8,	20.0,
33	3.7,	54.1,	90.1,	-62.1,	19.2,	34	3.7,	57.7,	88.9,	-67.5,	21.5,
35	3.7,	59.6,	85.1,	-71.1,	23.2,	36	3.7,	59.7,	78.8,	-72.5,	24.1,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	13.7,	30.4,	29.0,	-21.7,	-20.0,	2	13.7,	28.6,	30.6,	-18.9,	-20.9,
3	3.0,	15.5,	26.7,	-4.3,	-4.2,	4	3.0,	11.4,	27.1,	-3.9,	-2.5,
5	3.0,	7.0,	26.6,	-3.3,	-0.8,	6	3.0,	9.7,	26.9,	-3.5,	0.9,
7	13.7,	19.2,	30.2,	-1.4,	-16.2,	8	13.7,	23.2,	31.2,	0.7,	-13.6,
9	13.7,	26.5,	31.2,	2.8,	-10.6,	10	13.7,	29.0,	30.4,	4.8,	-7.2,
11	13.7,	30.6,	28.6,	6.7,	-3.6,	12	13.7,	31.3,	25.9,	8.3,	0.1,
13	13.7,	31.1,	22.4,	9.7,	3.8,	14	13.7,	29.9,	18.3,	10.8,	7.3,
15	13.7,	28.2,	14.6,	11.1,	10.7,	16	13.7,	30.2,	19.2,	6.7,	13.7,
17	13.7,	31.2,	23.2,	2.0,	16.3,	18	13.7,	31.2,	26.5,	-2.7,	18.4,
19	13.7,	30.4,	29.0,	-7.3,	20.0,	20	13.7,	28.6,	30.6,	-11.7,	20.9,
21	3.0,	15.5,	26.7,	-22.4,	4.2,	22	3.0,	11.4,	27.1,	-23.2,	2.5,
23	3.0,	7.0,	26.6,	-23.2,	0.8,	24	3.0,	9.7,	26.9,	-23.4,	-0.9,
25	13.7,	19.2,	30.2,	-28.8,	16.2,	26	13.7,	23.2,	31.2,	-31.9,	13.6,
27	13.7,	26.5,	31.2,	-34.1,	10.6,	28	13.7,	29.0,	30.4,	-35.2,	7.2,
29	13.7,	30.6,	28.6,	-35.2,	3.6,	30	13.7,	31.3,	25.9,	-34.2,	-0.1,
31	13.7,	31.1,	22.4,	-32.1,	-3.8,	32	130.2,	41.3,	67.7,	-262.0,	14.3,
33	130.2,	37.0,	69.8,	-263.4,	-22.8,	34	13.7,	30.2,	19.2,	-25.8,	-13.7,
35	13.7,	31.2,	23.2,	-25.2,	-16.3,	36	13.7,	31.2,	26.5,	-23.8,	-18.4,

SOURCE ID: 4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	13.7,	30.4,	29.0,	-19.7,	-3.7,	2	13.7,	28.6,	30.6,	-19.8,	-4.5,
3	13.7,	25.9,	31.3,	-19.2,	-5.2,	4	13.7,	22.4,	31.1,	-18.2,	-5.8,
5	13.7,	18.3,	29.9,	-16.5,	-6.1,	6	13.7,	14.6,	28.2,	-14.6,	-6.3,
7	13.7,	19.2,	30.2,	-14.5,	-6.3,	8	13.7,	23.2,	31.2,	-13.9,	-6.1,
9	13.7,	26.5,	31.2,	-12.9,	-5.7,	10	13.7,	29.0,	30.4,	-11.5,	-5.2,
11	13.7,	30.6,	28.6,	-9.8,	-4.4,	12	13.7,	31.3,	25.9,	-7.7,	-3.6,
13	13.7,	31.1,	22.4,	-5.4,	-2.6,	14	13.7,	29.9,	18.3,	-3.0,	-1.6,
15	13.7,	28.2,	14.6,	-1.0,	-0.5,	16	13.7,	30.2,	19.2,	-3.3,	0.6,
17	13.7,	31.2,	23.2,	-5.5,	1.7,	18	13.7,	31.2,	26.5,	-7.5,	2.7,
19	13.7,	30.4,	29.0,	-9.3,	3.7,	20	13.7,	28.6,	30.6,	-10.9,	4.5,
21	13.7,	25.9,	31.3,	-12.1,	5.2,	22	13.7,	22.4,	31.1,	-12.9,	5.8,
23	13.7,	18.3,	29.9,	-13.4,	6.1,	24	13.7,	14.6,	28.2,	-13.6,	6.3,
25	13.7,	19.2,	30.2,	-15.7,	6.3,	26	13.7,	23.2,	31.2,	-17.3,	6.1,
27	13.7,	26.5,	31.2,	-18.4,	5.7,	28	13.7,	29.0,	30.4,	-18.9,	5.2,
29	67.1,	67.0,	81.6,	-405.5,	26.6,	30	67.1,	76.0,	74.4,	-401.0,	-37.1,
31	13.7,	31.1,	22.4,	-17.0,	2.6,	32	130.2,	40.2,	67.7,	-248.2,	23.2,
33	130.2,	37.0,	69.8,	-251.4,	-11.7,	34	13.7,	30.2,	19.2,	-15.9,	-0.6,
35	13.7,	31.2,	23.2,	-17.7,	-1.7,	36	13.7,	31.2,	26.5,	-19.0,	-2.7,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 5

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	9.1,	27.1,	125.2,	3.1,	1.4,	2	130.2,	58.1,	67.5,	-316.7,	21.7,
3	130.2,	63.2,	60.5,	-311.0,	-30.1,	4	9.1,	85.7,	119.8,	-3.8,	34.1,
5	9.1,	100.7,	110.6,	-5.9,	43.3,	6	9.1,	112.7,	98.0,	-7.8,	51.2,
7	9.1,	121.3,	82.3,	-9.6,	57.6,	8	9.1,	126.1,	64.2,	-11.0,	62.2,
9	9.1,	127.2,	44.2,	-12.1,	64.9,	10	9.1,	125.2,	27.1,	-15.0,	65.7,
11	45.7,	54.1,	94.6,	57.3,	-40.6,	12	45.7,	39.5,	96.0,	62.0,	-21.8,
13	9.1,	119.8,	85.7,	-76.9,	56.2,	14	45.7,	33.3,	95.8,	63.0,	17.1,
15	45.7,	48.4,	95.5,	58.4,	36.1,	16	9.1,	82.3,	121.3,	-118.2,	31.6,
17	9.1,	64.2,	126.1,	-125.3,	21.1,	18	9.1,	44.2,	127.2,	-128.5,	10.0,
19	9.1,	27.1,	125.2,	-128.3,	-1.4,	20	9.1,	48.3,	127.3,	-128.1,	-12.8,
21	9.1,	68.0,	125.5,	-124.0,	-23.8,	22	9.1,	85.7,	119.8,	-116.1,	-34.1,
23	9.1,	100.7,	110.6,	-104.7,	-43.3,	24	9.1,	112.7,	98.0,	-90.1,	-51.2,
25	9.1,	121.3,	82.3,	-72.8,	-57.6,	26	9.1,	126.1,	64.2,	-53.2,	-62.2,
27	15.2,	111.1,	92.7,	-126.5,	57.4,	28	15.2,	104.2,	101.5,	-141.2,	39.6,
29	45.7,	54.1,	94.6,	-151.9,	40.6,	30	45.7,	39.5,	96.0,	-158.1,	21.8,
31	48.8,	49.4,	58.4,	-282.0,	29.1,	32	67.1,	86.9,	53.5,	-270.9,	68.7,
33	67.1,	88.5,	40.4,	-272.6,	25.3,	34	67.1,	87.4,	26.2,	-266.0,	-18.9,
35	67.1,	87.8,	29.1,	-260.3,	-62.6,	36	9.1,	44.2,	127.2,	1.3,	-10.0,

SOURCE ID: 6

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-212.4,	-69.6,	2	45.7,	94.6,	54.1,	-55.6,	-28.1,
3	130.2,	63.2,	60.5,	-312.4,	47.3,	4	130.2,	66.5,	51.7,	-310.8,	-5.0,
5	130.2,	67.3,	41.3,	-299.7,	-57.1,	6	45.7,	95.5,	48.4,	-28.0,	-39.9,
7	45.7,	92.4,	62.1,	-27.8,	-39.9,	8	45.7,	86.5,	73.9,	-26.8,	-38.8,
9	45.7,	78.0,	83.4,	-25.0,	-36.4,	10	45.7,	67.0,	90.4,	-22.5,	-33.0,
11	45.7,	54.1,	94.6,	-19.2,	-28.5,	12	45.7,	39.5,	96.0,	-15.4,	-23.2,
13	45.7,	23.7,	94.5,	-11.1,	-17.2,	14	45.7,	33.3,	95.8,	-9.3,	-10.7,
15	45.7,	48.4,	95.5,	-7.9,	-3.8,	16	45.7,	62.1,	92.4,	-6.3,	3.2,
17	45.7,	73.9,	86.5,	-4.5,	10.1,	18	45.7,	83.4,	78.0,	-2.5,	16.7,
19	45.7,	90.4,	67.0,	-0.5,	22.7,	20	45.7,	94.6,	54.1,	1.5,	28.1,
21	45.7,	96.0,	39.5,	3.5,	32.6,	22	45.7,	94.5,	23.7,	5.3,	36.2,
23	45.7,	95.8,	33.3,	-6.0,	38.6,	24	45.7,	95.5,	48.4,	-20.4,	39.9,
25	45.7,	92.4,	62.1,	-34.2,	39.9,	26	45.7,	86.5,	73.9,	-47.0,	38.8,
27	45.7,	78.0,	83.4,	-58.4,	36.4,	28	45.7,	67.0,	90.4,	-67.9,	33.0,
29	45.7,	54.1,	94.6,	-75.5,	28.5,	30	45.7,	39.5,	96.0,	-80.7,	23.2,
31	48.8,	49.4,	58.4,	-206.0,	43.9,	32	48.8,	148.8,	66.5,	-211.6,	65.5,
33	67.1,	88.5,	40.4,	-206.2,	65.2,	34	67.1,	87.4,	26.2,	-207.6,	31.9,
35	67.1,	87.8,	29.1,	-211.7,	-2.4,	36	67.1,	88.4,	43.2,	-215.3,	-36.6,

SOURCE ID: 7

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-190.9,	-17.6,	2	67.1,	81.6,	67.0,	-190.9,	-45.6,
3	67.1,	172.6,	102.0,	-351.5,	48.9,	4	130.2,	66.5,	51.7,	-318.2,	50.9,
5	130.2,	67.7,	41.3,	-316.7,	-3.3,	6	130.2,	67.7,	37.0,	-312.2,	-56.0,
7	45.7,	92.4,	62.1,	-62.2,	4.7,	8	45.7,	86.5,	73.9,	-68.4,	-0.8,
9	45.7,	78.0,	83.4,	-72.6,	-6.2,	10	45.7,	67.0,	90.4,	-74.5,	-11.5,
11	45.7,	54.1,	94.6,	-74.2,	-16.4,	12	45.7,	39.5,	96.0,	-71.7,	-20.8,
13	15.2,	55.8,	58.1,	-67.4,	23.2,	14	48.8,	148.8,	66.5,	91.4,	-82.5,
15	45.7,	48.4,	95.5,	-57.8,	-29.9,	16	45.7,	62.1,	92.4,	-50.9,	-31.2,
17	48.8,	135.5,	76.7,	97.0,	-15.4,	18	48.8,	133.2,	97.7,	87.4,	11.4,
19	48.8,	126.8,	115.7,	75.2,	37.8,	20	67.1,	81.6,	67.0,	123.9,	45.6,
21	45.7,	96.0,	39.5,	1.1,	-23.7,	22	45.7,	94.5,	23.7,	12.8,	-19.7,
23	45.7,	95.8,	33.3,	11.0,	-15.1,	24	45.7,	95.5,	48.4,	5.6,	-10.1,
25	45.7,	92.4,	62.1,	0.1,	-4.7,	26	45.7,	86.5,	73.9,	-5.4,	0.8,
27	45.7,	78.0,	83.4,	-10.8,	6.2,	28	45.7,	67.0,	90.4,	-15.9,	11.5,
29	45.7,	54.1,	94.6,	-20.4,	16.4,	30	45.7,	39.5,	96.0,	-24.4,	20.8,
31	15.2,	55.8,	58.1,	9.3,	-23.2,	32	48.8,	149.9,	92.2,	-257.1,	86.2,
33	48.8,	152.8,	70.8,	-259.0,	48.1,	34	67.1,	87.4,	26.2,	-162.9,	66.2,
35	67.1,	87.8,	29.1,	-173.6,	39.2,	36	67.1,	88.4,	43.2,	-185.1,	11.0,

SOURCE ID: 9

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	7.6,	27.6,	23.3,	-6.7,	-0.2,	2	7.6,	29.7,	26.6,	-8.4,	0.7,
3	7.6,	31.0,	29.0,	-9.8,	1.6,	4	7.6,	31.3,	30.6,	-11.0,	2.3,
5	7.6,	30.6,	31.3,	-11.8,	3.1,	6	7.6,	29.0,	31.0,	-12.2,	3.7,
7	7.6,	26.6,	29.7,	-12.3,	4.2,	8	7.6,	23.3,	27.6,	-12.0,	4.6,
9	7.6,	19.3,	24.6,	-11.3,	4.8,	10	7.6,	23.3,	27.6,	-13.6,	4.9,
11	7.6,	26.6,	29.7,	-15.6,	4.9,	12	7.6,	29.0,	31.0,	-17.0,	4.7,
13	7.6,	30.6,	31.3,	-18.0,	4.3,	14	7.6,	31.3,	30.6,	-18.4,	3.9,
15	7.6,	31.0,	29.0,	-18.2,	3.3,	16	7.6,	29.7,	26.6,	-17.5,	2.6,
17	7.6,	27.6,	23.3,	-16.2,	1.8,	18	7.6,	24.6,	19.3,	-14.5,	1.0,
19	7.6,	27.6,	23.3,	-16.6,	0.2,	20	7.6,	29.7,	26.6,	-18.2,	-0.7,
21	7.6,	31.0,	29.0,	-19.2,	-1.6,	22	7.6,	31.3,	30.6,	-19.7,	-2.3,
23	7.6,	30.6,	31.3,	-19.5,	-3.1,	24	7.6,	29.0,	31.0,	-18.8,	-3.7,
25	7.6,	26.6,	29.7,	-17.5,	-4.2,	26	7.6,	23.3,	27.6,	-15.6,	-4.6,
27	7.6,	19.3,	24.6,	-13.3,	-4.8,	28	7.6,	23.3,	27.6,	-13.9,	-4.9,
29	7.6,	26.6,	29.7,	-14.2,	-4.9,	30	7.6,	29.0,	31.0,	-13.9,	-4.7,
31	7.6,	30.6,	31.3,	-13.3,	-4.3,	32	7.6,	31.3,	30.6,	-12.2,	-3.9,
33	7.6,	31.0,	29.0,	-10.8,	-3.3,	34	7.6,	29.7,	26.6,	-9.1,	-2.6,
35	7.6,	27.6,	23.3,	-7.1,	-1.8,	36	7.6,	24.6,	19.3,	-4.8,	-1.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 10

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-247.1,	-32.5,	2	67.1,	81.6,	67.0,	-243.7,	-70.1,
3	67.1,	172.6,	102.0,	-399.3,	15.6,	4	130.2,	66.5,	51.7,	-359.5,	9.8,
5	130.2,	67.5,	41.3,	-350.2,	-51.0,	6	45.7,	95.5,	48.4,	-78.8,	-42.6,
7	45.7,	92.4,	62.1,	-77.4,	-51.5,	8	45.7,	86.5,	73.9,	-73.6,	-58.7,
9	15.2,	46.8,	51.4,	-35.3,	-15.6,	10	15.2,	39.8,	45.5,	-29.4,	-17.0,
11	15.2,	45.5,	50.4,	-28.8,	-17.9,	12	15.2,	51.4,	55.1,	-28.0,	-18.2,
13	15.2,	55.8,	58.1,	-26.4,	-18.0,	14	15.2,	58.5,	59.4,	-23.9,	-17.3,
15	15.2,	59.4,	58.8,	-20.7,	-16.0,	16	45.7,	62.1,	92.4,	5.3,	-46.3,
17	45.7,	73.9,	86.5,	15.5,	-36.7,	18	45.7,	83.4,	78.0,	25.2,	-25.9,
19	45.7,	90.4,	67.0,	34.2,	-14.4,	20	45.7,	94.6,	54.1,	42.2,	-2.4,
21	45.7,	96.0,	39.5,	48.8,	9.6,	22	45.7,	94.5,	23.7,	54.0,	21.4,
23	45.7,	95.8,	33.3,	44.5,	32.5,	24	45.7,	95.5,	48.4,	30.4,	42.6,
25	45.7,	92.4,	62.1,	15.3,	51.5,	26	45.7,	86.5,	73.9,	-0.2,	58.7,
27	15.2,	46.8,	51.4,	-16.2,	15.6,	28	15.2,	39.8,	45.5,	-16.1,	17.0,
29	15.2,	45.5,	50.4,	-21.5,	17.9,	30	15.2,	51.4,	55.1,	-27.1,	18.2,
31	15.2,	55.8,	58.1,	-31.7,	18.0,	32	15.2,	58.5,	59.4,	-35.5,	17.3,
33	48.8,	146.1,	59.1,	-213.5,	87.2,	34	61.0,	108.8,	104.9,	-297.9,	70.7,
35	67.1,	87.8,	29.1,	-231.6,	44.4,	36	67.1,	88.4,	43.2,	-243.1,	6.0,

SOURCE ID: 11A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	82.6,	79.9,	-50.8,	37.3,	2	18.3,	88.7,	74.5,	-56.3,	35.3,
3	18.3,	93.1,	67.3,	-60.4,	31.7,	4	18.3,	94.8,	63.4,	-62.7,	27.1,
5	18.3,	93.5,	61.5,	-63.1,	21.7,	6	18.3,	90.8,	61.1,	-65.0,	15.2,
7	18.3,	92.2,	63.7,	-65.7,	8.9,	8	18.3,	90.8,	69.5,	-69.5,	2.3,
9	18.3,	86.7,	77.2,	-75.2,	-4.4,	10	18.3,	79.9,	82.6,	-78.6,	-10.9,
11	18.3,	74.5,	88.7,	-79.6,	-19.0,	12	18.3,	67.3,	93.1,	-78.2,	-26.8,
13	18.3,	63.4,	94.8,	-74.5,	-31.0,	14	18.3,	61.5,	93.5,	-68.4,	-32.4,
15	18.3,	61.1,	90.8,	-60.6,	-34.5,	16	18.3,	63.7,	92.2,	-55.0,	-33.9,
17	18.3,	69.5,	90.8,	-47.7,	-34.8,	18	18.3,	77.2,	86.7,	-39.0,	-36.6,
19	18.3,	82.6,	79.9,	-29.0,	-37.3,	20	18.3,	88.7,	74.5,	-18.2,	-35.3,
21	18.3,	93.1,	67.3,	-6.9,	-31.7,	22	18.3,	94.8,	63.4,	-0.7,	-27.1,
23	18.3,	93.5,	61.5,	1.7,	-21.7,	24	18.3,	90.8,	61.1,	4.0,	-15.2,
25	18.3,	92.2,	63.7,	2.0,	-8.9,	26	18.3,	90.8,	69.5,	-0.0,	-2.3,
27	18.3,	86.7,	77.2,	-2.0,	4.4,	28	18.3,	79.9,	82.6,	-4.0,	10.9,
29	18.3,	74.5,	88.7,	-9.0,	19.0,	30	18.3,	67.3,	93.1,	-14.9,	26.8,
31	18.3,	63.4,	94.8,	-20.3,	31.0,	32	18.3,	61.5,	93.5,	-25.1,	32.4,
33	18.3,	61.1,	90.8,	-30.2,	34.5,	34	18.3,	63.7,	92.2,	-37.2,	33.9,
35	18.3,	69.5,	90.8,	-43.1,	34.8,	36	18.3,	77.2,	86.7,	-47.7,	36.6,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 11B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	18.3,	82.6,	79.9,	-22.3,	15.1,	2	18.3,	88.7,	74.5,	-24.3,	18.3,
3	18.3,	93.1,	67.3,	-26.0,	20.5,	4	18.3,	94.8,	63.4,	-26.9,	22.0,
5	18.3,	93.5,	61.5,	-27.0,	22.9,	6	18.3,	90.8,	61.1,	-29.7,	22.7,
7	18.3,	92.2,	63.7,	-32.2,	22.4,	8	18.3,	90.8,	69.5,	-38.9,	21.4,
9	18.3,	86.7,	77.2,	-48.4,	19.8,	10	18.3,	79.9,	82.6,	-56.4,	17.6,
11	18.3,	74.5,	88.7,	-62.7,	12.9,	12	18.3,	67.3,	93.1,	-67.1,	7.6,
13	18.3,	63.4,	94.8,	-69.4,	4.8,	14	18.3,	61.5,	93.5,	-69.7,	3.7,
15	18.3,	61.1,	90.8,	-68.1,	0.9,	16	18.3,	63.7,	92.2,	-68.5,	-0.3,
17	18.3,	69.5,	90.8,	-66.9,	-4.1,	18	18.3,	77.2,	86.7,	-63.1,	-9.7,
19	18.3,	82.6,	79.9,	-57.5,	-15.1,	20	18.3,	88.7,	74.5,	-50.1,	-18.3,
21	18.3,	93.1,	67.3,	-41.2,	-20.5,	22	18.3,	94.8,	63.4,	-36.5,	-22.0,
23	18.3,	93.5,	61.5,	-34.4,	-22.9,	24	18.3,	90.8,	61.1,	-31.4,	-22.7,
25	18.3,	92.2,	63.7,	-31.5,	-22.4,	26	18.3,	90.8,	69.5,	-30.7,	-21.4,
27	18.3,	86.7,	77.2,	-28.9,	-19.8,	28	18.3,	79.9,	82.6,	-26.2,	-17.6,
29	18.3,	74.5,	88.7,	-26.0,	-12.9,	30	67.1,	102.0,	172.6,	-491.5,	32.3,
31	18.3,	63.4,	94.8,	-25.4,	-4.8,	32	18.3,	61.5,	93.5,	-23.9,	-3.7,
33	18.3,	61.1,	90.8,	-22.7,	-0.9,	34	18.3,	63.7,	92.2,	-23.7,	0.3,
35	18.3,	69.5,	90.8,	-24.0,	4.1,	36	18.3,	77.2,	86.7,	-23.5,	9.7,

SOURCE ID: 12

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	18.3,	94.8,	63.4,	-129.7,	41.0,
5	18.3,	93.5,	61.5,	-131.5,	23.8,	6	18.3,	90.8,	61.1,	-132.7,	5.4,
7	18.3,	92.2,	63.7,	-130.7,	-12.5,	8	18.3,	90.8,	69.5,	-129.8,	-30.1,
9	18.3,	86.7,	77.2,	-129.0,	-46.7,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	0.0,	0.0,	0.0,	0.0,	0.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	0.0,	0.0,	0.0,	0.0,	0.0,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 13

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	39.6,	34.8,	43.7,	1.5,	4.5,	2	39.6,	40.2,	46.7,	-1.1,	8.5,
3	39.6,	44.3,	48.3,	-3.7,	12.3,	4	39.6,	47.1,	48.4,	-6.2,	15.6,
5	39.6,	48.4,	47.1,	-8.5,	18.5,	6	39.6,	48.3,	44.3,	-10.6,	20.8,
7	39.6,	46.7,	40.2,	-12.3,	22.5,	8	39.6,	43.7,	34.8,	-13.7,	23.5,
9	39.6,	39.4,	28.4,	-14.6,	23.8,	10	39.6,	43.7,	34.8,	-21.9,	23.4,
11	39.6,	46.7,	40.2,	-28.6,	22.2,	12	39.6,	48.3,	44.3,	-34.4,	20.4,
13	39.6,	48.4,	47.1,	-39.2,	18.0,	14	39.6,	47.1,	48.4,	-42.7,	15.0,
15	39.6,	44.3,	48.3,	-45.0,	11.6,	16	39.6,	40.2,	46.7,	-45.9,	7.8,
17	39.6,	34.8,	43.7,	-45.4,	3.7,	18	39.6,	28.4,	39.4,	-43.5,	-0.4,
19	39.6,	34.8,	43.7,	-45.3,	-4.5,	20	39.6,	40.2,	46.7,	-45.6,	-8.5,
21	39.6,	44.3,	48.3,	-44.6,	-12.3,	22	39.6,	47.1,	48.4,	-42.2,	-15.6,
23	39.6,	48.4,	47.1,	-38.5,	-18.5,	24	39.6,	48.3,	44.3,	-33.7,	-20.8,
25	39.6,	46.7,	40.2,	-27.9,	-22.5,	26	39.6,	43.7,	34.8,	-21.2,	-23.5,
27	39.6,	39.4,	28.4,	-13.8,	-23.8,	28	39.6,	43.7,	34.8,	-12.9,	-23.4,
29	39.6,	46.7,	40.2,	-11.6,	-22.2,	30	39.6,	48.3,	44.3,	-9.9,	-20.4,
31	39.6,	48.4,	47.1,	-7.9,	-18.0,	32	39.6,	47.1,	48.4,	-5.7,	-15.0,
33	45.7,	48.4,	95.5,	-320.0,	31.5,	34	45.7,	62.1,	92.4,	-319.8,	-16.3,
35	39.6,	34.8,	43.7,	1.7,	-3.7,	36	39.6,	28.4,	39.4,	4.1,	0.4,

SOURCE ID: 14

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	18.3,	94.8,	63.4,	-133.7,	41.2,
5	18.3,	93.5,	61.5,	-135.5,	23.3,	6	18.3,	90.8,	61.1,	-136.6,	4.2,
7	18.3,	92.2,	63.7,	-134.3,	-14.4,	8	18.3,	90.8,	69.5,	-133.0,	-32.5,
9	18.3,	86.7,	77.2,	-131.7,	-49.7,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	0.0,	0.0,	0.0,	0.0,	0.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	0.0,	0.0,	0.0,	0.0,	0.0,	28	0.0,	0.0,	0.0,	0.0,	0.0,
29	0.0,	0.0,	0.0,	0.0,	0.0,	30	0.0,	0.0,	0.0,	0.0,	0.0,
31	0.0,	0.0,	0.0,	0.0,	0.0,	32	0.0,	0.0,	0.0,	0.0,	0.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 15

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	48.8,	148.7,	98.4,	-54.7,	65.1,	2	48.8,	139.5,	116.0,	-75.1,	63.3,
3	48.8,	126.1,	130.7,	-93.4,	59.5,	4	48.8,	110.8,	142.5,	-108.7,	53.0,
5	61.0,	135.1,	91.1,	-120.8,	97.0,	6	61.0,	121.8,	98.4,	-140.2,	82.2,
7	67.1,	172.4,	74.0,	-352.9,	99.4,	8	67.1,	164.4,	101.3,	-378.1,	45.4,
9	130.2,	75.2,	42.7,	-391.9,	28.1,	10	130.2,	72.4,	51.1,	-393.8,	-34.3,
11	67.1,	67.0,	81.6,	-196.7,	5.5,	12	67.1,	76.0,	74.4,	-191.7,	-21.6,
13	67.1,	82.7,	64.9,	-180.8,	-48.1,	14	67.1,	86.9,	53.5,	-164.5,	-73.1,
15	48.8,	152.8,	70.8,	-70.8,	-52.8,	16	48.8,	151.1,	47.2,	-48.4,	-58.1,
17	48.8,	153.2,	54.7,	-45.3,	-62.8,	18	48.8,	153.3,	77.7,	-45.2,	-65.0,
19	48.8,	148.7,	98.4,	-43.7,	-65.1,	20	48.8,	139.5,	116.0,	-40.9,	-63.3,
21	48.8,	126.1,	130.7,	-37.4,	-59.5,	22	48.8,	110.8,	142.5,	-33.8,	-53.0,
23	61.0,	135.1,	91.1,	29.7,	-97.0,	24	61.0,	121.8,	98.4,	41.8,	-82.2,
25	48.8,	47.2,	151.1,	-17.4,	-24.8,	26	61.0,	106.7,	123.4,	52.8,	-43.9,
27	61.0,	112.6,	136.2,	52.6,	-23.8,	28	61.0,	115.1,	144.9,	50.8,	-2.9,
29	67.1,	67.0,	81.6,	115.1,	-5.5,	30	67.1,	76.0,	74.4,	117.3,	21.6,
31	67.1,	82.7,	64.9,	115.9,	48.1,	32	67.1,	86.9,	53.5,	111.0,	73.1,
33	48.8,	152.8,	70.8,	0.0,	52.8,	34	48.8,	151.1,	47.2,	1.2,	58.1,
35	48.8,	153.2,	54.7,	-9.4,	62.8,	36	48.8,	153.3,	77.7,	-32.5,	65.0,

SOURCE ID: 16

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-123.6,	52.1,	2	67.1,	81.6,	67.0,	-136.7,	34.8,
3	67.1,	74.4,	76.0,	-145.7,	16.3,	4	67.1,	178.4,	78.4,	-321.5,	89.0,
5	67.1,	178.7,	52.5,	-321.2,	37.8,	6	130.2,	69.8,	37.0,	-322.3,	40.3,
7	130.2,	73.8,	38.3,	-330.0,	-12.5,	8	130.2,	74.9,	38.5,	-327.6,	-65.0,
9	48.8,	59.4,	36.7,	-15.7,	-38.7,	10	48.8,	59.5,	44.3,	-12.8,	-37.7,
11	48.8,	57.9,	50.6,	-9.5,	-35.5,	12	48.8,	54.5,	55.3,	-6.0,	-32.2,
13	48.8,	49.4,	58.4,	-2.2,	-27.9,	14	48.8,	149.9,	92.2,	68.3,	-79.4,
15	48.8,	152.8,	70.8,	91.9,	-58.2,	16	61.0,	108.8,	104.9,	43.7,	-82.3,
17	61.0,	123.4,	106.7,	57.5,	-63.9,	18	67.1,	88.4,	43.2,	63.5,	-68.0,
19	67.1,	86.3,	55.9,	67.7,	-52.1,	20	67.1,	81.6,	67.0,	69.7,	-34.8,
21	67.1,	74.4,	76.0,	69.7,	-16.3,	22	67.1,	64.9,	82.7,	67.5,	2.6,
23	61.0,	135.1,	91.1,	63.3,	62.3,	24	61.0,	121.8,	98.4,	47.3,	80.4,
25	48.8,	56.8,	26.1,	-2.3,	37.3,	26	48.8,	57.4,	27.9,	-9.9,	38.6,
27	48.8,	59.4,	36.7,	-21.0,	38.7,	28	48.8,	59.5,	44.3,	-31.5,	37.7,
29	48.8,	57.9,	50.6,	-41.1,	35.5,	30	48.8,	54.5,	55.3,	-49.3,	32.2,
31	48.8,	49.4,	58.4,	-56.1,	27.9,	32	48.8,	149.9,	92.2,	-160.5,	79.4,
33	48.8,	152.8,	70.8,	-162.7,	58.2,	34	61.0,	108.8,	104.9,	-148.6,	82.3,
35	61.0,	123.4,	106.7,	-164.1,	63.9,	36	67.1,	88.4,	43.2,	-106.7,	68.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 17

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-111.2,	16.7,	2	67.1,	81.6,	67.0,	-118.3,	2.0,
3	67.1,	74.4,	76.0,	-121.9,	-12.8,	4	67.1,	178.4,	78.4,	-293.1,	64.5,
5	67.1,	178.7,	52.5,	-288.9,	18.6,	6	130.2,	69.8,	37.0,	-287.2,	27.1,
7	130.2,	73.8,	38.3,	-293.1,	-19.4,	8	130.2,	74.8,	38.5,	-290.0,	-65.4,
9	48.8,	59.4,	36.7,	21.4,	-32.6,	10	48.8,	59.5,	44.3,	22.7,	-25.2,
11	48.8,	57.9,	50.6,	23.2,	-17.1,	12	48.8,	54.5,	55.3,	23.1,	-8.4,
13	48.8,	142.5,	110.8,	67.0,	-69.8,	14	67.1,	86.9,	53.5,	13.9,	-74.5,
15	67.1,	88.5,	40.4,	32.8,	-66.3,	16	67.1,	87.4,	26.2,	50.6,	-56.1,
17	67.1,	87.8,	29.1,	57.9,	-44.2,	18	67.1,	88.4,	43.2,	57.4,	-30.9,
19	67.1,	86.3,	55.9,	55.2,	-16.7,	20	67.1,	81.6,	67.0,	51.3,	-2.0,
21	67.1,	74.4,	76.0,	45.9,	12.8,	22	67.1,	64.9,	82.7,	39.0,	27.1,
23	61.0,	135.1,	91.1,	31.0,	81.5,	24	48.8,	59.1,	35.0,	-35.6,	48.1,
25	48.8,	56.8,	26.1,	-39.2,	44.3,	26	48.8,	57.4,	27.9,	-47.4,	39.0,
27	48.8,	59.4,	36.7,	-58.1,	32.6,	28	48.8,	59.5,	44.3,	-67.0,	25.2,
29	48.8,	57.9,	50.6,	-73.8,	17.1,	30	48.8,	54.5,	55.3,	-78.4,	8.4,
31	48.8,	142.5,	110.8,	-177.9,	69.8,	32	67.1,	86.9,	53.5,	-67.4,	74.5,
33	67.1,	88.5,	40.4,	-73.2,	66.3,	34	67.1,	87.4,	26.2,	-76.8,	56.1,
35	67.1,	87.8,	29.1,	-87.0,	44.2,	36	67.1,	88.4,	43.2,	-100.6,	30.9,

SOURCE ID: 18

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	90.8,	49.2,	2	67.1,	81.6,	67.0,	74.9,	69.1,
3	61.0,	149.0,	109.7,	23.0,	49.6,	4	61.0,	144.2,	102.0,	17.6,	62.4,
5	61.0,	135.1,	91.1,	11.7,	73.2,	6	61.0,	121.8,	98.4,	-5.6,	81.9,
7	12.2,	77.7,	90.2,	-8.4,	32.6,	8	67.1,	164.4,	101.3,	-251.5,	91.1,
9	67.1,	152.0,	125.4,	-275.2,	56.7,	10	130.2,	70.8,	51.1,	-290.4,	51.9,
11	130.2,	67.5,	58.1,	-296.9,	7.1,	12	130.2,	60.5,	63.2,	-294.3,	-38.0,
13	61.0,	102.0,	144.2,	-134.5,	68.6,	14	67.1,	86.9,	53.5,	-140.8,	59.3,
15	67.1,	88.5,	40.4,	-142.8,	38.6,	16	67.1,	87.4,	26.2,	-140.5,	16.7,
17	67.1,	87.8,	29.1,	-143.0,	-5.6,	18	67.1,	88.4,	43.2,	-147.1,	-27.9,
19	67.1,	86.3,	55.9,	-146.7,	-49.2,	20	67.1,	81.6,	67.0,	-141.9,	-69.1,
21	61.0,	149.0,	109.7,	-132.8,	-49.6,	22	61.0,	144.2,	102.0,	-119.6,	-62.4,
23	61.0,	135.1,	91.1,	-102.8,	-73.2,	24	61.0,	121.8,	98.4,	-92.8,	-81.9,
25	12.2,	77.7,	90.2,	-81.8,	-32.6,	26	12.2,	89.3,	93.8,	-80.1,	-38.5,
27	12.2,	101.1,	102.4,	-77.6,	-43.2,	28	12.2,	109.9,	108.8,	-72.6,	-46.6,
29	61.0,	114.2,	149.2,	-39.3,	-84.8,	30	67.1,	102.0,	172.6,	121.7,	58.7,
31	61.0,	102.0,	144.2,	-9.8,	-68.6,	32	67.1,	86.9,	53.5,	87.3,	-59.3,
33	67.1,	88.5,	40.4,	102.4,	-38.6,	34	67.1,	87.4,	26.2,	114.4,	-16.7,
35	67.1,	87.8,	29.1,	113.9,	5.6,	36	67.1,	88.4,	43.2,	103.9,	27.9,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 19

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	86.3,	55.9,	-85.5,	-21.0,	2	67.1,	81.6,	67.0,	-86.5,	-30.7,
3	67.1,	74.4,	76.0,	-84.8,	-39.4,	4	67.1,	178.4,	78.4,	-251.9,	44.7,
5	130.2,	67.7,	41.3,	-233.7,	61.8,	6	130.2,	69.8,	37.0,	-241.8,	22.5,
7	130.2,	73.8,	38.3,	-247.5,	-16.0,	8	130.2,	75.1,	38.5,	-245.8,	-54.1,
9	48.8,	59.4,	36.7,	63.0,	-13.9,	10	61.0,	115.1,	144.9,	-22.2,	-87.1,
11	67.1,	67.0,	81.6,	-10.1,	-53.0,	12	67.1,	76.0,	74.4,	2.2,	-46.8,
13	67.1,	82.7,	64.9,	14.5,	-39.3,	14	67.1,	86.9,	53.5,	26.3,	-30.5,
15	67.1,	88.5,	40.4,	37.3,	-20.9,	16	67.1,	87.4,	26.2,	47.2,	-10.6,
17	67.1,	87.8,	29.1,	46.6,	0.1,	18	67.1,	88.4,	43.2,	38.7,	10.7,
19	67.1,	86.3,	55.9,	29.5,	21.0,	20	67.1,	81.6,	67.0,	19.5,	30.7,
21	67.1,	74.4,	76.0,	8.8,	39.4,	22	67.1,	64.9,	82.7,	-2.1,	46.9,
23	61.0,	135.1,	91.1,	-12.9,	93.8,	24	48.8,	59.1,	35.0,	-81.0,	52.7,
25	48.8,	56.8,	26.1,	-84.7,	40.9,	26	48.8,	57.4,	27.9,	-91.7,	27.8,
27	48.8,	59.4,	36.7,	-99.7,	13.9,	28	61.0,	115.1,	144.9,	-122.8,	87.1,
29	67.1,	67.0,	81.6,	-71.5,	53.0,	30	67.1,	76.0,	74.4,	-76.6,	46.8,
31	67.1,	82.7,	64.9,	-79.4,	39.3,	32	67.1,	86.9,	53.5,	-79.8,	30.5,
33	67.1,	88.5,	40.4,	-77.8,	20.9,	34	67.1,	87.4,	26.2,	-73.4,	10.6,
35	67.1,	87.8,	29.1,	-75.8,	-0.1,	36	67.1,	88.4,	43.2,	-81.8,	-10.7,

SOURCE ID: 20

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	61.0,	144.9,	115.1,	75.5,	-62.4,	2	67.1,	81.6,	67.0,	132.5,	-4.4,
3	67.1,	74.4,	76.0,	126.2,	24.5,	4	67.1,	64.9,	82.7,	116.1,	52.7,
5	61.0,	135.1,	91.1,	98.3,	38.4,	6	61.0,	121.8,	98.4,	85.7,	62.6,
7	67.1,	172.4,	74.0,	-127.0,	119.3,	8	67.1,	164.4,	101.3,	-159.1,	104.2,
9	67.1,	152.0,	125.4,	-186.4,	85.7,	10	67.1,	139.2,	145.7,	-208.1,	62.5,
11	130.2,	60.1,	58.1,	-223.4,	64.7,	12	130.2,	60.1,	63.2,	-232.0,	31.5,
13	130.2,	51.7,	66.5,	-233.5,	-2.6,	14	130.2,	41.3,	67.7,	-227.9,	-36.6,
15	33.5,	58.5,	29.7,	-150.3,	6.2,	16	33.5,	57.1,	20.5,	-144.7,	-17.4,
17	33.5,	57.5,	22.4,	-140.6,	-40.4,	18	67.1,	88.4,	43.2,	-176.1,	60.9,
19	67.1,	86.3,	55.9,	-190.7,	33.1,	20	67.1,	81.6,	67.0,	-199.5,	4.4,
21	67.1,	74.4,	76.0,	-202.2,	-24.5,	22	67.1,	64.9,	82.7,	-198.9,	-52.7,
23	61.0,	135.1,	91.1,	-189.4,	-38.4,	24	61.0,	121.8,	98.4,	-184.1,	-62.6,
25	67.1,	172.4,	74.0,	52.9,	-119.3,	26	67.1,	164.4,	101.3,	57.8,	-104.2,
27	67.1,	152.0,	125.4,	61.0,	-85.7,	28	67.1,	139.2,	145.7,	62.3,	-62.5,
29	67.1,	122.4,	161.6,	61.8,	-37.2,	30	67.1,	102.0,	172.6,	59.3,	-10.8,
31	67.1,	46.7,	53.6,	55.1,	31.8,	32	3.0,	8.6,	9.4,	-4.2,	1.5,
33	3.0,	7.6,	8.7,	-4.1,	1.5,	34	3.0,	6.3,	7.7,	-3.8,	1.6,
35	3.0,	7.6,	8.7,	-4.6,	1.5,	36	67.1,	88.4,	43.2,	132.9,	-60.9,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 21

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.2,	50.2,	2	130.2,	58.1,	67.5,	-48.4,	46.1,
3	130.2,	63.2,	60.5,	-51.1,	40.5,	4	130.2,	66.5,	51.7,	-52.3,	33.7,
5	130.2,	67.7,	41.3,	-51.8,	25.9,	6	130.2,	69.8,	37.0,	-56.4,	18.8,
7	130.2,	73.8,	38.3,	-64.3,	12.5,	8	130.2,	75.6,	38.5,	-70.3,	5.8,
9	130.2,	75.2,	42.7,	-74.2,	-1.2,	10	130.2,	72.4,	51.1,	-75.8,	-8.0,
11	130.2,	67.5,	58.1,	-75.1,	-14.7,	12	130.2,	60.5,	63.2,	-72.1,	-20.9,
13	130.2,	51.7,	66.5,	-67.0,	-26.4,	14	130.2,	41.3,	67.7,	-59.8,	-31.2,
15	67.1,	40.0,	47.5,	75.4,	-25.1,	16	33.5,	57.1,	20.5,	11.4,	45.2,
17	67.1,	41.1,	43.5,	77.3,	10.4,	18	67.1,	46.6,	43.3,	72.2,	27.9,
19	130.2,	51.1,	72.4,	-28.2,	-50.2,	20	130.2,	58.1,	67.5,	-19.1,	-46.1,
21	130.2,	63.2,	60.5,	-9.4,	-40.5,	22	130.2,	66.5,	51.7,	0.6,	-33.7,
23	130.2,	67.7,	41.3,	10.5,	-25.9,	24	130.2,	69.8,	37.0,	19.4,	-18.8,
25	130.2,	73.8,	38.3,	26.0,	-12.5,	26	130.2,	75.6,	38.5,	31.9,	-5.8,
27	130.2,	75.2,	42.7,	31.5,	1.2,	28	130.2,	72.4,	51.1,	24.7,	8.0,
29	130.2,	67.5,	58.1,	17.0,	14.7,	30	130.2,	60.5,	63.2,	8.9,	20.9,
31	130.2,	51.7,	66.5,	0.5,	26.4,	32	130.2,	41.3,	67.7,	-7.9,	31.2,
33	67.1,	40.0,	47.5,	-122.8,	25.1,	34	67.1,	35.6,	42.9,	-123.0,	8.1,
35	67.1,	41.1,	43.5,	-120.8,	-10.4,	36	67.1,	46.6,	43.3,	-115.6,	-27.9,

SOURCE ID: 22

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	67.1,	50.8,	46.1,	-5.6,	25.4,	2	61.0,	149.2,	114.2,	97.6,	-99.3,
3	67.1,	172.6,	102.0,	-17.5,	87.6,	4	67.1,	178.4,	78.4,	-22.7,	91.0,
5	67.1,	178.7,	52.5,	-27.2,	91.7,	6	67.1,	176.6,	51.2,	-42.2,	91.1,
7	67.1,	172.4,	74.0,	-72.2,	89.4,	8	67.1,	164.4,	101.3,	-100.0,	84.3,
9	67.1,	152.0,	125.4,	-124.8,	76.3,	10	67.1,	139.2,	145.7,	-145.7,	64.0,
11	67.1,	122.4,	161.6,	-162.3,	49.5,	12	130.2,	49.5,	63.2,	-173.9,	54.2,
13	130.2,	49.5,	66.5,	-180.2,	29.9,	14	130.2,	41.3,	67.7,	-181.1,	4.6,
15	130.2,	37.0,	69.8,	-179.4,	-23.7,	16	67.1,	35.6,	42.9,	-46.1,	-15.9,
17	67.1,	41.1,	43.5,	-45.6,	-19.3,	18	67.1,	46.6,	43.3,	-43.7,	-22.7,
19	67.1,	50.8,	46.1,	-40.4,	-25.4,	20	67.1,	81.6,	67.0,	-211.8,	65.5,
21	67.1,	74.4,	76.0,	-225.0,	33.6,	22	67.1,	178.4,	78.4,	-55.7,	-91.0,
23	67.1,	178.7,	52.5,	-25.2,	-91.7,	24	67.1,	176.6,	51.2,	-9.0,	-91.1,
25	67.1,	172.4,	74.0,	-1.9,	-89.4,	26	67.1,	164.4,	101.3,	-1.3,	-84.3,
27	67.1,	152.0,	125.4,	-0.7,	-76.3,	28	67.1,	139.2,	145.7,	-0.0,	-64.0,
29	67.1,	122.4,	161.6,	0.6,	-49.5,	30	130.2,	49.5,	63.2,	110.6,	-54.2,
31	67.1,	46.7,	53.6,	1.8,	-0.6,	32	67.1,	44.0,	51.3,	2.4,	5.2,
33	67.1,	40.0,	47.5,	2.8,	11.0,	34	67.1,	35.6,	42.9,	3.2,	15.9,
35	67.1,	41.1,	43.5,	2.1,	19.3,	36	67.1,	46.6,	43.3,	0.3,	22.7,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 23A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.5,	-23.8,	2	130.2,	58.1,	67.5,	-35.8,	-26.9,
3	130.2,	63.2,	60.5,	-26.0,	-29.2,	4	130.2,	66.5,	51.7,	-15.5,	-30.5,
5	130.2,	67.7,	41.3,	-4.4,	-31.0,	6	130.2,	69.8,	37.0,	0.2,	-29.0,
7	130.2,	73.8,	38.3,	-0.3,	-24.8,	8	130.2,	75.6,	38.5,	-0.8,	-19.8,
9	130.2,	75.2,	42.7,	-1.3,	-14.3,	10	130.2,	72.4,	51.1,	-1.8,	-8.3,
11	130.2,	67.5,	58.1,	-2.1,	-2.1,	12	130.2,	60.5,	63.2,	-2.4,	4.2,
13	130.2,	51.7,	66.5,	-2.7,	10.4,	14	130.2,	41.3,	67.7,	-2.9,	16.2,
15	130.2,	37.0,	69.8,	-5.9,	18.7,	16	130.2,	38.3,	73.8,	-12.1,	18.8,
17	130.2,	38.5,	75.6,	-18.0,	18.4,	18	130.2,	42.7,	75.2,	-23.3,	20.0,
19	130.2,	51.1,	72.4,	-27.9,	23.8,	20	130.2,	58.1,	67.5,	-31.7,	26.9,
21	130.2,	63.2,	60.5,	-34.5,	29.2,	22	130.2,	66.5,	51.7,	-36.2,	30.5,
23	130.2,	67.7,	41.3,	-36.9,	31.0,	24	130.2,	69.8,	37.0,	-37.2,	29.0,
25	130.2,	73.8,	38.3,	-38.0,	24.8,	26	130.2,	75.6,	38.5,	-37.6,	19.8,
27	130.2,	75.2,	42.7,	-41.4,	14.3,	28	130.2,	72.4,	51.1,	-49.4,	8.3,
29	130.2,	67.5,	58.1,	-55.9,	2.1,	30	130.2,	60.5,	63.2,	-60.8,	-4.2,
31	130.2,	51.7,	66.5,	-63.8,	-10.4,	32	130.2,	41.3,	67.7,	-64.8,	-16.2,
33	130.2,	37.0,	69.8,	-63.9,	-18.7,	34	130.2,	38.3,	73.8,	-61.7,	-18.8,
35	130.2,	38.5,	75.6,	-57.6,	-18.4,	36	130.2,	42.7,	75.2,	-51.9,	-20.0,

SOURCE ID: 23B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	130.2,	51.1,	72.4,	-44.5,	-23.8,	2	130.2,	58.1,	67.5,	-35.8,	-26.9,
3	130.2,	63.2,	60.5,	-26.0,	-29.2,	4	130.2,	66.5,	51.7,	-15.5,	-30.5,
5	130.2,	67.7,	41.3,	-4.4,	-31.0,	6	130.2,	69.8,	37.0,	0.2,	-29.0,
7	130.2,	73.8,	38.3,	-0.3,	-24.8,	8	130.2,	75.6,	38.5,	-0.8,	-19.8,
9	130.2,	75.2,	42.7,	-1.3,	-14.3,	10	130.2,	72.4,	51.1,	-1.8,	-8.3,
11	130.2,	67.5,	58.1,	-2.1,	-2.1,	12	130.2,	60.5,	63.2,	-2.4,	4.2,
13	130.2,	51.7,	66.5,	-2.7,	10.4,	14	130.2,	41.3,	67.7,	-2.9,	16.2,
15	130.2,	37.0,	69.8,	-5.9,	18.7,	16	130.2,	38.3,	73.8,	-12.1,	18.8,
17	130.2,	38.5,	75.6,	-18.0,	18.4,	18	130.2,	42.7,	75.2,	-23.3,	20.0,
19	130.2,	51.1,	72.4,	-27.9,	23.8,	20	130.2,	58.1,	67.5,	-31.7,	26.9,
21	130.2,	63.2,	60.5,	-34.5,	29.2,	22	130.2,	66.5,	51.7,	-36.2,	30.5,
23	130.2,	67.7,	41.3,	-36.9,	31.0,	24	130.2,	69.8,	37.0,	-37.2,	29.0,
25	130.2,	73.8,	38.3,	-38.0,	24.8,	26	130.2,	75.6,	38.5,	-37.6,	19.8,
27	130.2,	75.2,	42.7,	-41.4,	14.3,	28	130.2,	72.4,	51.1,	-49.4,	8.3,
29	130.2,	67.5,	58.1,	-55.9,	2.1,	30	130.2,	60.5,	63.2,	-60.8,	-4.2,
31	130.2,	51.7,	66.5,	-63.8,	-10.4,	32	130.2,	41.3,	67.7,	-64.8,	-16.2,
33	130.2,	37.0,	69.8,	-63.9,	-18.7,	34	130.2,	38.3,	73.8,	-61.7,	-18.8,
35	130.2,	38.5,	75.6,	-57.6,	-18.4,	36	130.2,	42.7,	75.2,	-51.9,	-20.0,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: 24

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	21.3,	88.0,	93.8,	-50.9,	10.1,	2	21.3,	93.3,	96.0,	-53.7,	9.2,
3	67.1,	172.6,	102.0,	88.5,	-26.4,	4	130.2,	63.7,	51.7,	128.2,	53.1,
5	67.1,	178.7,	52.5,	111.3,	20.9,	6	67.1,	176.6,	51.2,	106.5,	45.4,
7	67.1,	172.4,	74.0,	82.2,	70.2,	8	67.1,	164.4,	101.3,	55.4,	92.2,
9	21.3,	88.8,	80.0,	-50.6,	-2.2,	10	21.3,	93.8,	88.0,	-54.1,	-4.0,
11	21.3,	96.0,	93.3,	-55.9,	-5.7,	12	21.3,	95.2,	95.9,	-56.0,	-7.2,
13	21.3,	91.5,	95.5,	-54.5,	-8.5,	14	21.3,	85.1,	92.2,	-51.2,	-9.6,
15	21.3,	76.1,	86.1,	-46.4,	-10.3,	16	21.3,	64.7,	77.4,	-40.2,	-10.7,
17	21.3,	69.5,	81.1,	-40.2,	-10.9,	18	21.3,	80.0,	88.8,	-42.2,	-10.6,
19	130.2,	51.1,	72.4,	-194.2,	23.2,	20	130.2,	58.1,	67.5,	-195.3,	-2.6,
21	130.2,	63.2,	60.5,	-190.5,	-28.3,	22	130.2,	63.7,	51.7,	-179.9,	-53.1,
23	67.1,	178.7,	52.5,	-163.8,	-20.9,	24	67.1,	176.6,	51.2,	-157.8,	-45.4,
25	67.1,	172.4,	74.0,	-156.3,	-70.2,	26	67.1,	164.4,	101.3,	-156.7,	-92.2,
27	21.3,	88.8,	80.0,	-29.4,	2.2,	28	21.3,	93.8,	88.0,	-33.9,	4.0,
29	21.3,	96.0,	93.3,	-37.4,	5.7,	30	21.3,	95.2,	95.9,	-39.8,	7.2,
31	21.3,	91.5,	95.5,	-41.0,	8.5,	32	21.3,	85.1,	92.2,	-40.9,	9.6,
33	21.3,	76.1,	86.1,	-39.6,	10.3,	34	21.3,	64.7,	77.4,	-37.1,	10.7,
35	21.3,	69.5,	81.1,	-40.9,	10.9,	36	21.3,	80.0,	88.8,	-46.6,	10.6,

SOURCE ID: 25A

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	54.9,	77.9,	92.7,	15.9,	-65.1,
3	54.9,	65.4,	98.4,	23.4,	-53.3,	4	54.9,	51.0,	101.1,	30.2,	-39.9,
5	54.9,	35.0,	100.7,	36.1,	-25.3,	6	54.9,	28.3,	99.7,	39.7,	-9.9,
7	54.9,	44.8,	101.3,	39.2,	5.8,	8	54.9,	59.9,	99.8,	37.6,	21.3,
9	54.9,	73.1,	95.3,	34.8,	36.2,	10	54.9,	84.2,	87.9,	31.0,	50.0,
11	54.9,	92.7,	77.9,	26.2,	62.2,	12	54.9,	98.4,	65.4,	20.6,	72.6,
13	6.1,	167.8,	149.4,	1.0,	61.9,	14	6.1,	161.1,	127.6,	-2.3,	78.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	54.9,	77.9,	92.7,	-108.6,	65.1,
21	54.9,	65.4,	98.4,	-121.8,	53.3,	22	54.9,	51.0,	101.1,	-131.3,	39.9,
23	54.9,	35.0,	100.7,	-136.8,	25.3,	24	54.9,	28.3,	99.7,	-139.4,	9.9,
25	54.9,	44.8,	101.3,	-140.5,	-5.8,	26	54.9,	59.9,	99.8,	-137.4,	-21.3,
27	54.9,	73.1,	95.3,	-130.1,	-36.2,	28	54.9,	84.2,	87.9,	-118.9,	-50.0,
29	54.9,	92.7,	77.9,	-104.0,	-62.2,	30	54.9,	98.4,	65.4,	-86.0,	-72.6,
31	6.1,	167.8,	149.4,	-150.3,	-61.9,	32	6.1,	161.1,	127.6,	-125.3,	-78.0,
33	0.0,	0.0,	0.0,	0.0,	0.0,	34	0.0,	0.0,	0.0,	0.0,	0.0,
35	0.0,	0.0,	0.0,	0.0,	0.0,	36	0.0,	0.0,	0.0,	0.0,	0.0,

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

SOURCE ID: 25B

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	54.9,	87.9,	84.2,	-44.8,	-22.2,	2	54.9,	77.9,	92.7,	-45.1,	-22.3,
3	54.9,	65.4,	98.4,	-44.1,	-21.8,	4	54.9,	51.0,	101.1,	-41.8,	-20.6,
5	54.9,	35.0,	100.7,	-38.1,	-18.7,	6	54.9,	28.3,	99.7,	-34.6,	-16.3,
7	54.9,	44.8,	101.3,	-32.8,	-13.4,	8	54.9,	59.9,	99.8,	-30.0,	-10.1,
9	54.9,	73.1,	95.3,	-26.3,	-6.5,	10	54.9,	84.2,	87.9,	-21.8,	-2.7,
11	54.9,	92.7,	77.9,	-16.6,	1.2,	12	54.9,	98.4,	65.4,	-10.9,	5.1,
13	54.9,	101.1,	51.0,	-4.9,	8.8,	14	54.9,	100.7,	35.0,	1.2,	12.2,
15	54.9,	99.7,	28.3,	2.2,	15.3,	16	54.9,	101.3,	44.8,	-9.0,	17.9,
17	54.9,	99.8,	59.9,	-19.8,	19.9,	18	54.9,	95.3,	73.1,	-30.1,	21.4,
19	54.9,	87.9,	84.2,	-39.4,	22.2,	20	54.9,	77.9,	92.7,	-47.6,	22.3,
21	54.9,	65.4,	98.4,	-54.3,	21.8,	22	54.9,	51.0,	101.1,	-59.3,	20.6,
23	54.9,	35.0,	100.7,	-62.6,	18.7,	24	54.9,	28.3,	99.7,	-65.1,	16.3,
25	54.9,	44.8,	101.3,	-68.5,	13.4,	26	54.9,	59.9,	99.8,	-69.9,	10.1,
27	54.9,	73.1,	95.3,	-69.1,	6.5,	28	54.9,	84.2,	87.9,	-66.2,	2.7,
29	54.9,	92.7,	77.9,	-61.3,	-1.2,	30	54.9,	98.4,	65.4,	-54.5,	-5.1,
31	54.9,	101.1,	51.0,	-46.1,	-8.8,	32	54.9,	100.7,	35.0,	-36.2,	-12.2,
33	54.9,	99.7,	28.3,	-30.5,	-15.3,	34	54.9,	101.3,	44.8,	-35.8,	-17.9,
35	54.9,	99.8,	59.9,	-40.0,	-19.9,	36	54.9,	95.3,	73.1,	-43.1,	-21.4,

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 1 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 3 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 4 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 8 ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 9 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 11B ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 17 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 19 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 23A ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 23B ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 25B ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.5000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 2 ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 5 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 6 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
						DAY OF WEEK = MONDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = TUESDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = WEDNESDY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = THURSDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = FRIDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SATURDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SUNDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                          ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Students                    ***        13:29:35
                                                                                                              PAGE  28
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 7           ; SOURCE TYPE = POINT    :
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .3800E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Students                         ***        13:29:35
                                                                                                                   PAGE  29
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 10   ; SOURCE TYPE = POINTCAP :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 11A ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 12 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 13 ; SOURCE TYPE = POINTHOR :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.5000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 14 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1200E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 15 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 16 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 18 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
						DAY OF WEEK = MONDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = TUESDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = WEDNESDY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = THURSDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = FRIDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SATURDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
						DAY OF WEEK = SUNDAY									
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 20 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1200E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 21 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 22 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.3800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 24 ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.5800E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = 25A ; SOURCE TYPE = POINT :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = MONDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.1000E+01	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = TUESDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = WEDNESDY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = THURSDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = FRIDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 366481.1, 3769638.0,   95.5,   95.5,   0.0);   ( 366491.1, 3769638.0,   95.4,   95.4,   0.0);
( 366481.1, 3769648.0,   95.8,   95.8,   0.0);   ( 366491.1, 3769648.0,   95.6,   95.6,   0.0);
( 366501.1, 3769648.0,   95.5,   95.5,   0.0);   ( 366481.1, 3769658.0,   96.0,   96.0,   0.0);
( 366491.1, 3769658.0,   95.9,   95.9,   0.0);   ( 366501.1, 3769658.0,   95.8,   95.8,   0.0);
( 366511.1, 3769658.0,   95.6,   95.6,   0.0);   ( 366521.1, 3769658.0,   95.5,   95.5,   0.0);
( 366471.1, 3769668.0,   96.5,   96.5,   0.0);   ( 366481.1, 3769668.0,   96.3,   96.3,   0.0);
( 366491.1, 3769668.0,   96.1,   96.1,   0.0);   ( 366501.1, 3769668.0,   96.0,   96.0,   0.0);
( 366511.1, 3769668.0,   95.8,   95.8,   0.0);   ( 366461.1, 3769678.0,   96.8,   96.8,   0.0);
( 366471.1, 3769678.0,   96.7,   96.7,   0.0);   ( 366481.1, 3769678.0,   96.5,   96.5,   0.0);
( 366491.1, 3769678.0,   96.3,   96.3,   0.0);   ( 366501.1, 3769678.0,   96.2,   96.2,   0.0);
( 366451.1, 3769688.0,   97.2,   97.2,   0.0);   ( 366461.1, 3769688.0,   97.0,   97.0,   0.0);
( 366471.1, 3769688.0,   96.8,   96.8,   0.0);   ( 366481.1, 3769688.0,   96.6,   96.6,   0.0);
( 366491.1, 3769688.0,   96.4,   96.4,   0.0);   ( 366501.1, 3769688.0,   96.2,   96.2,   0.0);
( 366451.1, 3769698.0,   97.3,   97.3,   0.0);   ( 366461.1, 3769698.0,   97.1,   97.1,   0.0);
( 366471.1, 3769698.0,   96.9,   96.9,   0.0);   ( 366481.1, 3769698.0,   96.7,   96.7,   0.0);
( 366491.1, 3769698.0,   96.5,   96.5,   0.0);   ( 366451.1, 3769708.0,   97.5,   97.5,   0.0);
( 366461.1, 3769708.0,   97.3,   97.3,   0.0);   ( 366471.1, 3769708.0,   97.0,   97.0,   0.0);
( 366481.1, 3769708.0,   96.7,   96.7,   0.0);   ( 366461.1, 3769718.0,   97.4,   97.4,   0.0);
( 366471.1, 3769718.0,   97.1,   97.1,   0.0);   ( 366481.1, 3769638.0,   95.5,   95.5,   3.0);
( 366491.1, 3769638.0,   95.4,   95.4,   3.0);   ( 366481.1, 3769648.0,   95.8,   95.8,   3.0);
( 366491.1, 3769648.0,   95.6,   95.6,   3.0);   ( 366501.1, 3769648.0,   95.5,   95.5,   3.0);
( 366481.1, 3769658.0,   96.0,   96.0,   3.0);   ( 366491.1, 3769658.0,   95.9,   95.9,   3.0);
( 366501.1, 3769658.0,   95.8,   95.8,   3.0);   ( 366511.1, 3769658.0,   95.6,   95.6,   3.0);
( 366521.1, 3769658.0,   95.5,   95.5,   3.0);   ( 366471.1, 3769668.0,   96.5,   96.5,   3.0);
( 366481.1, 3769668.0,   96.3,   96.3,   3.0);   ( 366491.1, 3769668.0,   96.1,   96.1,   3.0);
( 366501.1, 3769668.0,   96.0,   96.0,   3.0);   ( 366511.1, 3769668.0,   95.8,   95.8,   3.0);
( 366461.1, 3769678.0,   96.8,   96.8,   3.0);   ( 366471.1, 3769678.0,   96.7,   96.7,   3.0);
( 366481.1, 3769678.0,   96.5,   96.5,   3.0);   ( 366491.1, 3769678.0,   96.3,   96.3,   3.0);
( 366501.1, 3769678.0,   96.2,   96.2,   3.0);   ( 366451.1, 3769688.0,   97.2,   97.2,   3.0);
( 366461.1, 3769688.0,   97.0,   97.0,   3.0);   ( 366471.1, 3769688.0,   96.8,   96.8,   3.0);
( 366481.1, 3769688.0,   96.6,   96.6,   3.0);   ( 366491.1, 3769688.0,   96.4,   96.4,   3.0);
( 366501.1, 3769688.0,   96.2,   96.2,   3.0);   ( 366451.1, 3769698.0,   97.3,   97.3,   3.0);
( 366461.1, 3769698.0,   97.1,   97.1,   3.0);   ( 366471.1, 3769698.0,   96.9,   96.9,   3.0);
( 366481.1, 3769698.0,   96.7,   96.7,   3.0);   ( 366491.1, 3769698.0,   96.5,   96.5,   3.0);
( 366451.1, 3769708.0,   97.5,   97.5,   3.0);   ( 366461.1, 3769708.0,   97.3,   97.3,   3.0);
( 366471.1, 3769708.0,   97.0,   97.0,   3.0);   ( 366481.1, 3769708.0,   96.7,   96.7,   3.0);
( 366461.1, 3769718.0,   97.4,   97.4,   3.0);   ( 366471.1, 3769718.0,   97.1,   97.1,   3.0);
( 366481.1, 3769638.0,   95.5,   95.5,   6.1);   ( 366491.1, 3769638.0,   95.4,   95.4,   6.1);
( 366481.1, 3769648.0,   95.8,   95.8,   6.1);   ( 366491.1, 3769648.0,   95.6,   95.6,   6.1);
( 366501.1, 3769648.0,   95.5,   95.5,   6.1);   ( 366481.1, 3769658.0,   96.0,   96.0,   6.1);
( 366491.1, 3769658.0,   95.9,   95.9,   6.1);   ( 366501.1, 3769658.0,   95.8,   95.8,   6.1);
( 366511.1, 3769658.0,   95.6,   95.6,   6.1);   ( 366521.1, 3769658.0,   95.5,   95.5,   6.1);
```

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,      96.5,       96.5,        6.1);
( 366481.1, 3769668.0,      96.3,       96.3,        6.1);
( 366491.1, 3769668.0,      96.1,       96.1,        6.1);
( 366501.1, 3769668.0,      96.0,       96.0,        6.1);
( 366511.1, 3769668.0,      95.8,       95.8,        6.1);
( 366461.1, 3769678.0,      96.8,       96.8,        6.1);
( 366471.1, 3769678.0,      96.7,       96.7,        6.1);
( 366481.1, 3769678.0,      96.5,       96.5,        6.1);
( 366491.1, 3769678.0,      96.3,       96.3,        6.1);
( 366501.1, 3769678.0,      96.2,       96.2,        6.1);
( 366451.1, 3769688.0,      97.2,       97.2,        6.1);
( 366461.1, 3769688.0,      97.0,       97.0,        6.1);
( 366471.1, 3769688.0,      96.8,       96.8,        6.1);
( 366481.1, 3769688.0,      96.6,       96.6,        6.1);
( 366491.1, 3769688.0,      96.4,       96.4,        6.1);
( 366501.1, 3769688.0,      96.2,       96.2,        6.1);
( 366451.1, 3769698.0,      97.3,       97.3,        6.1);
( 366461.1, 3769698.0,      97.1,       97.1,        6.1);
( 366471.1, 3769698.0,      96.9,       96.9,        6.1);
( 366481.1, 3769698.0,      96.7,       96.7,        6.1);
( 366491.1, 3769698.0,      96.5,       96.5,        6.1);
( 366451.1, 3769708.0,      97.5,       97.5,        6.1);
( 366461.1, 3769708.0,      97.3,       97.3,        6.1);
( 366471.1, 3769708.0,      97.0,       97.0,        6.1);
( 366481.1, 3769708.0,      96.7,       96.7,        6.1);
( 366461.1, 3769718.0,      97.4,       97.4,        6.1);
( 366471.1, 3769718.0,      97.1,       97.1,        6.1);
( 366412.3, 3769692.5,      97.8,       97.8,        0.0);
( 366420.8, 3769692.8,      97.7,       97.7,        0.0);
( 366431.4, 3769704.4,      97.9,       97.9,        0.0);
( 366431.1, 3769693.8,      97.6,       97.6,        0.0);
( 366441.3, 3769691.1,      97.4,       97.4,        0.0);
( 366421.2, 3769678.5,      97.4,       97.4,        0.0);
( 366430.7, 3769680.2,      97.3,       97.3,        0.0);
( 366442.0, 3769680.2,      97.1,       97.1,        0.0);
( 366450.8, 3769679.5,      97.0,       97.0,        0.0);
( 366460.7, 3769667.6,      96.6,       96.6,        0.0);
( 366450.5, 3769667.2,      96.7,       96.7,        0.0);
( 366442.0, 3769667.6,      96.9,       96.9,        0.0);
( 366430.7, 3769667.6,      97.0,       97.0,        0.0);
( 366470.6, 3769658.0,      96.2,       96.2,        0.0);
( 366461.1, 3769658.0,      96.3,       96.3,        0.0);
( 366449.8, 3769658.0,      96.5,       96.5,        0.0);
( 366441.3, 3769658.7,      96.7,       96.7,        0.0);
( 366520.4, 3769648.8,      95.3,       95.3,        0.0);
( 366511.2, 3769650.2,      95.4,       95.4,        0.0);
( 366500.9, 3769639.6,      95.3,       95.3,        0.0);
( 366491.4, 3769630.1,      95.3,       95.3,        0.0);
( 366480.5, 3769629.4,      95.4,       95.4,        0.0);
( 366470.9, 3769648.2,      95.9,       95.9,        0.0);
( 366470.6, 3769639.6,      95.7,       95.7,        0.0);
( 366469.9, 3769629.4,      95.5,       95.5,        0.0);
( 366469.6, 3769616.5,      95.2,       95.2,        0.0);
( 366480.8, 3769620.9,      95.2,       95.2,        0.0);
( 366460.4, 3769629.8,      95.7,       95.7,        0.0);
( 366460.4, 3769639.6,      95.9,       95.9,        0.0);
( 366459.3, 3769648.8,      96.1,       96.1,        0.0);
( 366449.1, 3769648.2,      96.3,       96.3,        0.0);
( 366449.1, 3769640.0,      96.1,       96.1,        0.0);
```

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                    ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Students                              ***        13:29:35
                                                                                                                        PAGE  44
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                                                     *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                        (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                                     (METERS/SEC)

                                                                1.54,   3.09,   5.14,   8.23,  10.80,
```

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION  15181 ***    *** Geffen Acad at UCLA                                                ***        04/19/16
*** AERMET - VERSION  14134 ***    *** Operation - Stationary Sources - Students                          ***        13:29:35
                                                                                                                      PAGE  45
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

                                   *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

  Surface file:   C:\!MET Files\SCAQMD Met Files\wsla8.sfc                                     Met Version:  14134
  Profile file:   C:\!MET Files\SCAQMD Met Files\wsla8.PFL
  Surface format: FREE
  Profile format: FREE
  Surface station no.:       0                Upper air station no.:     3190
                 Name: UNKNOWN                                  Name: UNKNOWN
                 Year:   2008                                   Year:   2008
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First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
1	1ST HIGHEST VALUE IS	0.28752	AT (366461.11, 3769718.05, 97.38, 97.38, 3.05)	DC	
	2ND HIGHEST VALUE IS	0.28453	AT (366471.11, 3769718.05, 97.08, 97.08, 3.05)	DC	
	3RD HIGHEST VALUE IS	0.28306	AT (366461.11, 3769718.05, 97.38, 97.38, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.28010	AT (366471.11, 3769718.05, 97.08, 97.08, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.27696	AT (366461.11, 3769718.05, 97.38, 97.38, 6.10)	DC	
	6TH HIGHEST VALUE IS	0.27683	AT (366471.11, 3769718.05, 97.08, 97.08, 6.10)	DC	
	7TH HIGHEST VALUE IS	0.26895	AT (366451.11, 3769708.05, 97.54, 97.54, 3.05)	DC	
	8TH HIGHEST VALUE IS	0.26619	AT (366461.11, 3769708.05, 97.27, 97.27, 3.05)	DC	
	9TH HIGHEST VALUE IS	0.26498	AT (366451.11, 3769708.05, 97.54, 97.54, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.26363	AT (366471.11, 3769708.05, 96.99, 96.99, 3.05)	DC	
10	1ST HIGHEST VALUE IS	0.01240	AT (366501.11, 3769688.05, 96.21, 96.21, 6.10)	DC	
	2ND HIGHEST VALUE IS	0.01235	AT (366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
	3RD HIGHEST VALUE IS	0.01233	AT (366491.11, 3769698.05, 96.47, 96.47, 6.10)	DC	
	4TH HIGHEST VALUE IS	0.01229	AT (366491.11, 3769698.05, 96.47, 96.47, 3.05)	DC	
	5TH HIGHEST VALUE IS	0.01227	AT (366501.11, 3769688.05, 96.21, 96.21, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.01221	AT (366491.11, 3769698.05, 96.47, 96.47, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.01190	AT (366491.11, 3769688.05, 96.40, 96.40, 6.10)	DC	
	8TH HIGHEST VALUE IS	0.01190	AT (366481.11, 3769708.05, 96.73, 96.73, 6.10)	DC	
	9TH HIGHEST VALUE IS	0.01187	AT (366501.11, 3769678.05, 96.16, 96.16, 6.10)	DC	
	10TH HIGHEST VALUE IS	0.01187	AT (366511.11, 3769668.05, 95.81, 95.81, 6.10)	DC	
2	1ST HIGHEST VALUE IS	0.01035	AT (366471.11, 3769718.05, 97.08, 97.08, 3.05)	DC	
	2ND HIGHEST VALUE IS	0.01026	AT (366471.11, 3769718.05, 97.08, 97.08, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.01015	AT (366461.11, 3769718.05, 97.38, 97.38, 3.05)	DC	
	4TH HIGHEST VALUE IS	0.01007	AT (366461.11, 3769718.05, 97.38, 97.38, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.00986	AT (366471.11, 3769718.05, 97.08, 97.08, 6.10)	DC	
	6TH HIGHEST VALUE IS	0.00962	AT (366481.11, 3769708.05, 96.73, 96.73, 3.05)	DC	
	7TH HIGHEST VALUE IS	0.00961	AT (366461.11, 3769718.05, 97.38, 97.38, 6.10)	DC	
	8TH HIGHEST VALUE IS	0.00954	AT (366481.11, 3769708.05, 96.73, 96.73, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.00946	AT (366471.11, 3769708.05, 96.99, 96.99, 3.05)	DC	
	10TH HIGHEST VALUE IS	0.00939	AT (366471.11, 3769708.05, 96.99, 96.99, 0.00)	DC	
3	1ST HIGHEST VALUE IS	5.52853	AT (366461.11, 3769718.05, 97.38, 97.38, 0.00)	DC	
	2ND HIGHEST VALUE IS	5.13247	AT (366471.11, 3769718.05, 97.08, 97.08, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.97339	AT (366461.11, 3769718.05, 97.38, 97.38, 3.05)	DC	
	4TH HIGHEST VALUE IS	4.69782	AT (366471.11, 3769718.05, 97.08, 97.08, 3.05)	DC	

	5TH HIGHEST VALUE IS	4.68245 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	6TH HIGHEST VALUE IS	4.54807 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	7TH HIGHEST VALUE IS	4.48045 AT (	366461.11,	3769708.05,	97.27,	97.27,	0.00)	DC
	8TH HIGHEST VALUE IS	4.32341 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	9TH HIGHEST VALUE IS	4.22501 AT (	366471.11,	3769708.05,	96.99,	96.99,	0.00)	DC
	10TH HIGHEST VALUE IS	4.20424 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
4	1ST HIGHEST VALUE IS	1.44704 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	2ND HIGHEST VALUE IS	1.40628 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	3RD HIGHEST VALUE IS	1.38007 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	4TH HIGHEST VALUE IS	1.36140 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	5TH HIGHEST VALUE IS	1.32422 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	6TH HIGHEST VALUE IS	1.30253 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	7TH HIGHEST VALUE IS	1.29658 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	8TH HIGHEST VALUE IS	1.28474 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	9TH HIGHEST VALUE IS	1.28098 AT (	366461.11,	3769708.05,	97.27,	97.27,	0.00)	DC
	10TH HIGHEST VALUE IS	1.25510 AT (	366471.11,	3769708.05,	96.99,	96.99,	0.00)	DC
5	1ST HIGHEST VALUE IS	0.02464 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	2ND HIGHEST VALUE IS	0.02435 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	3RD HIGHEST VALUE IS	0.02404 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	4TH HIGHEST VALUE IS	0.02384 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	5TH HIGHEST VALUE IS	0.02359 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	6TH HIGHEST VALUE IS	0.02321 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	7TH HIGHEST VALUE IS	0.02279 AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC
	8TH HIGHEST VALUE IS	0.02252 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	9TH HIGHEST VALUE IS	0.02231 AT (	366471.11,	3769708.05,	96.99,	96.99,	3.05)	DC
	10TH HIGHEST VALUE IS	0.02230 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC
6	1ST HIGHEST VALUE IS	0.01444 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	2ND HIGHEST VALUE IS	0.01433 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	3RD HIGHEST VALUE IS	0.01427 AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC
	4TH HIGHEST VALUE IS	0.01418 AT (	366501.11,	3769678.05,	96.16,	96.16,	3.05)	DC
	5TH HIGHEST VALUE IS	0.01418 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	6TH HIGHEST VALUE IS	0.01413 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	7TH HIGHEST VALUE IS	0.01409 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	8TH HIGHEST VALUE IS	0.01408 AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC
	9TH HIGHEST VALUE IS	0.01408 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	10TH HIGHEST VALUE IS	0.01408 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
7	1ST HIGHEST VALUE IS	0.00457 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	2ND HIGHEST VALUE IS	0.00457 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00456 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	4TH HIGHEST VALUE IS	0.00454 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00453 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	6TH HIGHEST VALUE IS	0.00453 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00453 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	8TH HIGHEST VALUE IS	0.00452 AT (	366501.11,	3769678.05,	96.16,	96.16,	3.05)	DC
	9TH HIGHEST VALUE IS	0.00452 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00451 AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	OF TYPE	NETWORK GRID-ID
8	1ST HIGHEST VALUE IS	4.23628	AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	3.55961	AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	3RD HIGHEST VALUE IS	3.40877	AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	4TH HIGHEST VALUE IS	2.96762	AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC	
	5TH HIGHEST VALUE IS	2.78704	AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	6TH HIGHEST VALUE IS	2.52390	AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC	
	7TH HIGHEST VALUE IS	2.42542	AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC	
	8TH HIGHEST VALUE IS	2.40709	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	9TH HIGHEST VALUE IS	2.39219	AT (	366441.29,	3769691.11,	97.39,	97.39,	0.00)	DC	
	10TH HIGHEST VALUE IS	2.26743	AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC	
9	1ST HIGHEST VALUE IS	0.10438	AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
	2ND HIGHEST VALUE IS	0.10332	AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
	3RD HIGHEST VALUE IS	0.10329	AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.10222	AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	
	5TH HIGHEST VALUE IS	0.10215	AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.10116	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.09909	AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC	
	8TH HIGHEST VALUE IS	0.09896	AT (	366471.11,	3769708.05,	96.99,	96.99,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.09860	AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC	
	10TH HIGHEST VALUE IS	0.09810	AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC	
11A	1ST HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	2ND HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	3RD HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	4TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	5TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	6TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	7TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	8TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	9TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
	10TH HIGHEST VALUE IS	0.00000	AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
11B	1ST HIGHEST VALUE IS	0.58286	AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.55253	AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.54515	AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.51826	AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC	

	5TH HIGHEST VALUE IS	0.50742 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC
	6TH HIGHEST VALUE IS	0.49181 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	7TH HIGHEST VALUE IS	0.48326 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC
	8TH HIGHEST VALUE IS	0.48064 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	9TH HIGHEST VALUE IS	0.47688 AT (	366441.29,	3769691.11,	97.39,	97.39,	0.00)	DC
	10TH HIGHEST VALUE IS	0.47595 AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC
12	1ST HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	2ND HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	3RD HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	4TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	5TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	6TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	7TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	8TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	9TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
	10TH HIGHEST VALUE IS	0.00000 AT (	0.00,	0.00,	0.00,	0.00,	0.00)	
13	1ST HIGHEST VALUE IS	0.00270 AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC
	2ND HIGHEST VALUE IS	0.00270 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00269 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00264 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	5TH HIGHEST VALUE IS	0.00264 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	6TH HIGHEST VALUE IS	0.00263 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00261 AT (	366481.11,	3769708.05,	96.73,	96.73,	6.10)	DC
	8TH HIGHEST VALUE IS	0.00261 AT (	366481.11,	3769708.05,	96.73,	96.73,	3.05)	DC
	9TH HIGHEST VALUE IS	0.00260 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00257 AT (	366471.11,	3769708.05,	96.99,	96.99,	6.10)	DC
14	1ST HIGHEST VALUE IS	0.00133 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00132 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00130 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	4TH HIGHEST VALUE IS	0.00129 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00128 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00128 AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC
	7TH HIGHEST VALUE IS	0.00126 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	8TH HIGHEST VALUE IS	0.00126 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00126 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
	10TH HIGHEST VALUE IS	0.00125 AT (	366451.11,	3769708.05,	97.54,	97.54,	6.10)	DC
15	1ST HIGHEST VALUE IS	0.01028 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00996 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	3RD HIGHEST VALUE IS	0.00994 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00987 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	5TH HIGHEST VALUE IS	0.00975 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00955 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC
	7TH HIGHEST VALUE IS	0.00949 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC
	8TH HIGHEST VALUE IS	0.00946 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00939 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	10TH HIGHEST VALUE IS	0.00936 AT (	366501.11,	3769648.05,	95.53,	95.53,	3.05)	DC

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
16	1ST HIGHEST VALUE IS	0.00442 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	2ND HIGHEST VALUE IS	0.00440 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.00434 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	4TH HIGHEST VALUE IS	0.00434 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.00419 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	6TH HIGHEST VALUE IS	0.00416 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.00414 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.00411 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.00409 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.00407 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
17	1ST HIGHEST VALUE IS	0.33941 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.33878 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	3RD HIGHEST VALUE IS	0.33680 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.32357 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	5TH HIGHEST VALUE IS	0.31966 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.31798 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	7TH HIGHEST VALUE IS	0.31744 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.31726 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.31428 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.30437 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
18	1ST HIGHEST VALUE IS	0.01068 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.01066 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.01038 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	4TH HIGHEST VALUE IS	0.01017 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.01016 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	6TH HIGHEST VALUE IS	0.01014 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.01009 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.00989 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC	
	9TH HIGHEST VALUE IS	0.00980 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
	10TH HIGHEST VALUE IS	0.00969 AT (	366501.11,	3769658.05,	95.75,	95.75,	0.00)	DC	
19	1ST HIGHEST VALUE IS	0.57871 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.56207 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.56196 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	4TH HIGHEST VALUE IS	0.55228 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	

Model Input - Stationary Sources for Students
Unit Emission Rates (1 g/s)

	5TH HIGHEST VALUE IS	0.54865 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	6TH HIGHEST VALUE IS	0.53814 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
	7TH HIGHEST VALUE IS	0.53125 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	8TH HIGHEST VALUE IS	0.53001 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	9TH HIGHEST VALUE IS	0.52806 AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC
	10TH HIGHEST VALUE IS	0.52774 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
20	1ST HIGHEST VALUE IS	0.00223 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC
	2ND HIGHEST VALUE IS	0.00223 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	3RD HIGHEST VALUE IS	0.00222 AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC
	4TH HIGHEST VALUE IS	0.00218 AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC
	5TH HIGHEST VALUE IS	0.00217 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
	6TH HIGHEST VALUE IS	0.00215 AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC
	7TH HIGHEST VALUE IS	0.00215 AT (	366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC
	8TH HIGHEST VALUE IS	0.00213 AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC
	9TH HIGHEST VALUE IS	0.00213 AT (	366480.48,	3769629.41,	95.38,	95.38,	0.00)	DC
	10TH HIGHEST VALUE IS	0.00213 AT (	366501.11,	3769648.05,	95.53,	95.53,	3.05)	DC
21	1ST HIGHEST VALUE IS	0.04400 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	2ND HIGHEST VALUE IS	0.04211 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	3RD HIGHEST VALUE IS	0.04113 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	4TH HIGHEST VALUE IS	0.04067 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	5TH HIGHEST VALUE IS	0.03743 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
	6TH HIGHEST VALUE IS	0.03526 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
	7TH HIGHEST VALUE IS	0.03512 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC
	8TH HIGHEST VALUE IS	0.03417 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC
	9TH HIGHEST VALUE IS	0.03361 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	10TH HIGHEST VALUE IS	0.03339 AT (	366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC
22	1ST HIGHEST VALUE IS	0.02007 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	2ND HIGHEST VALUE IS	0.01937 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	3RD HIGHEST VALUE IS	0.01921 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	4TH HIGHEST VALUE IS	0.01901 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	5TH HIGHEST VALUE IS	0.01841 AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC
	6TH HIGHEST VALUE IS	0.01758 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
	7TH HIGHEST VALUE IS	0.01743 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC
	8TH HIGHEST VALUE IS	0.01731 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC
	9TH HIGHEST VALUE IS	0.01724 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	10TH HIGHEST VALUE IS	0.01686 AT (	366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC
23A	1ST HIGHEST VALUE IS	5.66007 AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
	2ND HIGHEST VALUE IS	4.65409 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	3RD HIGHEST VALUE IS	4.30904 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	4TH HIGHEST VALUE IS	3.82059 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	5TH HIGHEST VALUE IS	3.11389 AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC
	6TH HIGHEST VALUE IS	2.76201 AT (	366501.11,	3769648.05,	95.53,	95.53,	6.10)	DC
	7TH HIGHEST VALUE IS	2.54019 AT (	366511.11,	3769668.05,	95.81,	95.81,	6.10)	DC
	8TH HIGHEST VALUE IS	2.43547 AT (	366511.11,	3769658.05,	95.60,	95.60,	3.05)	DC
	9TH HIGHEST VALUE IS	2.29506 AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC
	10TH HIGHEST VALUE IS	2.22675 AT (	366491.11,	3769638.05,	95.43,	95.43,	6.10)	DC

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	OF TYPE	NETWORK GRID-ID
23B	1ST HIGHEST VALUE IS	23.24892	AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC	
	2ND HIGHEST VALUE IS	16.87991	AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	3RD HIGHEST VALUE IS	15.49782	AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	4TH HIGHEST VALUE IS	14.94642	AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	5TH HIGHEST VALUE IS	14.35575	AT (	366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC	
	6TH HIGHEST VALUE IS	13.36410	AT (	366511.11,	3769658.05,	95.60,	95.60,	6.10)	DC	
	7TH HIGHEST VALUE IS	12.04114	AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC	
	8TH HIGHEST VALUE IS	11.79340	AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	9TH HIGHEST VALUE IS	11.38719	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	10TH HIGHEST VALUE IS	11.12488	AT (	366501.11,	3769648.05,	95.53,	95.53,	6.10)	DC	
24	1ST HIGHEST VALUE IS	0.03349	AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.03333	AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.03284	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.03237	AT (	366511.16,	3769650.20,	95.44,	95.44,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.03230	AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.03194	AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.03191	AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
	8TH HIGHEST VALUE IS	0.03190	AT (	366491.11,	3769638.05,	95.43,	95.43,	6.10)	DC	
	9TH HIGHEST VALUE IS	0.03187	AT (	366501.11,	3769648.05,	95.53,	95.53,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.03182	AT (	366501.11,	3769648.05,	95.53,	95.53,	3.05)	DC	
25A	1ST HIGHEST VALUE IS	0.01501	AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	2ND HIGHEST VALUE IS	0.01494	AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	3RD HIGHEST VALUE IS	0.01487	AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	4TH HIGHEST VALUE IS	0.01484	AT (	366441.29,	3769658.73,	96.66,	96.66,	0.00)	DC	
	5TH HIGHEST VALUE IS	0.01472	AT (	366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC	
	6TH HIGHEST VALUE IS	0.01454	AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	7TH HIGHEST VALUE IS	0.01448	AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	8TH HIGHEST VALUE IS	0.01444	AT (	366460.37,	3769639.64,	95.91,	95.91,	0.00)	DC	
	9TH HIGHEST VALUE IS	0.01432	AT (	366449.81,	3769658.04,	96.52,	96.52,	0.00)	DC	
	10TH HIGHEST VALUE IS	0.01423	AT (	366441.97,	3769667.59,	96.86,	96.86,	0.00)	DC	
25B	1ST HIGHEST VALUE IS	7.80768	AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	7.73656	AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	3RD HIGHEST VALUE IS	7.63523	AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	4TH HIGHEST VALUE IS	7.46758	AT (	366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC	

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  5TH HIGHEST VALUE IS       7.44378 AT (  366469.92,  3769629.41,    95.52,    95.52,    0.00)  DC
  6TH HIGHEST VALUE IS       7.41834 AT (  366460.37,  3769639.64,    95.91,    95.91,    0.00)  DC
  7TH HIGHEST VALUE IS       7.32666 AT (  366441.29,  3769658.73,    96.66,    96.66,    0.00)  DC
  8TH HIGHEST VALUE IS       7.28282 AT (  366480.82,  3769620.89,    95.20,    95.20,    0.00)  DC
  9TH HIGHEST VALUE IS       7.19463 AT (  366430.72,  3769667.59,    97.02,    97.02,    0.00)  DC
 10TH HIGHEST VALUE IS       7.14498 AT (  366421.17,  3769678.50,    97.39,    97.39,    0.00)  DC

*** RECEPTOR TYPES:  GC = GRIDCART
                     GP = GRIDPOLR
                     DC = DISCCART
                     DP = DISCPOLR
```

**MODELOPTs: NonDFAULT CONC ELEV FLGPOL BETA URBAN

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
1	HIGH	1ST HIGH VALUE IS	69.53797	ON 11032316: AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
10	HIGH	1ST HIGH VALUE IS	31.06856	ON 08012111: AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC	
2	HIGH	1ST HIGH VALUE IS	19.67650	ON 11121211: AT (	366471.11,	3769718.05,	97.08,	97.08,	6.10)	DC	
3	HIGH	1ST HIGH VALUE IS	2124.01534	ON 11121517: AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
4	HIGH	1ST HIGH VALUE IS	170.67611	ON 09060311: AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
5	HIGH	1ST HIGH VALUE IS	76.20430	ON 09120711: AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
6	HIGH	1ST HIGH VALUE IS	37.82583	ON 08012111: AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	
7	HIGH	1ST HIGH VALUE IS	11.75755	ON 08012111: AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
8	HIGH	1ST HIGH VALUE IS	541.52516	ON 12122017: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
9	HIGH	1ST HIGH VALUE IS	60.86735	ON 11121517: AT (	366461.11,	3769718.05,	97.38,	97.38,	6.10)	DC	
11A	HIGH	1ST HIGH VALUE IS	0.00000	ON 00000000: AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
11B	HIGH	1ST HIGH VALUE IS	49.56813	ON 10110816: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
12	HIGH	1ST HIGH VALUE IS	0.00000	ON 00000000: AT (	0.00,	0.00,	0.00,	0.00,	0.00)		
13	HIGH	1ST HIGH VALUE IS	17.51842	ON 08050911: AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
14	HIGH	1ST HIGH VALUE IS	2.12311	ON 10021511: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
15	HIGH	1ST HIGH VALUE IS	23.28224	ON 10121311: AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
16	HIGH	1ST HIGH VALUE IS	12.68425	ON 10121311: AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
17	HIGH	1ST HIGH VALUE IS	142.88886	ON 11121917: AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
18	HIGH	1ST HIGH VALUE IS	24.18176	ON 09101911: AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	

19	HIGH	1ST HIGH VALUE IS	139.55296	ON 10020516:	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
20	HIGH	1ST HIGH VALUE IS	7.08880	ON 09101211:	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
21	HIGH	1ST HIGH VALUE IS	55.59613	ON 10112211:	AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC
22	HIGH	1ST HIGH VALUE IS	47.59325	ON 09101211:	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
23A	HIGH	1ST HIGH VALUE IS	275.76907	ON 12112916:	AT (	366491.11,	3769688.05,	96.40,	96.40,	0.00)	DC
23B	HIGH	1ST HIGH VALUE IS	999.58896	ON 08110711:	AT (	366521.11,	3769658.05,	95.45,	95.45,	6.10)	DC
24	HIGH	1ST HIGH VALUE IS	18.68334	ON 08011411:	AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC
25A	HIGH	1ST HIGH VALUE IS	39.96909	ON 10062811:	AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC
25B	HIGH	1ST HIGH VALUE IS	216.88688	ON 12021511:	AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                          ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Operation - Stationary Sources - Students                    ***        13:29:35
                                                                                                              PAGE 167
**MODELOPTs:   NonDFAULT CONC      ELEV      FLGPOL    BETA      URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of          18 Warning Message(s)
A Total of        1558 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of         115 Calm Hours Identified

A Total of        1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
SO W320      95        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320      96        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320      98        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     100        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     101        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     106        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     107        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     108        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     112        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     113        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     114        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     115        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     116        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     119        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     120        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     123        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     124        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS
SO W320     125        PPARM: Input Parameter May Be Out-of-Range for Parameter           VS

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

Results Summary

Geffen Acad at UCLA
Mobile Sources - Staff

Concentration - Source Group: 26A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	66.46602	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	9/6/2011, 18
8-HR	1ST	27.12814	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	12/6/2010, 24
PERIOD		5.73501	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 26B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	65.75242	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	9/6/2011, 18
8-HR	1ST	26.84951	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	12/6/2010, 24
PERIOD		5.77135	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 27A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	65.59122	ug/m^3	366451.11	3769688.05	97.16	6.10	97.16	10/27/2008, 18
8-HR	1ST	21.91966	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	12/6/2010, 24
PERIOD		3.45205	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	

Results Summary

Geffen Acad at UCLA
Mobile Sources - Staff

Concentration - Source Group: 27B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	66.17439	ug/m^3	366451.11	3769688.05	97.16	3.05	97.16	9/25/2009, 18
8-HR	1ST	21.79908	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	12/6/2010, 24
PERIOD		3.46215	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	

Concentration - Source Group: 28A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	128.22429	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	2/26/2009, 18
8-HR	1ST	45.78425	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	12/6/2010, 24
PERIOD		7.06325	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Concentration - Source Group: 28B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	125.67820	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	2/26/2009, 18
8-HR	1ST	44.85949	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	12/6/2010, 24
PERIOD		6.66856	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Results Summary

Geffen Acad at UCLA
Mobile Sources - Staff

Concentration - Source Group: 29A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	580.67553	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	9/6/2011, 18
8-HR	1ST	218.53733	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	12/6/2010, 24
PERIOD		39.37572	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 29B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	509.55680	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	9/6/2011, 18
8-HR	1ST	192.43031	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	12/6/2010, 24
PERIOD		33.60661	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 30A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	49.80533	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	11/15/2012, 17
8-HR	1ST	18.24916	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	12/6/2010, 24
PERIOD		2.11233	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Results Summary

Geffen Acad at UCLA
Mobile Sources - Staff

Concentration - Source Group: 30B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	62.34538	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	11/24/2008, 18
8-HR	1ST	18.18284	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	12/6/2010, 24
PERIOD		2.08893	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                   ***        04/21/16
 *** AERMET - VERSION  14134 ***   *** Mobile Sources - Staff                                                ***        13:18:50
                                                                                                                         PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                            ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for   322 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.
         6. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Accepts FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  OTHER

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR  24-HR
     and Calculates PERIOD Averages

 **This Run Includes:    322 Source(s);      10 Source Group(s); and     143 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    322 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 OPENPIT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      4.0 MB of RAM.

**Detailed Error/Message File:   geffenmobilestaff.err
**File for Summary of Results:   geffenmobilestaff.sum
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.37037E-01	366891.5	3769670.7	98.6	0.60	14.19	3.03	YES	HRDOW
L0000002	0	0.37037E-01	366862.4	3769661.4	97.8	0.60	14.19	3.03	YES	HRDOW
L0000003	0	0.37037E-01	366833.4	3769652.0	96.8	0.60	14.19	3.03	YES	HRDOW
L0000004	0	0.37037E-01	366804.4	3769642.6	95.9	0.60	14.19	3.03	YES	HRDOW
L0000005	0	0.37037E-01	366775.4	3769633.2	94.8	0.60	14.19	3.03	YES	HRDOW
L0000006	0	0.37037E-01	366746.3	3769623.8	93.9	0.60	14.19	3.03	YES	HRDOW
L0000007	0	0.37037E-01	366717.3	3769614.5	93.4	0.60	14.19	3.03	YES	HRDOW
L0000008	0	0.37037E-01	366688.3	3769605.1	93.1	0.60	14.19	3.03	YES	HRDOW
L0000009	0	0.37037E-01	366659.3	3769595.7	93.0	0.60	14.19	3.03	YES	HRDOW
L0000010	0	0.37037E-01	366630.3	3769586.3	93.0	0.60	14.19	3.03	YES	HRDOW
L0000011	0	0.37037E-01	366601.2	3769576.9	92.9	0.60	14.19	3.03	YES	HRDOW
L0000012	0	0.37037E-01	366572.2	3769567.6	93.0	0.60	14.19	3.03	YES	HRDOW
L0000013	0	0.37037E-01	366543.2	3769558.2	93.2	0.60	14.19	3.03	YES	HRDOW
L0000014	0	0.37037E-01	366514.2	3769548.8	93.5	0.60	14.19	3.03	YES	HRDOW
L0000015	0	0.37037E-01	366485.1	3769539.4	93.7	0.60	14.19	3.03	YES	HRDOW
L0000016	0	0.37037E-01	366456.1	3769530.0	93.8	0.60	14.19	3.03	YES	HRDOW
L0000017	0	0.37037E-01	366427.1	3769520.7	93.9	0.60	14.19	3.03	YES	HRDOW
L0000018	0	0.37037E-01	366398.1	3769511.3	94.0	0.60	14.19	3.03	YES	HRDOW
L0000019	0	0.37037E-01	366369.1	3769501.9	94.1	0.60	14.19	3.03	YES	HRDOW
L0000020	0	0.37037E-01	366340.0	3769492.5	94.3	0.60	14.19	3.03	YES	HRDOW
L0000021	0	0.37037E-01	366311.0	3769483.2	94.5	0.60	14.19	3.03	YES	HRDOW
L0000022	0	0.37037E-01	366282.6	3769472.4	94.8	0.60	14.19	3.03	YES	HRDOW
L0000023	0	0.37037E-01	366256.2	3769457.1	94.9	0.60	14.19	3.03	YES	HRDOW
L0000024	0	0.37037E-01	366229.9	3769441.8	95.0	0.60	14.19	3.03	YES	HRDOW
L0000025	0	0.37037E-01	366203.5	3769426.5	95.3	0.60	14.19	3.03	YES	HRDOW
L0000026	0	0.37037E-01	366177.1	3769411.2	95.6	0.60	14.19	3.03	YES	HRDOW
L0000027	0	0.37037E-01	366150.7	3769395.9	96.2	0.60	14.19	3.03	YES	HRDOW
L0000028	0	0.27027E-01	366096.3	3769936.1	105.2	0.60	10.88	2.81	YES	HRDOW
L0000029	0	0.27027E-01	366109.9	3769917.1	104.5	0.60	10.88	2.81	YES	HRDOW
L0000030	0	0.27027E-01	366123.5	3769898.1	104.2	0.60	10.88	2.81	YES	HRDOW
L0000031	0	0.27027E-01	366137.0	3769879.0	103.8	0.60	10.88	2.81	YES	HRDOW
L0000032	0	0.27027E-01	366150.6	3769860.0	103.4	0.60	10.88	2.81	YES	HRDOW
L0000033	0	0.27027E-01	366164.2	3769840.9	102.7	0.60	10.88	2.81	YES	HRDOW
L0000034	0	0.27027E-01	366177.8	3769821.9	101.9	0.60	10.88	2.81	YES	HRDOW
L0000035	0	0.27027E-01	366191.4	3769802.8	101.0	0.60	10.88	2.81	YES	HRDOW
L0000036	0	0.27027E-01	366205.0	3769783.8	100.0	0.60	10.88	2.81	YES	HRDOW
L0000037	0	0.27027E-01	366218.6	3769764.7	98.9	0.60	10.88	2.81	YES	HRDOW
L0000038	0	0.27027E-01	366232.2	3769745.7	98.2	0.60	10.88	2.81	YES	HRDOW

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

L0000039	0	0.27027E-01	366245.8	3769726.6	97.8	0.60	10.88	2.81	YES	HRDOW
L0000040	0	0.27027E-01	366259.4	3769707.6	97.5	0.60	10.88	2.81	YES	HRDOW
L0000041	0	0.27027E-01	366273.0	3769688.5	97.1	0.60	10.88	2.81	YES	HRDOW
L0000042	0	0.27027E-01	366286.6	3769669.5	96.8	0.60	10.88	2.81	YES	HRDOW
L0000043	0	0.27027E-01	366300.2	3769650.4	96.5	0.60	10.88	2.81	YES	HRDOW
L0000044	0	0.27027E-01	366313.4	3769631.2	96.3	0.60	10.88	2.81	YES	HRDOW
L0000045	0	0.27027E-01	366326.0	3769611.5	96.1	0.60	10.88	2.81	YES	HRDOW
L0000046	0	0.27027E-01	366338.7	3769591.8	95.8	0.60	10.88	2.81	YES	HRDOW
L0000047	0	0.27027E-01	366351.3	3769572.0	95.5	0.60	10.88	2.81	YES	HRDOW
L0000048	0	0.27027E-01	366363.9	3769552.3	94.9	0.60	10.88	2.81	YES	HRDOW
L0000049	0	0.27027E-01	366376.5	3769532.6	94.5	0.60	10.88	2.81	YES	HRDOW
L0000050	0	0.27027E-01	366389.1	3769512.9	94.1	0.60	10.88	2.81	YES	HRDOW
L0000051	0	0.27027E-01	366402.3	3769493.6	93.7	0.60	10.88	2.81	YES	HRDOW
L0000052	0	0.27027E-01	366415.7	3769474.4	93.3	0.60	10.88	2.81	YES	HRDOW
L0000053	0	0.27027E-01	366429.0	3769455.2	93.0	0.60	10.88	2.81	YES	HRDOW
L0000054	0	0.27027E-01	366442.3	3769435.9	92.5	0.60	10.88	2.81	YES	HRDOW
L0000055	0	0.27027E-01	366455.7	3769416.7	92.2	0.60	10.88	2.81	YES	HRDOW
L0000056	0	0.27027E-01	366469.0	3769397.5	91.8	0.60	10.88	2.81	YES	HRDOW
L0000057	0	0.27027E-01	366482.4	3769378.2	91.5	0.60	10.88	2.81	YES	HRDOW
L0000058	0	0.27027E-01	366495.7	3769359.0	91.1	0.60	10.88	2.81	YES	HRDOW
L0000059	0	0.27027E-01	366509.0	3769339.8	90.7	0.60	10.88	2.81	YES	HRDOW
L0000060	0	0.27027E-01	366522.4	3769320.6	90.4	0.60	10.88	2.81	YES	HRDOW
L0000061	0	0.27027E-01	366535.7	3769301.3	90.0	0.60	10.88	2.81	YES	HRDOW
L0000062	0	0.27027E-01	366549.0	3769282.1	89.7	0.60	10.88	2.81	YES	HRDOW
L0000063	0	0.27027E-01	366562.4	3769262.9	89.3	0.60	10.88	2.81	YES	HRDOW
L0000064	0	0.27027E-01	366575.7	3769243.6	89.0	0.60	10.88	2.81	YES	HRDOW
L0000065	0	0.24390E-01	366338.4	3770100.7	103.7	0.60	10.47	2.78	YES	HRDOW
L0000066	0	0.24390E-01	366336.1	3770078.3	103.2	0.60	10.47	2.78	YES	HRDOW
L0000067	0	0.24390E-01	366339.4	3770056.5	103.5	0.60	10.47	2.78	YES	HRDOW
L0000068	0	0.24390E-01	366346.8	3770035.3	103.4	0.60	10.47	2.78	YES	HRDOW
L0000069	0	0.24390E-01	366354.3	3770014.1	103.2	0.60	10.47	2.78	YES	HRDOW
L0000070	0	0.24390E-01	366361.8	3769992.9	103.0	0.60	10.47	2.78	YES	HRDOW
L0000071	0	0.24390E-01	366369.3	3769971.7	102.6	0.60	10.47	2.78	YES	HRDOW
L0000072	0	0.24390E-01	366381.9	3769953.1	102.0	0.60	10.47	2.78	YES	HRDOW
L0000073	0	0.24390E-01	366394.8	3769934.6	101.3	0.60	10.47	2.78	YES	HRDOW
L0000074	0	0.24390E-01	366407.7	3769916.2	100.7	0.60	10.47	2.78	YES	HRDOW
L0000075	0	0.24390E-01	366420.6	3769897.8	100.1	0.60	10.47	2.78	YES	HRDOW
L0000076	0	0.24390E-01	366433.6	3769879.4	99.5	0.60	10.47	2.78	YES	HRDOW
L0000077	0	0.24390E-01	366446.5	3769861.0	99.1	0.60	10.47	2.78	YES	HRDOW
L0000078	0	0.24390E-01	366459.4	3769842.5	98.6	0.60	10.47	2.78	YES	HRDOW
L0000079	0	0.24390E-01	366472.3	3769824.1	98.2	0.60	10.47	2.78	YES	HRDOW
L0000080	0	0.24390E-01	366485.2	3769805.7	97.8	0.60	10.47	2.78	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000081	0	0.24390E-01	366498.2	3769787.3	97.4	0.60	10.47	2.78	YES	HRDOW
L0000082	0	0.24390E-01	366511.1	3769768.9	97.1	0.60	10.47	2.78	YES	HRDOW
L0000083	0	0.24390E-01	366524.0	3769750.5	96.7	0.60	10.47	2.78	YES	HRDOW
L0000084	0	0.24390E-01	366536.9	3769732.0	96.3	0.60	10.47	2.78	YES	HRDOW
L0000085	0	0.24390E-01	366549.8	3769713.6	95.9	0.60	10.47	2.78	YES	HRDOW
L0000086	0	0.24390E-01	366562.8	3769695.2	95.5	0.60	10.47	2.78	YES	HRDOW
L0000087	0	0.24390E-01	366575.2	3769676.5	95.1	0.60	10.47	2.78	YES	HRDOW
L0000088	0	0.24390E-01	366584.9	3769656.2	94.6	0.60	10.47	2.78	YES	HRDOW
L0000089	0	0.24390E-01	366590.7	3769634.8	94.1	0.60	10.47	2.78	YES	HRDOW
L0000090	0	0.24390E-01	366593.0	3769612.4	93.7	0.60	10.47	2.78	YES	HRDOW
L0000091	0	0.24390E-01	366595.2	3769590.0	93.2	0.60	10.47	2.78	YES	HRDOW
L0000092	0	0.24390E-01	366597.5	3769567.6	92.7	0.60	10.47	2.78	YES	HRDOW
L0000093	0	0.24390E-01	366605.0	3769546.7	92.2	0.60	10.47	2.78	YES	HRDOW
L0000094	0	0.24390E-01	366614.4	3769526.3	91.9	0.60	10.47	2.78	YES	HRDOW
L0000095	0	0.24390E-01	366623.9	3769505.9	91.6	0.60	10.47	2.78	YES	HRDOW
L0000096	0	0.24390E-01	366633.4	3769485.5	91.3	0.60	10.47	2.78	YES	HRDOW
L0000097	0	0.24390E-01	366642.9	3769465.1	91.0	0.60	10.47	2.78	YES	HRDOW
L0000098	0	0.24390E-01	366652.4	3769444.7	90.8	0.60	10.47	2.78	YES	HRDOW
L0000099	0	0.24390E-01	366661.9	3769424.3	90.5	0.60	10.47	2.78	YES	HRDOW
L0000100	0	0.24390E-01	366671.4	3769403.9	90.4	0.60	10.47	2.78	YES	HRDOW
L0000101	0	0.24390E-01	366680.9	3769383.5	90.3	0.60	10.47	2.78	YES	HRDOW
L0000102	0	0.24390E-01	366690.4	3769363.1	90.2	0.60	10.47	2.78	YES	HRDOW
L0000103	0	0.24390E-01	366699.9	3769342.7	90.0	0.60	10.47	2.78	YES	HRDOW
L0000104	0	0.24390E-01	366709.4	3769322.3	89.7	0.60	10.47	2.78	YES	HRDOW
L0000105	0	0.24390E-01	366718.8	3769301.9	89.4	0.60	10.47	2.78	YES	HRDOW
L0000106	0	0.38462E-01	366313.2	3769642.8	96.5	0.60	7.91	2.60	YES	HRDOW
L0000107	0	0.38462E-01	366327.1	3769652.6	96.7	0.60	7.91	2.60	YES	HRDOW
L0000108	0	0.38462E-01	366341.0	3769662.4	97.0	0.60	7.91	2.60	YES	HRDOW
L0000109	0	0.38462E-01	366354.9	3769672.2	97.4	0.60	7.91	2.60	YES	HRDOW
L0000110	0	0.38462E-01	366368.7	3769682.0	97.7	0.60	7.91	2.60	YES	HRDOW
L0000111	0	0.38462E-01	366382.6	3769691.8	97.9	0.60	7.91	2.60	YES	HRDOW
L0000112	0	0.38462E-01	366396.5	3769701.6	98.1	0.60	7.91	2.60	YES	HRDOW
L0000113	0	0.38462E-01	366410.4	3769711.4	98.2	0.60	7.91	2.60	YES	HRDOW
L0000114	0	0.38462E-01	366424.3	3769721.2	98.2	0.60	7.91	2.60	YES	HRDOW
L0000115	0	0.38462E-01	366438.2	3769731.0	98.0	0.60	7.91	2.60	YES	HRDOW
L0000116	0	0.38462E-01	366452.1	3769740.8	97.9	0.60	7.91	2.60	YES	HRDOW
L0000117	0	0.38462E-01	366466.0	3769750.6	97.5	0.60	7.91	2.60	YES	HRDOW
L0000118	0	0.38462E-01	366479.9	3769760.4	97.2	0.60	7.91	2.60	YES	HRDOW

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

L0000119	0	0.38462E-01	366493.8	3769770.2	97.2	0.60	7.91	2.60	YES	HRDOW
L0000120	0	0.38462E-01	366507.7	3769780.0	97.3	0.60	7.91	2.60	YES	HRDOW
L0000121	0	0.38462E-01	366521.5	3769789.8	97.4	0.60	7.91	2.60	YES	HRDOW
L0000122	0	0.38462E-01	366535.4	3769799.6	97.6	0.60	7.91	2.60	YES	HRDOW
L0000123	0	0.38462E-01	366549.6	3769809.0	97.7	0.60	7.91	2.60	YES	HRDOW
L0000124	0	0.38462E-01	366563.9	3769818.2	97.8	0.60	7.91	2.60	YES	HRDOW
L0000125	0	0.38462E-01	366578.2	3769827.3	98.0	0.60	7.91	2.60	YES	HRDOW
L0000126	0	0.38462E-01	366593.7	3769834.3	98.1	0.60	7.91	2.60	YES	HRDOW
L0000127	0	0.38462E-01	366609.5	3769840.2	98.1	0.60	7.91	2.60	YES	HRDOW
L0000128	0	0.38462E-01	366626.5	3769840.2	98.3	0.60	7.91	2.60	YES	HRDOW
L0000129	0	0.38462E-01	366643.5	3769840.2	98.6	0.60	7.91	2.60	YES	HRDOW
L0000130	0	0.38462E-01	366660.5	3769840.2	99.1	0.60	7.91	2.60	YES	HRDOW
L0000131	0	0.38462E-01	366677.5	3769840.2	99.4	0.60	7.91	2.60	YES	HRDOW
L0000132	0	0.33333E-01	366606.6	3770104.6	103.3	0.60	12.09	2.89	YES	HRDOW
L0000133	0	0.33333E-01	366606.1	3770078.6	103.1	0.60	12.09	2.89	YES	HRDOW
L0000134	0	0.33333E-01	366605.6	3770052.7	102.8	0.60	12.09	2.89	YES	HRDOW
L0000135	0	0.33333E-01	366605.0	3770026.7	102.5	0.60	12.09	2.89	YES	HRDOW
L0000136	0	0.33333E-01	366604.5	3770000.7	101.9	0.60	12.09	2.89	YES	HRDOW
L0000137	0	0.33333E-01	366604.0	3769974.7	101.2	0.60	12.09	2.89	YES	HRDOW
L0000138	0	0.33333E-01	366603.5	3769948.7	100.6	0.60	12.09	2.89	YES	HRDOW
L0000139	0	0.33333E-01	366603.0	3769922.7	100.1	0.60	12.09	2.89	YES	HRDOW
L0000140	0	0.33333E-01	366602.5	3769896.7	99.5	0.60	12.09	2.89	YES	HRDOW
L0000141	0	0.33333E-01	366602.0	3769870.7	98.8	0.60	12.09	2.89	YES	HRDOW
L0000142	0	0.33333E-01	366601.5	3769844.7	98.2	0.60	12.09	2.89	YES	HRDOW
L0000143	0	0.33333E-01	366602.5	3769819.1	97.8	0.60	12.09	2.89	YES	HRDOW
L0000144	0	0.33333E-01	366616.9	3769797.5	97.5	0.60	12.09	2.89	YES	HRDOW
L0000145	0	0.33333E-01	366631.3	3769775.8	97.3	0.60	12.09	2.89	YES	HRDOW
L0000146	0	0.33333E-01	366645.7	3769754.2	97.1	0.60	12.09	2.89	YES	HRDOW
L0000147	0	0.33333E-01	366660.1	3769732.5	96.7	0.60	12.09	2.89	YES	HRDOW
L0000148	0	0.33333E-01	366674.5	3769710.9	96.2	0.60	12.09	2.89	YES	HRDOW
L0000149	0	0.33333E-01	366688.9	3769689.2	95.7	0.60	12.09	2.89	YES	HRDOW
L0000150	0	0.33333E-01	366703.2	3769667.5	95.1	0.60	12.09	2.89	YES	HRDOW
L0000151	0	0.33333E-01	366717.6	3769645.9	94.4	0.60	12.09	2.89	YES	HRDOW
L0000152	0	0.33333E-01	366732.0	3769624.2	93.7	0.60	12.09	2.89	YES	HRDOW
L0000153	0	0.33333E-01	366744.8	3769601.6	93.3	0.60	12.09	2.89	YES	HRDOW
L0000154	0	0.33333E-01	366757.1	3769578.7	93.0	0.60	12.09	2.89	YES	HRDOW
L0000155	0	0.33333E-01	366769.3	3769555.8	93.3	0.60	12.09	2.89	YES	HRDOW
L0000156	0	0.33333E-01	366781.6	3769532.8	93.5	0.60	12.09	2.89	YES	HRDOW
L0000157	0	0.33333E-01	366793.9	3769509.9	93.8	0.60	12.09	2.89	YES	HRDOW
L0000158	0	0.33333E-01	366806.1	3769487.0	94.0	0.60	12.09	2.89	YES	HRDOW
L0000159	0	0.33333E-01	366818.4	3769464.1	94.2	0.60	12.09	2.89	YES	HRDOW
L0000160	0	0.33333E-01	366830.7	3769441.1	94.2	0.60	12.09	2.89	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000161	0	0.33333E-01	366842.9	3769418.2	94.0	0.60	12.09	2.89	YES	HRDOW
L0000323	0	0.37037E-01	366891.5	3769670.7	98.6	4.15	14.19	3.03	YES	HRDOW
L0000324	0	0.37037E-01	366862.4	3769661.4	97.8	4.15	14.19	3.03	YES	HRDOW
L0000325	0	0.37037E-01	366833.4	3769652.0	96.8	4.15	14.19	3.03	YES	HRDOW
L0000326	0	0.37037E-01	366804.4	3769642.6	95.9	4.15	14.19	3.03	YES	HRDOW
L0000327	0	0.37037E-01	366775.4	3769633.2	94.8	4.15	14.19	3.03	YES	HRDOW
L0000328	0	0.37037E-01	366746.3	3769623.8	93.9	4.15	14.19	3.03	YES	HRDOW
L0000329	0	0.37037E-01	366717.3	3769614.5	93.4	4.15	14.19	3.03	YES	HRDOW
L0000330	0	0.37037E-01	366688.3	3769605.1	93.1	4.15	14.19	3.03	YES	HRDOW
L0000331	0	0.37037E-01	366659.3	3769595.7	93.0	4.15	14.19	3.03	YES	HRDOW
L0000332	0	0.37037E-01	366630.3	3769586.3	93.0	4.15	14.19	3.03	YES	HRDOW
L0000333	0	0.37037E-01	366601.2	3769576.9	92.9	4.15	14.19	3.03	YES	HRDOW
L0000334	0	0.37037E-01	366572.2	3769567.6	93.0	4.15	14.19	3.03	YES	HRDOW
L0000335	0	0.37037E-01	366543.2	3769558.2	93.2	4.15	14.19	3.03	YES	HRDOW
L0000336	0	0.37037E-01	366514.2	3769548.8	93.5	4.15	14.19	3.03	YES	HRDOW
L0000337	0	0.37037E-01	366485.1	3769539.4	93.7	4.15	14.19	3.03	YES	HRDOW
L0000338	0	0.37037E-01	366456.1	3769530.0	93.8	4.15	14.19	3.03	YES	HRDOW
L0000339	0	0.37037E-01	366427.1	3769520.7	93.9	4.15	14.19	3.03	YES	HRDOW
L0000340	0	0.37037E-01	366398.1	3769511.3	94.0	4.15	14.19	3.03	YES	HRDOW
L0000341	0	0.37037E-01	366369.1	3769501.9	94.1	4.15	14.19	3.03	YES	HRDOW
L0000342	0	0.37037E-01	366340.0	3769492.5	94.3	4.15	14.19	3.03	YES	HRDOW
L0000343	0	0.37037E-01	366311.0	3769483.2	94.5	4.15	14.19	3.03	YES	HRDOW
L0000344	0	0.37037E-01	366282.6	3769472.4	94.8	4.15	14.19	3.03	YES	HRDOW
L0000345	0	0.37037E-01	366256.2	3769457.1	94.9	4.15	14.19	3.03	YES	HRDOW
L0000346	0	0.37037E-01	366229.9	3769441.8	95.0	4.15	14.19	3.03	YES	HRDOW
L0000347	0	0.37037E-01	366203.5	3769426.5	95.3	4.15	14.19	3.03	YES	HRDOW
L0000348	0	0.37037E-01	366177.1	3769411.2	95.6	4.15	14.19	3.03	YES	HRDOW
L0000349	0	0.37037E-01	366150.7	3769395.9	96.2	4.15	14.19	3.03	YES	HRDOW
L0000350	0	0.27027E-01	366096.3	3769936.1	105.2	4.15	10.88	2.81	YES	HRDOW
L0000351	0	0.27027E-01	366109.9	3769917.1	104.5	4.15	10.88	2.81	YES	HRDOW
L0000352	0	0.27027E-01	366123.5	3769898.1	104.2	4.15	10.88	2.81	YES	HRDOW
L0000353	0	0.27027E-01	366137.0	3769879.0	103.8	4.15	10.88	2.81	YES	HRDOW
L0000354	0	0.27027E-01	366150.6	3769860.0	103.4	4.15	10.88	2.81	YES	HRDOW
L0000355	0	0.27027E-01	366164.2	3769840.9	102.7	4.15	10.88	2.81	YES	HRDOW
L0000356	0	0.27027E-01	366177.8	3769821.9	101.9	4.15	10.88	2.81	YES	HRDOW
L0000357	0	0.27027E-01	366191.4	3769802.8	101.0	4.15	10.88	2.81	YES	HRDOW
L0000358	0	0.27027E-01	366205.0	3769783.8	100.0	4.15	10.88	2.81	YES	HRDOW
L0000359	0	0.27027E-01	366218.6	3769764.7	98.9	4.15	10.88	2.81	YES	HRDOW

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

L0000360	0	0.27027E-01	366232.2	3769745.7	98.2	4.15	10.88	2.81	YES	HRDOW
L0000361	0	0.27027E-01	366245.8	3769726.6	97.8	4.15	10.88	2.81	YES	HRDOW
L0000362	0	0.27027E-01	366259.4	3769707.6	97.5	4.15	10.88	2.81	YES	HRDOW
L0000363	0	0.27027E-01	366273.0	3769688.5	97.1	4.15	10.88	2.81	YES	HRDOW
L0000364	0	0.27027E-01	366286.6	3769669.5	96.8	4.15	10.88	2.81	YES	HRDOW
L0000365	0	0.27027E-01	366300.2	3769650.4	96.5	4.15	10.88	2.81	YES	HRDOW
L0000366	0	0.27027E-01	366313.4	3769631.2	96.3	4.15	10.88	2.81	YES	HRDOW
L0000367	0	0.27027E-01	366326.0	3769611.5	96.1	4.15	10.88	2.81	YES	HRDOW
L0000368	0	0.27027E-01	366338.7	3769591.8	95.8	4.15	10.88	2.81	YES	HRDOW
L0000369	0	0.27027E-01	366351.3	3769572.0	95.5	4.15	10.88	2.81	YES	HRDOW
L0000370	0	0.27027E-01	366363.9	3769552.3	94.9	4.15	10.88	2.81	YES	HRDOW
L0000371	0	0.27027E-01	366376.5	3769532.6	94.5	4.15	10.88	2.81	YES	HRDOW
L0000372	0	0.27027E-01	366389.1	3769512.9	94.1	4.15	10.88	2.81	YES	HRDOW
L0000373	0	0.27027E-01	366402.3	3769493.6	93.7	4.15	10.88	2.81	YES	HRDOW
L0000374	0	0.27027E-01	366415.7	3769474.4	93.3	4.15	10.88	2.81	YES	HRDOW
L0000375	0	0.27027E-01	366429.0	3769455.2	93.0	4.15	10.88	2.81	YES	HRDOW
L0000376	0	0.27027E-01	366442.3	3769435.9	92.5	4.15	10.88	2.81	YES	HRDOW
L0000377	0	0.27027E-01	366455.7	3769416.7	92.2	4.15	10.88	2.81	YES	HRDOW
L0000378	0	0.27027E-01	366469.0	3769397.5	91.8	4.15	10.88	2.81	YES	HRDOW
L0000379	0	0.27027E-01	366482.4	3769378.2	91.5	4.15	10.88	2.81	YES	HRDOW
L0000380	0	0.27027E-01	366495.7	3769359.0	91.1	4.15	10.88	2.81	YES	HRDOW
L0000381	0	0.27027E-01	366509.0	3769339.8	90.7	4.15	10.88	2.81	YES	HRDOW
L0000382	0	0.27027E-01	366522.4	3769320.6	90.4	4.15	10.88	2.81	YES	HRDOW
L0000383	0	0.27027E-01	366535.7	3769301.3	90.0	4.15	10.88	2.81	YES	HRDOW
L0000384	0	0.27027E-01	366549.0	3769282.1	89.7	4.15	10.88	2.81	YES	HRDOW
L0000385	0	0.27027E-01	366562.4	3769262.9	89.3	4.15	10.88	2.81	YES	HRDOW
L0000386	0	0.27027E-01	366575.7	3769243.6	89.0	4.15	10.88	2.81	YES	HRDOW
L0000387	0	0.24390E-01	366338.4	3770100.7	103.7	4.15	10.47	2.78	YES	HRDOW
L0000388	0	0.24390E-01	366336.1	3770078.3	103.2	4.15	10.47	2.78	YES	HRDOW
L0000389	0	0.24390E-01	366339.4	3770056.5	103.5	4.15	10.47	2.78	YES	HRDOW
L0000390	0	0.24390E-01	366346.8	3770035.3	103.4	4.15	10.47	2.78	YES	HRDOW
L0000391	0	0.24390E-01	366354.3	3770014.1	103.2	4.15	10.47	2.78	YES	HRDOW
L0000392	0	0.24390E-01	366361.8	3769992.9	103.0	4.15	10.47	2.78	YES	HRDOW
L0000393	0	0.24390E-01	366369.3	3769971.7	102.6	4.15	10.47	2.78	YES	HRDOW
L0000394	0	0.24390E-01	366381.9	3769953.1	102.0	4.15	10.47	2.78	YES	HRDOW
L0000395	0	0.24390E-01	366394.8	3769934.6	101.3	4.15	10.47	2.78	YES	HRDOW
L0000396	0	0.24390E-01	366407.7	3769916.2	100.7	4.15	10.47	2.78	YES	HRDOW
L0000397	0	0.24390E-01	366420.6	3769897.8	100.1	4.15	10.47	2.78	YES	HRDOW
L0000398	0	0.24390E-01	366433.6	3769879.4	99.5	4.15	10.47	2.78	YES	HRDOW
L0000399	0	0.24390E-01	366446.5	3769861.0	99.1	4.15	10.47	2.78	YES	HRDOW
L0000400	0	0.24390E-01	366459.4	3769842.5	98.6	4.15	10.47	2.78	YES	HRDOW
L0000401	0	0.24390E-01	366472.3	3769824.1	98.2	4.15	10.47	2.78	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000402	0	0.24390E-01	366485.2	3769805.7	97.8	4.15	10.47	2.78	YES	HRDOW
L0000403	0	0.24390E-01	366498.2	3769787.3	97.4	4.15	10.47	2.78	YES	HRDOW
L0000404	0	0.24390E-01	366511.1	3769768.9	97.1	4.15	10.47	2.78	YES	HRDOW
L0000405	0	0.24390E-01	366524.0	3769750.5	96.7	4.15	10.47	2.78	YES	HRDOW
L0000406	0	0.24390E-01	366536.9	3769732.0	96.3	4.15	10.47	2.78	YES	HRDOW
L0000407	0	0.24390E-01	366549.8	3769713.6	95.9	4.15	10.47	2.78	YES	HRDOW
L0000408	0	0.24390E-01	366562.8	3769695.2	95.5	4.15	10.47	2.78	YES	HRDOW
L0000409	0	0.24390E-01	366575.2	3769676.5	95.1	4.15	10.47	2.78	YES	HRDOW
L0000410	0	0.24390E-01	366584.9	3769656.2	94.6	4.15	10.47	2.78	YES	HRDOW
L0000411	0	0.24390E-01	366590.7	3769634.8	94.1	4.15	10.47	2.78	YES	HRDOW
L0000412	0	0.24390E-01	366593.0	3769612.4	93.7	4.15	10.47	2.78	YES	HRDOW
L0000413	0	0.24390E-01	366595.2	3769590.0	93.2	4.15	10.47	2.78	YES	HRDOW
L0000414	0	0.24390E-01	366597.5	3769567.6	92.7	4.15	10.47	2.78	YES	HRDOW
L0000415	0	0.24390E-01	366605.0	3769546.7	92.2	4.15	10.47	2.78	YES	HRDOW
L0000416	0	0.24390E-01	366614.4	3769526.3	91.9	4.15	10.47	2.78	YES	HRDOW
L0000417	0	0.24390E-01	366623.9	3769505.9	91.6	4.15	10.47	2.78	YES	HRDOW
L0000418	0	0.24390E-01	366633.4	3769485.5	91.3	4.15	10.47	2.78	YES	HRDOW
L0000419	0	0.24390E-01	366642.9	3769465.1	91.0	4.15	10.47	2.78	YES	HRDOW
L0000420	0	0.24390E-01	366652.4	3769444.7	90.8	4.15	10.47	2.78	YES	HRDOW
L0000421	0	0.24390E-01	366661.9	3769424.3	90.5	4.15	10.47	2.78	YES	HRDOW
L0000422	0	0.24390E-01	366671.4	3769403.9	90.4	4.15	10.47	2.78	YES	HRDOW
L0000423	0	0.24390E-01	366680.9	3769383.5	90.3	4.15	10.47	2.78	YES	HRDOW
L0000424	0	0.24390E-01	366690.4	3769363.1	90.2	4.15	10.47	2.78	YES	HRDOW
L0000425	0	0.24390E-01	366699.9	3769342.7	90.0	4.15	10.47	2.78	YES	HRDOW
L0000426	0	0.24390E-01	366709.4	3769322.3	89.7	4.15	10.47	2.78	YES	HRDOW
L0000427	0	0.24390E-01	366718.8	3769301.9	89.4	4.15	10.47	2.78	YES	HRDOW
L0000428	0	0.38462E-01	366313.2	3769642.8	96.5	4.15	7.91	2.60	YES	HRDOW
L0000429	0	0.38462E-01	366327.1	3769652.6	96.7	4.15	7.91	2.60	YES	HRDOW
L0000430	0	0.38462E-01	366341.0	3769662.4	97.0	4.15	7.91	2.60	YES	HRDOW
L0000431	0	0.38462E-01	366354.9	3769672.2	97.4	4.15	7.91	2.60	YES	HRDOW
L0000432	0	0.38462E-01	366368.7	3769682.0	97.7	4.15	7.91	2.60	YES	HRDOW
L0000433	0	0.38462E-01	366382.6	3769691.8	97.9	4.15	7.91	2.60	YES	HRDOW
L0000434	0	0.38462E-01	366396.5	3769701.6	98.1	4.15	7.91	2.60	YES	HRDOW
L0000435	0	0.38462E-01	366410.4	3769711.4	98.2	4.15	7.91	2.60	YES	HRDOW
L0000436	0	0.38462E-01	366424.3	3769721.2	98.2	4.15	7.91	2.60	YES	HRDOW
L0000437	0	0.38462E-01	366438.2	3769731.0	98.0	4.15	7.91	2.60	YES	HRDOW
L0000438	0	0.38462E-01	366452.1	3769740.8	97.9	4.15	7.91	2.60	YES	HRDOW
L0000439	0	0.38462E-01	366466.0	3769750.6	97.5	4.15	7.91	2.60	YES	HRDOW

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

L0000440	0	0.38462E-01	366479.9	3769760.4	97.2	4.15	7.91	2.60	YES	HRDOW
L0000441	0	0.38462E-01	366493.8	3769770.2	97.2	4.15	7.91	2.60	YES	HRDOW
L0000442	0	0.38462E-01	366507.7	3769780.0	97.3	4.15	7.91	2.60	YES	HRDOW
L0000443	0	0.38462E-01	366521.5	3769789.8	97.4	4.15	7.91	2.60	YES	HRDOW
L0000444	0	0.38462E-01	366535.4	3769799.6	97.6	4.15	7.91	2.60	YES	HRDOW
L0000445	0	0.38462E-01	366549.6	3769809.0	97.7	4.15	7.91	2.60	YES	HRDOW
L0000446	0	0.38462E-01	366563.9	3769818.2	97.8	4.15	7.91	2.60	YES	HRDOW
L0000447	0	0.38462E-01	366578.2	3769827.3	98.0	4.15	7.91	2.60	YES	HRDOW
L0000448	0	0.38462E-01	366593.7	3769834.3	98.1	4.15	7.91	2.60	YES	HRDOW
L0000449	0	0.38462E-01	366609.5	3769840.2	98.1	4.15	7.91	2.60	YES	HRDOW
L0000450	0	0.38462E-01	366626.5	3769840.2	98.3	4.15	7.91	2.60	YES	HRDOW
L0000451	0	0.38462E-01	366643.5	3769840.2	98.6	4.15	7.91	2.60	YES	HRDOW
L0000452	0	0.38462E-01	366660.5	3769840.2	99.1	4.15	7.91	2.60	YES	HRDOW
L0000453	0	0.38462E-01	366677.5	3769840.2	99.4	4.15	7.91	2.60	YES	HRDOW
L0000454	0	0.33333E-01	366606.6	3770104.6	103.3	4.15	12.09	2.89	YES	HRDOW
L0000455	0	0.33333E-01	366606.1	3770078.6	103.1	4.15	12.09	2.89	YES	HRDOW
L0000456	0	0.33333E-01	366605.6	3770052.7	102.8	4.15	12.09	2.89	YES	HRDOW
L0000457	0	0.33333E-01	366605.0	3770026.7	102.5	4.15	12.09	2.89	YES	HRDOW
L0000458	0	0.33333E-01	366604.5	3770000.7	101.9	4.15	12.09	2.89	YES	HRDOW
L0000459	0	0.33333E-01	366604.0	3769974.7	101.2	4.15	12.09	2.89	YES	HRDOW
L0000460	0	0.33333E-01	366603.5	3769948.7	100.6	4.15	12.09	2.89	YES	HRDOW
L0000461	0	0.33333E-01	366603.0	3769922.7	100.1	4.15	12.09	2.89	YES	HRDOW
L0000462	0	0.33333E-01	366602.5	3769896.7	99.5	4.15	12.09	2.89	YES	HRDOW
L0000463	0	0.33333E-01	366602.0	3769870.7	98.8	4.15	12.09	2.89	YES	HRDOW
L0000464	0	0.33333E-01	366601.5	3769844.7	98.2	4.15	12.09	2.89	YES	HRDOW
L0000465	0	0.33333E-01	366602.5	3769819.1	97.8	4.15	12.09	2.89	YES	HRDOW
L0000466	0	0.33333E-01	366616.9	3769797.5	97.5	4.15	12.09	2.89	YES	HRDOW
L0000467	0	0.33333E-01	366631.3	3769775.8	97.3	4.15	12.09	2.89	YES	HRDOW
L0000468	0	0.33333E-01	366645.7	3769754.2	97.1	4.15	12.09	2.89	YES	HRDOW
L0000469	0	0.33333E-01	366660.1	3769732.5	96.7	4.15	12.09	2.89	YES	HRDOW
L0000470	0	0.33333E-01	366674.5	3769710.9	96.2	4.15	12.09	2.89	YES	HRDOW
L0000471	0	0.33333E-01	366688.9	3769689.2	95.7	4.15	12.09	2.89	YES	HRDOW
L0000472	0	0.33333E-01	366703.2	3769667.5	95.1	4.15	12.09	2.89	YES	HRDOW
L0000473	0	0.33333E-01	366717.6	3769645.9	94.4	4.15	12.09	2.89	YES	HRDOW
L0000474	0	0.33333E-01	366732.0	3769624.2	93.7	4.15	12.09	2.89	YES	HRDOW
L0000475	0	0.33333E-01	366744.8	3769601.6	93.3	4.15	12.09	2.89	YES	HRDOW
L0000476	0	0.33333E-01	366757.1	3769578.7	93.0	4.15	12.09	2.89	YES	HRDOW
L0000477	0	0.33333E-01	366769.3	3769555.8	93.3	4.15	12.09	2.89	YES	HRDOW
L0000478	0	0.33333E-01	366781.6	3769532.8	93.5	4.15	12.09	2.89	YES	HRDOW
L0000479	0	0.33333E-01	366793.9	3769509.9	93.8	4.15	12.09	2.89	YES	HRDOW
L0000480	0	0.33333E-01	366806.1	3769487.0	94.0	4.15	12.09	2.89	YES	HRDOW
L0000481	0	0.33333E-01	366818.4	3769464.1	94.2	4.15	12.09	2.89	YES	HRDOW

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                        ***         04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Staff                                                     ***         13:18:50
                                                                                                                             PAGE  10
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000482	0	0.33333E-01	366830.7	3769441.1	94.2	4.15	12.09	2.89	YES	HRDOW
L0000483	0	0.33333E-01	366842.9	3769418.2	94.0	4.15	12.09	2.89	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs						
26A	L0000001 ,	L0000002 ,	L0000003 ,	L0000004 ,	L0000005 ,	L0000006 ,	L0000007 ,	L0000008 ,
	L0000009 ,	L0000010 ,	L0000011 ,	L0000012 ,	L0000013 ,	L0000014 ,	L0000015 ,	L0000016 ,
	L0000017 ,	L0000018 ,	L0000019 ,	L0000020 ,	L0000021 ,	L0000022 ,	L0000023 ,	L0000024 ,
	L0000025 ,	L0000026 ,	L0000027 ,					
26B	L0000323 ,	L0000324 ,	L0000325 ,	L0000326 ,	L0000327 ,	L0000328 ,	L0000329 ,	L0000330 ,
	L0000331 ,	L0000332 ,	L0000333 ,	L0000334 ,	L0000335 ,	L0000336 ,	L0000337 ,	L0000338 ,
	L0000339 ,	L0000340 ,	L0000341 ,	L0000342 ,	L0000343 ,	L0000344 ,	L0000345 ,	L0000346 ,
	L0000347 ,	L0000348 ,	L0000349 ,					
27A	L0000028 ,	L0000029 ,	L0000030 ,	L0000031 ,	L0000032 ,	L0000033 ,	L0000034 ,	L0000035 ,
	L0000036 ,	L0000037 ,	L0000038 ,	L0000039 ,	L0000040 ,	L0000041 ,	L0000042 ,	L0000043 ,
	L0000044 ,	L0000045 ,	L0000046 ,	L0000047 ,	L0000048 ,	L0000049 ,	L0000050 ,	L0000051 ,
	L0000052 ,	L0000053 ,	L0000054 ,	L0000055 ,	L0000056 ,	L0000057 ,	L0000058 ,	L0000059 ,
	L0000060 ,	L0000061 ,	L0000062 ,	L0000063 ,	L0000064 ,			
27B	L0000350 ,	L0000351 ,	L0000352 ,	L0000353 ,	L0000354 ,	L0000355 ,	L0000356 ,	L0000357 ,
	L0000358 ,	L0000359 ,	L0000360 ,	L0000361 ,	L0000362 ,	L0000363 ,	L0000364 ,	L0000365 ,
	L0000366 ,	L0000367 ,	L0000368 ,	L0000369 ,	L0000370 ,	L0000371 ,	L0000372 ,	L0000373 ,
	L0000374 ,	L0000375 ,	L0000376 ,	L0000377 ,	L0000378 ,	L0000379 ,	L0000380 ,	L0000381 ,
	L0000382 ,	L0000383 ,	L0000384 ,	L0000385 ,	L0000386 ,			
28A	L0000065 ,	L0000066 ,	L0000067 ,	L0000068 ,	L0000069 ,	L0000070 ,	L0000071 ,	L0000072 ,
	L0000073 ,	L0000074 ,	L0000075 ,	L0000076 ,	L0000077 ,	L0000078 ,	L0000079 ,	L0000080 ,

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
	L0000081 ,	L0000082 ,	L0000083 ,	L0000084 ,	L0000085 ,	L0000086 ,	L0000087 ,	L0000088 ,
	L0000089 ,	L0000090 ,	L0000091 ,	L0000092 ,	L0000093 ,	L0000094 ,	L0000095 ,	L0000096 ,
	L0000097 ,	L0000098 ,	L0000099 ,	L0000100 ,	L0000101 ,	L0000102 ,	L0000103 ,	L0000104 ,
	L0000105 ,							
28B	L0000387 ,	L0000388 ,	L0000389 ,	L0000390 ,	L0000391 ,	L0000392 ,	L0000393 ,	L0000394 ,
	L0000395 ,	L0000396 ,	L0000397 ,	L0000398 ,	L0000399 ,	L0000400 ,	L0000401 ,	L0000402 ,
	L0000403 ,	L0000404 ,	L0000405 ,	L0000406 ,	L0000407 ,	L0000408 ,	L0000409 ,	L0000410 ,
	L0000411 ,	L0000412 ,	L0000413 ,	L0000414 ,	L0000415 ,	L0000416 ,	L0000417 ,	L0000418 ,
	L0000419 ,	L0000420 ,	L0000421 ,	L0000422 ,	L0000423 ,	L0000424 ,	L0000425 ,	L0000426 ,
	L0000427 ,							
29A	L0000106 ,	L0000107 ,	L0000108 ,	L0000109 ,	L0000110 ,	L0000111 ,	L0000112 ,	L0000113 ,
	L0000114 ,	L0000115 ,	L0000116 ,	L0000117 ,	L0000118 ,	L0000119 ,	L0000120 ,	L0000121 ,
	L0000122 ,	L0000123 ,	L0000124 ,	L0000125 ,	L0000126 ,	L0000127 ,	L0000128 ,	L0000129 ,
	L0000130 ,	L0000131 ,						
29B	L0000428 ,	L0000429 ,	L0000430 ,	L0000431 ,	L0000432 ,	L0000433 ,	L0000434 ,	L0000435 ,
	L0000436 ,	L0000437 ,	L0000438 ,	L0000439 ,	L0000440 ,	L0000441 ,	L0000442 ,	L0000443 ,
	L0000444 ,	L0000445 ,	L0000446 ,	L0000447 ,	L0000448 ,	L0000449 ,	L0000450 ,	L0000451 ,
	L0000452 ,	L0000453 ,						
30A	L0000132 ,	L0000133 ,	L0000134 ,	L0000135 ,	L0000136 ,	L0000137 ,	L0000138 ,	L0000139 ,
	L0000140 ,	L0000141 ,	L0000142 ,	L0000143 ,	L0000144 ,	L0000145 ,	L0000146 ,	L0000147 ,

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

*** SOURCE IDs DEFINING SOURCE GROUPS ***

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SRCGROUP ID                                          SOURCE IDs
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            L0000148    , L0000149    , L0000150    , L0000151    , L0000152    , L0000153    , L0000154    , L0000155    ,

            L0000156    , L0000157    , L0000158    , L0000159    , L0000160    , L0000161    ,

 30B        L0000454    , L0000455    , L0000456    , L0000457    , L0000458    , L0000459    , L0000460    , L0000461    ,

            L0000462    , L0000463    , L0000464    , L0000465    , L0000466    , L0000467    , L0000468    , L0000469    ,

            L0000470    , L0000471    , L0000472    , L0000473    , L0000474    , L0000475    , L0000476    , L0000477    ,

            L0000478    , L0000479    , L0000480    , L0000481    , L0000482    , L0000483    ,
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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                     ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Staff                                                  ***        13:18:50
                                                                                                                         PAGE  14
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL     URBAN

                                                   *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID    URBAN POP                                    SOURCE IDs
 --------    ---------                                    ----------


             3884000.   L0000001    , L0000002    , L0000003    , L0000004    , L0000005    , L0000006    , L0000007    ,
L0000008    ,
            L0000009    , L0000010    , L0000011    , L0000012    , L0000013    , L0000014    , L0000015    , L0000016    ,

            L0000017    , L0000018    , L0000019    , L0000020    , L0000021    , L0000022    , L0000023    , L0000024    ,

            L0000025    , L0000026    , L0000027    , L0000028    , L0000029    , L0000030    , L0000031    , L0000032    ,

            L0000033    , L0000034    , L0000035    , L0000036    , L0000037    , L0000038    , L0000039    , L0000040    ,

            L0000041    , L0000042    , L0000043    , L0000044    , L0000045    , L0000046    , L0000047    , L0000048    ,

            L0000049    , L0000050    , L0000051    , L0000052    , L0000053    , L0000054    , L0000055    , L0000056    ,

            L0000057    , L0000058    , L0000059    , L0000060    , L0000061    , L0000062    , L0000063    , L0000064    ,

            L0000065    , L0000066    , L0000067    , L0000068    , L0000069    , L0000070    , L0000071    , L0000072    ,

            L0000073    , L0000074    , L0000075    , L0000076    , L0000077    , L0000078    , L0000079    , L0000080    ,

            L0000081    , L0000082    , L0000083    , L0000084    , L0000085    , L0000086    , L0000087    , L0000088    ,

            L0000089    , L0000090    , L0000091    , L0000092    , L0000093    , L0000094    , L0000095    , L0000096    ,

            L0000097    , L0000098    , L0000099    , L0000100    , L0000101    , L0000102    , L0000103    , L0000104    ,

            L0000105    , L0000106    , L0000107    , L0000108    , L0000109    , L0000110    , L0000111    , L0000112    ,

            L0000113    , L0000114    , L0000115    , L0000116    , L0000117    , L0000118    , L0000119    , L0000120    ,

            L0000121    , L0000122    , L0000123    , L0000124    , L0000125    , L0000126    , L0000127    , L0000128    ,

            L0000129    , L0000130    , L0000131    , L0000132    , L0000133    , L0000134    , L0000135    , L0000136    ,

            L0000137    , L0000138    , L0000139    , L0000140    , L0000141    , L0000142    , L0000143    , L0000144    ,

            L0000145    , L0000146    , L0000147    , L0000148    , L0000149    , L0000150    , L0000151    , L0000152    ,

            L0000153    , L0000154    , L0000155    , L0000156    , L0000157    , L0000158    , L0000159    , L0000160    ,
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Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs						
	L0000161 ,	L0000323 ,	L0000324 ,	L0000325 ,	L0000326 ,	L0000327 ,	L0000328 ,	L0000329 ,
	L0000330 ,	L0000331 ,	L0000332 ,	L0000333 ,	L0000334 ,	L0000335 ,	L0000336 ,	L0000337 ,
	L0000338 ,	L0000339 ,	L0000340 ,	L0000341 ,	L0000342 ,	L0000343 ,	L0000344 ,	L0000345 ,
	L0000346 ,	L0000347 ,	L0000348 ,	L0000349 ,	L0000350 ,	L0000351 ,	L0000352 ,	L0000353 ,
	L0000354 ,	L0000355 ,	L0000356 ,	L0000357 ,	L0000358 ,	L0000359 ,	L0000360 ,	L0000361 ,
	L0000362 ,	L0000363 ,	L0000364 ,	L0000365 ,	L0000366 ,	L0000367 ,	L0000368 ,	L0000369 ,
	L0000370 ,	L0000371 ,	L0000372 ,	L0000373 ,	L0000374 ,	L0000375 ,	L0000376 ,	L0000377 ,
	L0000378 ,	L0000379 ,	L0000380 ,	L0000381 ,	L0000382 ,	L0000383 ,	L0000384 ,	L0000385 ,
	L0000386 ,	L0000387 ,	L0000388 ,	L0000389 ,	L0000390 ,	L0000391 ,	L0000392 ,	L0000393 ,
	L0000394 ,	L0000395 ,	L0000396 ,	L0000397 ,	L0000398 ,	L0000399 ,	L0000400 ,	L0000401 ,
	L0000402 ,	L0000403 ,	L0000404 ,	L0000405 ,	L0000406 ,	L0000407 ,	L0000408 ,	L0000409 ,
	L0000410 ,	L0000411 ,	L0000412 ,	L0000413 ,	L0000414 ,	L0000415 ,	L0000416 ,	L0000417 ,
	L0000418 ,	L0000419 ,	L0000420 ,	L0000421 ,	L0000422 ,	L0000423 ,	L0000424 ,	L0000425 ,
	L0000426 ,	L0000427 ,	L0000428 ,	L0000429 ,	L0000430 ,	L0000431 ,	L0000432 ,	L0000433 ,
	L0000434 ,	L0000435 ,	L0000436 ,	L0000437 ,	L0000438 ,	L0000439 ,	L0000440 ,	L0000441 ,
	L0000442 ,	L0000443 ,	L0000444 ,	L0000445 ,	L0000446 ,	L0000447 ,	L0000448 ,	L0000449 ,
	L0000450 ,	L0000451 ,	L0000452 ,	L0000453 ,	L0000454 ,	L0000455 ,	L0000456 ,	L0000457 ,
	L0000458 ,	L0000459 ,	L0000460 ,	L0000461 ,	L0000462 ,	L0000463 ,	L0000464 ,	L0000465 ,
	L0000466 ,	L0000467 ,	L0000468 ,	L0000469 ,	L0000470 ,	L0000471 ,	L0000472 ,	L0000473 ,
	L0000474 ,	L0000475 ,	L0000476 ,	L0000477 ,	L0000478 ,	L0000479 ,	L0000480 ,	L0000481 ,
	L0000482 ,	L0000483 ,						

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 26A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.4940E+00
9	.1000E+01	10	.8790E+00	11	.8730E+00	12	.8640E+00	13	.8890E+00	14	.6780E+00	15	.7920E+00	16	.7540E+00
17	.7010E+00	18	.7330E+00	19	.3890E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 27A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.2540E+00
9	.6520E+00	10	.5820E+00	11	.5070E+00	12	.5070E+00	13	.5880E+00	14	.6330E+00	15	.7010E+00	16	.7760E+00
17	.8360E+00	18	.1000E+01	19	.3980E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L000028A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.3380E+00
9	.7490E+00	10	.7590E+00	11	.7190E+00	12	.7750E+00	13	.8670E+00	14	.8040E+00	15	.8150E+00	16	.8080E+00
17	.8520E+00	18	.1000E+01	19	.4740E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 29A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.2500E+00
9	.7460E+00	10	.6440E+00	11	.5210E+00	12	.5550E+00	13	.5780E+00	14	.5790E+00	15	.6690E+00	16	.7480E+00
17	.8480E+00	18	.1000E+01	19	.4420E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 30A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.2750E+00
9	.6860E+00	10	.7020E+00	11	.7230E+00	12	.7850E+00	13	.8830E+00	14	.8360E+00	15	.9410E+00	16	.9720E+00
17	.9620E+00	18	.1000E+01	19	.4420E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 26B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.4940E+00
9	.1000E+01	10	.8790E+00	11	.8730E+00	12	.8640E+00	13	.8890E+00	14	.6780E+00	15	.7920E+00	16	.7540E+00
17	.7010E+00	18	.7330E+00	19	.3890E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 27B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.2540E+00
9	.6520E+00	10	.5820E+00	11	.5070E+00	12	.5070E+00	13	.5880E+00	14	.6330E+00	15	.7010E+00	16	.7760E+00
17	.8360E+00	18	.1000E+01	19	.3980E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 28B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.3380E+00
9	.7490E+00	10	.7590E+00	11	.7190E+00	12	.7750E+00	13	.8670E+00	14	.8040E+00	15	.8150E+00	16	.8080E+00
17	.8520E+00	18	.1000E+01	19	.4740E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                          ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Staff                                                       ***        13:18:50
                                                                                                                              PAGE 308
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 29B     ; SOURCE TYPE = VOLUME   :
 HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR   HOUR    SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .2500E+00
   9  .7460E+00   10  .6440E+00   11  .5210E+00   12  .5550E+00   13  .5780E+00   14  .5790E+00   15  .6690E+00   16  .7480E+00
  17  .8480E+00   18  .1000E+01   19  .4420E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 30B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.2750E+00
9	.6860E+00	10	.7020E+00	11	.7230E+00	12	.7850E+00	13	.8830E+00	14	.8360E+00	15	.9410E+00	16	.9720E+00
17	.9620E+00	18	.1000E+01	19	.4420E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 366481.1, 3769638.0,      95.5,      95.5,       0.0);        ( 366491.1, 3769638.0,      95.4,      95.4,       0.0);
( 366481.1, 3769648.0,      95.8,      95.8,       0.0);        ( 366491.1, 3769648.0,      95.6,      95.6,       0.0);
( 366501.1, 3769648.0,      95.5,      95.5,       0.0);        ( 366481.1, 3769658.0,      96.0,      96.0,       0.0);
( 366491.1, 3769658.0,      95.9,      95.9,       0.0);        ( 366501.1, 3769658.0,      95.8,      95.8,       0.0);
( 366511.1, 3769658.0,      95.6,      95.6,       0.0);        ( 366521.1, 3769658.0,      95.5,      95.5,       0.0);
( 366471.1, 3769668.0,      96.5,      96.5,       0.0);        ( 366481.1, 3769668.0,      96.3,      96.3,       0.0);
( 366491.1, 3769668.0,      96.1,      96.1,       0.0);        ( 366501.1, 3769668.0,      96.0,      96.0,       0.0);
( 366511.1, 3769668.0,      95.8,      95.8,       0.0);        ( 366461.1, 3769678.0,      96.8,      96.8,       0.0);
( 366471.1, 3769678.0,      96.7,      96.7,       0.0);        ( 366481.1, 3769678.0,      96.5,      96.5,       0.0);
( 366491.1, 3769678.0,      96.3,      96.3,       0.0);        ( 366501.1, 3769678.0,      96.2,      96.2,       0.0);
( 366451.1, 3769688.0,      97.2,      97.2,       0.0);        ( 366461.1, 3769688.0,      97.0,      97.0,       0.0);
( 366471.1, 3769688.0,      96.8,      96.8,       0.0);        ( 366481.1, 3769688.0,      96.6,      96.6,       0.0);
( 366491.1, 3769688.0,      96.4,      96.4,       0.0);        ( 366501.1, 3769688.0,      96.2,      96.2,       0.0);
( 366451.1, 3769698.0,      97.3,      97.3,       0.0);        ( 366461.1, 3769698.0,      97.1,      97.1,       0.0);
( 366471.1, 3769698.0,      96.9,      96.9,       0.0);        ( 366481.1, 3769698.0,      96.7,      96.7,       0.0);
( 366491.1, 3769698.0,      96.5,      96.5,       0.0);        ( 366451.1, 3769708.0,      97.5,      97.5,       0.0);
( 366461.1, 3769708.0,      97.3,      97.3,       0.0);        ( 366471.1, 3769708.0,      97.0,      97.0,       0.0);
( 366481.1, 3769708.0,      96.7,      96.7,       0.0);        ( 366461.1, 3769718.0,      97.4,      97.4,       0.0);
( 366471.1, 3769718.0,      97.1,      97.1,       0.0);        ( 366481.1, 3769638.0,      95.5,      95.5,       3.0);
( 366491.1, 3769638.0,      95.4,      95.4,       3.0);        ( 366481.1, 3769648.0,      95.8,      95.8,       3.0);
( 366491.1, 3769648.0,      95.6,      95.6,       3.0);        ( 366501.1, 3769648.0,      95.5,      95.5,       3.0);
( 366481.1, 3769658.0,      96.0,      96.0,       3.0);        ( 366491.1, 3769658.0,      95.9,      95.9,       3.0);
( 366501.1, 3769658.0,      95.8,      95.8,       3.0);        ( 366511.1, 3769658.0,      95.6,      95.6,       3.0);
( 366521.1, 3769658.0,      95.5,      95.5,       3.0);        ( 366471.1, 3769668.0,      96.5,      96.5,       3.0);
( 366481.1, 3769668.0,      96.3,      96.3,       3.0);        ( 366491.1, 3769668.0,      96.1,      96.1,       3.0);
( 366501.1, 3769668.0,      96.0,      96.0,       3.0);        ( 366511.1, 3769668.0,      95.8,      95.8,       3.0);
( 366461.1, 3769678.0,      96.8,      96.8,       3.0);        ( 366471.1, 3769678.0,      96.7,      96.7,       3.0);
( 366481.1, 3769678.0,      96.5,      96.5,       3.0);        ( 366491.1, 3769678.0,      96.3,      96.3,       3.0);
( 366501.1, 3769678.0,      96.2,      96.2,       3.0);        ( 366451.1, 3769688.0,      97.2,      97.2,       3.0);
( 366461.1, 3769688.0,      97.0,      97.0,       3.0);        ( 366471.1, 3769688.0,      96.8,      96.8,       3.0);
( 366481.1, 3769688.0,      96.6,      96.6,       3.0);        ( 366491.1, 3769688.0,      96.4,      96.4,       3.0);
( 366501.1, 3769688.0,      96.2,      96.2,       3.0);        ( 366451.1, 3769698.0,      97.3,      97.3,       3.0);
( 366461.1, 3769698.0,      97.1,      97.1,       3.0);        ( 366471.1, 3769698.0,      96.9,      96.9,       3.0);
( 366481.1, 3769698.0,      96.7,      96.7,       3.0);        ( 366491.1, 3769698.0,      96.5,      96.5,       3.0);
( 366451.1, 3769708.0,      97.5,      97.5,       3.0);        ( 366461.1, 3769708.0,      97.3,      97.3,       3.0);
( 366471.1, 3769708.0,      97.0,      97.0,       3.0);        ( 366481.1, 3769708.0,      96.7,      96.7,       3.0);
( 366461.1, 3769718.0,      97.4,      97.4,       3.0);        ( 366471.1, 3769718.0,      97.1,      97.1,       3.0);
( 366481.1, 3769638.0,      95.5,      95.5,       6.1);        ( 366491.1, 3769638.0,      95.4,      95.4,       6.1);
( 366481.1, 3769648.0,      95.8,      95.8,       6.1);        ( 366491.1, 3769648.0,      95.6,      95.6,       6.1);
( 366501.1, 3769648.0,      95.5,      95.5,       6.1);        ( 366481.1, 3769658.0,      96.0,      96.0,       6.1);
( 366491.1, 3769658.0,      95.9,      95.9,       6.1);        ( 366501.1, 3769658.0,      95.8,      95.8,       6.1);
( 366511.1, 3769658.0,      95.6,      95.6,       6.1);        ( 366521.1, 3769658.0,      95.5,      95.5,       6.1);
```

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,    96.5,    96.5,    6.1);    ( 366481.1, 3769668.0,    96.3,    96.3,    6.1);
( 366491.1, 3769668.0,    96.1,    96.1,    6.1);    ( 366501.1, 3769668.0,    96.0,    96.0,    6.1);
( 366511.1, 3769668.0,    95.8,    95.8,    6.1);    ( 366461.1, 3769678.0,    96.8,    96.8,    6.1);
( 366471.1, 3769678.0,    96.7,    96.7,    6.1);    ( 366481.1, 3769678.0,    96.5,    96.5,    6.1);
( 366491.1, 3769678.0,    96.3,    96.3,    6.1);    ( 366501.1, 3769678.0,    96.2,    96.2,    6.1);
( 366451.1, 3769688.0,    97.2,    97.2,    6.1);    ( 366461.1, 3769688.0,    97.0,    97.0,    6.1);
( 366471.1, 3769688.0,    96.8,    96.8,    6.1);    ( 366481.1, 3769688.0,    96.6,    96.6,    6.1);
( 366491.1, 3769688.0,    96.4,    96.4,    6.1);    ( 366501.1, 3769688.0,    96.2,    96.2,    6.1);
( 366451.1, 3769698.0,    97.3,    97.3,    6.1);    ( 366461.1, 3769698.0,    97.1,    97.1,    6.1);
( 366471.1, 3769698.0,    96.9,    96.9,    6.1);    ( 366481.1, 3769698.0,    96.7,    96.7,    6.1);
( 366491.1, 3769698.0,    96.5,    96.5,    6.1);    ( 366451.1, 3769708.0,    97.5,    97.5,    6.1);
( 366461.1, 3769708.0,    97.3,    97.3,    6.1);    ( 366471.1, 3769708.0,    97.0,    97.0,    6.1);
( 366481.1, 3769708.0,    96.7,    96.7,    6.1);    ( 366461.1, 3769718.0,    97.4,    97.4,    6.1);
( 366471.1, 3769718.0,    97.1,    97.1,    6.1);    ( 366412.3, 3769692.5,    97.8,    97.8,    0.0);
( 366420.8, 3769692.8,    97.7,    97.7,    0.0);    ( 366431.4, 3769704.4,    97.9,    97.9,    0.0);
( 366431.1, 3769693.8,    97.6,    97.6,    0.0);    ( 366441.3, 3769691.1,    97.4,    97.4,    0.0);
( 366421.2, 3769678.5,    97.4,    97.4,    0.0);    ( 366430.7, 3769680.2,    97.3,    97.3,    0.0);
( 366442.0, 3769680.2,    97.1,    97.1,    0.0);    ( 366450.8, 3769679.5,    97.0,    97.0,    0.0);
( 366460.7, 3769667.6,    96.6,    96.6,    0.0);    ( 366450.5, 3769667.2,    96.7,    96.7,    0.0);
( 366442.0, 3769667.6,    96.9,    96.9,    0.0);    ( 366430.7, 3769667.6,    97.0,    97.0,    0.0);
( 366470.6, 3769658.0,    96.2,    96.2,    0.0);    ( 366461.1, 3769658.0,    96.3,    96.3,    0.0);
( 366449.8, 3769658.0,    96.5,    96.5,    0.0);    ( 366441.3, 3769658.7,    96.7,    96.7,    0.0);
( 366520.4, 3769648.8,    95.3,    95.3,    0.0);    ( 366511.2, 3769650.2,    95.4,    95.4,    0.0);
( 366500.9, 3769639.6,    95.3,    95.3,    0.0);    ( 366491.4, 3769630.1,    95.3,    95.3,    0.0);
( 366480.5, 3769629.4,    95.4,    95.4,    0.0);    ( 366470.9, 3769648.2,    95.9,    95.9,    0.0);
( 366470.6, 3769639.6,    95.7,    95.7,    0.0);    ( 366469.9, 3769629.4,    95.5,    95.5,    0.0);
( 366469.6, 3769616.5,    95.2,    95.2,    0.0);    ( 366480.8, 3769620.9,    95.2,    95.2,    0.0);
( 366460.4, 3769629.8,    95.7,    95.7,    0.0);    ( 366460.4, 3769639.6,    95.9,    95.9,    0.0);
( 366459.3, 3769648.8,    96.1,    96.1,    0.0);    ( 366449.1, 3769648.2,    96.3,    96.3,    0.0);
( 366449.1, 3769640.0,    96.1,    96.1,    0.0);
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** AERMOD - VERSION 15181 *** *** Geffen Acad at UCLA *** 04/21/16
*** AERMET - VERSION 14134 *** *** Mobile Sources - Staff *** 13:18:50

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\!MET Files\SCAQMD Met Files\wsla8.sfc Met Version: 14134
Profile file: C:\!MET Files\SCAQMD Met Files\wsla8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
26A	1ST HIGHEST VALUE IS	5.73501 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	5.68250 AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	3RD HIGHEST VALUE IS	5.32027 AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	4TH HIGHEST VALUE IS	5.15434 AT (	366480.48,	3769629.41,	95.38,	95.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	4.96608 AT (	366469.92,	3769629.41,	95.52,	95.52,	0.00)	DC	
	6TH HIGHEST VALUE IS	4.95992 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	7TH HIGHEST VALUE IS	4.87998 AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
	8TH HIGHEST VALUE IS	4.87641 AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	9TH HIGHEST VALUE IS	4.81086 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	10TH HIGHEST VALUE IS	4.78767 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
26B	1ST HIGHEST VALUE IS	5.77135 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	5.71835 AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	3RD HIGHEST VALUE IS	5.34300 AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	4TH HIGHEST VALUE IS	5.17082 AT (	366480.48,	3769629.41,	95.38,	95.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	4.97596 AT (	366469.92,	3769629.41,	95.52,	95.52,	0.00)	DC	
	6TH HIGHEST VALUE IS	4.97192 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	7TH HIGHEST VALUE IS	4.88580 AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	8TH HIGHEST VALUE IS	4.81959 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	9TH HIGHEST VALUE IS	4.79175 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	10TH HIGHEST VALUE IS	4.74403 AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
27A	1ST HIGHEST VALUE IS	3.45205 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	2ND HIGHEST VALUE IS	3.44255 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	3RD HIGHEST VALUE IS	3.38958 AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	4TH HIGHEST VALUE IS	3.36843 AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	5TH HIGHEST VALUE IS	3.27018 AT (	366441.29,	3769658.73,	96.66,	96.66,	0.00)	DC	
	6TH HIGHEST VALUE IS	3.25133 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	7TH HIGHEST VALUE IS	3.24399 AT (	366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC	
	8TH HIGHEST VALUE IS	3.23092 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	9TH HIGHEST VALUE IS	3.23040 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	10TH HIGHEST VALUE IS	3.19448 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC	
27B	1ST HIGHEST VALUE IS	3.46215 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	2ND HIGHEST VALUE IS	3.45284 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	3RD HIGHEST VALUE IS	3.39919 AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	

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 4TH HIGHEST VALUE IS       3.37581 AT (  366449.12,  3769639.98,     96.09,     96.09,     0.00)  DC
 5TH HIGHEST VALUE IS       3.27904 AT (  366441.29,  3769658.73,     96.66,     96.66,     0.00)  DC
 6TH HIGHEST VALUE IS       3.25731 AT (  366460.37,  3769629.75,     95.67,     95.67,     0.00)  DC
 7TH HIGHEST VALUE IS       3.25202 AT (  366449.12,  3769648.16,     96.30,     96.30,     0.00)  DC
 8TH HIGHEST VALUE IS       3.24231 AT (  366420.83,  3769692.81,     97.72,     97.72,     0.00)  DC
 9TH HIGHEST VALUE IS       3.23566 AT (  366469.58,  3769616.46,     95.25,     95.25,     0.00)  DC
10TH HIGHEST VALUE IS       3.20552 AT (  366430.72,  3769680.20,     97.31,     97.31,     0.00)  DC
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**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
28A	1ST HIGHEST VALUE IS	7.06325	AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	2ND HIGHEST VALUE IS	6.81001	AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC	
	3RD HIGHEST VALUE IS	6.55006	AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	4TH HIGHEST VALUE IS	6.53785	AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	5TH HIGHEST VALUE IS	6.45113	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	6TH HIGHEST VALUE IS	6.42987	AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC	
	7TH HIGHEST VALUE IS	6.28923	AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	
	8TH HIGHEST VALUE IS	6.14363	AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC	
	9TH HIGHEST VALUE IS	6.09570	AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC	
	10TH HIGHEST VALUE IS	6.06646	AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
28B	1ST HIGHEST VALUE IS	6.66856	AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
	2ND HIGHEST VALUE IS	6.41899	AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC	
	3RD HIGHEST VALUE IS	6.20702	AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC	
	4TH HIGHEST VALUE IS	6.18957	AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
	5TH HIGHEST VALUE IS	6.13484	AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	6TH HIGHEST VALUE IS	6.07590	AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC	
	7TH HIGHEST VALUE IS	5.93568	AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	
	8TH HIGHEST VALUE IS	5.83893	AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC	
	9TH HIGHEST VALUE IS	5.77448	AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC	
	10TH HIGHEST VALUE IS	5.75939	AT (	366511.11,	3769668.05,	95.81,	95.81,	3.05)	DC	
29A	1ST HIGHEST VALUE IS	39.37572	AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	37.17393	AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	3RD HIGHEST VALUE IS	31.20714	AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	4TH HIGHEST VALUE IS	28.25971	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	26.66859	AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC	
	6TH HIGHEST VALUE IS	25.54417	AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC	
	7TH HIGHEST VALUE IS	25.22366	AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC	
	8TH HIGHEST VALUE IS	24.10038	AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC	
	9TH HIGHEST VALUE IS	22.68713	AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC	
	10TH HIGHEST VALUE IS	21.55601	AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC	
29B	1ST HIGHEST VALUE IS	33.60661	AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	2ND HIGHEST VALUE IS	32.17716	AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC	
	3RD HIGHEST VALUE IS	27.53923	AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	4TH HIGHEST VALUE IS	25.25729	AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC	

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

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  5TH HIGHEST VALUE IS      23.01721 AT (  366451.11,  3769708.05,    97.54,    97.54,    0.00)  DC
  6TH HIGHEST VALUE IS      22.69637 AT (  366431.06,  3769693.83,    97.63,    97.63,    0.00)  DC
  7TH HIGHEST VALUE IS      22.43335 AT (  366461.11,  3769718.05,    97.38,    97.38,    3.05)  DC
  8TH HIGHEST VALUE IS      20.55566 AT (  366471.11,  3769718.05,    97.08,    97.08,    0.00)  DC
  9TH HIGHEST VALUE IS      20.46109 AT (  366451.11,  3769708.05,    97.54,    97.54,    3.05)  DC
 10TH HIGHEST VALUE IS      18.93798 AT (  366461.11,  3769708.05,    97.27,    97.27,    0.00)  DC
```

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
30A	1ST HIGHEST VALUE IS	2.11233 AT (	366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	2.08370 AT (	366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	3RD HIGHEST VALUE IS	2.05538 AT (	366501.11, 3769688.05, 96.21, 96.21, 0.00)	DC	
	4TH HIGHEST VALUE IS	2.04715 AT (	366511.11, 3769668.05, 95.81, 95.81, 0.00)	DC	
	5TH HIGHEST VALUE IS	2.02553 AT (	366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	6TH HIGHEST VALUE IS	2.02097 AT (	366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
	7TH HIGHEST VALUE IS	2.01669 AT (	366511.11, 3769668.05, 95.81, 95.81, 3.05)	DC	
	8TH HIGHEST VALUE IS	1.99004 AT (	366521.11, 3769658.05, 95.45, 95.45, 6.10)	DC	
	9TH HIGHEST VALUE IS	1.98118 AT (	366491.11, 3769698.05, 96.47, 96.47, 0.00)	DC	
	10TH HIGHEST VALUE IS	1.98095 AT (	366501.11, 3769678.05, 96.16, 96.16, 0.00)	DC	
30B	1ST HIGHEST VALUE IS	2.08893 AT (	366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	2.04811 AT (	366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	3RD HIGHEST VALUE IS	2.03441 AT (	366501.11, 3769688.05, 96.21, 96.21, 0.00)	DC	
	4TH HIGHEST VALUE IS	2.02595 AT (	366511.11, 3769668.05, 95.81, 95.81, 0.00)	DC	
	5TH HIGHEST VALUE IS	2.00427 AT (	366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	6TH HIGHEST VALUE IS	1.97040 AT (	366511.11, 3769668.05, 95.81, 95.81, 3.05)	DC	
	7TH HIGHEST VALUE IS	1.96941 AT (	366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
	8TH HIGHEST VALUE IS	1.96237 AT (	366491.11, 3769698.05, 96.47, 96.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	1.96186 AT (	366501.11, 3769678.05, 96.16, 96.16, 0.00)	DC	
	10TH HIGHEST VALUE IS	1.95102 AT (	366511.11, 3769658.05, 95.60, 95.60, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

Model Input - Mobile Sources for Staff
Unit Emission Rates (1 g/s)


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**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                                *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***

                                    ** CONC OF OTHER    IN MICROGRAMS/M**3                                **

                                                         DATE                                                                NETWORK
GROUP ID                                  AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

26A       HIGH   1ST HIGH VALUE IS      66.46602  ON 11090618: AT (  366469.58,  3769616.46,     95.25,     95.25,     0.00)  DC

26B       HIGH   1ST HIGH VALUE IS      65.75242  ON 11090618: AT (  366469.58,  3769616.46,     95.25,     95.25,     0.00)  DC

27A       HIGH   1ST HIGH VALUE IS      65.59122  ON 08102718: AT (  366451.11,  3769688.05,     97.16,     97.16,     6.10)  DC

27B       HIGH   1ST HIGH VALUE IS      66.17439  ON 09092518: AT (  366451.11,  3769688.05,     97.16,     97.16,     3.05)  DC

28A       HIGH   1ST HIGH VALUE IS     128.22429  ON 09022618: AT (  366521.11,  3769658.05,     95.45,     95.45,     6.10)  DC

28B       HIGH   1ST HIGH VALUE IS     125.67820  ON 09022618: AT (  366521.11,  3769658.05,     95.45,     95.45,     3.05)  DC

29A       HIGH   1ST HIGH VALUE IS     580.67553  ON 11090618: AT (  366412.31,  3769692.47,     97.78,     97.78,     0.00)  DC

29B       HIGH   1ST HIGH VALUE IS     509.55680  ON 11090618: AT (  366412.31,  3769692.47,     97.78,     97.78,     0.00)  DC

30A       HIGH   1ST HIGH VALUE IS      49.80533  ON 12111517: AT (  366501.11,  3769688.05,     96.21,     96.21,     6.10)  DC

30B       HIGH   1ST HIGH VALUE IS      62.34538  ON 08112418: AT (  366501.11,  3769688.05,     96.21,     96.21,     6.10)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
26A	HIGH	1ST HIGH VALUE IS	27.12814m	ON 10120624: AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
26B	HIGH	1ST HIGH VALUE IS	26.84951m	ON 10120624: AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
27A	HIGH	1ST HIGH VALUE IS	21.91966m	ON 10120624: AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
27B	HIGH	1ST HIGH VALUE IS	21.79908m	ON 10120624: AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
28A	HIGH	1ST HIGH VALUE IS	45.78425m	ON 10120624: AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
28B	HIGH	1ST HIGH VALUE IS	44.85949m	ON 10120624: AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
29A	HIGH	1ST HIGH VALUE IS	218.53733m	ON 10120624: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
29B	HIGH	1ST HIGH VALUE IS	192.43031m	ON 10120624: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
30A	HIGH	1ST HIGH VALUE IS	18.24916m	ON 10120624: AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC	
30B	HIGH	1ST HIGH VALUE IS	18.18284m	ON 10120624: AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                          ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Staff                                                       ***        13:18:50
                                                                                                                              PAGE 429
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           0 Warning Message(s)
A Total of        1558 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of         115 Calm Hours Identified

A Total of        1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
              ***  NONE  ***


   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
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Model Output - Mobile Sources
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Mobile Sources - Students

Concentration - Source Group: 26A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	66.43017	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	11/8/2012, 16
8-HR	1ST	23.34115	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	11/8/2012, 16
PERIOD		2.73739	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 26B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	65.38385	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	11/28/2012, 16
8-HR	1ST	22.75874	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	11/8/2012, 16
PERIOD		2.80891	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	

Concentration - Source Group: 27A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	43.24919	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	11/28/2012, 16
8-HR	1ST	12.16287	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	11/8/2012, 16
PERIOD		1.41523	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	

Results Summary

Geffen Acad at UCLA
Mobile Sources - Students

Concentration - Source Group: 27B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	43.90881	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	11/28/2012, 16
8-HR	1ST	12.98133	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	11/8/2012, 16
PERIOD		1.42735	ug/m^3	366421.17	3769678.50	97.39	0.00	97.39	

Concentration - Source Group: 28A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	79.38772	ug/m^3	366521.11	3769658.05	95.45	6.10	95.45	1/22/2008, 16
8-HR	1ST	28.55190	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	1/22/2008, 16
PERIOD		2.81825	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Concentration - Source Group: 28B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	82.29717	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	1/22/2008, 16
8-HR	1ST	28.94255	ug/m^3	366521.11	3769658.05	95.45	3.05	95.45	1/22/2008, 16
PERIOD		2.61693	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Results Summary

Geffen Acad at UCLA
Mobile Sources - Students

Concentration - Source Group: 29A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	411.92240	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	1/22/2008, 16
8-HR	1ST	114.89751	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	12/17/2012, 16
PERIOD		17.24523	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 29B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	344.53164	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	1/22/2008, 16
8-HR	1ST	108.65981	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	12/25/2012, 16
PERIOD		14.90527	ug/m^3	366412.31	3769692.47	97.78	0.00	97.78	

Concentration - Source Group: 30A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	47.15072	ug/m^3	366471.11	3769718.05	97.08	6.10	97.08	1/22/2008, 16
8-HR	1ST	12.66725	ug/m^3	366501.11	3769688.05	96.21	6.10	96.21	1/22/2008, 16
PERIOD		0.67580	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Model Output - Mobile Sources
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Mobile Sources - Students

Concentration - Source Group: 30B

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	48.38755	ug/m^3	366491.11	3769698.05	96.47	6.10	96.47	1/22/2008, 16
8-HR	1ST	12.97646	ug/m^3	366501.11	3769688.05	96.21	3.05	96.21	1/22/2008, 16
PERIOD		0.66688	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                            ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Students                                      ***        14:54:49
                                                                                                                PAGE   1
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                           ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for   322 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR  24-HR
    and Calculates PERIOD Averages

**This Run Includes:    322 Source(s);      10 Source Group(s); and     143 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:    322 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  14134
```

```
**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      4.0 MB of RAM.

**Detailed Error/Message File:   geffenmobilestdnts.err
**File for Summary of Results:   geffenmobilestdnts.sum
```

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.37037E-01	366891.5	3769670.7	98.6	0.60	14.19	3.03	YES	HRDOW
L0000002	0	0.37037E-01	366862.4	3769661.4	97.8	0.60	14.19	3.03	YES	HRDOW
L0000003	0	0.37037E-01	366833.4	3769652.0	96.8	0.60	14.19	3.03	YES	HRDOW
L0000004	0	0.37037E-01	366804.4	3769642.6	95.9	0.60	14.19	3.03	YES	HRDOW
L0000005	0	0.37037E-01	366775.4	3769633.2	94.8	0.60	14.19	3.03	YES	HRDOW
L0000006	0	0.37037E-01	366746.3	3769623.8	93.9	0.60	14.19	3.03	YES	HRDOW
L0000007	0	0.37037E-01	366717.3	3769614.5	93.4	0.60	14.19	3.03	YES	HRDOW
L0000008	0	0.37037E-01	366688.3	3769605.1	93.1	0.60	14.19	3.03	YES	HRDOW
L0000009	0	0.37037E-01	366659.3	3769595.7	93.0	0.60	14.19	3.03	YES	HRDOW
L0000010	0	0.37037E-01	366630.3	3769586.3	93.0	0.60	14.19	3.03	YES	HRDOW
L0000011	0	0.37037E-01	366601.2	3769576.9	92.9	0.60	14.19	3.03	YES	HRDOW
L0000012	0	0.37037E-01	366572.2	3769567.6	93.0	0.60	14.19	3.03	YES	HRDOW
L0000013	0	0.37037E-01	366543.2	3769558.2	93.2	0.60	14.19	3.03	YES	HRDOW
L0000014	0	0.37037E-01	366514.2	3769548.8	93.5	0.60	14.19	3.03	YES	HRDOW
L0000015	0	0.37037E-01	366485.1	3769539.4	93.7	0.60	14.19	3.03	YES	HRDOW
L0000016	0	0.37037E-01	366456.1	3769530.0	93.8	0.60	14.19	3.03	YES	HRDOW
L0000017	0	0.37037E-01	366427.1	3769520.7	93.9	0.60	14.19	3.03	YES	HRDOW
L0000018	0	0.37037E-01	366398.1	3769511.3	94.0	0.60	14.19	3.03	YES	HRDOW
L0000019	0	0.37037E-01	366369.1	3769501.9	94.1	0.60	14.19	3.03	YES	HRDOW
L0000020	0	0.37037E-01	366340.0	3769492.5	94.3	0.60	14.19	3.03	YES	HRDOW
L0000021	0	0.37037E-01	366311.0	3769483.2	94.5	0.60	14.19	3.03	YES	HRDOW
L0000022	0	0.37037E-01	366282.6	3769472.4	94.8	0.60	14.19	3.03	YES	HRDOW
L0000023	0	0.37037E-01	366256.2	3769457.1	94.9	0.60	14.19	3.03	YES	HRDOW
L0000024	0	0.37037E-01	366229.9	3769441.8	95.0	0.60	14.19	3.03	YES	HRDOW
L0000025	0	0.37037E-01	366203.5	3769426.5	95.3	0.60	14.19	3.03	YES	HRDOW
L0000026	0	0.37037E-01	366177.1	3769411.2	95.6	0.60	14.19	3.03	YES	HRDOW
L0000027	0	0.37037E-01	366150.7	3769395.9	96.2	0.60	14.19	3.03	YES	HRDOW
L0000028	0	0.27027E-01	366096.3	3769936.1	105.2	0.60	10.88	2.81	YES	HRDOW
L0000029	0	0.27027E-01	366109.9	3769917.1	104.5	0.60	10.88	2.81	YES	HRDOW
L0000030	0	0.27027E-01	366123.5	3769898.1	104.2	0.60	10.88	2.81	YES	HRDOW
L0000031	0	0.27027E-01	366137.0	3769879.0	103.8	0.60	10.88	2.81	YES	HRDOW
L0000032	0	0.27027E-01	366150.6	3769860.0	103.4	0.60	10.88	2.81	YES	HRDOW
L0000033	0	0.27027E-01	366164.2	3769840.9	102.7	0.60	10.88	2.81	YES	HRDOW
L0000034	0	0.27027E-01	366177.8	3769821.9	101.9	0.60	10.88	2.81	YES	HRDOW
L0000035	0	0.27027E-01	366191.4	3769802.8	101.0	0.60	10.88	2.81	YES	HRDOW
L0000036	0	0.27027E-01	366205.0	3769783.8	100.0	0.60	10.88	2.81	YES	HRDOW
L0000037	0	0.27027E-01	366218.6	3769764.7	98.9	0.60	10.88	2.81	YES	HRDOW
L0000038	0	0.27027E-01	366232.2	3769745.7	98.2	0.60	10.88	2.81	YES	HRDOW

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

L0000039	0	0.27027E-01	366245.8	3769726.6	97.8	0.60	10.88	2.81	YES	HRDOW
L0000040	0	0.27027E-01	366259.4	3769707.6	97.5	0.60	10.88	2.81	YES	HRDOW
L0000041	0	0.27027E-01	366273.0	3769688.5	97.1	0.60	10.88	2.81	YES	HRDOW
L0000042	0	0.27027E-01	366286.6	3769669.5	96.8	0.60	10.88	2.81	YES	HRDOW
L0000043	0	0.27027E-01	366300.2	3769650.4	96.5	0.60	10.88	2.81	YES	HRDOW
L0000044	0	0.27027E-01	366313.4	3769631.2	96.3	0.60	10.88	2.81	YES	HRDOW
L0000045	0	0.27027E-01	366326.0	3769611.5	96.1	0.60	10.88	2.81	YES	HRDOW
L0000046	0	0.27027E-01	366338.7	3769591.8	95.8	0.60	10.88	2.81	YES	HRDOW
L0000047	0	0.27027E-01	366351.3	3769572.0	95.5	0.60	10.88	2.81	YES	HRDOW
L0000048	0	0.27027E-01	366363.9	3769552.3	94.9	0.60	10.88	2.81	YES	HRDOW
L0000049	0	0.27027E-01	366376.5	3769532.6	94.5	0.60	10.88	2.81	YES	HRDOW
L0000050	0	0.27027E-01	366389.1	3769512.9	94.1	0.60	10.88	2.81	YES	HRDOW
L0000051	0	0.27027E-01	366402.3	3769493.6	93.7	0.60	10.88	2.81	YES	HRDOW
L0000052	0	0.27027E-01	366415.7	3769474.4	93.3	0.60	10.88	2.81	YES	HRDOW
L0000053	0	0.27027E-01	366429.0	3769455.2	93.0	0.60	10.88	2.81	YES	HRDOW
L0000054	0	0.27027E-01	366442.3	3769435.9	92.5	0.60	10.88	2.81	YES	HRDOW
L0000055	0	0.27027E-01	366455.7	3769416.7	92.2	0.60	10.88	2.81	YES	HRDOW
L0000056	0	0.27027E-01	366469.0	3769397.5	91.8	0.60	10.88	2.81	YES	HRDOW
L0000057	0	0.27027E-01	366482.4	3769378.2	91.5	0.60	10.88	2.81	YES	HRDOW
L0000058	0	0.27027E-01	366495.7	3769359.0	91.1	0.60	10.88	2.81	YES	HRDOW
L0000059	0	0.27027E-01	366509.0	3769339.8	90.7	0.60	10.88	2.81	YES	HRDOW
L0000060	0	0.27027E-01	366522.4	3769320.6	90.4	0.60	10.88	2.81	YES	HRDOW
L0000061	0	0.27027E-01	366535.7	3769301.3	90.0	0.60	10.88	2.81	YES	HRDOW
L0000062	0	0.27027E-01	366549.0	3769282.1	89.7	0.60	10.88	2.81	YES	HRDOW
L0000063	0	0.27027E-01	366562.4	3769262.9	89.3	0.60	10.88	2.81	YES	HRDOW
L0000064	0	0.27027E-01	366575.7	3769243.6	89.0	0.60	10.88	2.81	YES	HRDOW
L0000065	0	0.24390E-01	366338.4	3770100.7	103.7	0.60	10.47	2.78	YES	HRDOW
L0000066	0	0.24390E-01	366336.1	3770078.3	103.2	0.60	10.47	2.78	YES	HRDOW
L0000067	0	0.24390E-01	366339.4	3770056.5	103.5	0.60	10.47	2.78	YES	HRDOW
L0000068	0	0.24390E-01	366346.8	3770035.3	103.4	0.60	10.47	2.78	YES	HRDOW
L0000069	0	0.24390E-01	366354.3	3770014.1	103.2	0.60	10.47	2.78	YES	HRDOW
L0000070	0	0.24390E-01	366361.8	3769992.9	103.0	0.60	10.47	2.78	YES	HRDOW
L0000071	0	0.24390E-01	366369.3	3769971.7	102.6	0.60	10.47	2.78	YES	HRDOW
L0000072	0	0.24390E-01	366381.9	3769953.1	102.0	0.60	10.47	2.78	YES	HRDOW
L0000073	0	0.24390E-01	366394.8	3769934.6	101.3	0.60	10.47	2.78	YES	HRDOW
L0000074	0	0.24390E-01	366407.7	3769916.2	100.7	0.60	10.47	2.78	YES	HRDOW
L0000075	0	0.24390E-01	366420.6	3769897.8	100.1	0.60	10.47	2.78	YES	HRDOW
L0000076	0	0.24390E-01	366433.6	3769879.4	99.5	0.60	10.47	2.78	YES	HRDOW
L0000077	0	0.24390E-01	366446.5	3769861.0	99.1	0.60	10.47	2.78	YES	HRDOW
L0000078	0	0.24390E-01	366459.4	3769842.5	98.6	0.60	10.47	2.78	YES	HRDOW
L0000079	0	0.24390E-01	366472.3	3769824.1	98.2	0.60	10.47	2.78	YES	HRDOW
L0000080	0	0.24390E-01	366485.2	3769805.7	97.8	0.60	10.47	2.78	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000081	0	0.24390E-01	366498.2	3769787.3	97.4	0.60	10.47	2.78	YES	HRDOW
L0000082	0	0.24390E-01	366511.1	3769768.9	97.1	0.60	10.47	2.78	YES	HRDOW
L0000083	0	0.24390E-01	366524.0	3769750.5	96.7	0.60	10.47	2.78	YES	HRDOW
L0000084	0	0.24390E-01	366536.9	3769732.0	96.3	0.60	10.47	2.78	YES	HRDOW
L0000085	0	0.24390E-01	366549.8	3769713.6	95.9	0.60	10.47	2.78	YES	HRDOW
L0000086	0	0.24390E-01	366562.8	3769695.2	95.5	0.60	10.47	2.78	YES	HRDOW
L0000087	0	0.24390E-01	366575.2	3769676.5	95.1	0.60	10.47	2.78	YES	HRDOW
L0000088	0	0.24390E-01	366584.9	3769656.2	94.6	0.60	10.47	2.78	YES	HRDOW
L0000089	0	0.24390E-01	366590.7	3769634.8	94.1	0.60	10.47	2.78	YES	HRDOW
L0000090	0	0.24390E-01	366593.0	3769612.4	93.7	0.60	10.47	2.78	YES	HRDOW
L0000091	0	0.24390E-01	366595.2	3769590.0	93.2	0.60	10.47	2.78	YES	HRDOW
L0000092	0	0.24390E-01	366597.5	3769567.6	92.7	0.60	10.47	2.78	YES	HRDOW
L0000093	0	0.24390E-01	366605.0	3769546.7	92.2	0.60	10.47	2.78	YES	HRDOW
L0000094	0	0.24390E-01	366614.4	3769526.3	91.9	0.60	10.47	2.78	YES	HRDOW
L0000095	0	0.24390E-01	366623.9	3769505.9	91.6	0.60	10.47	2.78	YES	HRDOW
L0000096	0	0.24390E-01	366633.4	3769485.5	91.3	0.60	10.47	2.78	YES	HRDOW
L0000097	0	0.24390E-01	366642.9	3769465.1	91.0	0.60	10.47	2.78	YES	HRDOW
L0000098	0	0.24390E-01	366652.4	3769444.7	90.8	0.60	10.47	2.78	YES	HRDOW
L0000099	0	0.24390E-01	366661.9	3769424.3	90.5	0.60	10.47	2.78	YES	HRDOW
L0000100	0	0.24390E-01	366671.4	3769403.9	90.4	0.60	10.47	2.78	YES	HRDOW
L0000101	0	0.24390E-01	366680.9	3769383.5	90.3	0.60	10.47	2.78	YES	HRDOW
L0000102	0	0.24390E-01	366690.4	3769363.1	90.2	0.60	10.47	2.78	YES	HRDOW
L0000103	0	0.24390E-01	366699.9	3769342.7	90.0	0.60	10.47	2.78	YES	HRDOW
L0000104	0	0.24390E-01	366709.4	3769322.3	89.7	0.60	10.47	2.78	YES	HRDOW
L0000105	0	0.24390E-01	366718.8	3769301.9	89.4	0.60	10.47	2.78	YES	HRDOW
L0000106	0	0.38462E-01	366313.2	3769642.8	96.5	0.60	7.91	2.60	YES	HRDOW
L0000107	0	0.38462E-01	366327.1	3769652.6	96.7	0.60	7.91	2.60	YES	HRDOW
L0000108	0	0.38462E-01	366341.0	3769662.4	97.0	0.60	7.91	2.60	YES	HRDOW
L0000109	0	0.38462E-01	366354.9	3769672.2	97.4	0.60	7.91	2.60	YES	HRDOW
L0000110	0	0.38462E-01	366368.7	3769682.0	97.7	0.60	7.91	2.60	YES	HRDOW
L0000111	0	0.38462E-01	366382.6	3769691.8	97.9	0.60	7.91	2.60	YES	HRDOW
L0000112	0	0.38462E-01	366396.5	3769701.6	98.1	0.60	7.91	2.60	YES	HRDOW
L0000113	0	0.38462E-01	366410.4	3769711.4	98.2	0.60	7.91	2.60	YES	HRDOW
L0000114	0	0.38462E-01	366424.3	3769721.2	98.2	0.60	7.91	2.60	YES	HRDOW
L0000115	0	0.38462E-01	366438.2	3769731.0	98.0	0.60	7.91	2.60	YES	HRDOW
L0000116	0	0.38462E-01	366452.1	3769740.8	97.9	0.60	7.91	2.60	YES	HRDOW
L0000117	0	0.38462E-01	366466.0	3769750.6	97.5	0.60	7.91	2.60	YES	HRDOW
L0000118	0	0.38462E-01	366479.9	3769760.4	97.2	0.60	7.91	2.60	YES	HRDOW

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

L0000119	0	0.38462E-01	366493.8	3769770.2	97.2	0.60	7.91	2.60	YES	HRDOW
L0000120	0	0.38462E-01	366507.7	3769780.0	97.3	0.60	7.91	2.60	YES	HRDOW
L0000121	0	0.38462E-01	366521.5	3769789.8	97.4	0.60	7.91	2.60	YES	HRDOW
L0000122	0	0.38462E-01	366535.4	3769799.6	97.6	0.60	7.91	2.60	YES	HRDOW
L0000123	0	0.38462E-01	366549.6	3769809.0	97.7	0.60	7.91	2.60	YES	HRDOW
L0000124	0	0.38462E-01	366563.9	3769818.2	97.8	0.60	7.91	2.60	YES	HRDOW
L0000125	0	0.38462E-01	366578.2	3769827.3	98.0	0.60	7.91	2.60	YES	HRDOW
L0000126	0	0.38462E-01	366593.7	3769834.3	98.1	0.60	7.91	2.60	YES	HRDOW
L0000127	0	0.38462E-01	366609.5	3769840.2	98.1	0.60	7.91	2.60	YES	HRDOW
L0000128	0	0.38462E-01	366626.5	3769840.2	98.3	0.60	7.91	2.60	YES	HRDOW
L0000129	0	0.38462E-01	366643.5	3769840.2	98.6	0.60	7.91	2.60	YES	HRDOW
L0000130	0	0.38462E-01	366660.5	3769840.2	99.1	0.60	7.91	2.60	YES	HRDOW
L0000131	0	0.38462E-01	366677.5	3769840.2	99.4	0.60	7.91	2.60	YES	HRDOW
L0000132	0	0.33333E-01	366606.6	3770104.6	103.3	0.60	12.09	2.89	YES	HRDOW
L0000133	0	0.33333E-01	366606.1	3770078.6	103.1	0.60	12.09	2.89	YES	HRDOW
L0000134	0	0.33333E-01	366605.6	3770052.7	102.8	0.60	12.09	2.89	YES	HRDOW
L0000135	0	0.33333E-01	366605.0	3770026.7	102.5	0.60	12.09	2.89	YES	HRDOW
L0000136	0	0.33333E-01	366604.5	3770000.7	101.9	0.60	12.09	2.89	YES	HRDOW
L0000137	0	0.33333E-01	366604.0	3769974.7	101.2	0.60	12.09	2.89	YES	HRDOW
L0000138	0	0.33333E-01	366603.5	3769948.7	100.6	0.60	12.09	2.89	YES	HRDOW
L0000139	0	0.33333E-01	366603.0	3769922.7	100.1	0.60	12.09	2.89	YES	HRDOW
L0000140	0	0.33333E-01	366602.5	3769896.7	99.5	0.60	12.09	2.89	YES	HRDOW
L0000141	0	0.33333E-01	366602.0	3769870.7	98.8	0.60	12.09	2.89	YES	HRDOW
L0000142	0	0.33333E-01	366601.5	3769844.7	98.2	0.60	12.09	2.89	YES	HRDOW
L0000143	0	0.33333E-01	366602.5	3769819.1	97.8	0.60	12.09	2.89	YES	HRDOW
L0000144	0	0.33333E-01	366616.9	3769797.5	97.5	0.60	12.09	2.89	YES	HRDOW
L0000145	0	0.33333E-01	366631.3	3769775.8	97.3	0.60	12.09	2.89	YES	HRDOW
L0000146	0	0.33333E-01	366645.7	3769754.2	97.1	0.60	12.09	2.89	YES	HRDOW
L0000147	0	0.33333E-01	366660.1	3769732.5	96.7	0.60	12.09	2.89	YES	HRDOW
L0000148	0	0.33333E-01	366674.5	3769710.9	96.2	0.60	12.09	2.89	YES	HRDOW
L0000149	0	0.33333E-01	366688.9	3769689.2	95.7	0.60	12.09	2.89	YES	HRDOW
L0000150	0	0.33333E-01	366703.2	3769667.5	95.1	0.60	12.09	2.89	YES	HRDOW
L0000151	0	0.33333E-01	366717.6	3769645.9	94.4	0.60	12.09	2.89	YES	HRDOW
L0000152	0	0.33333E-01	366732.0	3769624.2	93.7	0.60	12.09	2.89	YES	HRDOW
L0000153	0	0.33333E-01	366744.8	3769601.6	93.3	0.60	12.09	2.89	YES	HRDOW
L0000154	0	0.33333E-01	366757.1	3769578.7	93.0	0.60	12.09	2.89	YES	HRDOW
L0000155	0	0.33333E-01	366769.3	3769555.8	93.3	0.60	12.09	2.89	YES	HRDOW
L0000156	0	0.33333E-01	366781.6	3769532.8	93.5	0.60	12.09	2.89	YES	HRDOW
L0000157	0	0.33333E-01	366793.9	3769509.9	93.8	0.60	12.09	2.89	YES	HRDOW
L0000158	0	0.33333E-01	366806.1	3769487.0	94.0	0.60	12.09	2.89	YES	HRDOW
L0000159	0	0.33333E-01	366818.4	3769464.1	94.2	0.60	12.09	2.89	YES	HRDOW
L0000160	0	0.33333E-01	366830.7	3769441.1	94.2	0.60	12.09	2.89	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000161	0	0.33333E-01	366842.9	3769418.2	94.0	0.60	12.09	2.89	YES	HRDOW
L0000323	0	0.37037E-01	366891.5	3769670.7	98.6	4.15	14.19	3.03	YES	HRDOW
L0000324	0	0.37037E-01	366862.4	3769661.4	97.8	4.15	14.19	3.03	YES	HRDOW
L0000325	0	0.37037E-01	366833.4	3769652.0	96.8	4.15	14.19	3.03	YES	HRDOW
L0000326	0	0.37037E-01	366804.4	3769642.6	95.9	4.15	14.19	3.03	YES	HRDOW
L0000327	0	0.37037E-01	366775.4	3769633.2	94.8	4.15	14.19	3.03	YES	HRDOW
L0000328	0	0.37037E-01	366746.3	3769623.8	93.9	4.15	14.19	3.03	YES	HRDOW
L0000329	0	0.37037E-01	366717.3	3769614.5	93.4	4.15	14.19	3.03	YES	HRDOW
L0000330	0	0.37037E-01	366688.3	3769605.1	93.1	4.15	14.19	3.03	YES	HRDOW
L0000331	0	0.37037E-01	366659.3	3769595.7	93.0	4.15	14.19	3.03	YES	HRDOW
L0000332	0	0.37037E-01	366630.3	3769586.3	93.0	4.15	14.19	3.03	YES	HRDOW
L0000333	0	0.37037E-01	366601.2	3769576.9	92.9	4.15	14.19	3.03	YES	HRDOW
L0000334	0	0.37037E-01	366572.2	3769567.6	93.0	4.15	14.19	3.03	YES	HRDOW
L0000335	0	0.37037E-01	366543.2	3769558.2	93.2	4.15	14.19	3.03	YES	HRDOW
L0000336	0	0.37037E-01	366514.2	3769548.8	93.5	4.15	14.19	3.03	YES	HRDOW
L0000337	0	0.37037E-01	366485.1	3769539.4	93.7	4.15	14.19	3.03	YES	HRDOW
L0000338	0	0.37037E-01	366456.1	3769530.0	93.8	4.15	14.19	3.03	YES	HRDOW
L0000339	0	0.37037E-01	366427.1	3769520.7	93.9	4.15	14.19	3.03	YES	HRDOW
L0000340	0	0.37037E-01	366398.1	3769511.3	94.0	4.15	14.19	3.03	YES	HRDOW
L0000341	0	0.37037E-01	366369.1	3769501.9	94.1	4.15	14.19	3.03	YES	HRDOW
L0000342	0	0.37037E-01	366340.0	3769492.5	94.3	4.15	14.19	3.03	YES	HRDOW
L0000343	0	0.37037E-01	366311.0	3769483.2	94.5	4.15	14.19	3.03	YES	HRDOW
L0000344	0	0.37037E-01	366282.6	3769472.4	94.8	4.15	14.19	3.03	YES	HRDOW
L0000345	0	0.37037E-01	366256.2	3769457.1	94.9	4.15	14.19	3.03	YES	HRDOW
L0000346	0	0.37037E-01	366229.9	3769441.8	95.0	4.15	14.19	3.03	YES	HRDOW
L0000347	0	0.37037E-01	366203.5	3769426.5	95.3	4.15	14.19	3.03	YES	HRDOW
L0000348	0	0.37037E-01	366177.1	3769411.2	95.6	4.15	14.19	3.03	YES	HRDOW
L0000349	0	0.37037E-01	366150.7	3769395.9	96.2	4.15	14.19	3.03	YES	HRDOW
L0000350	0	0.27027E-01	366096.3	3769936.1	105.2	4.15	10.88	2.81	YES	HRDOW
L0000351	0	0.27027E-01	366109.9	3769917.1	104.5	4.15	10.88	2.81	YES	HRDOW
L0000352	0	0.27027E-01	366123.5	3769898.1	104.2	4.15	10.88	2.81	YES	HRDOW
L0000353	0	0.27027E-01	366137.0	3769879.0	103.8	4.15	10.88	2.81	YES	HRDOW
L0000354	0	0.27027E-01	366150.6	3769860.0	103.4	4.15	10.88	2.81	YES	HRDOW
L0000355	0	0.27027E-01	366164.2	3769840.9	102.7	4.15	10.88	2.81	YES	HRDOW
L0000356	0	0.27027E-01	366177.8	3769821.9	101.9	4.15	10.88	2.81	YES	HRDOW
L0000357	0	0.27027E-01	366191.4	3769802.8	101.0	4.15	10.88	2.81	YES	HRDOW
L0000358	0	0.27027E-01	366205.0	3769783.8	100.0	4.15	10.88	2.81	YES	HRDOW
L0000359	0	0.27027E-01	366218.6	3769764.7	98.9	4.15	10.88	2.81	YES	HRDOW

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

L0000360	0	0.27027E-01	366232.2	3769745.7	98.2	4.15	10.88	2.81	YES	HRDOW
L0000361	0	0.27027E-01	366245.8	3769726.6	97.8	4.15	10.88	2.81	YES	HRDOW
L0000362	0	0.27027E-01	366259.4	3769707.6	97.5	4.15	10.88	2.81	YES	HRDOW
L0000363	0	0.27027E-01	366273.0	3769688.5	97.1	4.15	10.88	2.81	YES	HRDOW
L0000364	0	0.27027E-01	366286.6	3769669.5	96.8	4.15	10.88	2.81	YES	HRDOW
L0000365	0	0.27027E-01	366300.2	3769650.4	96.5	4.15	10.88	2.81	YES	HRDOW
L0000366	0	0.27027E-01	366313.4	3769631.2	96.3	4.15	10.88	2.81	YES	HRDOW
L0000367	0	0.27027E-01	366326.0	3769611.5	96.1	4.15	10.88	2.81	YES	HRDOW
L0000368	0	0.27027E-01	366338.7	3769591.8	95.8	4.15	10.88	2.81	YES	HRDOW
L0000369	0	0.27027E-01	366351.3	3769572.0	95.5	4.15	10.88	2.81	YES	HRDOW
L0000370	0	0.27027E-01	366363.9	3769552.3	94.9	4.15	10.88	2.81	YES	HRDOW
L0000371	0	0.27027E-01	366376.5	3769532.6	94.5	4.15	10.88	2.81	YES	HRDOW
L0000372	0	0.27027E-01	366389.1	3769512.9	94.1	4.15	10.88	2.81	YES	HRDOW
L0000373	0	0.27027E-01	366402.3	3769493.6	93.7	4.15	10.88	2.81	YES	HRDOW
L0000374	0	0.27027E-01	366415.7	3769474.4	93.3	4.15	10.88	2.81	YES	HRDOW
L0000375	0	0.27027E-01	366429.0	3769455.2	93.0	4.15	10.88	2.81	YES	HRDOW
L0000376	0	0.27027E-01	366442.3	3769435.9	92.5	4.15	10.88	2.81	YES	HRDOW
L0000377	0	0.27027E-01	366455.7	3769416.7	92.2	4.15	10.88	2.81	YES	HRDOW
L0000378	0	0.27027E-01	366469.0	3769397.5	91.8	4.15	10.88	2.81	YES	HRDOW
L0000379	0	0.27027E-01	366482.4	3769378.2	91.5	4.15	10.88	2.81	YES	HRDOW
L0000380	0	0.27027E-01	366495.7	3769359.0	91.1	4.15	10.88	2.81	YES	HRDOW
L0000381	0	0.27027E-01	366509.0	3769339.8	90.7	4.15	10.88	2.81	YES	HRDOW
L0000382	0	0.27027E-01	366522.4	3769320.6	90.4	4.15	10.88	2.81	YES	HRDOW
L0000383	0	0.27027E-01	366535.7	3769301.3	90.0	4.15	10.88	2.81	YES	HRDOW
L0000384	0	0.27027E-01	366549.0	3769282.1	89.7	4.15	10.88	2.81	YES	HRDOW
L0000385	0	0.27027E-01	366562.4	3769262.9	89.3	4.15	10.88	2.81	YES	HRDOW
L0000386	0	0.27027E-01	366575.7	3769243.6	89.0	4.15	10.88	2.81	YES	HRDOW
L0000387	0	0.24390E-01	366338.4	3770100.7	103.7	4.15	10.47	2.78	YES	HRDOW
L0000388	0	0.24390E-01	366336.1	3770078.3	103.2	4.15	10.47	2.78	YES	HRDOW
L0000389	0	0.24390E-01	366339.4	3770056.5	103.5	4.15	10.47	2.78	YES	HRDOW
L0000390	0	0.24390E-01	366346.8	3770035.3	103.4	4.15	10.47	2.78	YES	HRDOW
L0000391	0	0.24390E-01	366354.3	3770014.1	103.2	4.15	10.47	2.78	YES	HRDOW
L0000392	0	0.24390E-01	366361.8	3769992.9	103.0	4.15	10.47	2.78	YES	HRDOW
L0000393	0	0.24390E-01	366369.3	3769971.7	102.6	4.15	10.47	2.78	YES	HRDOW
L0000394	0	0.24390E-01	366381.9	3769953.1	102.0	4.15	10.47	2.78	YES	HRDOW
L0000395	0	0.24390E-01	366394.8	3769934.6	101.3	4.15	10.47	2.78	YES	HRDOW
L0000396	0	0.24390E-01	366407.7	3769916.2	100.7	4.15	10.47	2.78	YES	HRDOW
L0000397	0	0.24390E-01	366420.6	3769897.8	100.1	4.15	10.47	2.78	YES	HRDOW
L0000398	0	0.24390E-01	366433.6	3769879.4	99.5	4.15	10.47	2.78	YES	HRDOW
L0000399	0	0.24390E-01	366446.5	3769861.0	99.1	4.15	10.47	2.78	YES	HRDOW
L0000400	0	0.24390E-01	366459.4	3769842.5	98.6	4.15	10.47	2.78	YES	HRDOW
L0000401	0	0.24390E-01	366472.3	3769824.1	98.2	4.15	10.47	2.78	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000402	0	0.24390E-01	366485.2	3769805.7	97.8	4.15	10.47	2.78	YES	HRDOW
L0000403	0	0.24390E-01	366498.2	3769787.3	97.4	4.15	10.47	2.78	YES	HRDOW
L0000404	0	0.24390E-01	366511.1	3769768.9	97.1	4.15	10.47	2.78	YES	HRDOW
L0000405	0	0.24390E-01	366524.0	3769750.5	96.7	4.15	10.47	2.78	YES	HRDOW
L0000406	0	0.24390E-01	366536.9	3769732.0	96.3	4.15	10.47	2.78	YES	HRDOW
L0000407	0	0.24390E-01	366549.8	3769713.6	95.9	4.15	10.47	2.78	YES	HRDOW
L0000408	0	0.24390E-01	366562.8	3769695.2	95.5	4.15	10.47	2.78	YES	HRDOW
L0000409	0	0.24390E-01	366575.2	3769676.5	95.1	4.15	10.47	2.78	YES	HRDOW
L0000410	0	0.24390E-01	366584.9	3769656.2	94.6	4.15	10.47	2.78	YES	HRDOW
L0000411	0	0.24390E-01	366590.7	3769634.8	94.1	4.15	10.47	2.78	YES	HRDOW
L0000412	0	0.24390E-01	366593.0	3769612.4	93.7	4.15	10.47	2.78	YES	HRDOW
L0000413	0	0.24390E-01	366595.2	3769590.0	93.2	4.15	10.47	2.78	YES	HRDOW
L0000414	0	0.24390E-01	366597.5	3769567.6	92.7	4.15	10.47	2.78	YES	HRDOW
L0000415	0	0.24390E-01	366605.0	3769546.7	92.2	4.15	10.47	2.78	YES	HRDOW
L0000416	0	0.24390E-01	366614.4	3769526.3	91.9	4.15	10.47	2.78	YES	HRDOW
L0000417	0	0.24390E-01	366623.9	3769505.9	91.6	4.15	10.47	2.78	YES	HRDOW
L0000418	0	0.24390E-01	366633.4	3769485.5	91.3	4.15	10.47	2.78	YES	HRDOW
L0000419	0	0.24390E-01	366642.9	3769465.1	91.0	4.15	10.47	2.78	YES	HRDOW
L0000420	0	0.24390E-01	366652.4	3769444.7	90.8	4.15	10.47	2.78	YES	HRDOW
L0000421	0	0.24390E-01	366661.9	3769424.3	90.5	4.15	10.47	2.78	YES	HRDOW
L0000422	0	0.24390E-01	366671.4	3769403.9	90.4	4.15	10.47	2.78	YES	HRDOW
L0000423	0	0.24390E-01	366680.9	3769383.5	90.3	4.15	10.47	2.78	YES	HRDOW
L0000424	0	0.24390E-01	366690.4	3769363.1	90.2	4.15	10.47	2.78	YES	HRDOW
L0000425	0	0.24390E-01	366699.9	3769342.7	90.0	4.15	10.47	2.78	YES	HRDOW
L0000426	0	0.24390E-01	366709.4	3769322.3	89.7	4.15	10.47	2.78	YES	HRDOW
L0000427	0	0.24390E-01	366718.8	3769301.9	89.4	4.15	10.47	2.78	YES	HRDOW
L0000428	0	0.38462E-01	366313.2	3769642.8	96.5	4.15	7.91	2.60	YES	HRDOW
L0000429	0	0.38462E-01	366327.1	3769652.6	96.7	4.15	7.91	2.60	YES	HRDOW
L0000430	0	0.38462E-01	366341.0	3769662.4	97.0	4.15	7.91	2.60	YES	HRDOW
L0000431	0	0.38462E-01	366354.9	3769672.2	97.4	4.15	7.91	2.60	YES	HRDOW
L0000432	0	0.38462E-01	366368.7	3769682.0	97.7	4.15	7.91	2.60	YES	HRDOW
L0000433	0	0.38462E-01	366382.6	3769691.8	97.9	4.15	7.91	2.60	YES	HRDOW
L0000434	0	0.38462E-01	366396.5	3769701.6	98.1	4.15	7.91	2.60	YES	HRDOW
L0000435	0	0.38462E-01	366410.4	3769711.4	98.2	4.15	7.91	2.60	YES	HRDOW
L0000436	0	0.38462E-01	366424.3	3769721.2	98.2	4.15	7.91	2.60	YES	HRDOW
L0000437	0	0.38462E-01	366438.2	3769731.0	98.0	4.15	7.91	2.60	YES	HRDOW
L0000438	0	0.38462E-01	366452.1	3769740.8	97.9	4.15	7.91	2.60	YES	HRDOW
L0000439	0	0.38462E-01	366466.0	3769750.6	97.5	4.15	7.91	2.60	YES	HRDOW

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

L0000440	0	0.38462E-01	366479.9	3769760.4	97.2	4.15	7.91	2.60	YES	HRDOW
L0000441	0	0.38462E-01	366493.8	3769770.2	97.2	4.15	7.91	2.60	YES	HRDOW
L0000442	0	0.38462E-01	366507.7	3769780.0	97.3	4.15	7.91	2.60	YES	HRDOW
L0000443	0	0.38462E-01	366521.5	3769789.8	97.4	4.15	7.91	2.60	YES	HRDOW
L0000444	0	0.38462E-01	366535.4	3769799.6	97.6	4.15	7.91	2.60	YES	HRDOW
L0000445	0	0.38462E-01	366549.6	3769809.0	97.7	4.15	7.91	2.60	YES	HRDOW
L0000446	0	0.38462E-01	366563.9	3769818.2	97.8	4.15	7.91	2.60	YES	HRDOW
L0000447	0	0.38462E-01	366578.2	3769827.3	98.0	4.15	7.91	2.60	YES	HRDOW
L0000448	0	0.38462E-01	366593.7	3769834.3	98.1	4.15	7.91	2.60	YES	HRDOW
L0000449	0	0.38462E-01	366609.5	3769840.2	98.1	4.15	7.91	2.60	YES	HRDOW
L0000450	0	0.38462E-01	366626.5	3769840.2	98.3	4.15	7.91	2.60	YES	HRDOW
L0000451	0	0.38462E-01	366643.5	3769840.2	98.6	4.15	7.91	2.60	YES	HRDOW
L0000452	0	0.38462E-01	366660.5	3769840.2	99.1	4.15	7.91	2.60	YES	HRDOW
L0000453	0	0.38462E-01	366677.5	3769840.2	99.4	4.15	7.91	2.60	YES	HRDOW
L0000454	0	0.33333E-01	366606.6	3770104.6	103.3	4.15	12.09	2.89	YES	HRDOW
L0000455	0	0.33333E-01	366606.1	3770078.6	103.1	4.15	12.09	2.89	YES	HRDOW
L0000456	0	0.33333E-01	366605.6	3770052.7	102.8	4.15	12.09	2.89	YES	HRDOW
L0000457	0	0.33333E-01	366605.0	3770026.7	102.5	4.15	12.09	2.89	YES	HRDOW
L0000458	0	0.33333E-01	366604.5	3770000.7	101.9	4.15	12.09	2.89	YES	HRDOW
L0000459	0	0.33333E-01	366604.0	3769974.7	101.2	4.15	12.09	2.89	YES	HRDOW
L0000460	0	0.33333E-01	366603.5	3769948.7	100.6	4.15	12.09	2.89	YES	HRDOW
L0000461	0	0.33333E-01	366603.0	3769922.7	100.1	4.15	12.09	2.89	YES	HRDOW
L0000462	0	0.33333E-01	366602.5	3769896.7	99.5	4.15	12.09	2.89	YES	HRDOW
L0000463	0	0.33333E-01	366602.0	3769870.7	98.8	4.15	12.09	2.89	YES	HRDOW
L0000464	0	0.33333E-01	366601.5	3769844.7	98.2	4.15	12.09	2.89	YES	HRDOW
L0000465	0	0.33333E-01	366602.5	3769819.1	97.8	4.15	12.09	2.89	YES	HRDOW
L0000466	0	0.33333E-01	366616.9	3769797.5	97.5	4.15	12.09	2.89	YES	HRDOW
L0000467	0	0.33333E-01	366631.3	3769775.8	97.3	4.15	12.09	2.89	YES	HRDOW
L0000468	0	0.33333E-01	366645.7	3769754.2	97.1	4.15	12.09	2.89	YES	HRDOW
L0000469	0	0.33333E-01	366660.1	3769732.5	96.7	4.15	12.09	2.89	YES	HRDOW
L0000470	0	0.33333E-01	366674.5	3769710.9	96.2	4.15	12.09	2.89	YES	HRDOW
L0000471	0	0.33333E-01	366688.9	3769689.2	95.7	4.15	12.09	2.89	YES	HRDOW
L0000472	0	0.33333E-01	366703.2	3769667.5	95.1	4.15	12.09	2.89	YES	HRDOW
L0000473	0	0.33333E-01	366717.6	3769645.9	94.4	4.15	12.09	2.89	YES	HRDOW
L0000474	0	0.33333E-01	366732.0	3769624.2	93.7	4.15	12.09	2.89	YES	HRDOW
L0000475	0	0.33333E-01	366744.8	3769601.6	93.3	4.15	12.09	2.89	YES	HRDOW
L0000476	0	0.33333E-01	366757.1	3769578.7	93.0	4.15	12.09	2.89	YES	HRDOW
L0000477	0	0.33333E-01	366769.3	3769555.8	93.3	4.15	12.09	2.89	YES	HRDOW
L0000478	0	0.33333E-01	366781.6	3769532.8	93.5	4.15	12.09	2.89	YES	HRDOW
L0000479	0	0.33333E-01	366793.9	3769509.9	93.8	4.15	12.09	2.89	YES	HRDOW
L0000480	0	0.33333E-01	366806.1	3769487.0	94.0	4.15	12.09	2.89	YES	HRDOW
L0000481	0	0.33333E-01	366818.4	3769464.1	94.2	4.15	12.09	2.89	YES	HRDOW
L0000482	0	0.33333E-01	366830.7	3769441.1	94.2	4.15	12.09	2.89	YES	HRDOW
L0000483	0	0.33333E-01	366842.9	3769418.2	94.0	4.15	12.09	2.89	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
26A	L0000001 ,	L0000002 ,	L0000003 ,	L0000004 ,	L0000005 ,	L0000006 ,	L0000007 ,	L0000008 ,
	L0000009 ,	L0000010 ,	L0000011 ,	L0000012 ,	L0000013 ,	L0000014 ,	L0000015 ,	L0000016 ,
	L0000017 ,	L0000018 ,	L0000019 ,	L0000020 ,	L0000021 ,	L0000022 ,	L0000023 ,	L0000024 ,
	L0000025 ,	L0000026 ,	L0000027 ,					
26B	L0000323 ,	L0000324 ,	L0000325 ,	L0000326 ,	L0000327 ,	L0000328 ,	L0000329 ,	L0000330 ,
	L0000331 ,	L0000332 ,	L0000333 ,	L0000334 ,	L0000335 ,	L0000336 ,	L0000337 ,	L0000338 ,
	L0000339 ,	L0000340 ,	L0000341 ,	L0000342 ,	L0000343 ,	L0000344 ,	L0000345 ,	L0000346 ,
	L0000347 ,	L0000348 ,	L0000349 ,					
27A	L0000028 ,	L0000029 ,	L0000030 ,	L0000031 ,	L0000032 ,	L0000033 ,	L0000034 ,	L0000035 ,
	L0000036 ,	L0000037 ,	L0000038 ,	L0000039 ,	L0000040 ,	L0000041 ,	L0000042 ,	L0000043 ,
	L0000044 ,	L0000045 ,	L0000046 ,	L0000047 ,	L0000048 ,	L0000049 ,	L0000050 ,	L0000051 ,
	L0000052 ,	L0000053 ,	L0000054 ,	L0000055 ,	L0000056 ,	L0000057 ,	L0000058 ,	L0000059 ,
	L0000060 ,	L0000061 ,	L0000062 ,	L0000063 ,	L0000064 ,			
27B	L0000350 ,	L0000351 ,	L0000352 ,	L0000353 ,	L0000354 ,	L0000355 ,	L0000356 ,	L0000357 ,
	L0000358 ,	L0000359 ,	L0000360 ,	L0000361 ,	L0000362 ,	L0000363 ,	L0000364 ,	L0000365 ,
	L0000366 ,	L0000367 ,	L0000368 ,	L0000369 ,	L0000370 ,	L0000371 ,	L0000372 ,	L0000373 ,
	L0000374 ,	L0000375 ,	L0000376 ,	L0000377 ,	L0000378 ,	L0000379 ,	L0000380 ,	L0000381 ,
	L0000382 ,	L0000383 ,	L0000384 ,	L0000385 ,	L0000386 ,			
28A	L0000065 ,	L0000066 ,	L0000067 ,	L0000068 ,	L0000069 ,	L0000070 ,	L0000071 ,	L0000072 ,
	L0000073 ,	L0000074 ,	L0000075 ,	L0000076 ,	L0000077 ,	L0000078 ,	L0000079 ,	L0000080 ,

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs						
	L0000081 ,	L0000082 ,	L0000083 ,	L0000084 ,	L0000085 ,	L0000086 ,	L0000087 ,	L0000088 ,
	L0000089 ,	L0000090 ,	L0000091 ,	L0000092 ,	L0000093 ,	L0000094 ,	L0000095 ,	L0000096 ,
	L0000097 ,	L0000098 ,	L0000099 ,	L0000100 ,	L0000101 ,	L0000102 ,	L0000103 ,	L0000104 ,
	L0000105 ,							
28B	L0000387 ,	L0000388 ,	L0000389 ,	L0000390 ,	L0000391 ,	L0000392 ,	L0000393 ,	L0000394 ,
	L0000395 ,	L0000396 ,	L0000397 ,	L0000398 ,	L0000399 ,	L0000400 ,	L0000401 ,	L0000402 ,
	L0000403 ,	L0000404 ,	L0000405 ,	L0000406 ,	L0000407 ,	L0000408 ,	L0000409 ,	L0000410 ,
	L0000411 ,	L0000412 ,	L0000413 ,	L0000414 ,	L0000415 ,	L0000416 ,	L0000417 ,	L0000418 ,
	L0000419 ,	L0000420 ,	L0000421 ,	L0000422 ,	L0000423 ,	L0000424 ,	L0000425 ,	L0000426 ,
	L0000427 ,							
29A	L0000106 ,	L0000107 ,	L0000108 ,	L0000109 ,	L0000110 ,	L0000111 ,	L0000112 ,	L0000113 ,
	L0000114 ,	L0000115 ,	L0000116 ,	L0000117 ,	L0000118 ,	L0000119 ,	L0000120 ,	L0000121 ,
	L0000122 ,	L0000123 ,	L0000124 ,	L0000125 ,	L0000126 ,	L0000127 ,	L0000128 ,	L0000129 ,
	L0000130 ,	L0000131 ,						
29B	L0000428 ,	L0000429 ,	L0000430 ,	L0000431 ,	L0000432 ,	L0000433 ,	L0000434 ,	L0000435 ,
	L0000436 ,	L0000437 ,	L0000438 ,	L0000439 ,	L0000440 ,	L0000441 ,	L0000442 ,	L0000443 ,
	L0000444 ,	L0000445 ,	L0000446 ,	L0000447 ,	L0000448 ,	L0000449 ,	L0000450 ,	L0000451 ,
	L0000452 ,	L0000453 ,						
30A	L0000132 ,	L0000133 ,	L0000134 ,	L0000135 ,	L0000136 ,	L0000137 ,	L0000138 ,	L0000139 ,
	L0000140 ,	L0000141 ,	L0000142 ,	L0000143 ,	L0000144 ,	L0000145 ,	L0000146 ,	L0000147 ,

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
	L0000148 ,	L0000149 ,	L0000150 ,	L0000151 ,	L0000152 ,	L0000153 ,	L0000154 ,	L0000155 ,
	L0000156 ,	L0000157 ,	L0000158 ,	L0000159 ,	L0000160 ,	L0000161 ,		
30B	L0000454 ,	L0000455 ,	L0000456 ,	L0000457 ,	L0000458 ,	L0000459 ,	L0000460 ,	L0000461 ,
	L0000462 ,	L0000463 ,	L0000464 ,	L0000465 ,	L0000466 ,	L0000467 ,	L0000468 ,	L0000469 ,
	L0000470 ,	L0000471 ,	L0000472 ,	L0000473 ,	L0000474 ,	L0000475 ,	L0000476 ,	L0000477 ,
	L0000478 ,	L0000479 ,	L0000480 ,	L0000481 ,	L0000482 ,	L0000483 ,		

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                    ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Students                                              ***        14:54:49
                                                                                                                        PAGE  14
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL     URBAN

                                         *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID    URBAN POP                                     SOURCE IDs
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             3884000.   L0000001    , L0000002    , L0000003    , L0000004    , L0000005    , L0000006    , L0000007    ,
L0000008    ,
            L0000009    , L0000010    , L0000011    , L0000012    , L0000013    , L0000014    , L0000015    , L0000016    ,
            L0000017    , L0000018    , L0000019    , L0000020    , L0000021    , L0000022    , L0000023    , L0000024    ,
            L0000025    , L0000026    , L0000027    , L0000028    , L0000029    , L0000030    , L0000031    , L0000032    ,
            L0000033    , L0000034    , L0000035    , L0000036    , L0000037    , L0000038    , L0000039    , L0000040    ,
            L0000041    , L0000042    , L0000043    , L0000044    , L0000045    , L0000046    , L0000047    , L0000048    ,
            L0000049    , L0000050    , L0000051    , L0000052    , L0000053    , L0000054    , L0000055    , L0000056    ,
            L0000057    , L0000058    , L0000059    , L0000060    , L0000061    , L0000062    , L0000063    , L0000064    ,
            L0000065    , L0000066    , L0000067    , L0000068    , L0000069    , L0000070    , L0000071    , L0000072    ,
            L0000073    , L0000074    , L0000075    , L0000076    , L0000077    , L0000078    , L0000079    , L0000080    ,
            L0000081    , L0000082    , L0000083    , L0000084    , L0000085    , L0000086    , L0000087    , L0000088    ,
            L0000089    , L0000090    , L0000091    , L0000092    , L0000093    , L0000094    , L0000095    , L0000096    ,
            L0000097    , L0000098    , L0000099    , L0000100    , L0000101    , L0000102    , L0000103    , L0000104    ,
            L0000105    , L0000106    , L0000107    , L0000108    , L0000109    , L0000110    , L0000111    , L0000112    ,
            L0000113    , L0000114    , L0000115    , L0000116    , L0000117    , L0000118    , L0000119    , L0000120    ,
            L0000121    , L0000122    , L0000123    , L0000124    , L0000125    , L0000126    , L0000127    , L0000128    ,
            L0000129    , L0000130    , L0000131    , L0000132    , L0000133    , L0000134    , L0000135    , L0000136    ,
            L0000137    , L0000138    , L0000139    , L0000140    , L0000141    , L0000142    , L0000143    , L0000144    ,
            L0000145    , L0000146    , L0000147    , L0000148    , L0000149    , L0000150    , L0000151    , L0000152    ,
            L0000153    , L0000154    , L0000155    , L0000156    , L0000157    , L0000158    , L0000159    , L0000160    ,
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**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs							
		L0000161 ,	L0000323 ,	L0000324 ,	L0000325 ,	L0000326 ,	L0000327 ,	L0000328 ,	L0000329 ,
		L0000330 ,	L0000331 ,	L0000332 ,	L0000333 ,	L0000334 ,	L0000335 ,	L0000336 ,	L0000337 ,
		L0000338 ,	L0000339 ,	L0000340 ,	L0000341 ,	L0000342 ,	L0000343 ,	L0000344 ,	L0000345 ,
		L0000346 ,	L0000347 ,	L0000348 ,	L0000349 ,	L0000350 ,	L0000351 ,	L0000352 ,	L0000353 ,
		L0000354 ,	L0000355 ,	L0000356 ,	L0000357 ,	L0000358 ,	L0000359 ,	L0000360 ,	L0000361 ,
		L0000362 ,	L0000363 ,	L0000364 ,	L0000365 ,	L0000366 ,	L0000367 ,	L0000368 ,	L0000369 ,
		L0000370 ,	L0000371 ,	L0000372 ,	L0000373 ,	L0000374 ,	L0000375 ,	L0000376 ,	L0000377 ,
		L0000378 ,	L0000379 ,	L0000380 ,	L0000381 ,	L0000382 ,	L0000383 ,	L0000384 ,	L0000385 ,
		L0000386 ,	L0000387 ,	L0000388 ,	L0000389 ,	L0000390 ,	L0000391 ,	L0000392 ,	L0000393 ,
		L0000394 ,	L0000395 ,	L0000396 ,	L0000397 ,	L0000398 ,	L0000399 ,	L0000400 ,	L0000401 ,
		L0000402 ,	L0000403 ,	L0000404 ,	L0000405 ,	L0000406 ,	L0000407 ,	L0000408 ,	L0000409 ,
		L0000410 ,	L0000411 ,	L0000412 ,	L0000413 ,	L0000414 ,	L0000415 ,	L0000416 ,	L0000417 ,
		L0000418 ,	L0000419 ,	L0000420 ,	L0000421 ,	L0000422 ,	L0000423 ,	L0000424 ,	L0000425 ,
		L0000426 ,	L0000427 ,	L0000428 ,	L0000429 ,	L0000430 ,	L0000431 ,	L0000432 ,	L0000433 ,
		L0000434 ,	L0000435 ,	L0000436 ,	L0000437 ,	L0000438 ,	L0000439 ,	L0000440 ,	L0000441 ,
		L0000442 ,	L0000443 ,	L0000444 ,	L0000445 ,	L0000446 ,	L0000447 ,	L0000448 ,	L0000449 ,
		L0000450 ,	L0000451 ,	L0000452 ,	L0000453 ,	L0000454 ,	L0000455 ,	L0000456 ,	L0000457 ,
		L0000458 ,	L0000459 ,	L0000460 ,	L0000461 ,	L0000462 ,	L0000463 ,	L0000464 ,	L0000465 ,
		L0000466 ,	L0000467 ,	L0000468 ,	L0000469 ,	L0000470 ,	L0000471 ,	L0000472 ,	L0000473 ,
		L0000474 ,	L0000475 ,	L0000476 ,	L0000477 ,	L0000478 ,	L0000479 ,	L0000480 ,	L0000481 ,
		L0000482 ,	L0000483 ,						

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 26A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.8790E+00	11	.8730E+00	12	.8640E+00	13	.8890E+00	14	.6780E+00	15	.7920E+00	16	.7540E+00
17	.3510E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 27A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.5820E+00	11	.5070E+00	12	.5070E+00	13	.5880E+00	14	.6330E+00	15	.7010E+00	16	.7760E+00
17	.4180E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 28A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.7590E+00	11	.7190E+00	12	.7750E+00	13	.8670E+00	14	.8040E+00	15	.8150E+00	16	.8080E+00
17	.4260E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 29A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.6440E+00	11	.5210E+00	12	.5550E+00	13	.5780E+00	14	.5790E+00	15	.6690E+00	16	.7480E+00
17	.4240E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 30A ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.7020E+00	11	.7230E+00	12	.7850E+00	13	.8830E+00	14	.8360E+00	15	.9410E+00	16	.9720E+00
17	.4810E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 26B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.8790E+00	11	.8730E+00	12	.8640E+00	13	.8890E+00	14	.6780E+00	15	.7920E+00	16	.7540E+00
17	.3510E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 27B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.5820E+00	11	.5070E+00	12	.5070E+00	13	.5880E+00	14	.6330E+00	15	.7010E+00	16	.7760E+00
17	.4180E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 28B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.7590E+00	11	.7190E+00	12	.7750E+00	13	.8670E+00	14	.8040E+00	15	.8150E+00	16	.8080E+00
17	.4260E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 29B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.6440E+00	11	.5210E+00	12	.5550E+00	13	.5780E+00	14	.5790E+00	15	.6690E+00	16	.7480E+00
17	.4240E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 30B ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.7020E+00	11	.7230E+00	12	.7850E+00	13	.8830E+00	14	.8360E+00	15	.9410E+00	16	.9720E+00
17	.4810E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Students                                          ***        14:54:49
                                                                                                                    PAGE 339
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                        (METERS)

    ( 366481.1, 3769638.0,      95.5,      95.5,      0.0);        ( 366491.1, 3769638.0,      95.4,      95.4,      0.0);
    ( 366481.1, 3769648.0,      95.8,      95.8,      0.0);        ( 366491.1, 3769648.0,      95.6,      95.6,      0.0);
    ( 366501.1, 3769648.0,      95.5,      95.5,      0.0);        ( 366481.1, 3769658.0,      96.0,      96.0,      0.0);
    ( 366491.1, 3769658.0,      95.9,      95.9,      0.0);        ( 366501.1, 3769658.0,      95.8,      95.8,      0.0);
    ( 366511.1, 3769658.0,      95.6,      95.6,      0.0);        ( 366521.1, 3769658.0,      95.5,      95.5,      0.0);
    ( 366471.1, 3769668.0,      96.5,      96.5,      0.0);        ( 366481.1, 3769668.0,      96.3,      96.3,      0.0);
    ( 366491.1, 3769668.0,      96.1,      96.1,      0.0);        ( 366501.1, 3769668.0,      96.0,      96.0,      0.0);
    ( 366511.1, 3769668.0,      95.8,      95.8,      0.0);        ( 366461.1, 3769678.0,      96.8,      96.8,      0.0);
    ( 366471.1, 3769678.0,      96.7,      96.7,      0.0);        ( 366481.1, 3769678.0,      96.5,      96.5,      0.0);
    ( 366491.1, 3769678.0,      96.3,      96.3,      0.0);        ( 366501.1, 3769678.0,      96.2,      96.2,      0.0);
    ( 366451.1, 3769688.0,      97.2,      97.2,      0.0);        ( 366461.1, 3769688.0,      97.0,      97.0,      0.0);
    ( 366471.1, 3769688.0,      96.8,      96.8,      0.0);        ( 366481.1, 3769688.0,      96.6,      96.6,      0.0);
    ( 366491.1, 3769688.0,      96.4,      96.4,      0.0);        ( 366501.1, 3769688.0,      96.2,      96.2,      0.0);
    ( 366451.1, 3769698.0,      97.3,      97.3,      0.0);        ( 366461.1, 3769698.0,      97.1,      97.1,      0.0);
    ( 366471.1, 3769698.0,      96.9,      96.9,      0.0);        ( 366481.1, 3769698.0,      96.7,      96.7,      0.0);
    ( 366491.1, 3769698.0,      96.5,      96.5,      0.0);        ( 366451.1, 3769708.0,      97.5,      97.5,      0.0);
    ( 366461.1, 3769708.0,      97.3,      97.3,      0.0);        ( 366471.1, 3769708.0,      97.0,      97.0,      0.0);
    ( 366481.1, 3769708.0,      96.7,      96.7,      0.0);        ( 366461.1, 3769718.0,      97.4,      97.4,      0.0);
    ( 366471.1, 3769718.0,      97.1,      97.1,      0.0);        ( 366481.1, 3769638.0,      95.5,      95.5,      3.0);
    ( 366491.1, 3769638.0,      95.4,      95.4,      3.0);        ( 366481.1, 3769648.0,      95.8,      95.8,      3.0);
    ( 366491.1, 3769648.0,      95.6,      95.6,      3.0);        ( 366501.1, 3769648.0,      95.5,      95.5,      3.0);
    ( 366481.1, 3769658.0,      96.0,      96.0,      3.0);        ( 366491.1, 3769658.0,      95.9,      95.9,      3.0);
    ( 366501.1, 3769658.0,      95.8,      95.8,      3.0);        ( 366511.1, 3769658.0,      95.6,      95.6,      3.0);
    ( 366521.1, 3769658.0,      95.5,      95.5,      3.0);        ( 366471.1, 3769668.0,      96.5,      96.5,      3.0);
    ( 366481.1, 3769668.0,      96.3,      96.3,      3.0);        ( 366491.1, 3769668.0,      96.1,      96.1,      3.0);
    ( 366501.1, 3769668.0,      96.0,      96.0,      3.0);        ( 366511.1, 3769668.0,      95.8,      95.8,      3.0);
    ( 366461.1, 3769678.0,      96.8,      96.8,      3.0);        ( 366471.1, 3769678.0,      96.7,      96.7,      3.0);
    ( 366481.1, 3769678.0,      96.5,      96.5,      3.0);        ( 366491.1, 3769678.0,      96.3,      96.3,      3.0);
    ( 366501.1, 3769678.0,      96.2,      96.2,      3.0);        ( 366451.1, 3769688.0,      97.2,      97.2,      3.0);
    ( 366461.1, 3769688.0,      97.0,      97.0,      3.0);        ( 366471.1, 3769688.0,      96.8,      96.8,      3.0);
    ( 366481.1, 3769688.0,      96.6,      96.6,      3.0);        ( 366491.1, 3769688.0,      96.4,      96.4,      3.0);
    ( 366501.1, 3769688.0,      96.2,      96.2,      3.0);        ( 366451.1, 3769698.0,      97.3,      97.3,      3.0);
    ( 366461.1, 3769698.0,      97.1,      97.1,      3.0);        ( 366471.1, 3769698.0,      96.9,      96.9,      3.0);
    ( 366481.1, 3769698.0,      96.7,      96.7,      3.0);        ( 366491.1, 3769698.0,      96.5,      96.5,      3.0);
    ( 366451.1, 3769708.0,      97.5,      97.5,      3.0);        ( 366461.1, 3769708.0,      97.3,      97.3,      3.0);
    ( 366471.1, 3769708.0,      97.0,      97.0,      3.0);        ( 366481.1, 3769708.0,      96.7,      96.7,      3.0);
    ( 366461.1, 3769718.0,      97.4,      97.4,      3.0);        ( 366471.1, 3769718.0,      97.1,      97.1,      3.0);
    ( 366481.1, 3769638.0,      95.5,      95.5,      6.1);        ( 366491.1, 3769638.0,      95.4,      95.4,      6.1);
    ( 366481.1, 3769648.0,      95.8,      95.8,      6.1);        ( 366491.1, 3769648.0,      95.6,      95.6,      6.1);
    ( 366501.1, 3769648.0,      95.5,      95.5,      6.1);        ( 366481.1, 3769658.0,      96.0,      96.0,      6.1);
    ( 366491.1, 3769658.0,      95.9,      95.9,      6.1);        ( 366501.1, 3769658.0,      95.8,      95.8,      6.1);
    ( 366511.1, 3769658.0,      95.6,      95.6,      6.1);        ( 366521.1, 3769658.0,      95.5,      95.5,      6.1);
```

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,      96.5,      96.5,       6.1);
( 366491.1, 3769668.0,      96.1,      96.1,       6.1);
( 366511.1, 3769668.0,      95.8,      95.8,       6.1);
( 366471.1, 3769678.0,      96.7,      96.7,       6.1);
( 366491.1, 3769678.0,      96.3,      96.3,       6.1);
( 366451.1, 3769688.0,      97.2,      97.2,       6.1);
( 366471.1, 3769688.0,      96.8,      96.8,       6.1);
( 366491.1, 3769688.0,      96.4,      96.4,       6.1);
( 366451.1, 3769698.0,      97.3,      97.3,       6.1);
( 366471.1, 3769698.0,      96.9,      96.9,       6.1);
( 366491.1, 3769698.0,      96.5,      96.5,       6.1);
( 366461.1, 3769708.0,      97.3,      97.3,       6.1);
( 366481.1, 3769708.0,      96.7,      96.7,       6.1);
( 366471.1, 3769718.0,      97.1,      97.1,       6.1);
( 366420.8, 3769692.8,      97.7,      97.7,       0.0);
( 366431.1, 3769693.8,      97.6,      97.6,       0.0);
( 366421.2, 3769678.5,      97.4,      97.4,       0.0);
( 366442.0, 3769680.2,      97.1,      97.1,       0.0);
( 366460.7, 3769667.6,      96.6,      96.6,       0.0);
( 366442.0, 3769667.6,      96.9,      96.9,       0.0);
( 366470.6, 3769658.0,      96.2,      96.2,       0.0);
( 366449.8, 3769658.0,      96.5,      96.5,       0.0);
( 366520.4, 3769648.8,      95.3,      95.3,       0.0);
( 366500.9, 3769639.6,      95.3,      95.3,       0.0);
( 366480.5, 3769629.4,      95.4,      95.4,       0.0);
( 366470.6, 3769639.6,      95.7,      95.7,       0.0);
( 366469.6, 3769616.5,      95.2,      95.2,       0.0);
( 366460.4, 3769629.8,      95.7,      95.7,       0.0);
( 366459.3, 3769648.8,      96.1,      96.1,       0.0);
( 366449.1, 3769640.0,      96.1,      96.1,       0.0);
( 366481.1, 3769668.0,      96.3,      96.3,       6.1);
( 366501.1, 3769668.0,      96.0,      96.0,       6.1);
( 366461.1, 3769678.0,      96.8,      96.8,       6.1);
( 366481.1, 3769678.0,      96.5,      96.5,       6.1);
( 366501.1, 3769678.0,      96.2,      96.2,       6.1);
( 366461.1, 3769688.0,      97.0,      97.0,       6.1);
( 366481.1, 3769688.0,      96.6,      96.6,       6.1);
( 366501.1, 3769688.0,      96.2,      96.2,       6.1);
( 366461.1, 3769698.0,      97.1,      97.1,       6.1);
( 366481.1, 3769698.0,      96.7,      96.7,       6.1);
( 366451.1, 3769708.0,      97.5,      97.5,       6.1);
( 366471.1, 3769708.0,      97.0,      97.0,       6.1);
( 366461.1, 3769718.0,      97.4,      97.4,       6.1);
( 366412.3, 3769692.5,      97.8,      97.8,       0.0);
( 366431.4, 3769704.4,      97.9,      97.9,       0.0);
( 366441.3, 3769691.1,      97.4,      97.4,       0.0);
( 366430.7, 3769680.2,      97.3,      97.3,       0.0);
( 366450.8, 3769679.5,      97.0,      97.0,       0.0);
( 366450.5, 3769667.2,      96.7,      96.7,       0.0);
( 366430.7, 3769667.6,      97.0,      97.0,       0.0);
( 366461.1, 3769658.0,      96.3,      96.3,       0.0);
( 366441.3, 3769658.7,      96.7,      96.7,       0.0);
( 366511.2, 3769650.2,      95.4,      95.4,       0.0);
( 366491.4, 3769630.1,      95.3,      95.3,       0.0);
( 366470.9, 3769648.2,      95.9,      95.9,       0.0);
( 366469.9, 3769629.4,      95.5,      95.5,       0.0);
( 366480.8, 3769620.9,      95.2,      95.2,       0.0);
( 366460.4, 3769639.6,      95.9,      95.9,       0.0);
( 366449.1, 3769648.2,      96.3,      96.3,       0.0);
```

Model Input - Mobile Sources for Students
Unit Emission Rates (1 g/s)


```
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                      *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                         (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                       (METERS/SEC)

                                         1.54,    3.09,    5.14,    8.23,   10.80,
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\!MET Files\SCAQMD Met Files\wsla8.sfc Met Version: 14134
Profile file: C:\!MET Files\SCAQMD Met Files\wsla8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
26A	1ST HIGHEST VALUE IS	2.73739 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	2.71168 AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	3RD HIGHEST VALUE IS	2.53729 AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	4TH HIGHEST VALUE IS	2.45680 AT (	366480.48,	3769629.41,	95.38,	95.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	2.36552 AT (	366469.92,	3769629.41,	95.52,	95.52,	0.00)	DC	
	6TH HIGHEST VALUE IS	2.36316 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	7TH HIGHEST VALUE IS	2.35535 AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
	8TH HIGHEST VALUE IS	2.32201 AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	9TH HIGHEST VALUE IS	2.29245 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	10TH HIGHEST VALUE IS	2.29146 AT (	366491.11,	3769638.05,	95.43,	95.43,	6.10)	DC	
26B	1ST HIGHEST VALUE IS	2.80891 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	2ND HIGHEST VALUE IS	2.78181 AT (	366480.82,	3769620.89,	95.20,	95.20,	0.00)	DC	
	3RD HIGHEST VALUE IS	2.59112 AT (	366491.39,	3769630.09,	95.26,	95.26,	0.00)	DC	
	4TH HIGHEST VALUE IS	2.50325 AT (	366480.48,	3769629.41,	95.38,	95.38,	0.00)	DC	
	5TH HIGHEST VALUE IS	2.40408 AT (	366469.92,	3769629.41,	95.52,	95.52,	0.00)	DC	
	6TH HIGHEST VALUE IS	2.40323 AT (	366500.94,	3769639.64,	95.34,	95.34,	0.00)	DC	
	7TH HIGHEST VALUE IS	2.35893 AT (	366491.11,	3769638.05,	95.43,	95.43,	0.00)	DC	
	8TH HIGHEST VALUE IS	2.33497 AT (	366491.11,	3769638.05,	95.43,	95.43,	3.05)	DC	
	9TH HIGHEST VALUE IS	2.32791 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC	
	10TH HIGHEST VALUE IS	2.31054 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
27A	1ST HIGHEST VALUE IS	1.41523 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	2ND HIGHEST VALUE IS	1.41347 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	3RD HIGHEST VALUE IS	1.38630 AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	4TH HIGHEST VALUE IS	1.37254 AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	
	5TH HIGHEST VALUE IS	1.33303 AT (	366441.29,	3769658.73,	96.66,	96.66,	0.00)	DC	
	6TH HIGHEST VALUE IS	1.32124 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC	
	7TH HIGHEST VALUE IS	1.32077 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC	
	8TH HIGHEST VALUE IS	1.32018 AT (	366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC	
	9TH HIGHEST VALUE IS	1.31035 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
	10TH HIGHEST VALUE IS	1.30350 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC	
27B	1ST HIGHEST VALUE IS	1.42735 AT (	366421.17,	3769678.50,	97.39,	97.39,	0.00)	DC	
	2ND HIGHEST VALUE IS	1.42479 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
	3RD HIGHEST VALUE IS	1.39825 AT (	366430.72,	3769667.59,	97.02,	97.02,	0.00)	DC	
	4TH HIGHEST VALUE IS	1.38627 AT (	366449.12,	3769639.98,	96.09,	96.09,	0.00)	DC	

	5TH HIGHEST VALUE IS	1.34410 AT (	366441.29,	3769658.73,	96.66,	96.66,	0.00)	DC
	6TH HIGHEST VALUE IS	1.33320 AT (	366460.37,	3769629.75,	95.67,	95.67,	0.00)	DC
	7TH HIGHEST VALUE IS	1.33146 AT (	366449.12,	3769648.16,	96.30,	96.30,	0.00)	DC
	8TH HIGHEST VALUE IS	1.33010 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC
	9TH HIGHEST VALUE IS	1.32309 AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC
	10TH HIGHEST VALUE IS	1.31254 AT (	366430.72,	3769680.20,	97.31,	97.31,	0.00)	DC
28A	1ST HIGHEST VALUE IS	2.81825 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	2ND HIGHEST VALUE IS	2.69813 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	3RD HIGHEST VALUE IS	2.56720 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
	4TH HIGHEST VALUE IS	2.51864 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	5TH HIGHEST VALUE IS	2.51547 AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC
	6TH HIGHEST VALUE IS	2.45661 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	7TH HIGHEST VALUE IS	2.37169 AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC
	8TH HIGHEST VALUE IS	2.35659 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	9TH HIGHEST VALUE IS	2.34119 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	10TH HIGHEST VALUE IS	2.30275 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
28B	1ST HIGHEST VALUE IS	2.61693 AT (	366521.11,	3769658.05,	95.45,	95.45,	0.00)	DC
	2ND HIGHEST VALUE IS	2.49494 AT (	366501.11,	3769688.05,	96.21,	96.21,	0.00)	DC
	3RD HIGHEST VALUE IS	2.39373 AT (	366511.11,	3769668.05,	95.81,	95.81,	0.00)	DC
	4TH HIGHEST VALUE IS	2.36212 AT (	366520.36,	3769648.84,	95.29,	95.29,	0.00)	DC
	5TH HIGHEST VALUE IS	2.33264 AT (	366491.11,	3769698.05,	96.47,	96.47,	0.00)	DC
	6TH HIGHEST VALUE IS	2.31878 AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC
	7TH HIGHEST VALUE IS	2.21893 AT (	366501.11,	3769678.05,	96.16,	96.16,	0.00)	DC
	8TH HIGHEST VALUE IS	2.20194 AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC
	9TH HIGHEST VALUE IS	2.19212 AT (	366481.11,	3769708.05,	96.73,	96.73,	0.00)	DC
	10TH HIGHEST VALUE IS	2.16832 AT (	366511.11,	3769658.05,	95.60,	95.60,	0.00)	DC
29A	1ST HIGHEST VALUE IS	17.24523 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC
	2ND HIGHEST VALUE IS	16.18147 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	3RD HIGHEST VALUE IS	13.38910 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC
	4TH HIGHEST VALUE IS	11.99537 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	5TH HIGHEST VALUE IS	11.20681 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	6TH HIGHEST VALUE IS	10.73036 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	7TH HIGHEST VALUE IS	10.59304 AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC
	8TH HIGHEST VALUE IS	9.98627 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	9TH HIGHEST VALUE IS	9.41350 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	10TH HIGHEST VALUE IS	8.78907 AT (	366471.11,	3769718.05,	97.08,	97.08,	3.05)	DC
29B	1ST HIGHEST VALUE IS	14.90527 AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC
	2ND HIGHEST VALUE IS	14.17552 AT (	366431.40,	3769704.40,	97.87,	97.87,	0.00)	DC
	3RD HIGHEST VALUE IS	11.91614 AT (	366420.83,	3769692.81,	97.72,	97.72,	0.00)	DC
	4TH HIGHEST VALUE IS	10.78245 AT (	366461.11,	3769718.05,	97.38,	97.38,	0.00)	DC
	5TH HIGHEST VALUE IS	9.69031 AT (	366451.11,	3769708.05,	97.54,	97.54,	0.00)	DC
	6TH HIGHEST VALUE IS	9.54684 AT (	366431.06,	3769693.83,	97.63,	97.63,	0.00)	DC
	7TH HIGHEST VALUE IS	8.85657 AT (	366461.11,	3769718.05,	97.38,	97.38,	3.05)	DC
	8TH HIGHEST VALUE IS	8.50759 AT (	366471.11,	3769718.05,	97.08,	97.08,	0.00)	DC
	9TH HIGHEST VALUE IS	7.96321 AT (	366451.11,	3769708.05,	97.54,	97.54,	3.05)	DC
	10TH HIGHEST VALUE IS	7.72889 AT (	366461.11,	3769708.05,	97.27,	97.27,	0.00)	DC

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
30A	1ST HIGHEST VALUE IS	0.67580	AT (366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.65590	AT (366501.11, 3769688.05, 96.21, 96.21, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.65468	AT (366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	4TH HIGHEST VALUE IS	0.65119	AT (366511.11, 3769668.05, 95.81, 95.81, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.64226	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.63270	AT (366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
	7TH HIGHEST VALUE IS	0.62965	AT (366511.11, 3769668.05, 95.81, 95.81, 3.05)	DC	
	8TH HIGHEST VALUE IS	0.62853	AT (366491.11, 3769698.05, 96.47, 96.47, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.62658	AT (366501.11, 3769678.05, 96.16, 96.16, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.62172	AT (366511.11, 3769658.05, 95.60, 95.60, 0.00)	DC	
30B	1ST HIGHEST VALUE IS	0.66688	AT (366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.64805	AT (366501.11, 3769688.05, 96.21, 96.21, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.64509	AT (366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	4TH HIGHEST VALUE IS	0.64319	AT (366511.11, 3769668.05, 95.81, 95.81, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.63424	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.62182	AT (366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
	7TH HIGHEST VALUE IS	0.62162	AT (366491.11, 3769698.05, 96.47, 96.47, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.61947	AT (366511.11, 3769668.05, 95.81, 95.81, 3.05)	DC	
	9TH HIGHEST VALUE IS	0.61945	AT (366501.11, 3769678.05, 96.16, 96.16, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.61442	AT (366511.11, 3769658.05, 95.60, 95.60, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
26A	HIGH	1ST HIGH VALUE IS	66.43017	ON 12110816:	AT (366469.58, 3769616.46, 95.25, 95.25, 0.00)	DC	
26B	HIGH	1ST HIGH VALUE IS	65.38385	ON 12112816:	AT (366469.58, 3769616.46, 95.25, 95.25, 0.00)	DC	
27A	HIGH	1ST HIGH VALUE IS	43.24919	ON 12112816:	AT (366421.17, 3769678.50, 97.39, 97.39, 0.00)	DC	
27B	HIGH	1ST HIGH VALUE IS	43.90881	ON 12112816:	AT (366421.17, 3769678.50, 97.39, 97.39, 0.00)	DC	
28A	HIGH	1ST HIGH VALUE IS	79.38772	ON 08012216:	AT (366521.11, 3769658.05, 95.45, 95.45, 6.10)	DC	
28B	HIGH	1ST HIGH VALUE IS	82.29717	ON 08012216:	AT (366501.11, 3769688.05, 96.21, 96.21, 3.05)	DC	
29A	HIGH	1ST HIGH VALUE IS	411.92240	ON 08012216:	AT (366412.31, 3769692.47, 97.78, 97.78, 0.00)	DC	
29B	HIGH	1ST HIGH VALUE IS	344.53164	ON 08012216:	AT (366412.31, 3769692.47, 97.78, 97.78, 0.00)	DC	
30A	HIGH	1ST HIGH VALUE IS	47.15072	ON 08012216:	AT (366471.11, 3769718.05, 97.08, 97.08, 6.10)	DC	
30B	HIGH	1ST HIGH VALUE IS	48.38755	ON 08012216:	AT (366491.11, 3769698.05, 96.47, 96.47, 6.10)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
26A	HIGH	1ST HIGH VALUE IS	23.34115	ON 12110816: AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
26B	HIGH	1ST HIGH VALUE IS	22.75874	ON 12110816: AT (	366469.58,	3769616.46,	95.25,	95.25,	0.00)	DC	
27A	HIGH	1ST HIGH VALUE IS	12.16287	ON 12110816: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
27B	HIGH	1ST HIGH VALUE IS	12.98133	ON 12110816: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
28A	HIGH	1ST HIGH VALUE IS	28.55190	ON 08012216: AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
28B	HIGH	1ST HIGH VALUE IS	28.94255	ON 08012216: AT (	366521.11,	3769658.05,	95.45,	95.45,	3.05)	DC	
29A	HIGH	1ST HIGH VALUE IS	114.89751	ON 12121716: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
29B	HIGH	1ST HIGH VALUE IS	108.65981	ON 12122516: AT (	366412.31,	3769692.47,	97.78,	97.78,	0.00)	DC	
30A	HIGH	1ST HIGH VALUE IS	12.66725	ON 08012216: AT (	366501.11,	3769688.05,	96.21,	96.21,	6.10)	DC	
30B	HIGH	1ST HIGH VALUE IS	12.97646	ON 08012216: AT (	366501.11,	3769688.05,	96.21,	96.21,	3.05)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                        ***        04/21/16
*** AERMET - VERSION  14134 ***   *** Mobile Sources - Students                                                  ***        14:54:49
                                                                                                                            PAGE 429
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           0 Warning Message(s)
A Total of        1558 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of         115 Calm Hours Identified

A Total of        1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
              ***  NONE  ***


   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

Model Output - Construction
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Construction - Staff

Concentration - Source Group: OFF-SITE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	102.58980	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	12/29/2010, 14
8-HR	1ST	33.48515	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	6/9/2009, 16
PERIOD		4.83791	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: ON-SITE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	2211.14774	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	12/16/2011, 8
8-HR	1ST	790.83548	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	11/29/2012, 16
PERIOD		41.75858	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                          ***          04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Staff                                                         ***          15:21:23
                                                                                                                                PAGE   1
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for    24 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR  24-HR
    and Calculates PERIOD Averages

**This Run Includes:     24 Source(s);       2 Source Group(s); and     143 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     23 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  14134
```

```
**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.6 MB of RAM.

**Detailed Error/Message File:   geffenconstStaff.err
**File for Summary of Results:   geffenconstStaff.sum
```

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                  ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Staff                                                 ***        15:21:23
                                                                                                                      PAGE   2
**MODELOPTs:    RegDFAULT CONC      ELEV      FLGPOL     URBAN
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.43478E-01	366581.1	3769666.8	94.8	4.15	12.09	1.93	YES	HRDOW
L0000002	0	0.43478E-01	366586.6	3769641.6	94.3	4.15	12.09	1.93	YES	HRDOW
L0000003	0	0.43478E-01	366588.1	3769615.6	93.8	4.15	12.09	1.93	YES	HRDOW
L0000004	0	0.43478E-01	366589.7	3769589.7	93.3	4.15	12.09	1.93	YES	HRDOW
L0000005	0	0.43478E-01	366584.1	3769568.6	92.8	4.15	12.09	1.93	YES	HRDOW
L0000006	0	0.43478E-01	366559.4	3769560.6	93.0	4.15	12.09	1.93	YES	HRDOW
L0000007	0	0.43478E-01	366534.6	3769552.7	93.3	4.15	12.09	1.93	YES	HRDOW
L0000008	0	0.43478E-01	366509.9	3769544.7	93.5	4.15	12.09	1.93	YES	HRDOW
L0000009	0	0.43478E-01	366485.1	3769536.8	93.6	4.15	12.09	1.93	YES	HRDOW
L0000010	0	0.43478E-01	366460.4	3769528.8	93.7	4.15	12.09	1.93	YES	HRDOW
L0000011	0	0.43478E-01	366435.6	3769520.9	93.8	4.15	12.09	1.93	YES	HRDOW
L0000012	0	0.43478E-01	366410.9	3769512.9	93.9	4.15	12.09	1.93	YES	HRDOW
L0000013	0	0.43478E-01	366386.1	3769505.1	94.0	4.15	12.09	1.93	YES	HRDOW
L0000014	0	0.43478E-01	366361.1	3769497.8	94.2	4.15	12.09	1.93	YES	HRDOW
L0000015	0	0.43478E-01	366336.2	3769490.5	94.3	4.15	12.09	1.93	YES	HRDOW
L0000016	0	0.43478E-01	366311.3	3769482.8	94.5	4.15	12.09	1.93	YES	HRDOW
L0000017	0	0.43478E-01	366286.8	3769474.1	94.8	4.15	12.09	1.93	YES	HRDOW
L0000018	0	0.43478E-01	366263.1	3769463.7	94.9	4.15	12.09	1.93	YES	HRDOW
L0000019	0	0.43478E-01	366240.5	3769450.8	95.0	4.15	12.09	1.93	YES	HRDOW
L0000020	0	0.43478E-01	366217.9	3769437.9	95.1	4.15	12.09	1.93	YES	HRDOW
L0000021	0	0.43478E-01	366195.3	3769425.1	95.4	4.15	12.09	1.93	YES	HRDOW
L0000022	0	0.43478E-01	366172.7	3769412.2	95.7	4.15	12.09	1.93	YES	HRDOW
L0000023	0	0.43478E-01	366150.2	3769399.3	96.2	4.15	12.09	1.93	YES	HRDOW

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
23A	0	0.54840E-03	366573.2	3769591.9	93.5	4.15	9	1.93	YES	HRDOW

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)


```
                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID                                             SOURCE IDs
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 ON-SITE    23A         ,

 OFF-SITE   L0000001    , L0000002    , L0000003    , L0000004    , L0000005    , L0000006    , L0000007    , L0000008    ,

            L0000009    , L0000010    , L0000011    , L0000012    , L0000013    , L0000014    , L0000015    , L0000016    ,

            L0000017    , L0000018    , L0000019    , L0000020    , L0000021    , L0000022    , L0000023    ,
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
23A	3884000.	, L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 ,
		L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 ,
		L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 ,

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = ALL SOURCES   ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.5000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 366481.1, 3769638.0,   95.5,   95.5,   0.0);    ( 366491.1, 3769638.0,   95.4,   95.4,   0.0);
( 366481.1, 3769648.0,   95.8,   95.8,   0.0);    ( 366491.1, 3769648.0,   95.6,   95.6,   0.0);
( 366501.1, 3769648.0,   95.5,   95.5,   0.0);    ( 366481.1, 3769658.0,   96.0,   96.0,   0.0);
( 366491.1, 3769658.0,   95.9,   95.9,   0.0);    ( 366501.1, 3769658.0,   95.8,   95.8,   0.0);
( 366511.1, 3769658.0,   95.6,   95.6,   0.0);    ( 366521.1, 3769658.0,   95.5,   95.5,   0.0);
( 366471.1, 3769668.0,   96.5,   96.5,   0.0);    ( 366481.1, 3769668.0,   96.3,   96.3,   0.0);
( 366491.1, 3769668.0,   96.1,   96.1,   0.0);    ( 366501.1, 3769668.0,   96.0,   96.0,   0.0);
( 366511.1, 3769668.0,   95.8,   95.8,   0.0);    ( 366461.1, 3769678.0,   96.8,   96.8,   0.0);
( 366471.1, 3769678.0,   96.7,   96.7,   0.0);    ( 366481.1, 3769678.0,   96.5,   96.5,   0.0);
( 366491.1, 3769678.0,   96.3,   96.3,   0.0);    ( 366501.1, 3769678.0,   96.2,   96.2,   0.0);
( 366451.1, 3769688.0,   97.2,   97.2,   0.0);    ( 366461.1, 3769688.0,   97.0,   97.0,   0.0);
( 366471.1, 3769688.0,   96.8,   96.8,   0.0);    ( 366481.1, 3769688.0,   96.6,   96.6,   0.0);
( 366491.1, 3769688.0,   96.4,   96.4,   0.0);    ( 366501.1, 3769688.0,   96.2,   96.2,   0.0);
( 366451.1, 3769698.0,   97.3,   97.3,   0.0);    ( 366461.1, 3769698.0,   97.1,   97.1,   0.0);
( 366471.1, 3769698.0,   96.9,   96.9,   0.0);    ( 366481.1, 3769698.0,   96.7,   96.7,   0.0);
( 366491.1, 3769698.0,   96.5,   96.5,   0.0);    ( 366451.1, 3769708.0,   97.5,   97.5,   0.0);
( 366461.1, 3769708.0,   97.3,   97.3,   0.0);    ( 366471.1, 3769708.0,   97.0,   97.0,   0.0);
( 366481.1, 3769708.0,   96.7,   96.7,   0.0);    ( 366461.1, 3769718.0,   97.4,   97.4,   0.0);
( 366471.1, 3769718.0,   97.1,   97.1,   0.0);    ( 366481.1, 3769638.0,   95.5,   95.5,   3.0);
( 366491.1, 3769638.0,   95.4,   95.4,   3.0);    ( 366481.1, 3769648.0,   95.8,   95.8,   3.0);
( 366491.1, 3769648.0,   95.6,   95.6,   3.0);    ( 366501.1, 3769648.0,   95.5,   95.5,   3.0);
( 366481.1, 3769658.0,   96.0,   96.0,   3.0);    ( 366491.1, 3769658.0,   95.9,   95.9,   3.0);
( 366501.1, 3769658.0,   95.8,   95.8,   3.0);    ( 366511.1, 3769658.0,   95.6,   95.6,   3.0);
( 366521.1, 3769658.0,   95.5,   95.5,   3.0);    ( 366471.1, 3769668.0,   96.5,   96.5,   3.0);
( 366481.1, 3769668.0,   96.3,   96.3,   3.0);    ( 366491.1, 3769668.0,   96.1,   96.1,   3.0);
( 366501.1, 3769668.0,   96.0,   96.0,   3.0);    ( 366511.1, 3769668.0,   95.8,   95.8,   3.0);
( 366461.1, 3769678.0,   96.8,   96.8,   3.0);    ( 366471.1, 3769678.0,   96.7,   96.7,   3.0);
( 366481.1, 3769678.0,   96.5,   96.5,   3.0);    ( 366491.1, 3769678.0,   96.3,   96.3,   3.0);
( 366501.1, 3769678.0,   96.2,   96.2,   3.0);    ( 366451.1, 3769688.0,   97.2,   97.2,   3.0);
( 366461.1, 3769688.0,   97.0,   97.0,   3.0);    ( 366471.1, 3769688.0,   96.8,   96.8,   3.0);
( 366481.1, 3769688.0,   96.6,   96.6,   3.0);    ( 366491.1, 3769688.0,   96.4,   96.4,   3.0);
( 366501.1, 3769688.0,   96.2,   96.2,   3.0);    ( 366451.1, 3769698.0,   97.3,   97.3,   3.0);
( 366461.1, 3769698.0,   97.1,   97.1,   3.0);    ( 366471.1, 3769698.0,   96.9,   96.9,   3.0);
( 366481.1, 3769698.0,   96.7,   96.7,   3.0);    ( 366491.1, 3769698.0,   96.5,   96.5,   3.0);
( 366451.1, 3769708.0,   97.5,   97.5,   3.0);    ( 366461.1, 3769708.0,   97.3,   97.3,   3.0);
( 366471.1, 3769708.0,   97.0,   97.0,   3.0);    ( 366481.1, 3769708.0,   96.7,   96.7,   3.0);
( 366461.1, 3769718.0,   97.4,   97.4,   3.0);    ( 366471.1, 3769718.0,   97.1,   97.1,   3.0);
( 366481.1, 3769638.0,   95.5,   95.5,   6.1);    ( 366491.1, 3769638.0,   95.4,   95.4,   6.1);
( 366481.1, 3769648.0,   95.8,   95.8,   6.1);    ( 366491.1, 3769648.0,   95.6,   95.6,   6.1);
( 366501.1, 3769648.0,   95.5,   95.5,   6.1);    ( 366481.1, 3769658.0,   96.0,   96.0,   6.1);
( 366491.1, 3769658.0,   95.9,   95.9,   6.1);    ( 366501.1, 3769658.0,   95.8,   95.8,   6.1);
( 366511.1, 3769658.0,   95.6,   95.6,   6.1);    ( 366521.1, 3769658.0,   95.5,   95.5,   6.1);
```

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,      96.5,      96.5,       6.1);
( 366481.1, 3769668.0,      96.3,      96.3,       6.1);
( 366491.1, 3769668.0,      96.1,      96.1,       6.1);
( 366501.1, 3769668.0,      96.0,      96.0,       6.1);
( 366511.1, 3769668.0,      95.8,      95.8,       6.1);
( 366461.1, 3769678.0,      96.8,      96.8,       6.1);
( 366471.1, 3769678.0,      96.7,      96.7,       6.1);
( 366481.1, 3769678.0,      96.5,      96.5,       6.1);
( 366491.1, 3769678.0,      96.3,      96.3,       6.1);
( 366501.1, 3769678.0,      96.2,      96.2,       6.1);
( 366451.1, 3769688.0,      97.2,      97.2,       6.1);
( 366461.1, 3769688.0,      97.0,      97.0,       6.1);
( 366471.1, 3769688.0,      96.8,      96.8,       6.1);
( 366481.1, 3769688.0,      96.6,      96.6,       6.1);
( 366491.1, 3769688.0,      96.4,      96.4,       6.1);
( 366501.1, 3769688.0,      96.2,      96.2,       6.1);
( 366451.1, 3769698.0,      97.3,      97.3,       6.1);
( 366461.1, 3769698.0,      97.1,      97.1,       6.1);
( 366471.1, 3769698.0,      96.9,      96.9,       6.1);
( 366481.1, 3769698.0,      96.7,      96.7,       6.1);
( 366491.1, 3769698.0,      96.5,      96.5,       6.1);
( 366451.1, 3769708.0,      97.5,      97.5,       6.1);
( 366461.1, 3769708.0,      97.3,      97.3,       6.1);
( 366471.1, 3769708.0,      97.0,      97.0,       6.1);
( 366481.1, 3769708.0,      96.7,      96.7,       6.1);
( 366461.1, 3769718.0,      97.4,      97.4,       6.1);
( 366471.1, 3769718.0,      97.1,      97.1,       6.1);
( 366412.3, 3769692.5,      97.8,      97.8,       0.0);
( 366420.8, 3769692.8,      97.7,      97.7,       0.0);
( 366431.4, 3769704.4,      97.9,      97.9,       0.0);
( 366431.1, 3769693.8,      97.6,      97.6,       0.0);
( 366441.3, 3769691.1,      97.4,      97.4,       0.0);
( 366421.2, 3769678.5,      97.4,      97.4,       0.0);
( 366430.7, 3769680.2,      97.3,      97.3,       0.0);
( 366442.0, 3769680.2,      97.1,      97.1,       0.0);
( 366450.8, 3769679.5,      97.0,      97.0,       0.0);
( 366460.7, 3769667.6,      96.6,      96.6,       0.0);
( 366450.5, 3769667.2,      96.7,      96.7,       0.0);
( 366442.0, 3769667.6,      96.9,      96.9,       0.0);
( 366430.7, 3769667.6,      97.0,      97.0,       0.0);
( 366470.6, 3769658.0,      96.2,      96.2,       0.0);
( 366461.1, 3769658.0,      96.3,      96.3,       0.0);
( 366449.8, 3769658.0,      96.5,      96.5,       0.0);
( 366441.3, 3769658.7,      96.7,      96.7,       0.0);
( 366520.4, 3769648.8,      95.3,      95.3,       0.0);
( 366511.2, 3769650.2,      95.4,      95.4,       0.0);
( 366500.9, 3769639.6,      95.3,      95.3,       0.0);
( 366491.4, 3769630.1,      95.3,      95.3,       0.0);
( 366480.5, 3769629.4,      95.4,      95.4,       0.0);
( 366470.9, 3769648.2,      95.9,      95.9,       0.0);
( 366470.6, 3769639.6,      95.7,      95.7,       0.0);
( 366469.9, 3769629.4,      95.5,      95.5,       0.0);
( 366469.6, 3769616.5,      95.2,      95.2,       0.0);
( 366480.8, 3769620.9,      95.2,      95.2,       0.0);
( 366460.4, 3769629.8,      95.7,      95.7,       0.0);
( 366460.4, 3769639.6,      95.9,      95.9,       0.0);
( 366459.3, 3769648.8,      96.1,      96.1,       0.0);
( 366449.1, 3769648.2,      96.3,      96.3,       0.0);
( 366449.1, 3769640.0,      96.1,      96.1,       0.0);
```

```
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                        *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                           (1=YES; 0=NO)

          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

              NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                   *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                          (METERS/SEC)

                                              1.54,   3.09,   5.14,   8.23,  10.80,
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\!MET Files\SCAQMD Met Files\wsla8.sfc Met Version: 14134
Profile file: C:\!MET Files\SCAQMD Met Files\wsla8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ON-SITE	1ST HIGHEST VALUE IS	41.75858	AT (366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	2ND HIGHEST VALUE IS	41.32935	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	3RD HIGHEST VALUE IS	32.82532	AT (366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	4TH HIGHEST VALUE IS	25.53599	AT (366511.16, 3769650.20, 95.44, 95.44, 0.00)	DC	
	5TH HIGHEST VALUE IS	24.74966	AT (366511.11, 3769658.05, 95.60, 95.60, 0.00)	DC	
	6TH HIGHEST VALUE IS	24.52543	AT (366521.11, 3769658.05, 95.45, 95.45, 6.10)	DC	
	7TH HIGHEST VALUE IS	22.63916	AT (366511.11, 3769668.05, 95.81, 95.81, 0.00)	DC	
	8TH HIGHEST VALUE IS	20.64709	AT (366511.11, 3769658.05, 95.60, 95.60, 3.05)	DC	
	9TH HIGHEST VALUE IS	18.88449	AT (366511.11, 3769668.05, 95.81, 95.81, 3.05)	DC	
	10TH HIGHEST VALUE IS	16.70995	AT (366501.11, 3769648.05, 95.53, 95.53, 0.00)	DC	
OFF-SITE	1ST HIGHEST VALUE IS	4.83791	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
	2ND HIGHEST VALUE IS	4.56939	AT (366480.82, 3769620.89, 95.20, 95.20, 0.00)	DC	
	3RD HIGHEST VALUE IS	4.51815	AT (366469.58, 3769616.46, 95.25, 95.25, 0.00)	DC	
	4TH HIGHEST VALUE IS	4.51186	AT (366521.11, 3769658.05, 95.45, 95.45, 0.00)	DC	
	5TH HIGHEST VALUE IS	4.41509	AT (366491.39, 3769630.09, 95.26, 95.26, 0.00)	DC	
	6TH HIGHEST VALUE IS	4.32469	AT (366521.11, 3769658.05, 95.45, 95.45, 3.05)	DC	
	7TH HIGHEST VALUE IS	4.30783	AT (366500.94, 3769639.64, 95.34, 95.34, 0.00)	DC	
	8TH HIGHEST VALUE IS	4.29396	AT (366511.16, 3769650.20, 95.44, 95.44, 0.00)	DC	
	9TH HIGHEST VALUE IS	4.14857	AT (366480.48, 3769629.41, 95.38, 95.38, 0.00)	DC	
	10TH HIGHEST VALUE IS	4.06273	AT (366491.11, 3769638.05, 95.43, 95.43, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

Model Input - Construction for Staff
Unit Emission Rates (1 g/s)

```
 *** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                      ***        04/19/16
 *** AERMET - VERSION  14134 ***   *** Construction - Staff                                                     ***        15:21:23
                                                                                                                           PAGE  51
 **MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL     URBAN

                                                    *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***

                                            ** CONC OF OTHER    IN MICROGRAMS/M**3                         **

                                                                  DATE                                                                   NETWORK
GROUP ID                                  AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ON-SITE  HIGH   1ST HIGH VALUE IS    2211.14774  ON 11121608: AT (  366520.36,  3769648.84,    95.29,    95.29,    0.00)  DC

OFF-SITE HIGH   1ST HIGH VALUE IS     102.58980  ON 10122914: AT (  366469.58,  3769616.46,    95.25,    95.25,    0.00)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ON-SITE HIGH	1ST HIGH VALUE IS	790.83548	ON 12112916:	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
OFF-SITE HIGH	1ST HIGH VALUE IS	33.48515	ON 09060916:	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           0 Warning Message(s)
A Total of        1558 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of         115 Calm Hours Identified

A Total of        1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
              ***  NONE  ***


   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

Model Output - Construction
Unit Emission Rates (1 g/s)

Results Summary

Geffen Acad at UCLA
Construction - Students

Concentration - Source Group: OFF-SITE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	102.58980	ug/m^3	366469.58	3769616.46	95.25	0.00	95.25	12/29/2010, 14
8-HR	1ST	27.76988	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	11/19/2010, 16
PERIOD		3.63487	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	

Concentration - Source Group: ON-SITE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	1597.91315	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	12/7/2009, 15
8-HR	1ST	687.80988	ug/m^3	366520.36	3769648.84	95.29	0.00	95.29	11/29/2012, 16
PERIOD		27.92084	ug/m^3	366521.11	3769658.05	95.45	0.00	95.45	

```
** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                   ***        04/19/16
 *** AERMET - VERSION  14134 ***   *** Construction - Student                                               ***        14:53:36
                                                                                                                         PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    24 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   3884000.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.
         6. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Accepts FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  OTHER

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR  24-HR
    and Calculates PERIOD Averages

 **This Run Includes:     24 Source(s);       2 Source Group(s); and     143 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     23 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 OPENPIT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

Model Input - Construction for Students
Unit Emission Rates (1 g/s)

```
**Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    97.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.6 MB of RAM.

**Detailed Error/Message File:   geffenconst.err
**File for Summary of Results:   geffenconst.sum
```

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                       ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Student                                                    ***        14:53:36
                                                                                                                           PAGE   2
**MODELOPTs:    RegDFAULT CONC      ELEV      FLGPOL     URBAN
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.43478E-01	366581.1	3769666.8	94.8	4.15	12.09	1.93	YES	HRDOW
L0000002	0	0.43478E-01	366586.6	3769641.6	94.3	4.15	12.09	1.93	YES	HRDOW
L0000003	0	0.43478E-01	366588.1	3769615.6	93.8	4.15	12.09	1.93	YES	HRDOW
L0000004	0	0.43478E-01	366589.7	3769589.7	93.3	4.15	12.09	1.93	YES	HRDOW
L0000005	0	0.43478E-01	366584.1	3769568.6	92.8	4.15	12.09	1.93	YES	HRDOW
L0000006	0	0.43478E-01	366559.4	3769560.6	93.0	4.15	12.09	1.93	YES	HRDOW
L0000007	0	0.43478E-01	366534.6	3769552.7	93.3	4.15	12.09	1.93	YES	HRDOW
L0000008	0	0.43478E-01	366509.9	3769544.7	93.5	4.15	12.09	1.93	YES	HRDOW
L0000009	0	0.43478E-01	366485.1	3769536.8	93.6	4.15	12.09	1.93	YES	HRDOW
L0000010	0	0.43478E-01	366460.4	3769528.8	93.7	4.15	12.09	1.93	YES	HRDOW
L0000011	0	0.43478E-01	366435.6	3769520.9	93.8	4.15	12.09	1.93	YES	HRDOW
L0000012	0	0.43478E-01	366410.9	3769512.9	93.9	4.15	12.09	1.93	YES	HRDOW
L0000013	0	0.43478E-01	366386.1	3769505.1	94.0	4.15	12.09	1.93	YES	HRDOW
L0000014	0	0.43478E-01	366361.1	3769497.8	94.2	4.15	12.09	1.93	YES	HRDOW
L0000015	0	0.43478E-01	366336.2	3769490.5	94.3	4.15	12.09	1.93	YES	HRDOW
L0000016	0	0.43478E-01	366311.3	3769482.8	94.5	4.15	12.09	1.93	YES	HRDOW
L0000017	0	0.43478E-01	366286.8	3769474.1	94.8	4.15	12.09	1.93	YES	HRDOW
L0000018	0	0.43478E-01	366263.1	3769463.7	94.9	4.15	12.09	1.93	YES	HRDOW
L0000019	0	0.43478E-01	366240.5	3769450.8	95.0	4.15	12.09	1.93	YES	HRDOW
L0000020	0	0.43478E-01	366217.9	3769437.9	95.1	4.15	12.09	1.93	YES	HRDOW
L0000021	0	0.43478E-01	366195.3	3769425.1	95.4	4.15	12.09	1.93	YES	HRDOW
L0000022	0	0.43478E-01	366172.7	3769412.2	95.7	4.15	12.09	1.93	YES	HRDOW
L0000023	0	0.43478E-01	366150.2	3769399.3	96.2	4.15	12.09	1.93	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
23A	0	0.54840E-03	366573.2	3769591.9	93.5	4.15	9	1.93	YES	HRDOW

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs							
ON-SITE	23A ,							
OFF-SITE	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008 ,
	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016 ,
	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	, L0000022	, L0000023 ,	

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

```
                                         *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID   URBAN POP                                            SOURCE IDs
 --------   ---------                                            ----------


             3884000.   23A         , L0000001    , L0000002    , L0000003    , L0000004    , L0000005    , L0000006    ,
L0000007    ,

            L0000008    , L0000009    , L0000010    , L0000011    , L0000012    , L0000013    , L0000014    , L0000015    ,

            L0000016    , L0000017    , L0000018    , L0000019    , L0000020    , L0000021    , L0000022    , L0000023    ,
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = ALL SOURCES ; SOURCE TYPE = AREAPOLY :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Input - Construction for Students
Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                   ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Student                                                ***        14:53:36
                                                                                                                       PAGE  30
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                              *** DISCRETE CARTESIAN RECEPTORS ***
                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                            (METERS)

    ( 366481.1, 3769638.0,      95.5,      95.5,      0.0);        ( 366491.1, 3769638.0,      95.4,      95.4,      0.0);
    ( 366481.1, 3769648.0,      95.8,      95.8,      0.0);        ( 366491.1, 3769648.0,      95.6,      95.6,      0.0);
    ( 366501.1, 3769648.0,      95.5,      95.5,      0.0);        ( 366481.1, 3769658.0,      96.0,      96.0,      0.0);
    ( 366491.1, 3769658.0,      95.9,      95.9,      0.0);        ( 366501.1, 3769658.0,      95.8,      95.8,      0.0);
    ( 366511.1, 3769658.0,      95.6,      95.6,      0.0);        ( 366521.1, 3769658.0,      95.5,      95.5,      0.0);
    ( 366471.1, 3769668.0,      96.5,      96.5,      0.0);        ( 366481.1, 3769668.0,      96.3,      96.3,      0.0);
    ( 366491.1, 3769668.0,      96.1,      96.1,      0.0);        ( 366501.1, 3769668.0,      96.0,      96.0,      0.0);
    ( 366511.1, 3769668.0,      95.8,      95.8,      0.0);        ( 366461.1, 3769678.0,      96.8,      96.8,      0.0);
    ( 366471.1, 3769678.0,      96.7,      96.7,      0.0);        ( 366481.1, 3769678.0,      96.5,      96.5,      0.0);
    ( 366491.1, 3769678.0,      96.3,      96.3,      0.0);        ( 366501.1, 3769678.0,      96.2,      96.2,      0.0);
    ( 366451.1, 3769688.0,      97.2,      97.2,      0.0);        ( 366461.1, 3769688.0,      97.0,      97.0,      0.0);
    ( 366471.1, 3769688.0,      96.8,      96.8,      0.0);        ( 366481.1, 3769688.0,      96.6,      96.6,      0.0);
    ( 366491.1, 3769688.0,      96.4,      96.4,      0.0);        ( 366501.1, 3769688.0,      96.2,      96.2,      0.0);
    ( 366451.1, 3769698.0,      97.3,      97.3,      0.0);        ( 366461.1, 3769698.0,      97.1,      97.1,      0.0);
    ( 366471.1, 3769698.0,      96.9,      96.9,      0.0);        ( 366481.1, 3769698.0,      96.7,      96.7,      0.0);
    ( 366491.1, 3769698.0,      96.5,      96.5,      0.0);        ( 366451.1, 3769708.0,      97.5,      97.5,      0.0);
    ( 366461.1, 3769708.0,      97.3,      97.3,      0.0);        ( 366471.1, 3769708.0,      97.0,      97.0,      0.0);
    ( 366481.1, 3769708.0,      96.7,      96.7,      0.0);        ( 366461.1, 3769718.0,      97.4,      97.4,      0.0);
    ( 366471.1, 3769718.0,      97.1,      97.1,      0.0);        ( 366481.1, 3769638.0,      95.5,      95.5,      3.0);
    ( 366491.1, 3769638.0,      95.4,      95.4,      3.0);        ( 366481.1, 3769648.0,      95.8,      95.8,      3.0);
    ( 366491.1, 3769648.0,      95.6,      95.6,      3.0);        ( 366501.1, 3769648.0,      95.5,      95.5,      3.0);
    ( 366481.1, 3769658.0,      96.0,      96.0,      3.0);        ( 366491.1, 3769658.0,      95.9,      95.9,      3.0);
    ( 366501.1, 3769658.0,      95.8,      95.8,      3.0);        ( 366511.1, 3769658.0,      95.6,      95.6,      3.0);
    ( 366521.1, 3769658.0,      95.5,      95.5,      3.0);        ( 366471.1, 3769668.0,      96.5,      96.5,      3.0);
    ( 366481.1, 3769668.0,      96.3,      96.3,      3.0);        ( 366491.1, 3769668.0,      96.1,      96.1,      3.0);
    ( 366501.1, 3769668.0,      96.0,      96.0,      3.0);        ( 366511.1, 3769668.0,      95.8,      95.8,      3.0);
    ( 366461.1, 3769678.0,      96.8,      96.8,      3.0);        ( 366471.1, 3769678.0,      96.7,      96.7,      3.0);
    ( 366481.1, 3769678.0,      96.5,      96.5,      3.0);        ( 366491.1, 3769678.0,      96.3,      96.3,      3.0);
    ( 366501.1, 3769678.0,      96.2,      96.2,      3.0);        ( 366451.1, 3769688.0,      97.2,      97.2,      3.0);
    ( 366461.1, 3769688.0,      97.0,      97.0,      3.0);        ( 366471.1, 3769688.0,      96.8,      96.8,      3.0);
    ( 366481.1, 3769688.0,      96.6,      96.6,      3.0);        ( 366491.1, 3769688.0,      96.4,      96.4,      3.0);
    ( 366501.1, 3769688.0,      96.2,      96.2,      3.0);        ( 366451.1, 3769698.0,      97.3,      97.3,      3.0);
    ( 366461.1, 3769698.0,      97.1,      97.1,      3.0);        ( 366471.1, 3769698.0,      96.9,      96.9,      3.0);
    ( 366481.1, 3769698.0,      96.7,      96.7,      3.0);        ( 366491.1, 3769698.0,      96.5,      96.5,      3.0);
    ( 366451.1, 3769708.0,      97.5,      97.5,      3.0);        ( 366461.1, 3769708.0,      97.3,      97.3,      3.0);
    ( 366471.1, 3769708.0,      97.0,      97.0,      3.0);        ( 366481.1, 3769708.0,      96.7,      96.7,      3.0);
    ( 366461.1, 3769718.0,      97.4,      97.4,      3.0);        ( 366471.1, 3769718.0,      97.1,      97.1,      3.0);
    ( 366481.1, 3769638.0,      95.5,      95.5,      6.1);        ( 366491.1, 3769638.0,      95.4,      95.4,      6.1);
    ( 366481.1, 3769648.0,      95.8,      95.8,      6.1);        ( 366491.1, 3769648.0,      95.6,      95.6,      6.1);
    ( 366501.1, 3769648.0,      95.5,      95.5,      6.1);        ( 366481.1, 3769658.0,      96.0,      96.0,      6.1);
    ( 366491.1, 3769658.0,      95.9,      95.9,      6.1);        ( 366501.1, 3769658.0,      95.8,      95.8,      6.1);
    ( 366511.1, 3769658.0,      95.6,      95.6,      6.1);        ( 366521.1, 3769658.0,      95.5,      95.5,      6.1);
```

Model Input - Construction for Students
Unit Emission Rates (1 g/s)

```
( 366471.1, 3769668.0,      96.5,      96.5,       6.1);
( 366491.1, 3769668.0,      96.1,      96.1,       6.1);
( 366511.1, 3769668.0,      95.8,      95.8,       6.1);
( 366471.1, 3769678.0,      96.7,      96.7,       6.1);
( 366491.1, 3769678.0,      96.3,      96.3,       6.1);
( 366451.1, 3769688.0,      97.2,      97.2,       6.1);
( 366471.1, 3769688.0,      96.8,      96.8,       6.1);
( 366491.1, 3769688.0,      96.4,      96.4,       6.1);
( 366451.1, 3769698.0,      97.3,      97.3,       6.1);
( 366471.1, 3769698.0,      96.9,      96.9,       6.1);
( 366491.1, 3769698.0,      96.5,      96.5,       6.1);
( 366461.1, 3769708.0,      97.3,      97.3,       6.1);
( 366481.1, 3769708.0,      96.7,      96.7,       6.1);
( 366471.1, 3769718.0,      97.1,      97.1,       6.1);
( 366420.8, 3769692.8,      97.7,      97.7,       0.0);
( 366431.1, 3769693.8,      97.6,      97.6,       0.0);
( 366421.2, 3769678.5,      97.4,      97.4,       0.0);
( 366442.0, 3769680.2,      97.1,      97.1,       0.0);
( 366460.7, 3769667.6,      96.6,      96.6,       0.0);
( 366442.0, 3769667.6,      96.9,      96.9,       0.0);
( 366470.6, 3769658.0,      96.2,      96.2,       0.0);
( 366449.8, 3769658.0,      96.5,      96.5,       0.0);
( 366520.4, 3769648.8,      95.3,      95.3,       0.0);
( 366500.9, 3769639.6,      95.3,      95.3,       0.0);
( 366480.5, 3769629.4,      95.4,      95.4,       0.0);
( 366470.6, 3769639.6,      95.7,      95.7,       0.0);
( 366469.6, 3769616.5,      95.2,      95.2,       0.0);
( 366460.4, 3769629.8,      95.7,      95.7,       0.0);
( 366459.3, 3769648.8,      96.1,      96.1,       0.0);
( 366449.1, 3769640.0,      96.1,      96.1,       0.0);
( 366481.1, 3769668.0,      96.3,      96.3,       6.1);
( 366501.1, 3769668.0,      96.0,      96.0,       6.1);
( 366461.1, 3769678.0,      96.8,      96.8,       6.1);
( 366481.1, 3769678.0,      96.5,      96.5,       6.1);
( 366501.1, 3769678.0,      96.2,      96.2,       6.1);
( 366461.1, 3769688.0,      97.0,      97.0,       6.1);
( 366481.1, 3769688.0,      96.6,      96.6,       6.1);
( 366501.1, 3769688.0,      96.2,      96.2,       6.1);
( 366461.1, 3769698.0,      97.1,      97.1,       6.1);
( 366481.1, 3769698.0,      96.7,      96.7,       6.1);
( 366451.1, 3769708.0,      97.5,      97.5,       6.1);
( 366471.1, 3769708.0,      97.0,      97.0,       6.1);
( 366461.1, 3769718.0,      97.4,      97.4,       6.1);
( 366412.3, 3769692.5,      97.8,      97.8,       0.0);
( 366431.4, 3769704.4,      97.9,      97.9,       0.0);
( 366441.3, 3769691.1,      97.4,      97.4,       0.0);
( 366430.7, 3769680.2,      97.3,      97.3,       0.0);
( 366450.8, 3769679.5,      97.0,      97.0,       0.0);
( 366450.5, 3769667.2,      96.7,      96.7,       0.0);
( 366430.7, 3769667.6,      97.0,      97.0,       0.0);
( 366461.1, 3769658.0,      96.3,      96.3,       0.0);
( 366441.3, 3769658.7,      96.7,      96.7,       0.0);
( 366511.2, 3769650.2,      95.4,      95.4,       0.0);
( 366491.4, 3769630.1,      95.3,      95.3,       0.0);
( 366470.9, 3769648.2,      95.9,      95.9,       0.0);
( 366469.9, 3769629.4,      95.5,      95.5,       0.0);
( 366480.8, 3769620.9,      95.2,      95.2,       0.0);
( 366460.4, 3769639.6,      95.9,      95.9,       0.0);
( 366449.1, 3769648.2,      96.3,      96.3,       0.0);
```

Model Input - Construction for Students
Unit Emission Rates (1 g/s)

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                             ***        04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Student                                                          ***        14:53:36
                                                                                                                                 PAGE  32
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                                     *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                        (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                              *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                                      (METERS/SEC)

                                                         1.54,   3.09,   5.14,   8.23,  10.80,
```

Model Input - Construction for Students
Unit Emission Rates (1 g/s)

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\!MET Files\SCAQMD Met Files\wsla8.sfc Met Version: 14134
Profile file: C:\!MET Files\SCAQMD Met Files\wsla8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.0	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.9	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.8	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	287.6	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.55	999.00	999.	-9.0	288.4	5.5
08	01	01	1	09	21.6	-9.000	-9.000	-9.000	53.	-999.	-99999.0	0.40	1.00	0.32	999.00	999.	-9.0	288.9	5.5
08	01	01	1	10	66.0	-9.000	-9.000	-9.000	139.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	290.0	5.5
08	01	01	1	11	126.1	-9.000	-9.000	-9.000	371.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	292.0	5.5
08	01	01	1	12	144.0	-9.000	-9.000	-9.000	600.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.0	5.5
08	01	01	1	13	126.0	-9.000	-9.000	-9.000	722.	-999.	-99999.0	0.40	1.00	0.20	999.00	999.	-9.0	293.6	5.5
08	01	01	1	14	69.5	-9.000	-9.000	-9.000	753.	-999.	-99999.0	0.40	1.00	0.21	999.00	999.	-9.0	293.1	5.5
08	01	01	1	15	32.0	-9.000	-9.000	-9.000	767.	-999.	-99999.0	0.40	1.00	0.24	999.00	999.	-9.0	292.6	5.5
08	01	01	1	16	14.4	-9.000	-9.000	-9.000	773.	-999.	-99999.0	0.40	1.00	0.33	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	0.59	999.00	999.	-9.0	291.1	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	290.4	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.5	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.40	1.00	1.00	999.00	999.	-9.0	289.1	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	288.5	99.0	-99.00	-99.00
08	01	01	01	9.1	1	-999.	-99.00	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

```
 *** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                         ***        04/19/16
 *** AERMET - VERSION  14134 ***   *** Construction - Student                                                      ***        14:53:36
                                                                                                                              PAGE  50
 **MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                                       *** THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS ***

                                                   ** CONC OF OTHER    IN MICROGRAMS/M**3                          **

                                                                                                                         NETWORK
GROUP ID                       AVERAGE CONC               RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ON-SITE   1ST HIGHEST VALUE IS      27.92084 AT (  366521.11,  3769658.05,    95.45,    95.45,    0.00)  DC
          2ND HIGHEST VALUE IS      26.29299 AT (  366520.36,  3769648.84,    95.29,    95.29,    0.00)  DC
          3RD HIGHEST VALUE IS      21.53508 AT (  366521.11,  3769658.05,    95.45,    95.45,    3.05)  DC
          4TH HIGHEST VALUE IS      16.14578 AT (  366511.16,  3769650.20,    95.44,    95.44,    0.00)  DC
          5TH HIGHEST VALUE IS      16.07673 AT (  366511.11,  3769658.05,    95.60,    95.60,    0.00)  DC
          6TH HIGHEST VALUE IS      15.77866 AT (  366521.11,  3769658.05,    95.45,    95.45,    6.10)  DC
          7TH HIGHEST VALUE IS      15.34406 AT (  366511.11,  3769668.05,    95.81,    95.81,    0.00)  DC
          8TH HIGHEST VALUE IS      13.25253 AT (  366511.11,  3769658.05,    95.60,    95.60,    3.05)  DC
          9TH HIGHEST VALUE IS      12.59608 AT (  366511.11,  3769668.05,    95.81,    95.81,    3.05)  DC
         10TH HIGHEST VALUE IS      10.46279 AT (  366511.11,  3769658.05,    95.60,    95.60,    6.10)  DC

OFF-SITE  1ST HIGHEST VALUE IS       3.63487 AT (  366520.36,  3769648.84,    95.29,    95.29,    0.00)  DC
          2ND HIGHEST VALUE IS       3.46366 AT (  366480.82,  3769620.89,    95.20,    95.20,    0.00)  DC
          3RD HIGHEST VALUE IS       3.42944 AT (  366469.58,  3769616.46,    95.25,    95.25,    0.00)  DC
          4TH HIGHEST VALUE IS       3.39079 AT (  366521.11,  3769658.05,    95.45,    95.45,    0.00)  DC
          5TH HIGHEST VALUE IS       3.34185 AT (  366491.39,  3769630.09,    95.26,    95.26,    0.00)  DC
          6TH HIGHEST VALUE IS       3.25412 AT (  366500.94,  3769639.64,    95.34,    95.34,    0.00)  DC
          7TH HIGHEST VALUE IS       3.23743 AT (  366521.11,  3769658.05,    95.45,    95.45,    3.05)  DC
          8TH HIGHEST VALUE IS       3.23476 AT (  366511.16,  3769650.20,    95.44,    95.44,    0.00)  DC
          9TH HIGHEST VALUE IS       3.14683 AT (  366480.48,  3769629.41,    95.38,    95.38,    0.00)  DC
         10TH HIGHEST VALUE IS       3.07608 AT (  366491.11,  3769638.05,    95.43,    95.43,    0.00)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

**MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ON-SITE HIGH	1ST HIGH VALUE IS	1597.91315	ON 09120715:	AT (366520.36, 3769648.84, 95.29, 95.29, 0.00)	DC	
OFF-SITE HIGH	1ST HIGH VALUE IS	102.58980	ON 10122914:	AT (366469.58, 3769616.46, 95.25, 95.25, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

```
 *** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                                ***        04/19/16
 *** AERMET - VERSION  14134 ***   *** Construction - Student                                                             ***        14:53:36
                                                                                                                                     PAGE  52
 **MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

                                                *** THE SUMMARY OF HIGHEST  8-HR RESULTS ***

                                    ** CONC OF OTHER    IN MICROGRAMS/M**3                         **

                                                      DATE                                                                   NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)            RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ON-SITE  HIGH   1ST HIGH VALUE IS     687.80988  ON 12112916: AT (  366520.36, 3769648.84,    95.29,    95.29,    0.00)  DC

OFF-SITE HIGH   1ST HIGH VALUE IS      27.76988  ON 10111916: AT (  366520.36, 3769648.84,    95.29,    95.29,    0.00)  DC

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
*** AERMOD - VERSION  15181 ***   *** Geffen Acad at UCLA                                                            ***         04/19/16
*** AERMET - VERSION  14134 ***   *** Construction - Student                                                         ***         14:53:36
                                                                                                                                 PAGE  54
**MODELOPTs:   RegDFAULT CONC      ELEV      FLGPOL    URBAN

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            0 Warning Message(s)
A Total of         1558 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of          115 Calm Hours Identified

A Total of         1443 Missing Hours Identified (  3.29 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
              ***  NONE  ***


   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

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Appendix E. Risk Calculation Worksheets

Appendix

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Table E1
Pollutant Concentration Worksheet
Stationary Sources - Staff Scenario

Source No. (a)	Source (b)	Emission Rates[1] **Annual Average** (g/s) (f)	Contaminant (d)	Weight Fraction (e)	AERMOD Output[2] **Annual Average** (µg/m³) (c)	Annual Average MER Concentration (µg/m³) (g)	AERMOD Output[2] **1-Hour** (µg/m³) (h)	Acute (1-Hour) MER Concentration (µg/m³) (i)
Staff Scenario								
1	California Pizza Kitchen (charbroiler)	5.44E-04	Acetaldehyde	8.70E-02	4.91E-01	2.33E-05	1.16E+02	5.51E-03
			Benzene	1.50E-01		4.00E-05		9.48E-03
			Formaldehyde	1.20E-01		3.21E-05		7.59E-03
			Naphthalene	2.27E-02		6.06E-06		1.43E-03
			Propionaldehyde	2.35E-02		6.28E-06		1.49E-03
			Styrene	5.68E-02		1.52E-05		3.59E-03
			Toluene	5.92E-02		1.58E-05		3.75E-03
2	LA City, Dept. Gen Services	6.20E-03	Diesel Particulate	1.00E+00	1.04E-02	6.42E-05		0.00E+00
3	London Cleaners (dry cleaning)	5.38E-03	Perchloroethylene	1.00E+00	1.70E+01	9.15E-02	4.89E+03	2.63E+01
4	El Pollo Loco (charbroiler)	8.61E-04	Acetaldehyde	8.70E-02	2.37E+00	1.78E-04	3.15E+02	2.36E-02
			Benzene	1.50E-01		3.06E-04		4.06E-02
			Formaldehyde	1.20E-01		2.45E-04		3.25E-02
			Naphthalene	2.27E-02		4.63E-05		6.15E-03
			Propionaldehyde	2.35E-02		4.80E-05		6.37E-03
			Styrene	5.68E-02		1.16E-04		1.54E-02
			Toluene	5.92E-02		1.21E-04		1.61E-02
5	Casden Glendon	2.00E-03	Diesel Particulate	1.00E+00	2.46E-02	4.93E-05		0.00E+00
6	Center of Ambulatory Surgical Treatment (gen)	7.90E-03	Diesel Particulate	1.00E+00	1.44E-02	1.14E-04		0.00E+00
7	Trizec (generator)	3.20E-02	Diesel Particulate	1.00E+00	4.57E-03	1.46E-04		0.00E+00
8	UCLA Transit Operations Maintenance Yard (CNG buses)	1.30E-03	Acetaldehyde	5.57E-02	1.25E+01	9.07E-04	1.17E+03	8.50E-02
			Benzene	3.59E-03		5.85E-05		5.48E-03
			1,3-Butadiene	1.04E-03		1.69E-05		1.59E-03
			Formaldehyde	9.40E-01		1.53E-02		1.44E+00
	(diesel buses)	4.03E-06	Diesel Particulate	1.00E+00	1.25E+01	5.05E-05		0.00E+00
9	BBQ Chicken (charbroiler)	9.94E-04	Acetaldehyde	8.70E-02	2.10E-01	1.82E-05	1.47E+02	1.27E-02
			Benzene	1.50E-01		3.13E-05		2.19E-02
			Formaldehyde	1.20E-01		2.50E-05		1.75E-02
			Naphthalene	2.27E-02		4.73E-06		3.31E-03
			Propionaldehyde	2.35E-02		4.90E-06		3.44E-03
			Styrene	5.68E-02		1.19E-05		8.30E-03
			Toluene	5.92E-02		1.24E-05		8.67E-03
10	Verizon (generator)	3.10E-02	Diesel Particulate	1.00E+00	1.24E-02	3.84E-04		0.00E+00
11a	UCLA Rehabilitation Services (generator)	2.30E-02	Diesel Particulate	1.00E+00	1.69E-03	3.89E-05		0.00E+00
11b	UCLA Rehabilitation Services (natural gas combustion)	9.84E-03	Acetaldehyde	2.37E-04	9.60E-01	2.24E-06	8.12E+01	1.89E-04
			Acrolein	1.49E-04		1.41E-06		1.19E-04
			Ammonia	9.94E-01		9.39E-03		7.94E-01
			Benzene	4.42E-04		4.18E-06		3.53E-04
			Ethylbenzene	5.25E-04		4.96E-06		4.19E-04
			Formaldehyde	9.39E-04		8.87E-06		7.50E-04
			Hexane	3.48E-04		3.29E-06		2.78E-04
			Naphthalene	1.66E-05		1.57E-07		1.33E-05
			Toluene	2.02E-03		1.91E-05		1.61E-03
			Xylene	1.50E-03		1.42E-05		1.20E-03
12	UCLA Science & Tech Research Bldg (gen)	1.80E-02	Diesel Particulate	1.00E+00	2.04E-03	3.67E-05		0.00E+00
13	Regents of UC (gen)	1.70E-03	Diesel Particulate	1.00E+00	2.70E-03	4.59E-06		0.00E+00
14	Weyburn Terrace (gen)	3.20E-02	Diesel Particulate	1.00E+00	1.33E-03	4.26E-05		0.00E+00
15	Westwood Place Investors (generator)	2.10E-02	Diesel Particulate	1.00E+00	1.03E-02	2.16E-04		0.00E+00
16	Center West (generator)	3.50E-02	Diesel Particulate	1.00E+00	4.42E-03	1.55E-04		0.00E+00

Table E1
Pollutant Concentration Worksheet
Stationary Sources - Staff Scenario

Source No. (a)	Source (b)	Emission Rates[1] **Annual Average** (g/s) (f)	Contaminant (d)	Weight Fraction (e)	AERMOD Output[2] **Annual Average** (µg/m³) (c)	Annual Average MER Concentration (µg/m³) (g)	AERMOD Output[2] **1-Hour** (µg/m³) (h)	Acute (1-Hour) MER Concentration (µg/m³) (i)
Staff Scenario								
17	Palomino (charbroiler)	1.42E-03	Acetaldehyde	8.70E-02	5.46E-01	6.74E-05	2.86E+02	3.53E-02
			Benzene	1.50E-01		1.16E-04		6.08E-02
			Formaldehyde	1.20E-01		9.29E-05		4.87E-02
			Naphthalene	2.27E-02		1.76E-05		9.19E-03
			Propionaldehyde	2.35E-02		1.82E-05		9.53E-03
			Styrene	5.68E-02		4.40E-05		2.30E-02
			Toluene	5.92E-02		4.59E-05		2.40E-02
18	UCLA Health System	1.90E-02	Diesel Particulate	1.00E+00	1.07E-02	2.03E-04		0.00E+00
19	Oxy Building (natural gas combustion)	3.36E-03	Acetaldehyde	2.37E-04	1.30E+00	1.04E-06	3.78E+02	3.01E-04
			Acrolein	1.49E-04		6.52E-07		1.89E-04
			Ammonia	9.94E-01		4.35E-03		1.26E+00
			Benzene	4.42E-04		1.93E-06		5.62E-04
			Ethylbenzene	5.25E-04		2.30E-06		6.67E-04
			Formaldehyde	9.39E-04		4.11E-06		1.19E-03
			Hexane	3.48E-04		1.52E-06		4.42E-04
			Naphthalene	1.66E-05		7.26E-08		2.11E-05
			Toluene	2.02E-03		8.83E-06		2.57E-03
			Xylene	1.50E-03		6.56E-06		1.91E-03
20	UCLA Wilshire Center	5.70E-02	Diesel Particulate	1.00E+00	2.23E-03	1.27E-04		0.00E+00
21	Muller Company (gen)	1.30E-02	Diesel Particulate	1.00E+00	4.40E-02	5.72E-04		0.00E+00
22	The Tower (gen)	3.10E-02	Diesel Particulate	1.00E+00	2.01E-02	6.22E-04		0.00E+00
23b	The Wilshire-Gayley (gen)	1.10E-03	Diesel Particulate	1.00E+00	8.35E+00	9.19E-03		0.00E+00
23c	The Wilshire-Gayley (natural gas combustion)	1.41E-03	Acetaldehyde	2.37E-04	3.34E+01	1.12E-05	1.03E+03	3.44E-04
			Acrolein	1.49E-04		7.02E-06		2.16E-04
			Ammonia	9.94E-01		4.68E-02		1.44E+00
			Benzene	4.42E-04		2.08E-05		6.41E-04
			Ethylbenzene	5.25E-04		2.47E-05		7.62E-04
			Formaldehyde	9.39E-04		4.42E-05		1.36E-03
			Hexane	3.48E-04		1.64E-05		5.05E-04
			Naphthalene	1.66E-05		7.82E-07		2.41E-05
			Toluene	2.02E-03		9.52E-05		2.93E-03
			Xylene	1.50E-03		7.07E-05		2.18E-03
24	EOP (generator)	2.20E-02	Diesel Particulate	1.00E+00	3.35E-02	7.37E-04		0.00E+00
25a	US Government Bldg	3.40E-02	Diesel Particulate	1.00E+00	1.50E-02	5.10E-04		0.00E+00
25b	US Government Bldg (charbroiler)	2.98E-03	Acetaldehyde	8.70E-02	1.14E+01	2.95E-03	3.14E+02	8.15E-02
			Benzene	1.50E-01		5.07E-03		1.40E-01
			Formaldehyde	1.20E-01		4.06E-03		1.12E-01
			Naphthalene	2.27E-02		7.68E-04		2.12E-02
			Propionaldehyde	2.35E-02		7.96E-04		2.20E-02
			Styrene	5.68E-02		1.92E-03		5.32E-02
			Toluene	5.92E-02		2.01E-03		5.55E-02
Note: Maximum Exposed Receptor (MER)						For Cancer/Chronic Calculation		For Acute Calculation

[1] Emission Rates, per source, from Source Emissions Inventories (Appendix B).

[2] AERMOD Output (Appendix C) at the maximum exposed receptor (MER) are based on unit emission rates for emission sources (1 g/s per source).

Table E2
Pollutant Concentration Worksheet
Stationary Sources - Student Scenario

Source No. (a)	Source (b)	Emission Rates[1] **Annual Average** (g/s) (f)	Contaminant (d)	Weight Fraction (e)	AERMOD Output[2] **Annual Average** (μg/m^3) (c)	Annual Average MER Concentration (μg/m^3) (g)	AERMOD Output[2] **1-Hour** (μg/m^3) (h)	Acute (1-Hour) MER Concentration (μg/m^3) (i)
Student Scenario								
1	California Pizza Kitchen (charbroiler)	5.44E-04	Acetaldehyde	8.70E-02	2.88E-01	1.36E-05	6.95E+01	3.29E-03
			Benzene	1.50E-01		2.34E-05		5.66E-03
			Formaldehyde	1.20E-01		1.88E-05		4.54E-03
			Naphthalene	2.27E-02		3.54E-06		8.57E-04
			Propionaldehyde	2.35E-02		3.67E-06		8.88E-04
			Styrene	5.68E-02		8.88E-06		2.15E-03
			Toluene	5.92E-02		9.26E-06		2.24E-03
2	LA City, Dept. Gen Services	6.20E-03	Diesel Particulate	1.00E+00	1.04E-02	6.42E-05		0.00E+00
3	London Cleaners (dry cleaning)	5.38E-03	Perchloroethylene	1.00E+00	5.53E+00	2.97E-02	2.12E+03	1.14E+01
4	El Pollo Loco (charbroiler)	8.61E-04	Acetaldehyde	8.70E-02	1.45E+00	1.08E-04	1.71E+02	1.28E-02
			Benzene	1.50E-01		1.87E-04		2.20E-02
			Formaldehyde	1.20E-01		1.49E-04		1.76E-02
			Naphthalene	2.27E-02		2.82E-05		3.33E-03
			Propionaldehyde	2.35E-02		2.93E-05		3.45E-03
			Styrene	5.68E-02		7.07E-05		8.34E-03
			Toluene	5.92E-02		7.38E-05		8.70E-03
5	Casden Glendon	2.00E-03	Diesel Particulate	1.00E+00	2.46E-02	4.93E-05		0.00E+00
6	Center of Ambulatory Surgical Treatment (gen)	7.90E-03	Diesel Particulate	1.00E+00	1.44E-02	1.14E-04		0.00E+00
7	Trizec (generator)	3.20E-02	Diesel Particulate	1.00E+00	4.57E-03	1.46E-04		0.00E+00
8	UCLA Transit Operations Maintenance Yard (CNG buses)	1.30E-03	Acetaldehyde	5.57E-02	4.24E+00	3.07E-04	5.42E+02	3.92E-02
			Benzene	3.59E-03		1.98E-05		2.53E-03
			1,3-Butadiene	1.04E-03		5.73E-06		7.32E-04
			Formaldehyde	9.40E-01		5.18E-03		6.62E-01
	(diesel buses)	9.82E-06	Diesel Particulate	1.00E+00	4.24E+00	4.16E-05		0.00E+00
9	BBQ Chicken (charbroiler)	9.94E-04	Acetaldehyde	8.70E-02	1.04E-01	9.03E-06	6.09E+01	5.26E-03
			Benzene	1.50E-01		1.55E-05		9.06E-03
			Formaldehyde	1.20E-01		1.24E-05		7.26E-03
			Naphthalene	2.27E-02		2.35E-06		1.37E-03
			Propionaldehyde	2.35E-02		2.44E-06		1.42E-03
			Styrene	5.68E-02		5.89E-06		3.43E-03
			Toluene	5.92E-02		6.15E-06		3.58E-03
10	Verizon (generator)	3.10E-02	Diesel Particulate	1.00E+00	1.24E-02	3.84E-04		0.00E+00
11a	UCLA Rehabilitation Services (generator)	2.30E-02	Diesel Particulate	1.00E+00	0.00E+00	0.00E+00		0.00E+00
11b	UCLA Rehabilitation Services (natural gas combustion)	9.84E-03	Acetaldehyde	2.37E-04	5.83E-01	1.36E-06	4.96E+01	1.16E-04
			Acrolein	1.49E-04		8.55E-07		7.27E-05
			Ammonia	9.94E-01		5.70E-03		4.85E-01
			Benzene	4.42E-04		2.54E-06		2.16E-04
			Ethylbenzene	5.25E-04		3.01E-06		2.56E-04
			Formaldehyde	9.39E-04		5.39E-06		4.58E-04
			Hexane	3.48E-04		2.00E-06		1.70E-04
			Naphthalene	1.66E-05		9.52E-08		8.10E-06
			Toluene	2.02E-03		1.16E-05		9.85E-04
			Xylene	1.50E-03		8.60E-06		7.32E-04
12	UCLA Science & Tech Research Bldg (gen)	1.80E-02	Diesel Particulate	1.00E+00	0.00E+00	0.00E+00		0.00E+00
13	Regents of UC (gen)	1.70E-03	Diesel Particulate	1.00E+00	2.70E-03	4.59E-06		0.00E+00
14	Weyburn Terrace (gen)	3.20E-02	Diesel Particulate	1.00E+00	1.33E-03	4.26E-05		0.00E+00
15	Westwood Place Investors (generator)	2.10E-02	Diesel Particulate	1.00E+00	1.03E-02	2.16E-04		0.00E+00
16	Center West (generator)	3.50E-02	Diesel Particulate	1.00E+00	4.42E-03	1.55E-04		0.00E+00

Table E2
Pollutant Concentration Worksheet
Stationary Sources - Student Scenario

Source No. (a)	Source (b)	Emission Rates[1] **Annual Average** (g/s) (f)	Contaminant (d)	Weight Fraction (e)	AERMOD Output[2] **Annual Average** (µg/m³) (c)	Annual Average MER Concentration (µg/m³) (g)	AERMOD Output[2] **1-Hour** (µg/m³) (h)	Acute (1-Hour) MER Concentration (µg/m³) (i)
Student Scenario								
17	Palomino (charbroiler)	1.42E-03	Acetaldehyde	8.70E-02	3.39E-01	4.19E-05	1.43E+02	1.77E-02
			Benzene	1.50E-01		7.22E-05		3.04E-02
			Formaldehyde	1.20E-01		5.78E-05		2.43E-02
			Naphthalene	2.27E-02		1.09E-05		4.60E-03
			Propionaldehyde	2.35E-02		1.13E-05		4.77E-03
			Styrene	5.68E-02		2.74E-05		1.15E-02
			Toluene	5.92E-02		2.85E-05		1.20E-02
18	UCLA Health System	1.90E-02	Diesel Particulate	1.00E+00	1.07E-02	2.03E-04		0.00E+00
19	Oxy Building (natural gas combustion)	3.36E-03	Acetaldehyde	2.37E-04	5.79E-01	4.61E-07	1.40E+02	1.11E-04
			Acrolein	1.49E-04		2.90E-07		6.99E-05
			Ammonia	9.94E-01		1.93E-03		4.66E-01
			Benzene	4.42E-04		8.59E-07		2.07E-04
			Ethylbenzene	5.25E-04		1.02E-06		2.46E-04
			Formaldehyde	9.39E-04		1.83E-06		4.40E-04
			Hexane	3.48E-04		6.77E-07		1.63E-04
			Naphthalene	1.66E-05		3.23E-08		7.78E-06
			Toluene	2.02E-03		3.93E-06		9.47E-04
			Xylene	1.50E-03		2.92E-06		7.03E-04
20	UCLA Wilshire Center	5.70E-02	Diesel Particulate	1.00E+00	2.23E-03	1.27E-04		0.00E+00
21	Muller Company (gen)	1.30E-02	Diesel Particulate	1.00E+00	4.40E-02	5.72E-04		0.00E+00
22	The Tower (gen)	3.10E-02	Diesel Particulate	1.00E+00	2.01E-02	6.22E-04		0.00E+00
23b	The Wilshire-Gayley (gen)	1.10E-03	Diesel Particulate	1.00E+00	5.66E+00	6.23E-03		0.00E+00
23c	The Wilshire-Gayley (natural gas combustion)	1.41E-03	Acetaldehyde	2.37E-04	2.32E+01	7.77E-06	1.00E+03	3.34E-04
			Acrolein	1.49E-04		4.88E-06		2.10E-04
			Ammonia	9.94E-01		3.26E-02		1.40E+00
			Benzene	4.42E-04		1.45E-05		6.23E-04
			Ethylbenzene	5.25E-04		1.72E-05		7.40E-04
			Formaldehyde	9.39E-04		3.08E-05		1.32E-03
			Hexane	3.48E-04		1.14E-05		4.90E-04
			Naphthalene	1.66E-05		5.44E-07		2.34E-05
			Toluene	2.02E-03		6.62E-05		2.85E-03
			Xylene	1.50E-03		4.92E-05		2.11E-03
24	EOP (generator)	2.20E-02	Diesel Particulate	1.00E+00	3.35E-02	7.37E-04		0.00E+00
25a	US Government Bldg	3.40E-02	Diesel Particulate	1.00E+00	1.50E-02	5.10E-04		0.00E+00
25b	US Government Bldg (charbroiler)	2.98E-03	Acetaldehyde	8.70E-02	7.81E+00	2.02E-03	2.17E+02	5.62E-02
			Benzene	1.50E-01		3.48E-03		9.68E-02
			Formaldehyde	1.20E-01		2.79E-03		7.75E-02
			Naphthalene	2.27E-02		5.27E-04		1.46E-02
			Propionaldehyde	2.35E-02		5.46E-04		1.52E-02
			Styrene	5.68E-02		1.32E-03		3.67E-02
			Toluene	5.92E-02		1.38E-03		3.83E-02
Note: Maximum Exposed Receptor (MER)						For Cancer/Chronic Calculation		For Acute Calculation

[1] Emission Rates, per source, from Source Emissions Inventories (Appendix B).

[2] AERMOD Output (Appendix C) at the maximum exposed receptor (MER) are based on unit emission rates for emission sources (1 g/s per source).

Table E3
Pollutant Concentration Worksheet
Mobile Sources - Staff

Source No.	Source	Contaminant	Weight Fraction	Emission Rates[1] **Annual Avg** (g/s)	AERMOD Output[2] **Annual Avg** (µg/m³)	Annual Average MER Concentration (µg/m³)	Emission Rates[1] **1-Hour** (g/s)	AERMOD Output[2] **1-Hour** (µg/m³)	Acute (1-Hour) MER Concentration (µg/m³)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Staff Scenario									
26	Wilshire Trucks (DPM)	Diesel Particulate	1.00E+00	1.39E-04	5.771	0.00080	n/a	n/a	
	Wilshire Cars (TOG)	Acetaldehyde	2.80E-03	2.79E-02	5.735	0.00045	3.75E-02	66.466	0.0070
		Acrolein	1.30E-03			0.00021			0.0032
		Benzene	2.83E-02			0.00452			0.0705
		1,3-Butadiene	5.50E-03			0.00088			0.0137
		Ethylbenzene	1.17E-02			0.00187			0.0291
		Formaldehyde	1.58E-02			0.00253			0.0393
		Hexane	3.14E-02			0.00502			0.0782
		Methanol	1.20E-03			0.00019			0.0030
		Methyl Ethyl Ketone	2.00E-04			0.000032			0.0005
		Naphthalene	5.00E-04			0.000080			0.0012
		Propylene	3.06E-02			0.00489			0.0762
		Styrene	1.20E-03			0.00019			0.0030
		Toluene	7.46E-02			0.01192			0.1858
		Xylenes	5.38E-02			0.00860			0.1340
27	Veteran Trucks (DPM)	Diesel Particulate	1.00E+00	6.73E-05	3.462	0.00023	n/a	n/a	
	Veteran Cars (TOG)	Acetaldehyde	2.80E-03	1.48E-02	3.452	0.00014	1.84E-02	65.591	0.0034
		Acrolein	1.30E-03			0.00007			0.0016
		Benzene	2.83E-02			0.00145			0.0342
		1,3-Butadiene	5.50E-03			0.00028			0.0066
		Ethylbenzene	1.17E-02			0.00060			0.0141
		Formaldehyde	1.58E-02			0.00081			0.0191
		Hexane	3.14E-02			0.00161			0.0380
		Methanol	1.20E-03			0.00006			0.0015
		Methyl Ethyl Ketone	2.00E-04			0.00001			0.0002
		Naphthalene	5.00E-04			0.00003			0.0006
		Propylene	3.06E-02			0.00157			0.0370
		Styrene	1.20E-03			0.00006			0.0015
		Toluene	7.46E-02			0.00382			0.0902
		Xylenes	5.38E-02			0.00275			0.0650
28	Gayley Trucks (DPM)	Diesel Particulate	1.00E+00	4.62E-05	6.669	0.00027	n/a	n/a	
	Gayley Cars (TOG)	Acetaldehyde	2.80E-03	1.09E-02	7.063	0.00022	1.29E-02	128.224	0.0046
		Acrolein	1.30E-03			0.00010			0.0022
		Benzene	2.83E-02			0.00218			0.0469
		1,3-Butadiene	5.50E-03			0.00042			0.0091
		Ethylbenzene	1.17E-02			0.00090			0.0194
		Formaldehyde	1.58E-02			0.00122			0.0262
		Hexane	3.14E-02			0.00242			0.0520
		Methanol	1.20E-03			0.00009			0.0020
		Methyl Ethyl Ketone	2.00E-04			0.000015			0.0003
		Naphthalene	5.00E-04			0.000039			0.0008
		Propylene	3.06E-02			0.00236			0.0507
		Styrene	1.20E-03			0.00009			0.0020
		Toluene	7.46E-02			0.00574			0.1236
		Xylenes	5.38E-02			0.00414			0.0891

Table E3
Pollutant Concentration Worksheet
Mobile Sources - Staff

Source No. (a)	Source (b)	Contaminant (c)	Weight Fraction (d)	Emission Rates[1] **Annual Avg** (g/s) (e)	AERMOD Output[2] **Annual Avg** (μg/m^3) (f)	Annual Average MER Concentration (μg/m^3) (g)	Emission Rates[1] **1-Hour** (g/s) (h)	AERMOD Output[2] **1-Hour** (μg/m^3) (i)	Acute (1-Hour) MER Concentration (μg/m^3) (j)
Staff Scenario									
29	Kinross Trucks (DPM)	Diesel Particulate	1.00E+00	8.55E-06	33.607	0.00029	n/a	n/a	
	Kinross Cars (TOG)	Acetaldehyde	2.80E-03	4.41E-03	39.376	0.00049	4.89E-03	580.676	0.0080
		Acrolein	1.30E-03			0.00023			0.0037
		Benzene	2.83E-02			0.00491			0.0804
		1,3-Butadiene	5.50E-03			0.00095			0.0156
		Ethylbenzene	1.17E-02			0.00203			0.0332
		Formaldehyde	1.58E-02			0.00274			0.0449
		Hexane	3.14E-02			0.00545			0.0892
		Methanol	1.20E-03			0.00021			0.0034
		Methyl Ethyl Ketone	2.00E-04			0.00003			0.0006
		Naphthalene	5.00E-04			0.00009			0.0014
		Propylene	3.06E-02			0.00531			0.0870
		Styrene	1.20E-03			0.00021			0.0034
		Toluene	7.46E-02			0.01294			0.2120
		Xylenes	5.38E-02			0.00933			0.1529
30	Westwood Trucks	Diesel Particulate	1.00E+00	4.71E-05	2.089	0.00023	n/a	n/a	
	Westwood Cars (TOG)	Acetaldehyde	2.80E-03	9.16E-03	2.112	0.00014	1.27E-02	49.805	0.0018
		Acrolein	1.30E-03			0.00007			0.0008
		Benzene	2.83E-02			0.00145			0.0179
		1,3-Butadiene	5.50E-03			0.00028			0.0035
		Ethylbenzene	1.17E-02			0.00060			0.0074
		Formaldehyde	1.58E-02			0.00081			0.0100
		Hexane	3.14E-02			0.00161			0.0199
		Methanol	1.20E-03			0.00006			0.0008
		Methyl Ethyl Ketone	2.00E-04			0.00001			0.0001
		Naphthalene	5.00E-04			0.00003			0.0003
		Propylene	3.06E-02			0.00157			0.0194
		Styrene	1.20E-03			0.00006			0.0008
		Toluene	7.46E-02			0.00382			0.0472
		Xylenes	5.38E-02			0.00275			0.0341
Note: Maximum Exposed Receptor (MER)						For Cancer/Chronic Calculation			For Acute Calculation

[1] Emission Rates, per source, from Source Emissions Inventories (Appendix B).

[2] AERMOD Output (Appendix C) at the maximum exposed receptor (MER) are based on unit emission rates for emission sources (1 g/s per source).

Table E4
Pollutant Concentration Worksheet
Mobile Sources - Students

Source No.	Source	Contaminant	Weight Fraction	Emission Rates[1] **Annual Avg** (g/s)	AERMOD Output[2] **Annual Avg** (µg/m^3)	Annual Average MER Concentration (µg/m^3)	Emission Rates[1] **1-Hour** (g/s)	AERMOD Output[2] **1-Hour** (µg/m^3)	Acute (1-Hour) MER Concentration [3] (µg/m^3)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Student Scenario									
26	Wilshire Trucks (DPM)	Diesel Particulate	1.00E+00	2.80E-04	2.809	0.00079	n/a	n/a	
	Wilshire Cars (TOG)	Acetaldehyde	2.80E-03	3.46E-02	2.737	0.00027	3.75E-02	66.430	0.0070
		Acrolein	1.30E-03			0.00012			0.0032
		Benzene	2.83E-02			0.00268			0.0704
		1,3-Butadiene	5.50E-03			0.00052			0.0137
		Ethylbenzene	1.17E-02			0.00111			0.0291
		Formaldehyde	1.58E-02			0.00150			0.0393
		Hexane	3.14E-02			0.00297			0.0782
		Methanol	1.20E-03			0.00011			0.0030
		Methyl Ethyl Ketone	2.00E-04			0.000019			0.0005
		Naphthalene	5.00E-04			0.000047			0.0012
		Propylene	3.06E-02			0.00290			0.0762
		Styrene	1.20E-03			0.00011			0.0030
		Toluene	7.46E-02			0.00706			0.1857
		Xylenes	5.38E-02			0.00509			0.1339
27	Veteran Trucks (DPM)	Diesel Particulate	1.00E+00	1.33E-04	1.427	0.00019	n/a	n/a	
	Veteran Cars (TOG)	Acetaldehyde	2.80E-03	1.79E-02	1.415	0.00007	1.84E-02	43.249	0.0022
		Acrolein	1.30E-03			0.00003			0.0010
		Benzene	2.83E-02			0.00072			0.0226
		1,3-Butadiene	5.50E-03			0.00014			0.0044
		Ethylbenzene	1.17E-02			0.00030			0.0093
		Formaldehyde	1.58E-02			0.00040			0.0126
		Hexane	3.14E-02			0.00080			0.0250
		Methanol	1.20E-03			0.00003			0.0010
		Methyl Ethyl Ketone	2.00E-04			0.00001			0.0002
		Naphthalene	5.00E-04			0.00001			0.0004
		Propylene	3.06E-02			0.00078			0.0244
		Styrene	1.20E-03			0.00003			0.0010
		Toluene	7.46E-02			0.00189			0.0595
		Xylenes	5.38E-02			0.00137			0.0429
28	Gayley Trucks (DPM)	Diesel Particulate	1.00E+00	8.99E-05	2.617	0.00025	n/a	n/a	
	Gayley Cars (TOG) [3]	Acetaldehyde	2.80E-03	1.30E-02	2.818	0.00010	1.29E-02	79.388	0.0029
		Acrolein	1.30E-03			0.00005			0.0013
		Benzene	2.83E-02			0.00104			0.0290
		1,3-Butadiene	5.50E-03			0.00020			0.0056
		Ethylbenzene	1.17E-02			0.00043			0.0120
		Formaldehyde	1.58E-02			0.00058			0.0162
		Hexane	3.14E-02			0.00115			0.0322
		Methanol	1.20E-03			0.00004			0.0012
		Methyl Ethyl Ketone	2.00E-04			0.000007			0.0002
		Naphthalene	5.00E-04			0.000018			0.0005
		Propylene	3.06E-02			0.00112			0.0314
		Styrene	1.20E-03			0.00004			0.0012
		Toluene	7.46E-02			0.00273			0.0765
		Xylenes	5.38E-02			0.00197			0.0552

Table E4
Pollutant Concentration Worksheet
Mobile Sources - Students

Source No. (a)	Source (b)	Contaminant (c)	Weight Fraction (d)	Emission Rates[1] **Annual Avg** (g/s) (e)	AERMOD Output[2] **Annual Avg** ($\mu g/m^3$) (f)	Annual Average MER Concentration ($\mu g/m^3$) (g)	Emission Rates[1] **1-Hour** (g/s) (h)	AERMOD Output[2] **1-Hour** ($\mu g/m^3$) (i)	Acute (1-Hour) MER Concentration [3] ($\mu g/m^3$) (j)
Student Scenario									
29	Kinross Trucks (DPM)	Diesel Particulate	1.00E+00	1.63E-05	14.905	0.00024	n/a	n/a	
	Kinross Cars (TOG) [3]	Acetaldehyde	2.80E-03	5.15E-03	17.245	0.00025	4.89E-03	411.92	0.0056
		Acrolein	1.30E-03			0.00012			0.0026
		Benzene	2.83E-02			0.00251			0.0570
		1,3-Butadiene	5.50E-03			0.00049			0.0111
		Ethylbenzene	1.17E-02			0.00104			0.0236
		Formaldehyde	1.58E-02			0.00140			0.0318
		Hexane	3.14E-02			0.00279			0.0633
		Methanol	1.20E-03			0.00011			0.0024
		Methyl Ethyl Ketone	2.00E-04			0.00002			0.0004
		Naphthalene	5.00E-04			0.00004			0.0010
		Propylene	3.06E-02			0.00272			0.0617
		Styrene	1.20E-03			0.00011			0.0024
		Toluene	7.46E-02			0.00663			0.1504
		Xylenes	5.38E-02			0.00478			0.1085
30	Westwood Trucks	Diesel Particulate	1.00E+00	9.63E-05	0.667	0.00019	n/a	n/a	
	Westwood Cars (TOG) [3]	Acetaldehyde	2.80E-03	1.15E-02	0.676	0.00007	1.27E-02	47.151	0.0017
		Acrolein	1.30E-03			0.00003			0.0008
		Benzene	2.83E-02			0.00072			0.0170
		1,3-Butadiene	5.50E-03			0.00014			0.0033
		Ethylbenzene	1.17E-02			0.00030			0.0070
		Formaldehyde	1.58E-02			0.00040			0.0095
		Hexane	3.14E-02			0.00080			0.0188
		Methanol	1.20E-03			0.00003			0.0007
		Methyl Ethyl Ketone	2.00E-04			0.00001			0.0001
		Naphthalene	5.00E-04			0.00001			0.0003
		Propylene	3.06E-02			0.00078			0.0183
		Styrene	1.20E-03			0.00003			0.0007
		Toluene	7.46E-02			0.00189			0.0447
		Xylenes	5.38E-02			0.00137			0.0323
Note: Maximum Exposed Receptor (MER)						For Cancer/Chronic Calculation			For Acute Calculation [3]

[1] Emission Rates, per source, from Source Emissions Inventories (Appendix B).

[2] AERMOD Output (Appendix C) at the maximum exposed receptor (MER) are based on unit emission rates for emission sources (1 g/s per source).

[3] MER concentrations from the maximum 1-hour TOG emission rates were higher for the Staff Scenario than the Student Scenario, due to higher AERMOD Output for Staff Scenario (Table E3). Therefore, acute 1-hour TOG concentrations for the Staff Scenario were used to determine acute hazards.

Table E5
HARP2 Results for Cancer Risk and Chronic Hazards
Outdoor Exposure

No.	Source	Contaminant	Carcinogenic Risks		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	**Students**	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	**RESP**	SKIN	EYE	BONE	ENDO	BLOOD
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	California Pizza Kitchen (charbroiler)	Acetaldehyde	1.3E-05	7.9E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.3E-04	1.4E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05
		Formaldehyde	3.8E-05	2.3E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	4.1E-05	2.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	5.27E-08	0.00E+00	0.00E+00	0.00E+00	5.27E-08	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	LA City, Dept. Gen	Diesel Particulate	4.0E-03	4.1E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	London Cleaners	Perchloroethylene	1.1E-01	3.6E-02	0.00E+00	0.00E+00	0.00E+00	2.61E-03	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	El Pollo Loco (charbroiler)	Acetaldehyde	1.0E-04	6.3E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.7E-03	1.1E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
		Formaldehyde	2.9E-04	1.8E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	3.1E-04	2.0E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.03E-07	0.00E+00	0.00E+00	0.00E+00	4.03E-07	4.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	Casden Glendon	Diesel Particulate	3.1E-03	3.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	Center of Ambulatory	Diesel Particulate	7.1E-03	7.3E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	Trizec (generator)	Diesel Particulate	9.0E-03	9.4E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	UCLA Transit Maintenance Yard (CNG buses)	Acetaldehyde	5.1E-04	1.8E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	3.3E-04	1.2E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05
		1,3-Butadiene	5.7E-04	2.0E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	1.8E-02	6.3E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(diesel buses)	Diesel Particulate	3.1E-03	2.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	BBQ Chicken (charbroiler)	Acetaldehyde	1.0E-05	5.3E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.8E-04	9.0E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-05
		Formaldehyde	3.0E-05	1.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	3.2E-05	1.6E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.13E-08	0.00E+00	0.00E+00	0.00E+00	4.13E-08	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	Verizon (generator)	Diesel Particulate	2.4E-02	2.5E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11a	UCLA Rehabilitation	Diesel Particulate	2.4E-03	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11b	UCLA Rehabilitation Services (natural gas combustion)	Acetaldehyde	1.3E-06	7.9E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.4E-05	1.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-06
		Ethylbenzene	2.4E-06	1.5E-06	0.00E+00	0.00E+00	0.00E+00	2.48E-09	2.48E-09	2.48E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-09	0.00E+00
		Formaldehyde	1.0E-05	6.6E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	4.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.1E-06	6.7E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	6.37E-08	0.00E+00	0.00E+00	0.00E+00	6.37E-08	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	2.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-08	0.00E+00	2.03E-08	0.00E+00	0.00E+00	0.00E+00

Table E5
HARP2 Results for Cancer Risk and Chronic Hazards
Outdoor Exposure

No.	Source	Contaminant	Carcinogenic Risks		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	Students	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	BLOOD
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
12	UCLA Science & Tech	Diesel Particulate	2.3E-03	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	Regents of UC (gen)	Diesel Particulate	2.8E-04	2.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	Weyburn Terrace (gen)	Diesel Particulate	2.6E-03	2.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	Westwood Place	Diesel Particulate	1.3E-02	1.4E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	Center West (generator)	Diesel Particulate	9.6E-03	9.9E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	Palomino	Acetaldehyde	3.8E-05	2.4E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	6.5E-04	4.2E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
		Formaldehyde	1.1E-04	7.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.2E-04	7.6E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.53E-07	0.00E+00	0.00E+00	0.00E+00	1.53E-07	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	UCLA Health System	Diesel Particulate	1.3E-02	1.3E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	Oxy Building	Acetaldehyde	5.9E-07	2.7E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.1E-05	5.0E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-07
		Ethylbenzene	1.1E-06	5.2E-07	0.00E+00	0.00E+00	0.00E+00	1.15E-09	1.15E-09	1.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-09	0.00E+00
		Formaldehyde	4.9E-06	2.2E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	4.9E-07	2.3E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	2.94E-08	0.00E+00	0.00E+00	0.00E+00	2.94E-08	2.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	9.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-09	0.00E+00	9.37E-09	0.00E+00	0.00E+00	0.00E+00
20	UCLA Wilshire Center	Diesel Particulate	7.9E-03	8.1E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	Muller Company (gen)	Diesel Particulate	3.5E-02	3.7E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	The Tower (gen)	Diesel Particulate	3.8E-02	4.0E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23b	The Wilshire-Gayley	Diesel Particulate	5.7E-01	4.0E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23c	The Wilshire-Gayley	Acetaldehyde	6.3E-06	4.5E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.2E-04	8.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-06
		Ethylbenzene	1.2E-05	8.7E-06	0.00E+00	0.00E+00	0.00E+00	1.24E-08	1.24E-08	1.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-08	0.00E+00
		Formaldehyde	5.2E-05	3.8E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.3E-06	3.8E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	3.17E-07	0.00E+00	0.00E+00	0.00E+00	3.17E-07	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00
24	EOP (generator)	Diesel Particulate	4.6E-02	4.7E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25a	US Government Bldg	Diesel Particulate	3.2E-02	3.3E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25b	US Government Bldg	Acetaldehyde	1.7E-03	1.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	2.9E-02	2.0E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
		Formaldehyde	4.8E-03	3.4E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.2E-03	3.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	6.70E-06	0.00E+00	0.00E+00	0.00E+00	6.70E-06	6.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table E5
HARP2 Results for Cancer Risk and Chronic Hazards
Outdoor Exposure

No.	Source	Contaminant	**Carcinogenic Risks**		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	**Students**	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	**RESP**	SKIN	EYE	BONE	ENDO	BLOOD
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
26	Wilshire Trucks (DPM)	Diesel Particulate	4.9E-02	5.1E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Wilshire Cars (TOG)	Acetaldehyde	2.5E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.5E-02	1.6E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
		1,3-Butadiene	3.0E-02	1.8E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	9.2E-04	5.6E-04	0.00E+00	0.00E+00	0.00E+00	9.35E-07	9.35E-07	9.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-07	0.00E+00
		Formaldehyde	3.0E-03	1.8E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	7.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.4E-04	3.3E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	3.97E-05	0.00E+00	0.00E+00	0.00E+00	3.97E-05	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	1.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-05	0.00E+00	1.23E-05	0.00E+00	0.00E+00	0.00E+00
27	Veteran Trucks (DPM)	Diesel Particulate	1.4E-02	1.2E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Veteran Cars (TOG)	Acetaldehyde	8.1E-05	4.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	8.1E-03	4.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
		1,3-Butadiene	9.5E-03	4.9E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	2.9E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	2.99E-07	2.99E-07	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-07	0.00E+00
		Formaldehyde	9.6E-04	4.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.7E-04	8.9E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.27E-05	0.00E+00	0.00E+00	0.00E+00	1.27E-05	1.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00
28	Gayley Trucks (DPM)	Diesel Particulate	1.7E-02	1.6E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Gayley Cars (TOG)	Acetaldehyde	1.2E-04	6.0E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.2E-02	6.0E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-04
		1,3-Butadiene	1.4E-02	7.0E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	4.4E-04	2.2E-04	0.00E+00	0.00E+00	0.00E+00	4.50E-07	4.50E-07	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-07	0.00E+00
		Formaldehyde	1.4E-03	7.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	3.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	2.6E-04	1.3E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.91E-05	0.00E+00	0.00E+00	0.00E+00	1.91E-05	1.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	5.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-06	0.00E+00	5.92E-06	0.00E+00	0.00E+00	0.00E+00

Table E5
HARP2 Results for Cancer Risk and Chronic Hazards
Outdoor Exposure

No.	Source	Contaminant	**Carcinogenic Risks**		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	**Students**	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	**RESP**	SKIN	EYE	BONE	ENDO	BLOOD
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
29	Kinross Trucks (DPM)	Diesel Particulate	1.8E-02	1.6E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Kinross Cars (TOG)	Acetaldehyde	2.7E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.8E-02	1.5E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
		1,3-Butadiene	3.2E-02	1.7E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	9.9E-04	5.3E-04	0.00E+00	0.00E+00	0.00E+00	1.02E-06	1.02E-06	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00
		Formaldehyde	3.2E-03	1.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.9E-04	3.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	4.31E-05	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	1.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05	0.00E+00	1.33E-05	0.00E+00	0.00E+00	0.00E+00
30	Westwood Trucks	Diesel Particulate	1.4E-02	1.2E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Westwood Cars (TOG)	Acetaldehyde	8.1E-05	4.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	8.1E-03	4.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
		1,3-Butadiene	9.5E-03	4.9E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	2.9E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	2.99E-07	2.99E-07	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-07	0.00E+00
		Formaldehyde	9.6E-04	4.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.7E-04	8.9E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.27E-05	0.00E+00	0.00E+00	0.00E+00	1.27E-05	1.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00
		Scenario 1: Total - All Sources	**1.30**	**0.94**	0.00E+00	1.80E-04	0.00E+00	2.62E-03	2.62E-03	1.56E-03	**8.69E-03**	0.00E+00	3.95E-05	0.00E+00	3.02E-06	6.72E-03
		Scenario 2: Total - All Sources, without Source 23	**0.73**	**0.54**	0.00E+00	1.80E-04	0.00E+00	2.62E-03	2.62E-03	1.56E-03	**6.60E-03**	0.00E+00	3.95E-05	0.00E+00	3.02E-06	6.72E-03

	Staff	Students	
	16 < 70 years	2 < 16 years	age bin
Dose Exposure Factors:	250	180	exposure frequency (days/year)
	230	520	8-hour inhalation rate (L/kg-8 hours) [1]
	1	1	inhalation absorption factor
Risk Calculation Factors:	1	3	age sensitivity factor
	25	7	exposure duration (years)
	70	70	averaging time (years)

[1] 8-hour inhalation rate taken as the 95th percentile breathing rates for Moderate Intensity Activities (OEHHA, 2015).

* Key to Toxicological Endpoints

CV	Cardiovascular System
CNS	Central Nervous System
IMMUN	Immune System
KIDN	Kidneys
GILV	Gastrointestinal Tract and Liver/Alimentary Tract
RESP	Respiratory System
REPRO	Reproductive System
SKIN	Skin irritation and/or other effects
EYE	Eye irritation and/or other effects
BONE	Bones and Teeth
ENDO	Endocrine System
BLOOD	Hematological System

Table E6
HARP2 Results for Cancer Risk and Chronic Hazards
Indoor Exposure

No.	Source	Contaminant	**Carcinogenic Risks**		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	**Students**	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	**BLOOD**
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	California Pizza Kitchen	Acetaldehyde	1.3E-05	7.9E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	2.3E-04	1.4E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05
		Formaldehyde	3.8E-05	2.3E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	4.1E-05	2.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	5.27E-08	0.00E+00	0.00E+00	0.00E+00	5.27E-08	5.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	LA City, Dept. Gen	Diesel Particulate	4.0E-04	4.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	London Cleaners	Perchloroethylene	1.1E-01	3.6E-02	0.00E+00	0.00E+00	0.00E+00	2.61E-03	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	El Pollo Loco	Acetaldehyde	1.0E-04	6.3E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	1.7E-03	1.1E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
		Formaldehyde	2.9E-04	1.8E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	3.1E-04	2.0E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.03E-07	0.00E+00	0.00E+00	0.00E+00	4.03E-07	4.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	Casden Glendon	Diesel Particulate	3.1E-04	3.2E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	Center of Ambulatory	Diesel Particulate	7.1E-04	7.3E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	Trizec (generator)	Diesel Particulate	9.0E-04	9.4E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	UCLA Transit	Acetaldehyde	5.1E-04	1.8E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance Yard	Benzene	3.3E-04	1.2E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-05
	(CNG buses)	1,3-Butadiene	5.7E-04	2.0E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	1.8E-02	6.3E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(diesel buses)	Diesel Particulate	3.1E-04	2.7E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	BBQ Chicken	Acetaldehyde	1.0E-05	5.3E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	1.8E-04	9.0E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-05
		Formaldehyde	3.0E-05	1.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	3.2E-05	1.6E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.32E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.13E-08	0.00E+00	0.00E+00	0.00E+00	4.13E-08	4.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	Verizon (generator)	Diesel Particulate	2.4E-03	2.5E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11a	UCLA Rehabilitation	Diesel Particulate	2.4E-04	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11b	UCLA Rehabilitation	Acetaldehyde	1.3E-06	7.9E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Services	Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.4E-05	1.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-06
		Ethylbenzene	2.4E-06	1.5E-06	0.00E+00	0.00E+00	0.00E+00	2.48E-09	2.48E-09	2.48E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-09	0.00E+00
		Formaldehyde	1.0E-05	6.6E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	4.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.1E-06	6.7E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	6.37E-08	0.00E+00	0.00E+00	0.00E+00	6.37E-08	6.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	2.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-08	0.00E+00	2.03E-08	0.00E+00	0.00E+00	0.00E+00

Table E6
HARP2 Results for Cancer Risk and Chronic Hazards
Indoor Exposure

No.	Source	Contaminant	Carcinogenic Risks		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	Students	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	BLOOD
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
12	UCLA Science & Tech	Diesel Particulate	2.3E-04	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	Regents of UC (gen)	Diesel Particulate	2.8E-05	2.9E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	Weyburn Terrace (gen)	Diesel Particulate	2.6E-04	2.7E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	Westwood Place	Diesel Particulate	1.3E-03	1.4E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	Center West (generator)	Diesel Particulate	9.6E-04	9.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	Palomino	Acetaldehyde	3.8E-05	2.4E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	6.5E-04	4.2E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-05
		Formaldehyde	1.1E-04	7.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.2E-04	7.6E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	4.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.53E-07	0.00E+00	0.00E+00	0.00E+00	1.53E-07	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	UCLA Health System	Diesel Particulate	1.3E-03	1.3E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	Oxy Building	Acetaldehyde	5.9E-07	2.7E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.1E-05	5.0E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-07
		Ethylbenzene	1.1E-06	5.2E-07	0.00E+00	0.00E+00	0.00E+00	1.15E-09	1.15E-09	1.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-09	0.00E+00
		Formaldehyde	4.9E-06	2.2E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	4.9E-07	2.3E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.07E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	2.94E-08	0.00E+00	0.00E+00	0.00E+00	2.94E-08	2.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	9.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-09	0.00E+00	9.37E-09	0.00E+00	0.00E+00	0.00E+00
20	UCLA Wilshire Center	Diesel Particulate	7.9E-04	8.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	Muller Company (gen)	Diesel Particulate	3.5E-03	3.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	The Tower (gen)	Diesel Particulate	3.8E-03	4.0E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23b	The Wilshire-Gayley	Diesel Particulate	5.7E-02	4.0E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23c	The Wilshire-Gayley	Acetaldehyde	6.3E-06	4.5E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.2E-04	8.5E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-06
		Ethylbenzene	1.2E-05	8.7E-06	0.00E+00	0.00E+00	0.00E+00	1.24E-08	1.24E-08	1.24E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-08	0.00E+00
		Formaldehyde	5.2E-05	3.8E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.3E-06	3.8E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	3.17E-07	0.00E+00	0.00E+00	0.00E+00	3.17E-07	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.0E+00	0.0E+00	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00
24	EOP (generator)	Diesel Particulate	4.6E-03	4.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25a	US Government Bldg	Diesel Particulate	3.2E-03	3.3E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25b	US Government Bldg	Acetaldehyde	1.7E-03	1.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	2.9E-02	2.0E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
		Formaldehyde	4.8E-03	3.4E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.2E-03	3.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	6.70E-06	0.00E+00	0.00E+00	0.00E+00	6.70E-06	6.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table E6
HARP2 Results for Cancer Risk and Chronic Hazards
Indoor Exposure

No.	Source	Contaminant	Carcinogenic Risks: Staff	Carcinogenic Risks: Students	Chronic Non-Cancer Risks - Toxicological Endpoints*: CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	**BLOOD**
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
26	Wilshire Trucks (DPM)	Diesel Particulate	4.9E-03	5.1E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Wilshire Cars (TOG)	Acetaldehyde	2.5E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.5E-02	1.6E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
		1,3-Butadiene	3.0E-02	1.8E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	9.2E-04	5.6E-04	0.00E+00	0.00E+00	0.00E+00	9.35E-07	9.35E-07	9.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.35E-07	0.00E+00
		Formaldehyde	3.0E-03	1.8E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	7.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.4E-04	3.3E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	3.97E-05	0.00E+00	0.00E+00	0.00E+00	3.97E-05	3.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	1.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-05	0.00E+00	1.23E-05	0.00E+00	0.00E+00	0.00E+00
27	Veteran Trucks (DPM)	Diesel Particulate	1.4E-03	1.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Veteran Cars (TOG)	Acetaldehyde	8.1E-05	4.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	8.1E-03	4.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
		1,3-Butadiene	9.5E-03	4.9E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	2.9E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	2.99E-07	2.99E-07	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-07	0.00E+00
		Formaldehyde	9.6E-04	4.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.7E-04	8.9E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.27E-05	0.00E+00	0.00E+00	0.00E+00	1.27E-05	1.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00
28	Gayley Trucks (DPM)	Diesel Particulate	1.7E-03	1.6E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Gayley Cars (TOG)	Acetaldehyde	1.2E-04	6.0E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	1.2E-02	6.0E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-04
		1,3-Butadiene	1.4E-02	7.0E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	4.4E-04	2.2E-04	0.00E+00	0.00E+00	0.00E+00	4.50E-07	4.50E-07	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-07	0.00E+00
		Formaldehyde	1.4E-03	7.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	3.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	2.6E-04	1.3E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.91E-05	0.00E+00	0.00E+00	0.00E+00	1.91E-05	1.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	5.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-06	0.00E+00	5.92E-06	0.00E+00	0.00E+00	0.00E+00

Table E6
HARP2 Results for Cancer Risk and Chronic Hazards
Indoor Exposure

No.	Source	Contaminant	Carcinogenic Risks		Chronic Non-Cancer Risks - Toxicological Endpoints*											
			Staff	**Students**	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	**BLOOD**
			per million	per million												
(a)	(b)	(c)	(j)	(j)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
29	Kinross Trucks (DPM)	Diesel Particulate	1.8E-03	1.6E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Kinross Cars (TOG)	Acetaldehyde	2.7E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	2.8E-02	1.5E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
		1,3-Butadiene	3.2E-02	1.7E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	9.9E-04	5.3E-04	0.00E+00	0.00E+00	0.00E+00	1.02E-06	1.02E-06	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00
		Formaldehyde	3.2E-03	1.7E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	5.9E-04	3.1E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	2.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	4.31E-05	0.00E+00	0.00E+00	0.00E+00	4.31E-05	4.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	1.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05	0.00E+00	1.33E-05	0.00E+00	0.00E+00	0.00E+00
30	Westwood Trucks	Diesel Particulate	1.4E-03	1.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Westwood Cars (TOG)	Acetaldehyde	8.1E-05	4.1E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Benzene	8.1E-03	4.2E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
		1,3-Butadiene	9.5E-03	4.9E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	2.9E-04	1.5E-04	0.00E+00	0.00E+00	0.00E+00	2.99E-07	2.99E-07	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-07	0.00E+00
		Formaldehyde	9.6E-04	4.9E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.0E+00	0.0E+00	0.00E+00	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	1.7E-04	8.9E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.0E+00	0.0E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	0.0E+00	0.0E+00	0.00E+00	6.82E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.0E+00	0.0E+00	0.00E+00	1.27E-05	0.00E+00	0.00E+00	0.00E+00	1.27E-05	1.27E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.0E+00	0.0E+00	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	0.00E+00	3.93E-06	0.00E+00	0.00E+00	0.00E+00
Scenario 1: Total - All Sources			**0.46**	**0.26**	0.00E+00	1.80E-04	0.00E+00	2.62E-03	2.62E-03	1.56E-03	5.98E-03	0.00E+00	3.95E-05	0.00E+00	3.02E-06	**6.72E-03**
Scenario 2: Total - All Sources, without Source 23			**0.40**	**0.22**	0.00E+00	1.80E-04	0.00E+00	2.62E-03	2.62E-03	1.56E-03	5.53E-03	0.00E+00	3.95E-05	0.00E+00	3.02E-06	**6.72E-03**

MERV 13 Reduction[1]
0.90

	Staff	Students	
	16 < 70 years	2 < 16 years	age bin
Dose Exposure Factors:	250	180	exposure frequency (days/year)
	230	520	8-hour inhalation rate (L/kg-8 hours)[2]
	1	1	inhalation absorption factor
Risk Calculation Factors:	1	3	age sensitivity factor
	25	7	exposure duration (years)
	70	70	averaging time (years)

[1] School air filters with rated MERV 13 can remove up-to 90 percent of DPM emissions.

[2] 8-hour inhalation rate taken as the 95th percentile breathing rates for Moderate Intensity Activities (OEHHA, 2015).

* Key to Toxicological Endpoints

CV	Cardiovascular System
CNS	Central Nervous System
IMMUN	Immune System
KIDN	Kidneys
GILV	Gastrointestinal Tract and Liver/Alimentary Tract
RESP	Respiratory System
REPRO	Reproductive System
SKIN	Skin irritation and/or other effects
EYE	Eye irritation and/or other effects
BONE	Bones and Teeth
ENDO	Endocrine System
BLOOD	Hematological System

Table E7
HARP2 Results for Acute Hazards

Source No.	Source	Contaminant	Acute Non-Cancer Risks - Toxicological Endpoints*											
			CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	**EYE**	BONE	ENDO	BLOOD
(a)	(b)	(c)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	California Pizza Kitchen	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-05	0.00E+00	1.17E-05	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-04
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.71E-07	0.00E+00	1.71E-07	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00	1.01E-07	1.01E-07	0.00E+00	1.01E-07	0.00E+00	0.00E+00	0.00E+00
2	LA City, Dept. Gen	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	London Cleaners	Perchloroethylene	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00
4	El Pollo Loco	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05	0.00E+00	5.02E-05	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-04	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	7.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-07	7.33E-07	0.00E+00	7.33E-07	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	4.35E-07	0.00E+00	0.00E+00	0.00E+00	4.35E-07	4.35E-07	0.00E+00	4.35E-07	0.00E+00	0.00E+00	0.00E+00
5	Casden Glendon	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	Center of Ambulatory	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	Trizec (generator)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	UCLA Transit	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04	0.00E+00	1.81E-04	0.00E+00	0.00E+00	0.00E+00
	Maintenance Yard	Benzene	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04
	(CNG buses)	1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-02	0.00E+00	0.00E+00	0.00E+00
	(diesel buses)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	BBQ Chicken	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-05	0.00E+00	2.70E-05	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	0.00E+00	0.00E+00	8.11E-04	0.00E+00	0.00E+00	8.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.11E-04
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-04	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	3.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-07	3.95E-07	0.00E+00	3.95E-07	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	2.34E-07	0.00E+00	0.00E+00	0.00E+00	2.34E-07	2.34E-07	0.00E+00	2.34E-07	0.00E+00	0.00E+00	0.00E+00
10	Verizon (generator)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11a	UCLA Rehabilitation	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11b	UCLA Rehabilitation	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-07	0.00E+00	4.02E-07	0.00E+00	0.00E+00	0.00E+00
	Services	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-05	0.00E+00	4.76E-05	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Ammonia	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	1.31E-05	0.00E+00	0.00E+00	1.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-05
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-05	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	4.35E-08	0.00E+00	0.00E+00	0.00E+00	4.35E-08	4.35E-08	0.00E+00	4.35E-08	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.00E+00	5.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-08	0.00E+00	5.45E-08	0.00E+00	0.00E+00	0.00E+00

Table E7
HARP2 Results for Acute Hazards

Source No.	Source	Contaminant	Acute Non-Cancer Risks - Toxicological Endpoints*											
			CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	**EYE**	BONE	ENDO	BLOOD
(a)	(b)	(c)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
12	UCLA Science & Tech	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	Regents of UC (gen)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	Weyburn Terrace (gen)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	Westwood Place	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	Center West (generator)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	Palomino	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-05	0.00E+00	7.51E-05	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-04	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	1.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-06	1.10E-06	0.00E+00	1.10E-06	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	6.49E-07	0.00E+00	0.00E+00	0.00E+00	6.49E-07	6.49E-07	0.00E+00	6.49E-07	0.00E+00	0.00E+00	0.00E+00
18	UCLA Health System	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	Oxy Building	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-07	0.00E+00	6.40E-07	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-05	0.00E+00	7.56E-05	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.94E-04	0.00E+00	3.94E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	2.08E-05	0.00E+00	0.00E+00	2.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-05	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	6.95E-08	0.00E+00	0.00E+00	0.00E+00	6.95E-08	6.95E-08	0.00E+00	6.95E-08	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.00E+00	8.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-08	0.00E+00	8.68E-08	0.00E+00	0.00E+00	0.00E+00
20	UCLA Wilshire Center	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	Muller Company (gen)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	The Tower (gen)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23b	The Wilshire-Gayley	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23c	The Wilshire-Gayley	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.32E-07	0.00E+00	7.32E-07	0.00E+00	0.00E+00	0.00E+00
	(natural gas combustion)	Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-05	0.00E+00	8.64E-05	0.00E+00	0.00E+00	0.00E+00
		Ammonia	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-05	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	7.92E-08	0.00E+00	0.00E+00	0.00E+00	7.92E-08	7.92E-08	0.00E+00	7.92E-08	0.00E+00	0.00E+00	0.00E+00
		Xylene	0.00E+00	9.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-08	0.00E+00	9.91E-08	0.00E+00	0.00E+00	0.00E+00
24	EOP (generator)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25a	US Government Bldg	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25b	US Government Bldg	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04	0.00E+00	1.73E-04	0.00E+00	0.00E+00	0.00E+00
	(charbroiler)	Benzene	0.00E+00	0.00E+00	5.19E-03	0.00E+00	0.00E+00	5.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.19E-03
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propionaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	2.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-06	2.53E-06	0.00E+00	2.53E-06	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	1.50E-06	0.00E+00	0.00E+00	0.00E+00	1.50E-06	1.50E-06	0.00E+00	1.50E-06	0.00E+00	0.00E+00	0.00E+00

Table E7
HARP2 Results for Acute Hazards

Source No.	Source	Contaminant	Acute Non-Cancer Risks - Toxicological Endpoints*											
			CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	**EYE**	BONE	ENDO	BLOOD
(a)	(b)	(c)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
26	Wilshire Trucks (DPM)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Wilshire Cars (TOG)	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-05	0.00E+00	1.48E-05	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	2.61E-03	0.00E+00	0.00E+00	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03
		1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-04	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.00E+00	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-08	0.00E+00	3.83E-08	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-07	1.42E-07	0.00E+00	1.42E-07	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	5.02E-06	0.00E+00	0.00E+00	0.00E+00	5.02E-06	5.02E-06	0.00E+00	5.02E-06	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.00E+00	6.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-06	0.00E+00	6.09E-06	0.00E+00	0.00E+00	0.00E+00
27	Veteran Trucks (DPM)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Veteran Cars (TOG)	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-06	0.00E+00	7.20E-06	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-04	0.00E+00	6.29E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03
		1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.00E+00	5.18E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-08	0.00E+00	1.86E-08	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	6.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-08	6.91E-08	0.00E+00	6.91E-08	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	2.44E-06	0.00E+00	0.00E+00	0.00E+00	2.44E-06	2.44E-06	0.00E+00	2.44E-06	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.00E+00	2.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-06	0.00E+00	2.96E-06	0.00E+00	0.00E+00	0.00E+00
28	Gayley Trucks (DPM)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Gayley Cars (TOG)	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-06	0.00E+00	9.87E-06	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.61E-04	0.00E+00	8.61E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
		1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.00E+00	7.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-08	0.00E+00	2.55E-08	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	9.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.46E-08	9.46E-08	0.00E+00	9.46E-08	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	3.34E-06	0.00E+00	0.00E+00	0.00E+00	3.34E-06	3.34E-06	0.00E+00	3.34E-06	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.00E+00	4.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-06	0.00E+00	4.05E-06	0.00E+00	0.00E+00	0.00E+00

Table E7
HARP2 Results for Acute Hazards

Source No.	Source	Contaminant	Acute Non-Cancer Risks - Toxicological Endpoints*											
			CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	**EYE**	BONE	ENDO	BLOOD
(a)	(b)	(c)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
29	Kinross Trucks (DPM)	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Kinross Cars (TOG)	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-05	0.00E+00	1.69E-05	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	2.98E-03	0.00E+00	0.00E+00	2.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-03
		1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-04	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.00E+00	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-08	0.00E+00	4.37E-08	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-07	1.62E-07	0.00E+00	1.62E-07	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	5.73E-06	0.00E+00	0.00E+00	0.00E+00	5.73E-06	5.73E-06	0.00E+00	5.73E-06	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.00E+00	6.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-06	0.00E+00	6.95E-06	0.00E+00	0.00E+00	0.00E+00
30	Westwood Trucks	Diesel Particulate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Westwood Cars (TOG)	Acetaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-06	0.00E+00	3.77E-06	0.00E+00	0.00E+00	0.00E+00
		Acrolein	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-04	0.00E+00	3.29E-04	0.00E+00	0.00E+00	0.00E+00
		Benzene	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04
		1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethylbenzene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00
		Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	0.00E+00	2.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methyl Ethyl Ketone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.74E-09	0.00E+00	9.74E-09	0.00E+00	0.00E+00	0.00E+00
		Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Styrene	3.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-08	3.62E-08	0.00E+00	3.62E-08	0.00E+00	0.00E+00	0.00E+00
		Toluene	0.00E+00	1.28E-06	0.00E+00	0.00E+00	0.00E+00	1.28E-06	1.28E-06	0.00E+00	1.28E-06	0.00E+00	0.00E+00	0.00E+00
		Xylenes	0.00E+00	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-06	0.00E+00	1.55E-06	0.00E+00	0.00E+00	0.00E+00
		Total - All Sources	5.43E-06	1.36E-03	1.96E-02	0.00E+00	0.00E+00	1.97E-02	7.83E-03	0.00E+00	**4.06E-02**	0.00E+00	0.00E+00	1.96E-02

Maximum Acute Hazard Index 4.06E-02 Eye

* Key to Toxicological Endpoints

CV	Cardiovascular System	RESP	Respiratory System
CNS	Central Nervous System	SKIN	Skin irritation and/or other effects
IMMUN	Immune System	EYE	Eye irritation and/or other effects
KIDN	Kidneys	BONE	Bones and Teeth
GILV	Gastrointestinal Tract and Liver/Alimentary Tract	ENDO	Endocrine System
REPRO	Reproductive System	BLOOD	Hematological System

Table E8
Pollutant Concentration Worksheet
Construction Emissions (Source 23)

Source No. (a)	Source (b)	Emission Rates[1] **Annual Average** (g/s) (f)	Contaminant (d)	Weight Fraction (e)	AERMOD Output[2] **Annual Average** (μg/m^3) (c)	Annual Average MER Concentration (μg/m^3) (g)
Staff Scenario						
23	The Wilshire-Gayley 2017 on-site emissions	4.23E-02	Diesel Particulate	1.00E+00	4.18E+01	1.77E+00
	The Wilshire-Gayley 2017 off-site emissions	3.20E-04	Diesel Particulate	1.00E+00	4.84E+00	1.55E-03
	The Wilshire-Gayley 2018 on-site emissions	3.80E-02	Diesel Particulate	1.00E+00	4.18E+01	1.59E+00
	The Wilshire-Gayley 2018 off-site emissions	1.64E-04	Diesel Particulate	1.00E+00	4.84E+00	7.93E-04
	The Wilshire-Gayley 2019 on-site emissions	2.77E-02	Diesel Particulate	1.00E+00	4.18E+01	1.16E+00
	The Wilshire-Gayley 2019 off-site emissions	5.62E-05	Diesel Particulate	1.00E+00	4.84E+00	2.72E-04
Student Scenario						
23	The Wilshire-Gayley 2017 on-site emissions	4.23E-02	Diesel Particulate	1.00E+00	2.79E+01	1.18E+00
	The Wilshire-Gayley 2017 off-site emissions	3.20E-04	Diesel Particulate	1.00E+00	3.63E+00	1.16E-03
	The Wilshire-Gayley 2018 on-site emissions	3.80E-02	Diesel Particulate	1.00E+00	2.79E+01	1.06E+00
	The Wilshire-Gayley 2018 off-site emissions	1.64E-04	Diesel Particulate	1.00E+00	3.63E+00	5.96E-04
	The Wilshire-Gayley 2019 on-site emissions	2.77E-02	Diesel Particulate	1.00E+00	2.79E+01	7.72E-01
	The Wilshire-Gayley 2019 off-site emissions	5.62E-05	Diesel Particulate	1.00E+00	3.63E+00	2.04E-04
Note: Maximum Exposed Receptor (MER)						For Cancer/Chronic Calculation

[1] Emission Rates, per source, from Source Emissions Inventories (Appendix B).

[2] AERMOD Output (Appendix C) at the maximum exposed receptor (MER) are based on unit emission rates for emission sources (1 g/s per source).

Table E9
Cancer Risks from Construction Emissions (Source 23)

Source		MER Conc.		Contaminant	URF	CPF	Dose (by age bin)		Carcinogenic Risks (by age bin)	
		Students	Staff		URF	CPF	Students	Staff	Students	Staff
		(µg/m³)	(µg/m³)		(µg/m³)⁻¹	(mg/kg/day)⁻¹	(mg/kg-day)	(mg/kg-day)	per million	per million
(a)		(b)	(c)	(d)	(e)	(f)	(i)	(j)	(m)	(n)
Construction Emissions - Outdoor Exposure										
2017	On-Site Emissions	1.18E+00	1.77E+00	Diesel Particulate	3.0E-04	1.1E+00	3.0E-04	2.8E-04	1.36E+01	4.18E+00
	Truck Route	1.16E-03	1.55E-03		3.0E-04	1.1E+00	3.0E-07	2.4E-07	1.34E-02	3.65E-03
2018	On-Site Emissions	1.06E+00	1.59E+00		3.0E-04	1.1E+00	2.7E-04	2.5E-04	1.22E+01	3.75E+00
	Truck Route	5.96E-04	7.93E-04		3.0E-04	1.1E+00	1.5E-07	1.2E-07	6.87E-03	1.87E-03
2019	On-Site Emissions	7.72E-01	1.16E+00		3.0E-04	1.1E+00	2.0E-04	1.8E-04	1.49E+00	4.55E-01
	Truck Route	2.72E-04	2.72E-04		3.0E-04	1.1E+00	7.0E-08	4.3E-08	5.23E-04	1.07E-04
							Total Cancer Risk		**27.4**	**8.39**
Construction Emissions - Indoor Exposure [1]										
2017	On-Site Emissions	1.18E-01	1.77E-01	Diesel Particulate	3.0E-04	1.1E+00	3.0E-05	2.8E-05	1.36E+00	4.18E-01
	Truck Route	1.16E-04	1.55E-04		3.0E-04	1.1E+00	3.0E-08	2.4E-08	1.34E-03	3.65E-04
2018	On-Site Emissions	1.06E-01	1.59E-01		3.0E-04	1.1E+00	2.7E-05	2.5E-05	1.22E+00	3.75E-01
	Truck Route	5.96E-05	7.93E-05		3.0E-04	1.1E+00	1.5E-08	1.2E-08	6.87E-04	1.87E-04
2019	On-Site Emissions	7.72E-02	1.16E-01		3.0E-04	1.1E+00	2.0E-05	1.8E-05	1.49E-01	4.55E-02
	Truck Route	2.72E-05	2.72E-05		3.0E-04	1.1E+00	7.0E-09	4.3E-09	5.23E-05	1.07E-05
							Total Cancer Risk		**2.74**	**0.84**

MERV 13 Reduction[1]: 0.90

		Students	Staff
	age bin	2 < 16 years	16 < 70 years
	exposure year(s)	2017-2019	2017-2019
Dose Exposure Factors:	exposure frequency (days/year)	180	250
	8-hour inhalation rate (L/kg-day) [2]	520	230
	inhalation absorption factor	1	1
Risk Calculation Factors:	age sensitivity factor	3	1
	averaging time (years)	70	70

exposure durations per age bin	exposure durations (year)	
Construction Year	2 < 16 years	16 < 70 years
2017	1.00	1.00
2018	1.00	1.00
2019	0.17	0.17
Total	2.17	2.17

[1] School air filters with rated MERV 13 can remove up-to 90 percent of exhaust PM10 emissions.

[2] 8-hour inhalation rate taken as the 95th percentile breathing rates for Moderate Intensity Activities (OEHHA, 2015).

Table E10
Non-Carcinogenic Risks
Chronic Hazards from Construction Emissions (Source 23)

Source		REL Type	MER Conc. (µg/m^3)	Weight Fraction	Contaminant	Chronic Hazards / Toxicological Endpoints*								
						REL (µg/m^3)	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
Construction Emissions - Outdoor Exposure														
2017	On-Site Emissions	Chronic	1.77E+00	1.00E+00	Diesel Particulate	5.0E+00	3.5E-01							
	Truck Route		1.55E-03	1.00E+00		5.0E+00	3.1E-04							
2018	On-Site Emissions		1.59E+00	1.00E+00		5.0E+00	3.2E-01							
	Truck Route		7.93E-04	1.00E+00		5.0E+00	1.6E-04							
2019	On-Site Emissions		1.16E+00	1.00E+00		5.0E+00	2.3E-01							
	Truck Route		2.72E-04	1.00E+00		5.0E+00	5.4E-05							
TOTAL							9.0E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
					Maximum Chronic Hazard		**0.902**							
Construction Emissions - Indoor Exposure [1]														
2017	On-Site Emissions	Chronic	1.77E-01	1.00E+00	Diesel Particulate	5.0E+00	3.5E-02							
	Truck Route		1.55E-04	1.00E+00		5.0E+00	3.1E-05							
2018	On-Site Emissions		1.59E-01	1.00E+00		5.0E+00	3.2E-02							
	Truck Route		7.93E-05	1.00E+00		5.0E+00	1.6E-05							
2019	On-Site Emissions		1.16E-01	1.00E+00		5.0E+00	2.3E-02							
	Truck Route		2.72E-05	1.00E+00		5.0E+00	5.4E-06							
TOTAL							9.0E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
					Maximum Chronic Hazard		**0.090**							

* Key to Toxicological Endpoints

MERV 13 Reduction[1] 0.90

RESP	Respiratory System
CNS/PNS	Central/Peripheral Nervous System
CV/BL	Cardiovascular/Blood System
IMMUN	Immune System
KIDN	Kidney
REPRO	Reproductive System
EYES	Eye irritation and/or other effects

[1] School air filters with rated MERV 13 can remove up-to 90 percent of exhaust PM10 emissions.

Table E11
Pollutant Concentration Worksheet
Criteria Air Pollutants

Criteria Air Pollutants						
Pollutant	Source	Emission Rates [1]	AERMOD Output [2]	Mass GLC	AERMOD Output [2]	Mass GLC
		(g/s)	(μg/m^3)	(μg/m^3)	(μg/m^3)	(μg/m^3)
(a)	(b)	(c)	(d)	(e)	(f)	(g)
PM_{10}			Annual Average			
	Const On-site	6.66E-02	41.759	2.78E+00	MERV 13 Reduction[6]	0.90
	Const Off-site	3.55E-04	4.8379	1.72E-03		
	Wilshire Blvd	4.77E-02	5.7350	2.74E-01		
	Veteran Ave	2.34E-02	3.4521	8.09E-02		
	Gayley Ave	1.64E-02	7.0633	1.16E-01		
	Kinross Ave	6.19E-03	39.376	2.44E-01		
	Westwood Blvd	1.62E-02	2.1123	3.42E-02		
	Total Outdoor - All Sources (μg/m^3)			3.53		
	Total Indoor - With MERV reduction (μg/m3)			0.35		
	Total Outdoor - Operational Sources (μg/m^3)			0.75		
	Total Outdoor - With MERV reduction (μg/m3)			0.075		
CO			Max 1-hour		Max 8-hour	
	Const On-site Const On (ppm) [3]	3.29E-01	2211.1	7.26E+02 0.63	790.84	2.60E+02 0.23
	Const Off-site Const Off (ppm) [3]	4.28E-03	102.59	4.39E-01 0.00	33.485	1.43E-01 0.00
	Wilshire Blvd Wilshire (ppm) [3]	9.23E-01	66.466	6.13E+01 0.05	27.128	2.50E+01 0.02
	Veteran Ave Veteran (ppm) [3]	4.53E-01	65.591	2.97E+01 0.03	21.920	9.93E+00 0.01
	Gayley Ave Gayley (ppm) [3]	3.17E-01	128.22	4.07E+01 0.04	45.784	1.45E+01 0.01
	Kinross Ave Kinross (ppm) [3]	1.20E-01	580.68	6.95E+01 0.06	218.54	2.61E+01 0.02
	Westwood Blvd Westwood (ppm) [3]	3.13E-01	49.805	1.56E+01 0.01	18.249	5.72E+00 0.00
	Background Level (ppm)			2.00		1.40
	Total All Sources (ppm)			**2.82**		**1.70**
	Total Operational Sources (ppm)			**2.19**		**1.47**
	CAAQS Threshold (ppm)			20.0		9.0
	Exceeds Threshold?			**No**		**No**

Table E11
Pollutant Concentration Worksheet
Criteria Air Pollutants

Criteria Air Pollutants						
Pollutant	Source	Emission Rates [1] (g/s)	AERMOD Output [2] ($\mu g/m^3$)	Mass GLC ($\mu g/m^3$)	AERMOD Output [2] ($\mu g/m^3$)	Mass GLC ($\mu g/m^3$)
(a)	(b)	(c)	(d)	(e)	(f)	(g)
NOx			Max 1-hour		Annual Average	
	Const On-site	6.44E-01	2211.1	1.42E+03	41.759	2.69E+01
	Const On (ppm) [4]			7.57E-01		1.43E-02
	Const Off-site	7.35E-03	102.59	7.54E-01	4.8379	3.55E-02
	Const Off (ppm) [4]			4.01E-04		1.89E-05
	Wilshire Blvd	2.20E-01	66.466	1.46E+01	5.7350	1.26E+00
	Wilshire (ppm) [4]			7.76E-03		6.69E-04
	Veteran Ave	1.08E-01	65.591	7.08E+00	3.4521	3.72E-01
	Veteran (ppm) [4]			3.76E-03		1.98E-04
	Gayley Ave	7.56E-02	128.22	9.69E+00	7.0633	5.34E-01
	Gayley (ppm) [4]			5.15E-03		2.84E-04
	Kinross Ave	2.85E-02	580.68	1.65E+01	39.376	1.12E+00
	Kinross (ppm) [4]			8.79E-03		5.96E-04
	Westwood Blvd	7.46E-02	49.805	3.71E+00	2.1123	1.57E-01
	Westwood (ppm) [4]			1.97E-03		8.37E-05
NO_2	Const On (ppm) [5]			4.01E-02		7.58E-04
	Const Off (ppm) [5]			2.12E-05		1.00E-06
	Wilshire (ppm) [5]			4.81E-04		4.15E-05
	Veteran (ppm) [5]			2.77E-04		1.46E-05
	Gayley (ppm) [5]			2.73E-04		1.50E-05
	Kinross (ppm) [5]			4.66E-04		3.16E-05
	Westwood (ppm) [5]			1.88E-04		7.95E-06
	Background Level (ppm)			0.064		0.013
	Total All Sources (ppm)			**0.11**		**0.014**
	Total Operational Sources (ppm)			**0.066**		**0.013**
	CAAQS Threshold (ppm)			0.18		0.03
	Exceeds Threshold?			**No**		**No**

[1] Emission Rates from Source Emissions Inventory (Appendix B).

[2] AERMOD Output based on unit emission rates for roadway segments (1 g/s).

[3] CO conversion factor of 8.733E-04 ppm per $\mu g/m^3$ was used to convert concentrations.

[4] NOx conversion factor of 5.3157E-04 ppm per $\mu g/m^3$ was used to convert concentrations.

[5] NOx to NO_2 conversion rate was derived from a report entitled Final Localized Significance Threshold Methodology (SCAQMD, 2008)

Source	Source to Project Site (m)	NO_X to NO_2 Conversion Factor
Construction	adjacent	0.053
Wilshire Blvd	61	0.062
Veteran Ave	88	0.074
Gayley Ave	42	0.053
Kinross Ave	adjacent	0.053
Westwood Blvd	137	0.095

[6] School air filters with rated MERV 13 can remove up-to 90 percent of PM10 emissions.

TABLE E12
SUMMARY OF HEALTH RISK

Scenario 2 Health Risk Summary, with 2 Hour Outdoor Exposure						
Outdoor Exposure	Outdoor Risk x (2 hr outside/total hr school day)					
Indoor Exposure	Indoor Risk x (total hr school day minus 2 hr outside)/total hr school day					
				Significance Threshold		**Exceeds Threshold?**
Staff Receptor	**Cancer Risk**					
Scenario 2 - Operational Sources	Outdoor	0.13				
	Indoor	0.33				
	SubTotal	0.46				
Scenario 2 - Construction	Outdoor	1.52				
	Indoor	0.69				
	SubTotal	2.21				
	Total	**2.67**		**10**		**No**
Student Receptors	**Cancer Risk**					
Scenario 2 - Operational Sources	Outdoor	0.14				
	Indoor	0.16				
	SubTotal	0.30				
Scenario 2 - Construction	Outdoor	6.85				
	Indoor	2.05				
	SubTotal	8.90				
	Total	**9.20**		**10**		**No**
Staff and Student Receptors	**Chronic Hazards**					
Scenario 2 - Operational Sources	Outdoor	0.001				
	Indoor	0.005				
	SubTotal	0.007				
Scenario 2 - Construction	Outdoor	0.164				
	Indoor	0.074				
	SubTotal	0.238				
	Total	**0.24**		**1.0**		**No**
	Acute Hazards	**0.041**		**1.0**		**No**
Criteria Air Pollutants Evaluation, with 2 Hour Outdoor Exposure						
Scenario 1 - All Operational Sources	**PM_{10} (annual)**					
	Outdoor	0.14				
	Indoor	0.06				
	Total	**0.20**	μg/m^3	1.0	μg/m^3	No
Scenario 2 - Operational Sources and Construction	**PM_{10} (annual)**					
	Outdoor	0.64				
	Indoor	0.29				
	Total	**0.93**	μg/m^3	1.0	μg/m^3	No
Both Scenarios	**CO (1-Hour)**	**2.82**	ppm	20.0	ppm	No
	CO (8-Hour)	**1.70**	ppm	9.0	ppm	No
	NO_2 (1-Hour)	**0.106**	ppm	0.18	ppm	No
	NO_2 (Annual)	**0.014**	ppm	0.030	ppm	No

Appendix F. MERV Chart

Appendix

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TABLE 2: MINIMUM EFFICIENCY REPORTING VALUE (MERV) PARAMETERS

ASHRAE Standard 52.2				ASHRAE Standard 52.1	Application Guidelines		
MERV	Particle Size Removal Efficiency, Percent in Particle Size Range, μm			Dust-Spot Efficiency Percent	Particle Size and Typical Controlled Contaminant	Typical Applications	Typical Air Filter/Cleaner Type
	0.3 to 1	1 to 3	3 to 10				
20	≥ 99.999	in 0.1 – 0.2 μm particle size		—	**< 0.3 μm** Virus (unattached) Carbon dust Sea salt All combustion smoke	Electronics manufacturing Pharmaceutical manufacturing Carcinogenic materials	HEPA/ULPA Filters*
19	≥ 99.999	in 0.3 μm particle size		—			
18	≥ 99.99	in 0.3 μm particle size		—			
17	≥ 99.97	in 0.3 μm particle size		—			
16	> 95	> 95	> 95	—	**0.3-1 μm** All bacteria Droplet nuclei (sneeze) Cooking oil Most smoke Insecticide dust Most face powder Most paint pigments	Superior commercial buildings Hospital inpatient care General surgery	**Bag Filters** – Nonsupported (flexible) microfine fiberglass or synthetic media, 12 to 36 inches deep. **Box Filters** – Rigid style cartridge, 6 to 12 inches deep.
15	85-95	> 90	> 90	> 95			
14	75-85	> 90	> 90	90-95			
13	< 75	> 90	> 90	80-90			
12	—	> 80	> 90	70-75	**1-3 μm** Legionella Humidifier dust Lead dust Milled flour Auto emission particles Nebulizer drops	Superior residential Better commercial buildings Hospital laboratories	**Pleated filters** –Extended surface with cotton or polyester media or both, 1 to 6 inches thick. **Box Filters** – Rigid style cartridge, 6 to 12 inches deep.
11	—	65-80	> 85	60-65			
10	—	50-65	> 85	50-55			
9	—	< 50	> 85	40-45			
8	—	—	> 70	30-35	**3-10 μm** Mold Spores Dust mite body parts and droppings Cat and dog dander Hair spray Fabric protector Dusting aids Pudding mix Powdered milk	Better residential Commercial buildings Industrial workplaces	**Pleated filters** –Extended surface with cotton or polyester media or both, 1 to 6 inches thick. **Cartridge filters** –Viscous cube or pocket filters **Throwaway** –Synthetic media panel filters
7	—	—	50-70	25-30			
6**	—	—	35-50	< 20			
5	—	—	20-35	< 20			
4	—	—	< 20	< 20	**> 10 μm** Pollen Dust mites Cockroach body parts and droppings Spanish moss Sanding dust Spray paint dust Textile fibers Carpet fibers	Minimum filtration Residential window air conditioners	**Throwaway** – Fiberglass or synthetic media panel, 1 inch thick. **Washable** – Aluminum mesh, foam rubber panel **Electrostatic** – Self-charging (passive) woven polycarbonate panel
3	—	—	< 20	< 20			
2	—	—	< 20	< 20			
1	—	—	< 20	< 20			

This table is adapted from ANSI/ASHRAE Standard 52.2-2007. [15]

**The last four MERV values of 17 to 20 are not part of the official standard test, but have been added by ASHRAE for comparison purposes. Ultra Low Penetration Air filters (ULPA) have a minimum efficiency of 99.999 percent in removing 0.3 μm particles, based on the IEST test method. MERVs between 17 and 19 are rated for 0.3μm particles, whereas a MERV of 20 is rated for 0.1 to 0.2 μm particles.*

*** For residential applications, the ANSI/ASHRAE Standard 62.2-2007[16] requires a filter with a designated minimum efficiency of MERV 6 or better.*

Appendix C

Noise Monitoring Results

Summary

File Name	831_Data.087		
Serial Number	0001742		
Model	Model 831		
Firmware Version	2.300		
User			
Location	1-Inside fence, west side of Kinross Building		
Job Description			
Note			
Measurement Description			
Start	2016-01-14 13:36:10		
Stop	2016-01-14 13:56:12		
Duration	0:20:02.6		
Run Time	0:20:02.6		
Pause	0:00:00.0		
Pre Calibration	2016-01-14 13:35:50		
Post Calibration	None		
Calibration Deviation	---		

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
Gain	0.0 dB		
Overload	144.7 dB		
	A	**C**	**Z**
Under Range Peak	**77.2**	74.2	79.2 dB
Under Range Limit	**26.5**	26.8	32.6 dB
Noise Floor	17.3	17.7	23.1 dB

Results

LAeq	63.1 dB	
LAE	93.9 dB	
EA	275.762 µPa²h	
LApeak (max)	2016-01-14 13:48:00	93.0 dB
LASmax	2016-01-14 13:48:58	76.9 dB
LASmin	2016-01-14 13:50:01	58.3 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	8	110.4 s

Statistics

LAS5.00	65.0 dB
LAS10.00	64.0 dB
LAS33.30	62.7 dB
LAS50.00	62.0 dB
LAS66.60	61.2 dB
LAS90.00	59.5 dB

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	13:36:10	0:00:49.8	64.1	81.0	61.7	13:36:59	65.4	13:36:40
2	2016-01-14	13:37:00	0:01:00.0	62.1	79.9	60.6	13:37:33	64.2	13:37:20
3	2016-01-14	13:38:00	0:01:00.0	63.4	81.2	62.7	13:38:21	64.2	13:38:40
4	2016-01-14	13:39:00	0:01:00.0	62.8	80.6	61.5	13:39:59	64.4	13:39:10
5	2016-01-14	13:40:00	0:01:00.0	61.8	79.6	60.3	13:40:04	62.9	13:40:39
6	2016-01-14	13:41:00	0:01:00.0	62.7	80.5	60.2	13:41:57	66.7	13:41:08
7	2016-01-14	13:42:00	0:01:00.0	62.1	79.9	60.6	13:42:07	63.7	13:42:37
8	2016-01-14	13:43:00	0:01:00.0	63.1	80.9	62.0	13:43:11	65.0	13:43:36
9	2016-01-14	13:44:00	0:01:00.0	62.3	80.1	61.0	13:44:42	66.4	13:44:37
10	2016-01-14	13:45:00	0:01:00.0	62.2	80.0	60.7	13:45:09	63.9	13:45:43
11	2016-01-14	13:46:00	0:01:00.0	62.8	80.6	60.4	13:46:51	64.9	13:46:39
12	2016-01-14	13:47:00	0:01:00.0	60.7	78.5	59.3	13:47:37	64.2	13:47:59
13	2016-01-14	13:48:00	0:01:00.0	70.0	87.8	60.9	13:48:19	76.9	13:48:58
14	2016-01-14	13:49:00	0:01:00.0	63.1	80.8	58.8	13:49:59	73.3	13:49:00
15	2016-01-14	13:50:00	0:01:00.0	61.8	79.6	58.3	13:50:01	66.3	13:50:33
16	2016-01-14	13:51:00	0:01:00.0	61.6	79.4	60.4	13:51:59	62.5	13:51:34
17	2016-01-14	13:52:00	0:01:00.0	59.8	77.6	58.6	13:52:35	61.0	13:52:52
18	2016-01-14	13:53:00	0:01:00.0	62.0	79.8	60.0	13:53:01	64.3	13:53:37
19	2016-01-14	13:54:00	0:01:00.0	60.7	78.5	58.6	13:54:40	65.2	13:54:01
20	2016-01-14	13:55:00	0:01:00.0	59.8	77.6	58.7	13:55:15	61.6	13:55:59
21	2016-01-14	13:56:00	0:00:12.8	61.3	72.4	60.9	13:56:12	61.6	13:56:08

Summary

File Name	LxT_Data.006			
Serial Number	0004615			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User				
Location	2-Outside fence, west side of Kinross Building			
Job Description				
Note				
Measurement Description				
Start	2016-01-14 15:28:07			
Stop	2016-01-14 15:48:07			
Duration	0:20:00.8			
Run Time	0:20:00.8			
Pause	0:00:00.0			
Pre Calibration	2016-01-14 13:24:34			
Post Calibration	None			
Calibration Deviation	---			

Overall Settings

RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Linear			
Overload	143.4 dB			
	A	**C**	**Z**	
Under Range Peak	**99.6**	96.6	101.6	dB
Under Range Limit	**36.8**	34.8	42.8	dB
Noise Floor	24.0	24.6	32.0	dB

Results

LAeq	63.7 dB		
LAE	94.5 dB		
EA	315.467 µPa²h		
EA8	7.566 mPa²h		
EA40	37.831 mPa²h		
LApeak (max)	2016-01-14 15:41:04	94.4	dB
LASmax	2016-01-14 15:41:04	85.0	dB
LASmin	2016-01-14 15:46:56	55.4	dB
SEA	-99.9 dB		

Statistics

LAS5.00	64.7 dB
LAS10.00	61.1 dB
LAS33.30	59.0 dB
LAS50.00	58.3 dB
LAS66.60	57.7 dB
LAS90.00	56.8 dB

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	15:28:07	0:01:00.0	59.4	77.1	57.4	15:29:05	60.9	15:28:21
2	2016-01-14	15:29:07	0:01:00.0	58.7	76.5	57.0	15:29:19	65.1	15:29:30
3	2016-01-14	15:30:07	0:01:00.0	59.5	77.2	57.5	15:30:07	63.3	15:30:51
4	2016-01-14	15:31:07	0:01:00.0	58.5	76.3	56.6	15:31:48	62.8	15:31:19
5	2016-01-14	15:32:07	0:01:00.0	57.4	75.2	56.6	15:32:55	58.9	15:32:43
6	2016-01-14	15:33:07	0:01:00.0	59.4	77.2	57.6	15:33:07	60.5	15:33:50
7	2016-01-14	15:34:07	0:01:00.0	59.3	77.1	56.9	15:34:45	65.3	15:34:27
8	2016-01-14	15:35:07	0:01:00.0	59.3	77.1	57.1	15:35:11	61.5	15:35:14
9	2016-01-14	15:36:07	0:01:00.0	58.7	76.5	56.0	15:36:57	63.1	15:36:08
10	2016-01-14	15:37:07	0:01:00.0	57.6	75.4	55.8	15:37:18	59.4	15:37:43
11	2016-01-14	15:38:07	0:01:00.0	59.6	77.3	58.2	15:38:07	61.8	15:38:46
12	2016-01-14	15:39:07	0:01:00.0	59.1	76.9	56.0	15:39:34	65.8	15:39:59
13	2016-01-14	15:40:07	0:01:00.0	74.3	92.1	57.9	15:40:09	85.0	15:41:04
14	2016-01-14	15:41:07	0:01:00.0	68.5	86.3	57.2	15:42:04	78.1	15:41:07
15	2016-01-14	15:42:07	0:01:00.0	58.0	75.8	56.4	15:42:38	59.8	15:42:52
16	2016-01-14	15:43:07	0:01:00.0	58.1	75.9	56.9	15:44:06	59.2	15:43:30
17	2016-01-14	15:44:07	0:01:00.0	57.1	74.9	56.0	15:44:54	58.8	15:44:45
18	2016-01-14	15:45:07	0:01:00.0	59.0	76.8	56.6	15:45:07	64.9	15:45:56
19	2016-01-14	15:46:07	0:01:00.0	57.3	75.0	55.4	15:46:56	60.4	15:46:21
20	2016-01-14	15:47:07	0:01:00.0	57.3	75.1	55.6	15:47:25	58.8	15:47:31
21	2016-01-14	15:48:07	0:00:00.8	57.4	56.4	57.4	15:48:07	57.5	15:48:07

Summary				
File Name	LxT_Data.005			
Serial Number	0004615			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User				
Location	3-Northeast corner of project area			
Job Description				
Note				
Measurement Description				
Start	2016-01-14 15:05:45			
Stop	2016-01-14 15:25:46			
Duration	0:20:00.7			
Run Time	0:20:00.7			
Pause	0:00:00.0			
Pre Calibration	2016-01-14 13:24:34			
Post Calibration	None			
Calibration Deviation	---			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Linear			
Overload	143.4 dB			
	A	**C**	**Z**	
Under Range Peak	**99.6**	96.6	101.6	dB
Under Range Limit	**36.8**	34.8	42.8	dB
Noise Floor	24.0	24.6	32.0	dB
Results				
LAeq	67.3 dB			
LAE	98.1 dB			
EA	711.378 µPa²h			
EA8	17.063 mPa²h			
EA40	85.316 mPa²h			
LApeak (max)	2016-01-14 15:05:59	102.8 dB		
LASmax	2016-01-14 15:13:07	88.6 dB		
LASmin	2016-01-14 15:18:13	56.9 dB		
SEA	-99.9 dB			
Statistics				
LAS5.00	71.2 dB			
LAS10.00	69.1 dB			
LAS33.30	65.5 dB			
LAS50.00	63.8 dB			
LAS66.60	62.1 dB			
LAS90.00	59.5 dB			

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	15:05:45	0:01:00.0	69.8	87.5	60.6	15:06:43	79.9	15:06:15
2	2016-01-14	15:06:45	0:01:00.0	64.4	82.2	57.7	15:06:55	73.4	15:07:29
3	2016-01-14	15:07:45	0:01:00.0	66.0	83.8	59.3	15:08:43	72.2	15:07:53
4	2016-01-14	15:08:45	0:01:00.0	62.8	80.6	58.3	15:09:21	72.0	15:09:01
5	2016-01-14	15:09:45	0:01:00.0	64.0	81.8	58.6	15:10:08	73.8	15:10:08
6	2016-01-14	15:10:45	0:01:00.0	68.5	86.3	58.9	15:10:45	78.2	15:11:36
7	2016-01-14	15:11:45	0:01:00.0	67.3	85.1	60.7	15:12:26	73.2	15:12:16
8	2016-01-14	15:12:45	0:01:00.0	74.5	92.3	61.0	15:13:03	88.6	15:13:07
9	2016-01-14	15:13:45	0:01:00.0	63.7	81.5	59.6	15:14:13	68.0	15:13:51
10	2016-01-14	15:14:45	0:01:00.0	70.1	87.9	59.5	15:15:29	84.4	15:15:02
11	2016-01-14	15:15:45	0:01:00.0	63.1	80.9	58.2	15:15:56	68.2	15:16:43
12	2016-01-14	15:16:45	0:01:00.0	65.9	83.7	59.5	15:16:54	72.4	15:17:06
13	2016-01-14	15:17:45	0:01:00.0	63.8	81.6	56.9	15:18:13	70.2	15:17:58
14	2016-01-14	15:18:45	0:01:00.0	62.3	80.1	57.1	15:19:02	70.5	15:18:54
15	2016-01-14	15:19:45	0:01:00.0	63.4	81.2	58.3	15:20:23	70.8	15:20:04
16	2016-01-14	15:20:45	0:01:00.0	66.8	84.5	59.6	15:20:51	76.0	15:21:42
17	2016-01-14	15:21:45	0:01:00.0	62.9	80.6	57.8	15:22:10	72.5	15:22:45
18	2016-01-14	15:22:45	0:01:00.0	67.7	85.5	62.5	15:23:21	74.7	15:22:53
19	2016-01-14	15:23:45	0:01:00.0	65.9	83.7	59.5	15:24:26	71.5	15:23:51
20	2016-01-14	15:24:45	0:01:00.0	66.4	84.2	60.5	15:25:37	73.3	15:25:16
21	2016-01-14	15:25:45	0:00:00.7	63.2	61.7	66.4	15:25:46	68.1	15:25:45

Summary

File Name	LxT_Data.004			
Serial Number	0004615			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User				
Location	4-Inside fence, east side of Kinross Building			
Job Description				
Note				
Measurement Description				
Start	2016-01-14 14:44:16			
Stop	2016-01-14 15:04:22			
Duration	0:20:05.8			
Run Time	0:20:05.8			
Pause	0:00:00.0			
Pre Calibration	2016-01-14 13:24:34			
Post Calibration	None			
Calibration Deviation	---			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Linear			
Overload	143.4 dB			
	A	**C**	**Z**	
Under Range Peak	**99.6**	96.6	101.6	dB
Under Range Limit	**36.8**	34.8	42.8	dB
Noise Floor	24.0	24.6	32.0	dB
Results				
LAeq	62.9 dB			
LAE	93.7 dB			
EA	260.202 µPa²h			
EA8	6.215 mPa²h			
EA40	31.074 mPa²h			
LApeak (max)	2016-01-14 14:55:36	103.5 dB		
LASmax	2016-01-14 14:55:59	73.0 dB		
LASmin	2016-01-14 14:45:00	58.8 dB		
SEA	-99.9 dB			
Statistics				
LAS5.00	65.6 dB			
LAS10.00	64.7 dB			
LAS33.30	62.8 dB			
LAS50.00	62.0 dB			
LAS66.60	61.4 dB			
LAS90.00	60.6 dB			

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	14:44:16	0:01:00.0	63.1	80.9	58.8	14:45:00	67.7	14:44:36
2	2016-01-14	14:45:16	0:01:00.0	63.3	81.1	60.1	14:45:19	71.5	14:46:16
3	2016-01-14	14:46:16	0:01:00.0	62.8	80.6	60.5	14:46:56	72.5	14:46:17
4	2016-01-14	14:47:16	0:01:00.0	63.4	81.2	61.0	14:47:31	66.2	14:48:08
5	2016-01-14	14:48:16	0:01:00.0	63.7	81.5	60.2	14:49:13	69.2	14:48:42
6	2016-01-14	14:49:16	0:01:00.0	62.8	80.6	60.1	14:49:33	68.3	14:49:52
7	2016-01-14	14:50:16	0:01:00.0	62.0	79.8	59.6	14:50:19	65.4	14:51:16
8	2016-01-14	14:51:16	0:01:00.0	62.5	80.2	60.4	14:51:59	66.1	14:52:15
9	2016-01-14	14:52:16	0:01:00.0	62.0	79.8	60.3	14:52:56	65.6	14:52:16
10	2016-01-14	14:53:16	0:01:00.0	62.0	79.7	60.4	14:53:19	67.0	14:53:38
11	2016-01-14	14:54:16	0:01:00.0	64.1	81.8	60.7	14:54:23	67.4	14:55:15
12	2016-01-14	14:55:16	0:01:00.0	65.4	83.2	61.0	14:55:43	73.0	14:55:59
13	2016-01-14	14:56:16	0:01:00.0	62.4	80.2	60.1	14:56:58	70.4	14:56:28
14	2016-01-14	14:57:16	0:01:00.0	61.5	79.2	59.3	14:58:08	64.9	14:58:01
15	2016-01-14	14:58:16	0:01:00.0	61.8	79.5	59.7	14:58:21	63.5	14:59:08
16	2016-01-14	14:59:16	0:01:00.0	63.4	81.2	61.3	14:59:50	66.5	14:59:39
17	2016-01-14	15:00:16	0:01:00.0	64.3	82.1	61.2	15:01:07	69.7	15:00:39
18	2016-01-14	15:01:16	0:01:00.0	61.9	79.7	59.5	15:02:05	68.6	15:01:26
19	2016-01-14	15:02:16	0:01:00.0	61.1	78.9	60.1	15:02:21	63.1	15:02:34
20	2016-01-14	15:03:16	0:01:00.0	61.8	79.6	60.1	15:04:14	67.1	15:03:27
21	2016-01-14	15:04:16	0:00:05.8	60.4	68.0	60.2	15:04:19	60.6	15:04:21

Summary			
File Name	831_Data.088		
Serial Number	0001742		
Model	Model 831		
Firmware Version	2.300		
User			
Location	5-Outside fence, south side of Kinross Building		
Job Description			
Note			
Measurement Description			
Start	2016-01-14 14:09:19		
Stop	2016-01-14 14:29:20		
Duration	0:20:01.2		
Run Time	0:18:56.7		
Pause	0:01:04.5		
Pre Calibration	2016-01-14 13:35:46		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
Gain	0.0 dB		
Overload	144.7 dB		
	A	**C**	**Z**
Under Range Peak	**77.2**	74.2	79.2 dB
Under Range Limit	**26.5**	26.8	32.6 dB
Noise Floor	17.3	17.7	23.1 dB
Results			
LAeq	57.5 dB		
LAE	88.0 dB		
EA	70.591 µPa²h		
LApeak (max)	2016-01-14 14:11:14	98.5 dB	
LASmax	2016-01-14 14:12:50	71.6 dB	
LASmin	2016-01-14 14:25:17	54.1 dB	
SEA	-99.9 dB		
LAS > 65.0 dB (Exceedance Counts / Duration)	3	9.9 s	
Statistics			
LAS5.00	60.1 dB		
LAS10.00	58.6 dB		
LAS33.30	57.0 dB		
LAS50.00	56.5 dB		
LAS66.60	56.0 dB		
LAS90.00	55.3 dB		

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	14:09:19	0:00:40.7	56.2	57.9	56.9	14:09:20	58.7	14:09:19
2	2016-01-14	14:10:00	0:01:00.0	57.6	73.1	56.5	14:10:25	58.5	14:10:45
3	2016-01-14	14:11:00	0:01:00.0	58.9	76.6	55.4	14:11:58	65.3	14:11:14
4	2016-01-14	14:12:00	0:01:00.0	60.9	78.7	55.3	14:12:40	71.6	14:12:50
5	2016-01-14	14:13:00	0:01:00.0	58.0	75.8	56.6	14:13:54	62.4	14:13:18
6	2016-01-14	14:14:00	0:01:00.0	58.3	76.1	55.6	14:14:26	64.7	14:14:58
7	2016-01-14	14:15:00	0:01:00.0	56.7	74.4	55.5	14:15:26	63.2	14:15:00
8	2016-01-14	14:16:00	0:01:00.0	56.7	74.4	55.2	14:16:18	63.2	14:16:36
9	2016-01-14	14:17:00	0:01:00.0	56.6	74.4	54.6	14:17:41	60.3	14:17:34
10	2016-01-14	14:18:00	0:01:00.0	56.3	74.1	54.8	14:18:07	57.7	14:18:35
11	2016-01-14	14:19:00	0:01:00.0	57.1	74.9	55.1	14:19:10	63.4	14:19:21
12	2016-01-14	14:20:00	0:01:00.0	57.2	75.0	55.8	14:20:02	58.7	14:20:41
13	2016-01-14	14:21:00	0:01:00.0	56.0	73.8	55.1	14:21:53	57.4	14:21:45
14	2016-01-14	14:22:00	0:01:00.0	56.6	74.4	54.5	14:22:36	60.0	14:22:46
15	2016-01-14	14:23:00	0:01:00.0	59.0	76.7	55.5	14:23:54	66.6	14:23:26
16	2016-01-14	14:24:00	0:01:00.0	57.6	75.4	54.5	14:24:21	64.3	14:24:48
17	2016-01-14	14:25:00	0:01:00.0	55.9	73.7	54.1	14:25:17	57.7	14:25:01
18	2016-01-14	14:26:00	0:01:00.0	56.7	74.5	54.3	14:26:56	59.7	14:26:35
19	2016-01-14	14:27:00	0:01:00.0	56.6	74.4	54.5	14:27:01	63.5	14:27:51
20	2016-01-14	14:28:00	0:01:00.0	56.3	74.0	55.0	14:28:47	58.3	14:28:23
21	2016-01-14	14:29:00	0:00:20.5	55.8	68.9	55.2	14:29:10	56.6	14:29:06

Summary				
File Name	LxT_Data.003			
Serial Number	0004615			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User				
Location	6-Inside Kinross Building, SW corner 1st floor			
Job Description				
Note				
Measurement Description				
Start	2016-01-14 14:07:19			
Stop	2016-01-14 14:34:35			
Duration	0:27:16.4			
Run Time	0:26:43.5			
Pause	0:00:32.9			
Pre Calibration	2016-01-14 13:24:34			
Post Calibration	None			
Calibration Deviation	---			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Linear			
Overload	143.4 dB			
	A	**C**	**Z**	
Under Range Peak	**99.6**	96.6	101.6	dB
Under Range Limit	**36.8**	34.8	42.8	dB
Noise Floor	24.0	24.6	32.0	dB
Results				
LAeq	55.5 dB			
LAE	87.5 dB			
EA	62.562 µPa²h			
EA8	1.124 mPa²h			
EA40	5.618 mPa²h			
LApeak (max)	2016-01-14 14:31:40	100.1 dB		
LASmax	2016-01-14 14:12:17	77.5 dB		
LASmin	2016-01-14 14:27:04	37.2 dB		
SEA	-99.9 dB			
Results				
Dose	-99.9	-99.9 %		
Projected Dose	-99.9	-99.9 %		
TWA (Projected)	-99.9	-99.9 dB		
TWA (t)	-99.9	-99.9 dB		
Lep (t)	42.9	42.9 dB		
Statistics				
LAS5.00	61.4 dB			
LAS10.00	57.8 dB			
LAS33.30	48.2 dB			
LAS50.00	44.1 dB			
LAS66.60	41.7 dB			
LAS90.00	39.0 dB			

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	14:07:19	0:01:00.0	47.6	65.4	38.9	14:08:18	59.0	14:07:35
2	2016-01-14	14:08:19	0:01:00.0	41.0	58.8	37.8	14:08:52	48.2	14:09:09
3	2016-01-14	14:09:19	0:01:00.0	57.8	75.5	38.7	14:09:28	69.6	14:09:39
4	2016-01-14	14:10:19	0:01:00.0	58.5	76.3	44.8	14:10:28	64.7	14:10:59
5	2016-01-14	14:11:19	0:01:00.0	64.1	81.9	38.6	14:11:47	77.5	14:12:17
6	2016-01-14	14:12:19	0:01:00.0	60.0	77.7	43.2	14:13:00	72.6	14:12:19
7	2016-01-14	14:13:19	0:01:00.0	57.1	74.9	40.6	14:14:05	67.5	14:14:13
8	2016-01-14	14:14:19	0:01:00.0	54.8	72.6	39.8	14:14:37	68.0	14:14:43
9	2016-01-14	14:15:19	0:01:00.0	56.0	73.8	40.7	14:15:36	69.6	14:15:24
10	2016-01-14	14:16:19	0:01:00.0	49.3	67.1	37.5	14:16:53	64.1	14:17:15
11	2016-01-14	14:17:19	0:01:00.0	55.0	72.7	37.7	14:17:50	67.2	14:17:56
12	2016-01-14	14:18:19	0:01:00.0	50.0	67.8	40.2	14:18:41	61.8	14:19:08
13	2016-01-14	14:19:19	0:01:00.0	56.8	74.6	40.1	14:20:01	68.9	14:19:30
14	2016-01-14	14:20:19	0:01:00.0	53.1	70.9	40.1	14:21:18	68.3	14:20:36
15	2016-01-14	14:21:19	0:01:00.0	45.9	63.7	37.9	14:22:00	59.3	14:21:45
16	2016-01-14	14:22:19	0:01:00.0	40.4	58.2	37.9	14:22:48	43.1	14:23:10
17	2016-01-14	14:23:19	0:01:00.0	48.5	66.3	38.2	14:24:14	62.4	14:23:57
18	2016-01-14	14:24:19	0:01:00.0	53.9	71.7	37.9	14:24:30	63.4	14:25:09
19	2016-01-14	14:25:19	0:01:00.0	54.3	72.1	37.7	14:26:04	70.5	14:25:41
20	2016-01-14	14:26:19	0:01:00.0	39.8	57.6	37.2	14:27:04	44.1	14:26:52
21	2016-01-14	14:27:19	0:01:00.0	40.6	58.4	37.4	14:27:56	52.0	14:28:16
22	2016-01-14	14:28:19	0:01:00.0	54.5	72.3	40.9	14:28:43	68.9	14:28:24
23	2016-01-14	14:29:19	0:01:00.0	44.0	61.8	37.4	14:29:33	52.7	14:29:39
24	2016-01-14	14:30:19	0:01:00.0	49.5	67.3	39.0	14:31:00	64.4	14:30:38
25	2016-01-14	14:31:19	0:01:00.0	58.0	75.8	37.6	14:32:09	74.8	14:31:40
26	2016-01-14	14:32:19	0:01:00.0	46.7	64.5	39.3	14:32:32	52.6	14:32:58
27	2016-01-14	14:33:19	0:01:00.0	56.5	72.9	40.8	14:33:51	66.0	14:34:01
28	2016-01-14	14:34:19	0:00:16.4	-99.9	-99.9	-99.9	0:00:00	-99.9	0:00:00

Summary				
File Name	LxT_Data.002			
Serial Number	0004615			
Model	SoundTrack LxT®			
Firmware Version	2.301			
User				
Location	7-Inside Kinross Building, west side of 3rd floor			
Job Description				
Note				
Measurement Description				
Start	2016-01-14 13:26:03			
Stop	2016-01-14 14:02:17			
Duration	0:36:13.9			
Run Time	0:36:13.9			
Pause	0:00:00.0			
Pre Calibration	2016-01-14 13:24:34			
Post Calibration	None			
Calibration Deviation	---			
Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamp	PRMLxT1			
Microphone Correction	Off			
Integration Method	Linear			
Overload	143.4	dB		
	A		**C**	**Z**
Under Range Peak	**99.6**		96.6	101.6 dB
Under Range Limit	**36.8**		34.8	42.8 dB
Noise Floor	24.0		24.6	32.0 dB
Results				
LAeq	37.9	dB		
LAE	71.3	dB		
EA	1.494	µPa²h		
EA8	19.792	µPa²h		
EA40	98.962	µPa²h		
LApeak (max)	2016-01-14 13:46:22		70.6	dB
LASmax	2016-01-14 13:49:05		51.2	dB
LASmin	2016-01-14 13:59:29		32.8	dB
SEA	-99.9	dB		
Statistics				
LAS5.00	42.0	dB		
LAS10.00	39.5	dB		
LAS33.30	36.9	dB		
LAS50.00	36.2	dB		
LAS66.60	35.6	dB		
LAS90.00	34.5	dB		

Record #	Date	Time	Run Duration	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2016-01-14	13:26:03	0:01:00.0	37.6	55.4	33.4	13:27:00	45.3	13:26:09
2	2016-01-14	13:27:03	0:01:00.0	35.6	53.4	33.5	13:27:04	38.5	13:27:45
3	2016-01-14	13:28:03	0:01:00.0	37.3	55.0	34.8	13:28:20	44.3	13:28:07
4	2016-01-14	13:29:03	0:01:00.0	35.8	53.5	33.9	13:29:42	40.6	13:29:22
5	2016-01-14	13:30:03	0:01:00.0	37.4	55.2	35.0	13:30:16	43.4	13:30:49
6	2016-01-14	13:31:03	0:01:00.0	38.6	56.4	34.1	13:31:59	44.4	13:31:23
7	2016-01-14	13:32:03	0:01:00.0	36.1	53.9	33.9	13:32:25	39.8	13:32:08
8	2016-01-14	13:33:03	0:01:00.0	36.8	54.6	35.7	13:33:21	38.3	13:33:36
9	2016-01-14	13:34:03	0:01:00.0	36.3	54.0	35.0	13:34:30	40.7	13:34:06
10	2016-01-14	13:35:03	0:01:00.0	36.6	54.4	35.4	13:35:07	37.7	13:35:54
11	2016-01-14	13:36:03	0:01:00.0	37.4	55.1	36.2	13:37:03	39.3	13:36:49
12	2016-01-14	13:37:03	0:01:00.0	35.9	53.7	34.9	13:37:43	37.4	13:38:02
13	2016-01-14	13:38:03	0:01:00.0	36.7	54.5	36.0	13:38:20	37.8	13:38:50
14	2016-01-14	13:39:03	0:01:00.0	35.6	53.4	34.2	13:39:59	37.2	13:39:14
15	2016-01-14	13:40:03	0:01:00.0	35.4	53.2	33.8	13:40:19	36.5	13:40:43
16	2016-01-14	13:41:03	0:01:00.0	36.2	54.0	34.3	13:41:59	40.5	13:41:09
17	2016-01-14	13:42:03	0:01:00.0	35.2	53.0	34.1	13:42:11	37.2	13:42:43
18	2016-01-14	13:43:03	0:01:00.0	36.7	54.5	35.2	13:43:10	39.0	13:43:14
19	2016-01-14	13:44:03	0:01:00.0	36.0	53.8	34.6	13:44:33	39.6	13:44:45
20	2016-01-14	13:45:03	0:01:00.0	36.1	53.9	34.7	13:45:22	38.1	13:45:08
21	2016-01-14	13:46:03	0:01:00.0	39.6	57.4	35.9	13:46:53	50.3	13:46:22
22	2016-01-14	13:47:03	0:01:00.0	36.0	53.8	34.4	13:47:40	38.5	13:47:18
23	2016-01-14	13:48:03	0:01:00.0	41.5	59.3	35.6	13:48:06	48.7	13:49:01
24	2016-01-14	13:49:03	0:01:00.0	41.1	58.8	35.1	13:49:38	51.2	13:49:05
25	2016-01-14	13:50:03	0:01:00.0	38.2	56.0	35.3	13:50:09	42.7	13:50:47
26	2016-01-14	13:51:03	0:01:00.0	39.5	57.3	35.8	13:52:02	45.7	13:51:49
27	2016-01-14	13:52:03	0:01:00.0	42.0	59.7	34.5	13:52:41	50.4	13:52:56
28	2016-01-14	13:53:03	0:01:00.0	44.7	62.4	36.5	13:53:58	50.6	13:53:07
29	2016-01-14	13:54:03	0:01:00.0	37.6	55.4	33.9	13:54:57	41.2	13:54:06
30	2016-01-14	13:55:03	0:01:00.0	34.9	52.7	33.8	13:55:22	37.5	13:55:18
31	2016-01-14	13:56:03	0:01:00.0	36.0	53.8	33.8	13:57:01	38.0	13:56:44
32	2016-01-14	13:57:03	0:01:00.0	34.7	52.5	33.5	13:57:29	38.2	13:57:51
33	2016-01-14	13:58:03	0:01:00.0	36.4	54.2	33.9	13:58:41	41.3	13:58:36
34	2016-01-14	13:59:03	0:01:00.0	34.3	52.1	32.8	13:59:29	36.4	13:59:12
35	2016-01-14	14:00:03	0:01:00.0	36.8	54.6	33.0	14:00:26	43.3	14:00:42
36	2016-01-14	14:01:03	0:01:00.0	36.3	54.1	34.3	14:01:56	44.5	14:02:02
37	2016-01-14	14:02:03	0:00:13.9	37.8	49.2	33.5	14:02:17	43.7	14:02:04

Appendix D

Traffic Impact Study

TRAFFIC IMPACT STUDY
FOR THE PROPOSED GEFFEN ACADEMY PROJECT
ON UCLA SOUTHWEST CAMPUS

Prepared for:

THE UNIVERSITY OF CALIFORNIA, LOS ANGELES

Prepared by:

Crain & Associates
300 Corporate Pointe, Suite 470
Culver City, California 90230
(310) 473-6508
www.crainandassociates.com

April 21, 2016

EXECUTIVE SUMMARY

The University of California, Los Angeles (UCLA) proposes to vacate all of the current uses at the Kinross Building to convert the existing building to house the Geffen Academy (the "Project" or the "Academy"). The Kinross Building is located at 11000 Kinross Avenue, on the northeast corner of Lot 36 in the UCLA Southwest Campus on the west side of Westwood Village area of the City of Los Angeles.

The Geffen Academy would open in Fall 2017 with grades six and nine, eventually growing to a full complement of grades six through 12 and 620 students by year 2020. As part of the Project, the UCLA administrative employees currently working in the Kinross Building would be relocated to the former Occidental Petroleum Corporation Headquarters Building (the "Oxy Building"). The Oxy Building was purchased by UCLA in 2015. The Oxy Building, except for the Hammer Museum that is on the first four floors, is being vacated by Occidental Petroleum Corporation. The vacating of the Oxy Building commenced in 2014 and will be complete by April 2016. The Oxy Building, which is on the northeast corner of Wilshire Boulevard and Westwood Boulevard, is approximately two blocks southeast of the Kinross Building.

An important component of the Project will be establishing a separate campus for the Geffen Academy through construction of a perimeter fence. In addition to the school facilities, the surrounding areas inside the fence will be a drop-off/pick-up zone for students and will provide parking for visitors and student carpools only. Geffen Academy faculty and staff who drive will park in Lot 36, outside the fence. UCLA administrative staff relocated to the Oxy Building will have the same alternative mode choices and incentives as they currently do, and those choosing to drive will have parking provided in the Oxy Building. The UCLA Transportation Demand Management (TDM) program will be available to the Geffen Academy faculty and staff with the same alternative mode choices and incentives available to UCLA faculty and staff.

Considering both the Geffen Academy site and the Oxy Building site, the Project would generate an estimated 824 net vehicle trips per day, including 260 AM and 153 PM peak-hour trips. However, the majority of these trips are estimated to be replacement trips by persons already going to Westwood Village, UCLA Main Campus, or other nearby worksites. The impacts of the net added trips of the Project were analyzed at 31 study intersections. These intersections are where the large majority of Project trips are to be focused. New traffic counts for this traffic study were conducted in January 2016 at all 31 intersections.

Existing (2016) conditions, without and with the Project, and Future (2020) conditions, without and with the Project, were analyzed. The Future (2020) conditions analysis included traffic attributable to ambient traffic growth and 19 potential development projects in the study area. The analyses determined that the Project would result in a significant traffic impact at Wilshire Boulevard and Veteran Avenue during the PM peak-hour under Existing (2016) with Project conditions. Under the anticipated Future (2020) conditions with Project, two significant impacts are expected at Wilshire Boulevard and Veteran Avenue (Intersection 22) during the PM peak-hour and Wilshire Boulevard and Gayley Avenue/Midvale Avenue (Intersection 23) during the AM peak-hour. These two intersections were identified in the 2008 UCLA Northwest Housing Infill Project and Long Range Development Plan Amendment Environmental Impact Report ("2008 LRDP EIR") as having significant and unmitigatable impacts, which is consistent with findings of this analysis.

Project impacts were also analyzed according to the County of Los Angeles 2010 Congestion Management Program (CMP) guidelines. No significant arterial, freeway, or transit impacts due to the Project were identified. Impacts to the transit system were also analyzed and no significant impacts were identified.

To address the significant impacts to the two study intersections, potential mitigation measures were reviewed. The Wilshire Boulevard/I-405 interchange adjacent to the impacted intersection was rebuilt as part of the I-405 Sepulveda Pass Improvement Project completed in 2015. It was determined that there are no remaining feasible capacity increase measures at these intersections. These finding are consistent with the conclusions of the 2008 LRDP EIR. Further review identified that volume reduction measures were feasible. As such, these were developed as mitigation recommendations. The Project will expand the UCLA TDM program to address the relocated administrative staff and Geffen Academy students, faculty and staff. Specific measures are recommended to ensure the effectiveness of the TDM program expansion. However, significant Project traffic impacts at the two intersections may remain with implementation of the recommended mitigation measures.

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INTRODUCTION

The Project is a proposed conversion of an existing building ("Kinross Building") to a Junior/Senior High School ("Geffen Academy"). The Kinross Building is located at 11000 Kinross Avenue, on the northeast corner of Lot 36 in the UCLA Southwest Campus on the west side of Westwood Village area of the City of Los Angeles. Employees located the existing Kinross Building would be relocated two blocks southeast to the University of California, Los Angeles (UCLA)-owned former Occidental Petroleum Corporation Headquarters ("Oxy Building") located at the northeast corner of Wilshire Boulevard and Westwood Boulevard. The Geffen Academy would open in Fall 2017 with grades 6 and 9, eventually growing to a full complement of grades 6 through 12 and 620 students by the Fall of 2020. Figure 1 shows the Project site location and the surrounding area. It is estimated that the Project would be completed in 2020.

This report presents and documents the traffic impact study prepared for the Project by Crain & Associates. The study analyzes and addresses the potential traffic impacts of the Project on the surrounding roadway system. The methodology utilized in this study is consistent with the traffic methodology used in approved 2008 UCLA Northwest Housing Infill Project and Long Range Development Plan Amendment Environmental Impact Report ("2008 LRDP EIR"). It should be noted, however, that this Project contains land uses not considered in previous LRDP studies, including junior and senior high school facilities. Therefore, for those uses, the analysis was conducted in accordance with the assumptions, methodology and procedures approved by the City of Los Angeles Department of Transportation (LADOT). This report describes the analysis of Existing (2016) and Future (2020) traffic conditions, without and with the Project. The analysis provides a detailed evaluation of traffic conditions during typical weekday AM and PM peak hours at the following 31 study intersections:

1. Veteran Avenue & Montana Avenue/Gayley Avenue
2. Veteran Avenue & Levering Avenue
3. Gayley Avenue & Strathmore Drive/Strathmore Place
4. Hilgard Avenue/Westholme Avenue
5. Hilgard Avenue/Manning Avenue
6. Gayley Avenue & Le Conte Avenue
7. Westwood Plaza/Westwood Boulevard & Le Conte Avenue
8. Tiverton Avenue & Le Conte Avenue
9. Hilgard Avenue & Le Conte Avenue
10. Veteran Avenue & Weyburn Avenue
11. Gayley Avenue & Weyburn Avenue
12. Westwood Boulevard & Weyburn Avenue
13. Hilgard Avenue & Weyburn Avenue
14. Veteran Avenue & Kinross Avenue
15. Structure 32/Lot 36 & Kinross Avenue
16. Gayley Avenue & Kinross Avenue

17. Westwood Boulevard & Kinross Avenue
18. Gayley Avenue & Lindbrook Drive
19. Westwood Boulevard & Lindbrook Drive
20. Glendon Avenue/Tiverton Avenue & Lindbrook Drive
21. Sepulveda Boulevard & Wilshire Boulevard
22. Veteran Avenue & Wilshire Boulevard
23. Gayley Avenue/Midvale Avenue & Wilshire Boulevard
24. Westwood Boulevard & Wilshire Boulevard
25. Glendon Avenue & Wilshire Boulevard
26. Selby Avenue & Wilshire Boulevard
27. Westwood Boulevard & Rochester Avenue
28. Veteran Avenue & Ohio Avenue
29. Westwood Boulevard & Ohio Avenue
30. Veteran Avenue & Santa Monica Boulevard
31. Westwood Boulevard & Santa Monica Boulevard

The locations of these study intersections relative to the Project site are also shown in Figure 1. These intersections include those expected to be most directly impacted by Project traffic.

Potential Project impacts in accordance with the Los Angeles County Congestion Management Program (CMP) are also addressed.

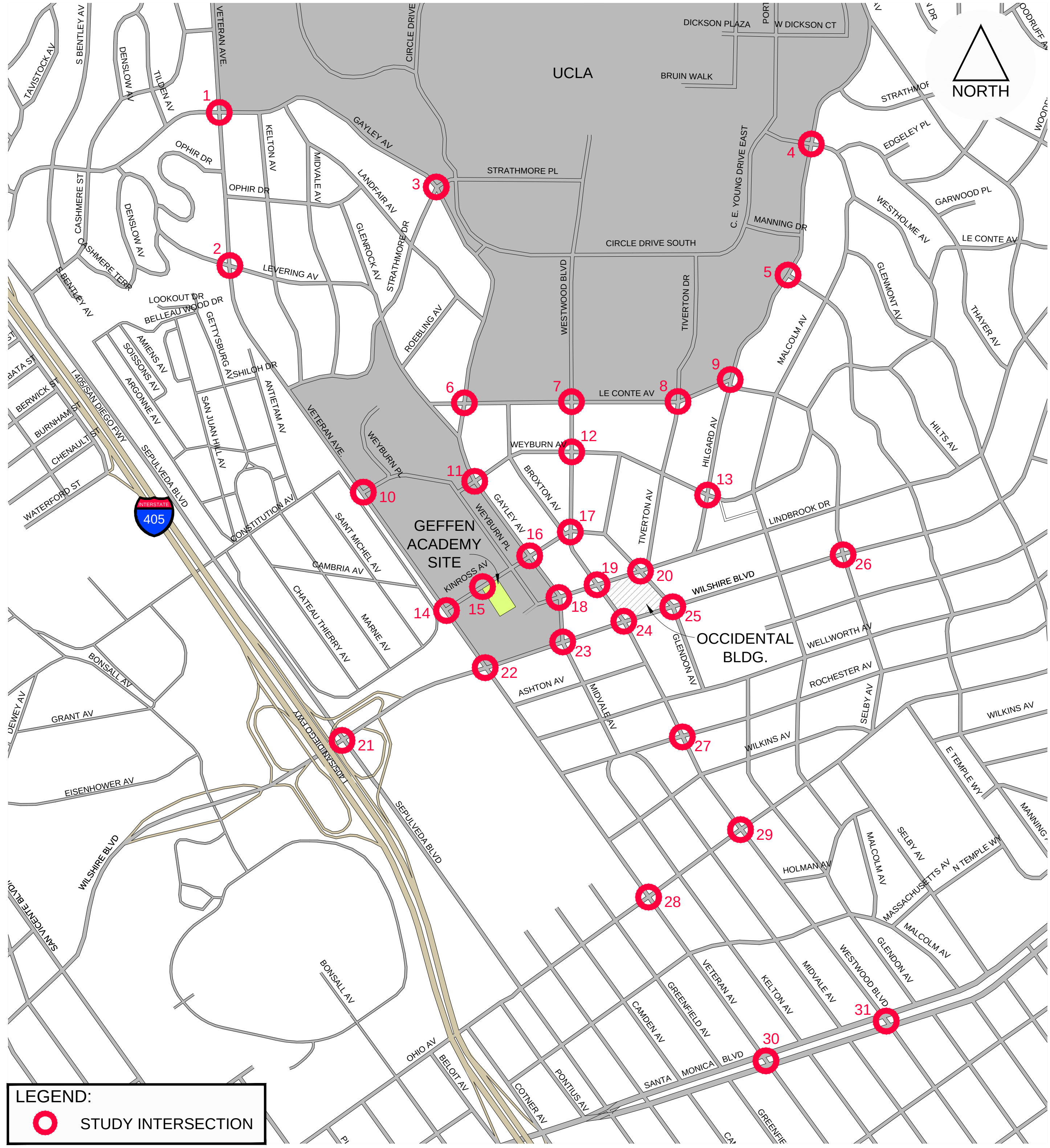

FIGURE 1

4/21/2016

FN: UCLAGeffenAcademy\STUDYINT

PROJECT SITE VICINITY
AND
STUDY INTERSECTIONS

CRAIN & ASSOCIATES

Transportation Planning
Traffic Engineering

300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771

www.crainandassociates.com

PROJECT DESCRIPTION

The proposed Project is a conversion of the existing Kinross Building consisting of administrative, recreation center, library conservation lab, and archeological collections storage uses to the Geffen Academy (the "Project" or the "Academy"). The Geffen Academy site is located northeasterly-adjacent to Lot 36 on the UCLA Southwest Campus, which is bounded by Kinross Avenue to the north, Wilshire Boulevard to the south, Veteran Avenue to the west, and a public alley to the east. The Academy will open in Fall 2017 with grades six and nine, eventually growing to a full complement of grades six through 12 and 620 students by the Fall of 2020. Existing employees located in the Kinross Building would be relocated to the former headquarters of the Occidental Petroleum Corporation at 10899 Wilshire Boulevard (the "Oxy Building"). The Oxy Building is located approximately one-quarter mile southeast of the Kinross Building on the northeast corner of Wilshire Boulevard and Westwood Boulevard. It is bounded by Lindbrook Drive to the north, Wilshire Boulevard to the south, Westwood Boulevard to the west, and Glendon Avenue to the east.

The Project will provide an educational facility for the children of UCLA faculty, staff and students, and the surrounding community. The Oxy Building was recently purchased by UCLA in 2015 and is being vacated by the Occidental Petroleum Corporation. It will house the relocated UCLA administrative staff that currently occupies the Kinross Building. The Oxy Building, with its close proximity to the Kinross Building and the main UCLA campus, generates a minimal shift in impact to the local transportation system as a result of the displacement of the Kinross Building occupants by the Project.

The Project will not change the square footage of the existing Kinross Building. It will include building interior upgrades to convert the existing spaces into school facilities. The Project will also make external upgrades to the area surrounding the Kinross Building to support the school program. These site upgrades will include installing a security fence along the Geffen Academy campus perimeter. The fence surrounding the Geffen Academy site will separate a portion of the easterly-most parking aisle in Lot 36 for the exclusive use by the Academy. This area will include a student drop-off/pick-up zone whereby a queuing area is to be established that will include a controlled entrance from the alley on the east side of the Kinross Building. There will be two exits from the drop-off/pick-up zone – first, a new right-turn-only egress driveway that will feed directly onto Kinross Avenue at the northeast corner of the site. Second, an exit gate to Lot 36 will be open only during the peak drop-off/pick-up times to allow a westbound exit at the existing signalized intersection of Structure 32/Lot 36 and Kinross Avenue. The parking for the Geffen Academy carpooling students and visitors will be provided inside the fenced area. The student parking will be limited to 25 spaces and only student carpools of three or more students will be permitted. This carpool compliance will be monitored by staff assigned to manage the daily parking and queuing during morning and afternoon periods, as well as throughout the day. The remaining parking spaces within the fenced area will be reserved for Geffen Academy visitors and ADA (American with Disabilities Act) accessible uses. The Geffen Academy faculty and staff will be parking outside the fence in the remaining portion of Lot 36 that will be shared with UCLA faculty, staff, students and visitors, and will be subject to the permit requirements.

For the Oxy Building, access and egress will remain unchanged from the existing configuration, which is a right-turn-in/right-turn-out driveway to and from Westwood Boulevard on the west side of the building and a right-turn-in/right-turn-out driveway to and from Glendon Avenue on the east side of the building. Parking for the employees relocated to the Oxy Building will be provided within the existing subterranean parking structure beneath the building.

The existing Transportation Demand Management (TDM) program will serve the Geffen Academy faculty and staff and will continue to serve the UCLA employees relocated to the Oxy Building. As noted above, students will be required to form a carpool of three or more students in order to receive a pass to utilize the Academy’s on-site parking. The UCLA Transportation Systems will assist in the carpool formation process for Geffen Academy students. A BruinBus Campus Express stop is within 200 feet of the Kinross Building entrance on Kinross Avenue and will be available for use by Geffen Academy faculty, staff and students traveling to and from the main UCLA campus. Four school buses, each transporting an average of approximately 30 students to and from the Geffen Academy, are anticipated to be part of the Academy’s transportation options. Additional specific recommendations for the expansion of the TDM Program to better serve the Project are included in the Mitigation Section of the study.

The Project is expected to be complete and fully occupied by Fall 2020. The Project site plan is presented in Figure 2.

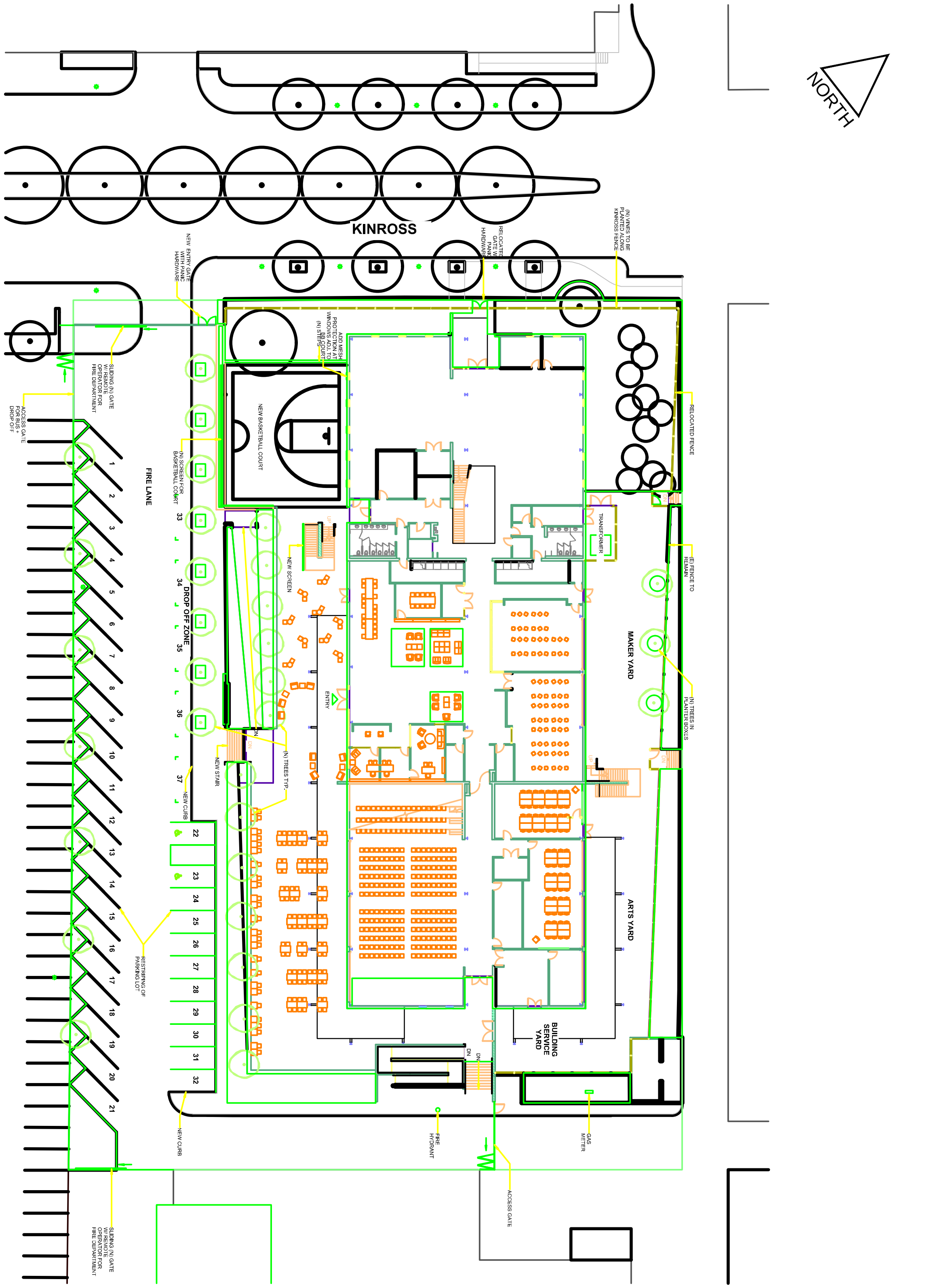

FIGURE 2

4/21/2016

FN: UCLAGeffenAcademy\SITE_PLAN

PROJECT SITE PLAN

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Culver City, California 90230
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ENVIRONMENTAL SETTING

The Geffen Academy Project site is located in the Kinross Building on the northeast corner of UCLA Parking Lot 36. Parking Lot 36 is on the UCLA Southwest Campus and is bounded by Kinross Avenue to the north, Wilshire Boulevard to the south, Veteran Avenue to the west, and an alley separating commercial uses along Gayley Avenue to the east, which is part of the Westwood Village area of the City of Los Angeles. The surrounding area is developed with a wide mix of uses, including office, educational, retail, restaurant, residential, entertainment, and cultural uses. Two freeways, the San Diego Freeway (I-405) and the Santa Monica Freeway (I-10), provide the site access to the regional freeway system. The site is also well-served by a network of arterial and local streets. These and other transportation facilities are described below.

Freeways

The San Diego Freeway (I-405) is less than one-half mile west of the Project site. It provides primary north-south regional access in the vicinity of the study area. It is a major traffic corridor between the San Fernando Valley to the north and Orange County to the south. The San Diego Freeway generally has four mainline travel lanes in each direction, plus auxiliary lanes and high-occupancy vehicle (HOV) lanes. Access is available via on- and off-ramps at Sunset Boulevard, Wilshire Boulevard and Santa Monica Boulevard in the study area. This freeway also has a full interchange with the Santa Monica Freeway.

The Santa Monica Freeway (I-10) is the primary east-west freeway in Los Angeles County. Located approximately 2.5 miles south of the Project site, it is a continuous route from the City of Santa Monica eastward to the Los Angeles central business district (CBD) and beyond. The Santa Monica Freeway mainline generally has four travel lanes in each direction, along with auxiliary lanes between some ramp locations. As mentioned above, this freeway and the San Diego Freeway fully interchange with each other.

Streets and Highways

(Note: The designations for the roadways below that are within the City of Los Angeles are in accordance with the City's recently adopted Mobility Plan 2035.)

North-South Streets

Gayley Avenue, an “Avenue II” roadway, is a primary access route for Westwood Village and UCLA. Gayley Avenue bends northwesterly, intersecting the east side of Veteran Avenue. Directly opposite and intersecting the west side of Veteran Avenue is Montana Avenue. South of Wilshire Boulevard, Gayley Avenue becomes Midvale Avenue. Gayley Avenue provides two travel lanes and left-turn channelization in each direction at the study intersections. At Wilshire Boulevard, northbound and southbound right-turn lanes are also provided. A combination of bike routes and lanes are provides along portions of Gayley Avenue, Midvale Avenue, and Montana Avenue.

Glendon Avenue is designated as a local street from Weyburn Avenue to Lindbrook Drive. The short segment between Lindbrook Drive and Wilshire Boulevard is classified as an “Avenue II” roadway. South of Wilshire Boulevard, Glendon Avenue continues as a local street. One travel lane is provided in each direction along with left-turn channelization at Weyburn Avenue, Lindbrook Drive, and Wilshire Boulevard. On-street parking is permitted along some portions of the roadway. Glendon Avenue is a bike route from Weyburn Avenue to Wellworth Avenue.

Hilgard Avenue extends from Sunset Boulevard south to Lindbrook Drive and is designated as an “Avenue II” roadway. One to two travel lanes are provided in each direction, with left-turn channelization provided at most major intersections. On-street parking is permitted along some portions of the roadway.

Manning Avenue is a local street between Hilgard Avenue and Wilshire Boulevard and south of Santa Monica Boulevard. Between Wilshire Boulevard and Santa Monica Boulevard, the roadway is designated an “Avenue III” roadway. One travel lane is provided in each direction.

Weyburn Place is an alley that extends from Strathmore Drive to Kinross Avenue. The alley, also known as Midvale alley, continues south of Kinross Avenue to Lindbrook Drive where it forms the eastern boundary of the Project site.

Selby Avenue is a local street that extends from Weyburn Avenue south to just north of the I-10. One travel lane is provided in each direction.

Sepulveda Boulevard is a “Boulevard II” roadway in the City of Los Angeles, Sepulveda Boulevard extends from the northern San Fernando Valley to the South Bay. It runs along the east side of I-405 and is located west of the Project site. Sepulveda Boulevard is generally striped with two travel lanes per direction, along with left-turn channelization.

Tiverton Avenue is a short roadway between Lindbrook Drive and Le Conte Avenue which continues onto the southern portion of the UCLA campus as Tiverton Drive. It is designated as a Collector street and is a bike route. Between Weyburn Avenue and Lindbrook Drive, Tiverton Avenue is a northbound one-way street that provides one travel lane. North of Weyburn Avenue, it is a two-way street and one travel lane in each direction is provided along with on-street parking.

Veteran Avenue extends from Sunset Boulevard to south of Pico Boulevard. Veteran Avenue is an "Avenue II" roadway from Sunset Boulevard to Missouri Avenue, a Collector street from Missouri Avenue to Pico Boulevard, and then a local street farther south. It is striped with two travel lanes and left- and right-turn channelization north and south of Wilshire Boulevard. It forms the western boundary of the Project site.

Westholme Avenue is designated a Collector street from Hilgard Avenue south to Santa Monica Boulevard, and south of Santa Monica Boulevard the roadway becomes a local street. One travel lane is provided in each direction. On-street parking is permitted along some portions of the roadway. The roadway is designated as a bike route.

Westwood Boulevard is designated a "Avenue II" roadway from Le Conte Avenue to Wilshire Boulevard, from Wilshire Boulevard to Santa Monica Boulevard the roadway is a "Boulevard II", and south it continues as an "Avenue II". North of Le Conte Avenue Westwood Boulevard enters the UCLA campus and becomes Westwood Plaza, providing two to three travel lanes in each direction. South of Le Conte Avenue, the roadway has two travel lanes in each direction, except at Wilshire Boulevard where it has three northbound lanes. Northbound and southbound left-turn and right-turn lanes are also provided at some study locations. Northbound and/or southbound left turns from Westwood Boulevard are not permitted at Weyburn Avenue, Kinross Avenue and Lindbrook Avenue during the AM and/or PM peak periods. On-street parking is permitted on both sides of the roadway. A bike lane is provided along Westwood Plaza from Le Conte Avenue to Charles E. Young Drive North. A scramble pedestrian crosswalk is located at the intersection with Le Conte Avenue.

East-West Streets

Kinross Avenue is a short street between Veteran Avenue and Glendon Avenue and forms the northern boundary of the Project site. The segment between Veteran Avenue and Weyburn Place is on the UCLA Southwest Campus, while the segment between Weyburn Place and Glendon Avenue is a local street in the City of Los Angeles. Kinross Avenue generally provides two travel lanes in each direction with on-street parking permitted between Weyburn Place and Glendon Avenue.

Le Conte Avenue is an “Avenue II” roadway between Gayley Avenue and Hilgard Avenue, becoming a local street east of Hilgard Avenue. There is one travel lane and left-turn channelization in each direction on Le Conte Avenue between Levering Avenue and Hilgard Avenue. It is also striped with a bike lane in each direction between Gayley Avenue and Hilgard Avenue. On-street parking is permitted on some portions of the roadway. A scramble pedestrian crosswalk is located at the intersection with Westwood Boulevard/Plaza.

Lindbrook Drive from Gayley Avenue to Hilgard Avenue is an “Avenue II” roadway, and from Hilgard Avenue easterly, a local street. It provides two travel lanes in each direction at the study intersections. On-street parking is permitted on some portions of the roadway.

Levering Avenue is a local street that extends from Montana Avenue south to Gayley Avenue. The roadway provides one travel lane in each direction with on-street parking permitted along some portions of the roadway.

Ohio Avenue is a Collector street striped with one travel lane per direction with left-turn channelization installed at key intersections. Additionally, on-street parking is permitted on both sides of the roadway and the roadway is designated a bike route.

Rochester Avenue extends from Veteran Avenue east to Comstock Avenue. Between Veteran Avenue and Midvale Avenue, Rochester Avenue is designated as an “Avenue II” roadway west of Midvale Avenue, and becomes a local street east of Midvale Avenue. One travel lane is provided in each direction and on-street parking is permitted along both sides of the roadway.

Santa Monica Boulevard begins in the City of Santa Monica and continues easterly into the Silver Lake neighborhood. It is a State highway, State Route 2, except for the segment within the City of West Hollywood. Santa Monica Boulevard is also designated a “Boulevard II” roadway in the City of Los Angeles. It has three travel lanes in each direction and left-turn channelization at major intersections in the Project site vicinity. In addition, bike lanes are located east of Sepulveda Boulevard, in both directions. Santa Monica Boulevard has full ramp connections with I-405.

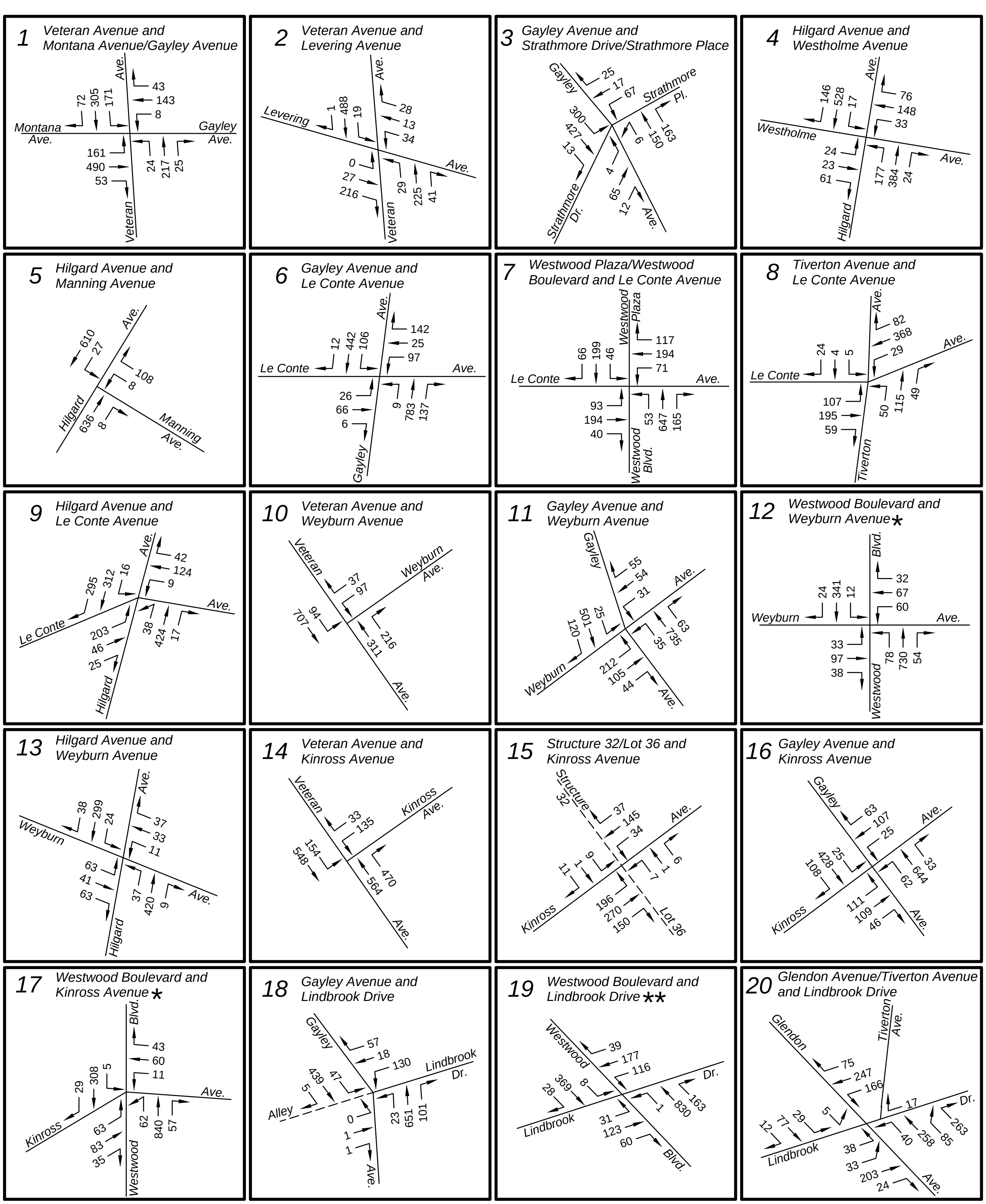
Strathmore Drive/Place extends from Veteran Avenue east to Westwood Plaza on the UCLA Main Campus. It is designated as a local street west of Gayley Avenue by the City of Los Angeles. One travel lane is provided in each direction and on-street parking is permitted along both sides of the roadway, west of Gayley Avenue. East of Gayley Avenue, the roadway provides two travel lanes in each direction along with an eastbound bike lane. Left- and right-turn channelization are provided traveling westbound at Gayley Avenue, left-turn channelization is provided eastbound at Charles E. Young Drive West, and right-turn channelization is provided eastbound at Westwood Plaza.

Wilshire Boulevard is a major thoroughfare between the City of Santa Monica and Downtown Los Angeles. It is classified a "Boulevard I" throughout its length in the City of Los Angeles. Full ramp access to and from the San Diego Freeway is provided via Wilshire Boulevard. Wilshire Boulevard forms the southern boundary of the Southwest Campus. In the study area, Wilshire Boulevard has three automobile travel lanes in both directions and left-turn channelization. Additionally, curb lanes east of Veteran Avenue are restricted to bus and right-turn-only operation during the weekday AM and PM peak periods. West of Veteran Avenue the curb lanes service freeway interchange traffic.

Weyburn Avenue extends easterly from Veteran Avenue to Le Conte Avenue and is designated as a local street. It has one to two travel lanes in each direction and westbound left-turn lanes at Veteran Avenue, Gayley Avenue and Broxton Avenue. A bike route is provided between Gayley Avenue and Tiverton Avenue. On-street parking is permitted on some portions of the roadway. A scramble pedestrian crosswalk is located at the Broxton Avenue intersection.

Existing Traffic Volumes

Traffic volume counts for existing weekday conditions were conducted at 30 of the 31 intersections on Tuesday, January 12, 2016. Due to street construction work, the traffic count for the intersection of Gayley Avenue and Kinross Avenue was deferred until Tuesday, January 26, 2016. UCLA classes were in normal session. The traffic counts covered the 7:00 - 10:00 AM and 3:00 - 6:00 PM peak-traffic periods. The peak-hour volumes for each study intersection were determined on the basis of the combined four highest consecutive 15-minute traffic counts for all vehicular movements entering the intersection. The existing peak-hour volumes are depicted in Figures 3(a) and 3(b). The traffic count data sheets are provided in Appendix A.



Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 3(a)

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EXISTING (2016) TRAFFIC VOLUMES
AM PEAK HOUR

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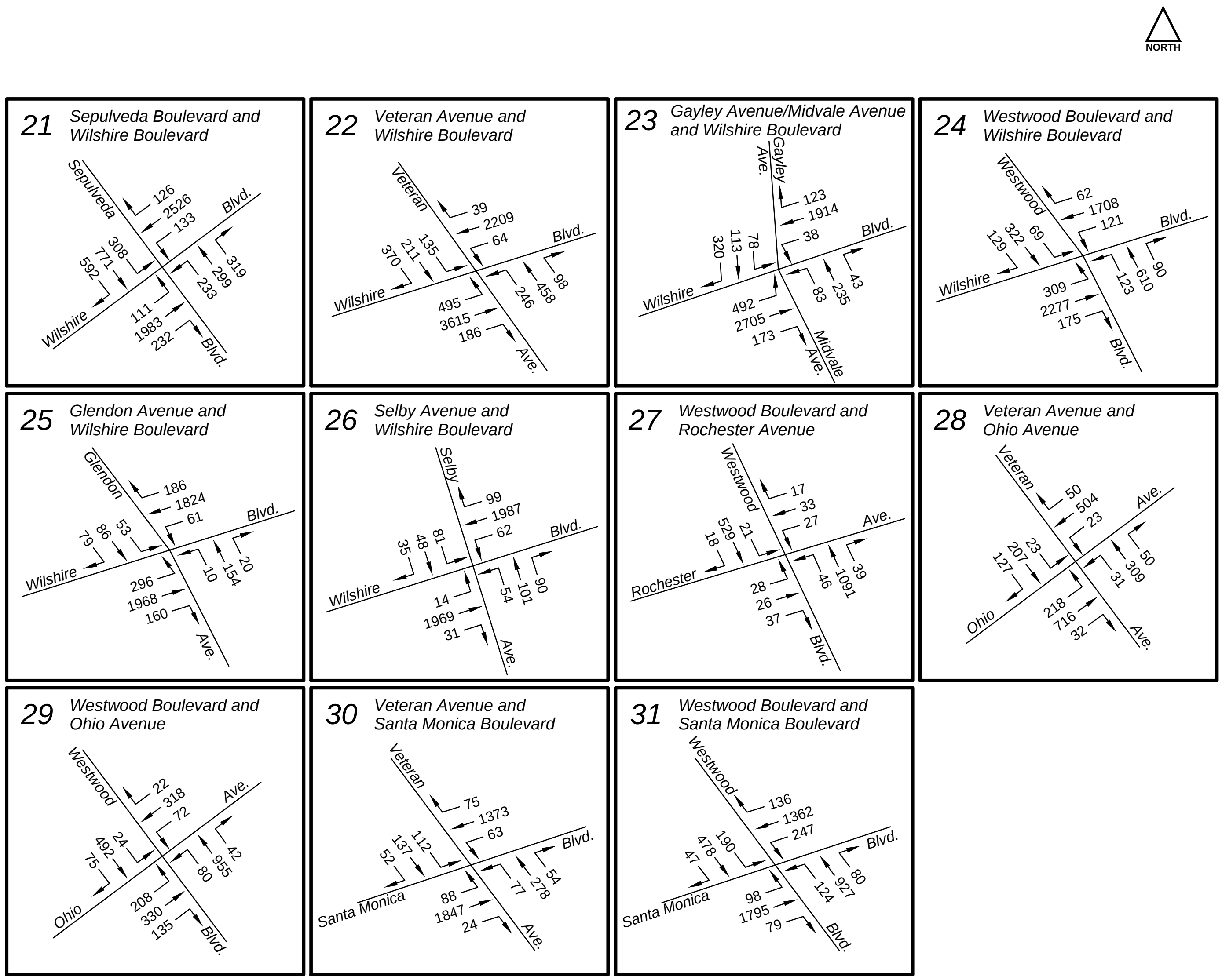

FIGURE 3(a)

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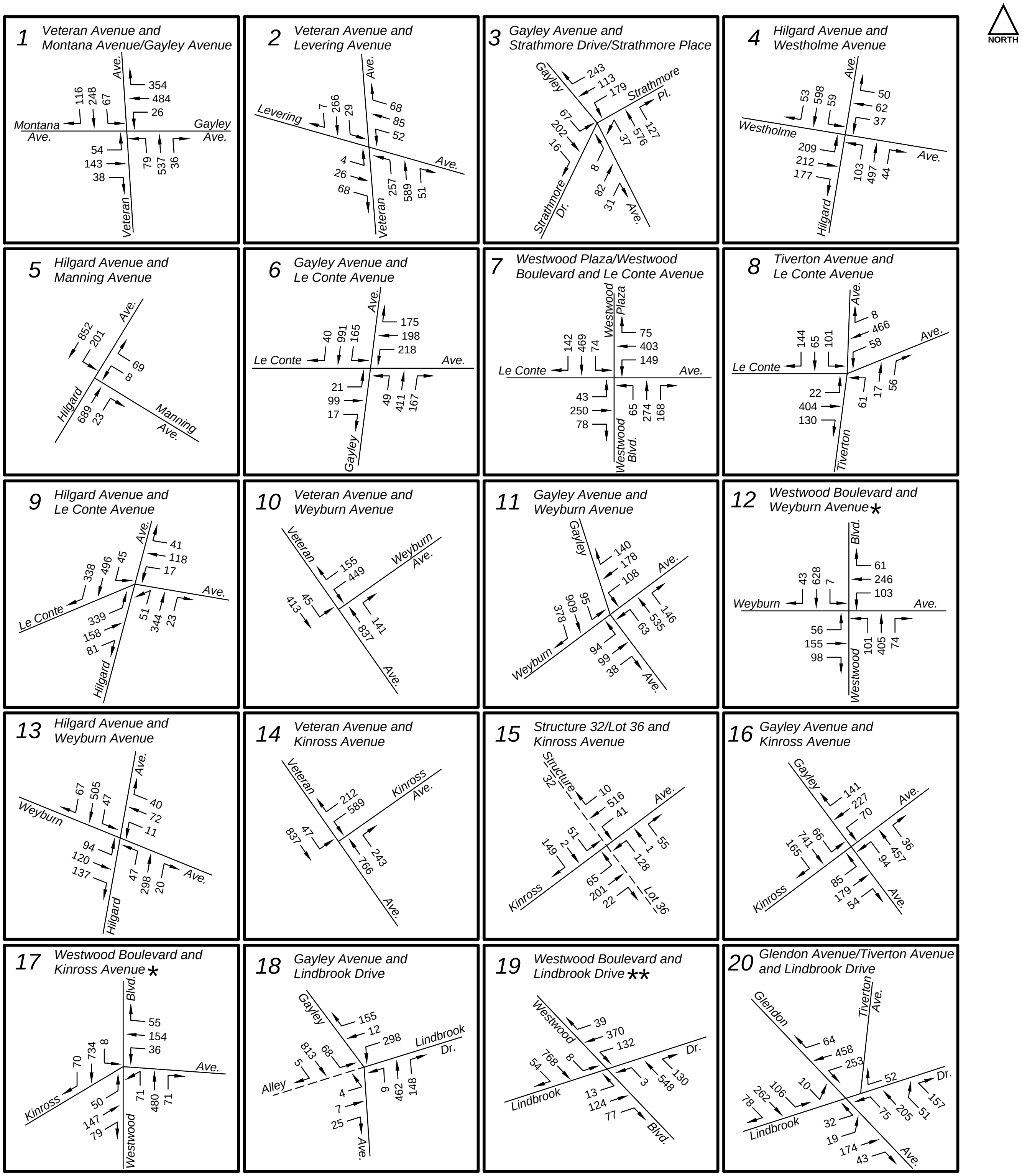

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 3(b)

4/21/2016

FN: UCLAGeffenAcademy\PM2016

EXISTING (2016) TRAFFIC VOLUMES
PM PEAK HOUR

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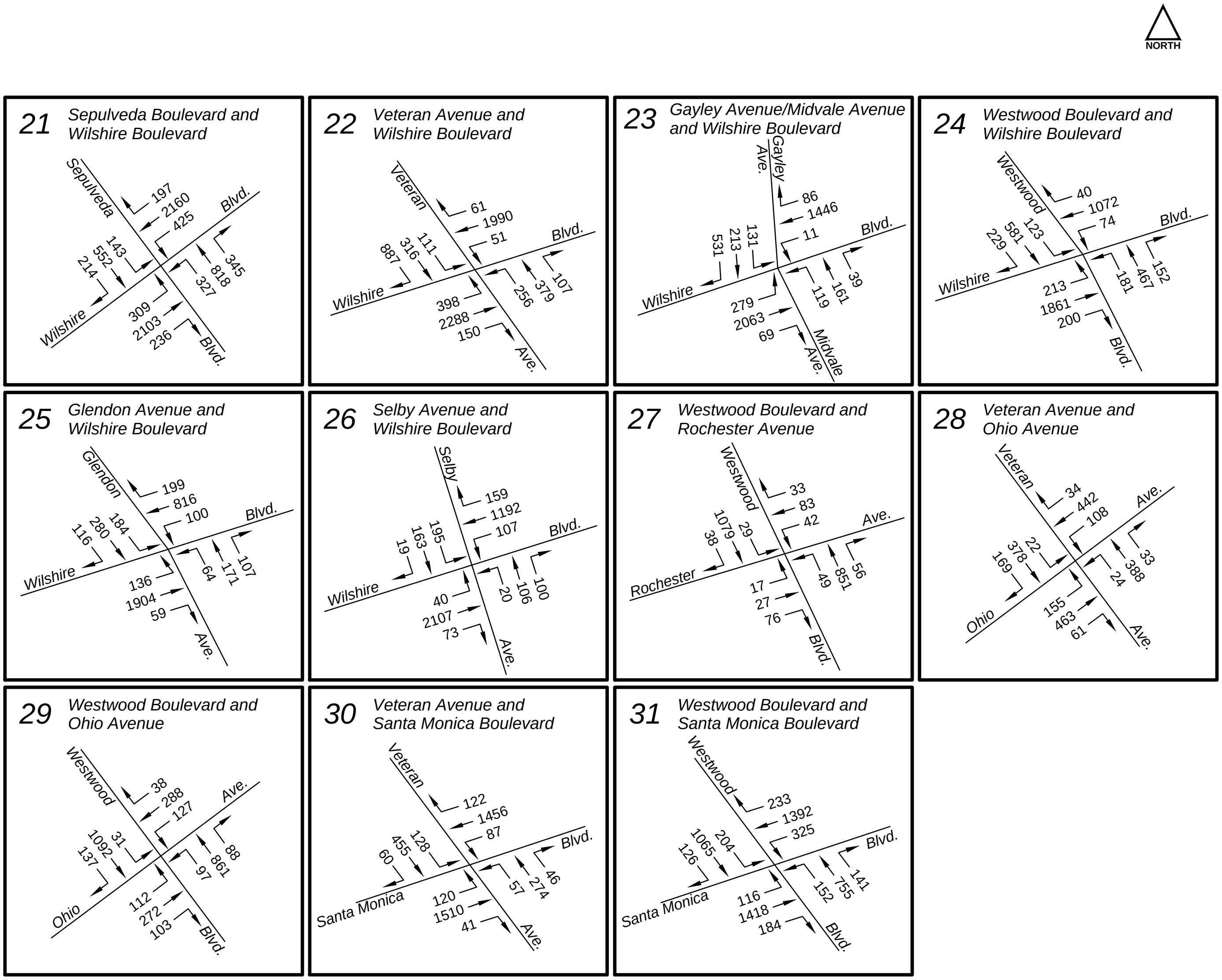

FIGURE 3(b)

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EXISTING (2016) TRAFFIC VOLUMES
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Existing Public Transit

There are numerous public transit lines serving the Project site and study area. These lines include those operated by Metro (Los Angeles County Metropolitan Transportation Authority), LADOT, Big Blue Bus (Santa Monica), Culver City Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and LAX FlyAway. These transit lines located within the Project vicinity are illustrated on the map in Figure 4. Table 1 shows a summary of the routes and service provided within a two-mile radius which includes local, express, and rapid bus service. This table also shows that many of these lines have stops within reasonable walking distance (approximately one-fourth mile) of the site. When transfer opportunities are considered, these lines provide excellent transit access to the site, the vicinity, and the greater Los Angeles region.

Existing UCLA Transportation

UCLA provides campus shuttles and evening van service to connect the UCLA Main Campus with the Southwest Campus and Westwood Village. The BruinBus shuttle service includes the Campus Express, Wilshire Center Express, Weyburn Express, and Westwood Shuttle, which connects the UCLA Main Campus to Southwest Campus and Westwood Village, including the Project Site, between the hours of 7:00 AM to 7:00 PM. The evening van service extends the BruinGo connection in the evening and provides service between UCLA Main Campus, Southwest Campus, and Westwood Village between the hours of 6:00 PM to 11:00 PM. The University Apartment Shuttle connects the UCLA campus and Westwood Village to the UCLA Apartments near Culver City and operates between 7:00 AM to 10:35 PM.

Analysis of Existing Traffic Conditions

Detailed traffic analyses of Existing conditions were performed at the following 31 study intersections:

1. Veteran Avenue & Montana Avenue/Gayley Avenue
2. Veteran Avenue & Levering Avenue
3. Gayley Avenue & Strathmore Drive/Strathmore Place
4. Hilgard Avenue/Westholme Avenue
5. Hilgard Avenue/Manning Avenue
6. Gayley Avenue & Le Conte Avenue
7. Westwood Plaza/Westwood Boulevard & Le Conte Avenue
8. Tiverton Avenue & Le Conte Avenue
9. Hilgard Avenue & Le Conte Avenue
10. Veteran Avenue & Weyburn Avenue
11. Gayley Avenue & Weyburn Avenue
12. Westwood Boulevard & Weyburn Avenue
13. Hilgard Avenue & Weyburn Avenue
14. Veteran Avenue & Kinross Avenue
15. Structure 32/Lot 36 & Kinross Avenue

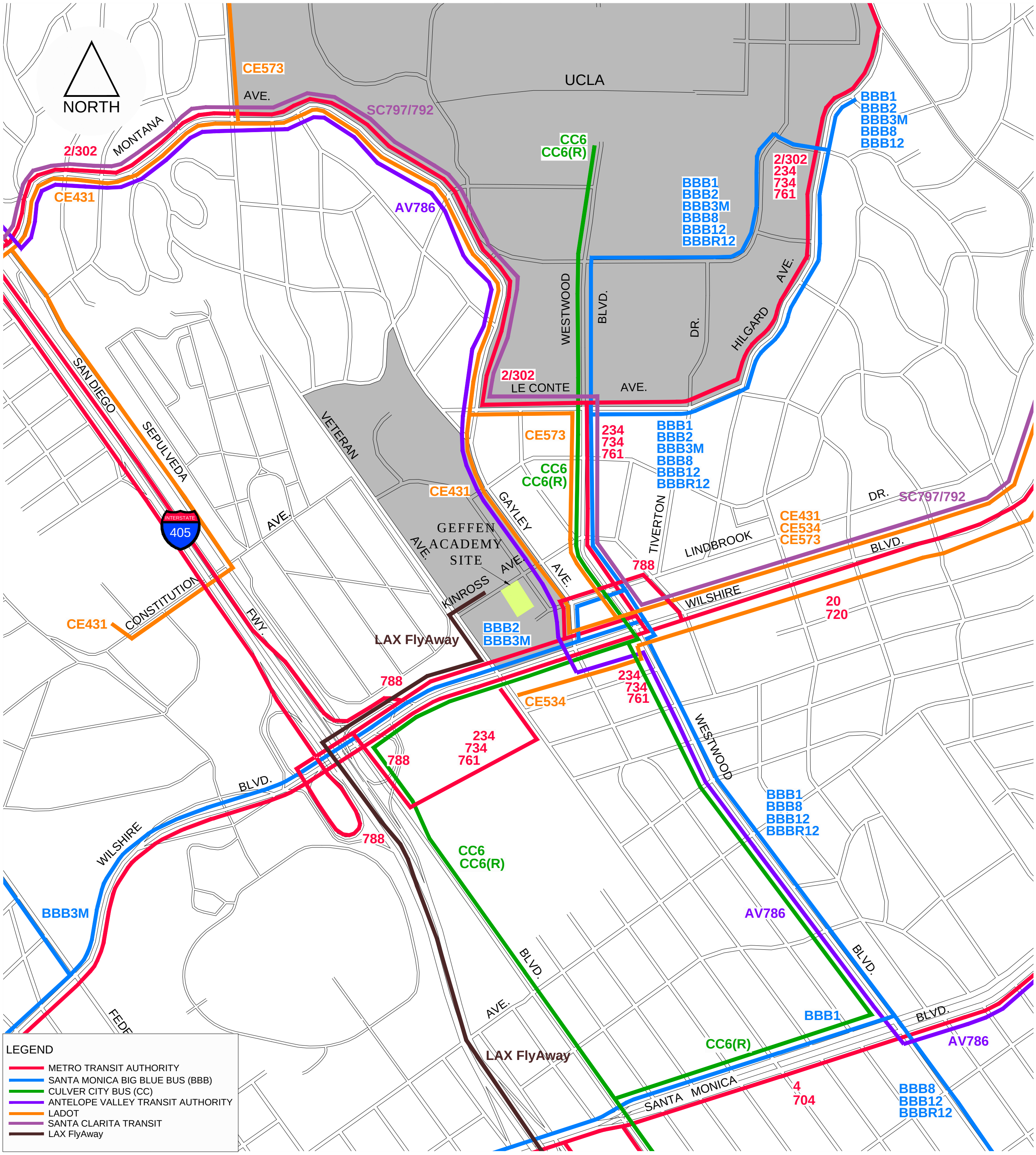

FIGURE 4

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PUBLIC TRANSPORTATION LINES

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Transportation Planning
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Culver City, California 90230
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www.crainandassociates.com

Table 1
Area Public Transit Service Summary

Line	Dir	Service Type	Regional Connection	Route	Nearest Bus Stop	Distance to Stop (miles)	Weekday Peak-Hour Headways	Weekend Peak-Hour Headways
Metro Bus								
2	E/W	Local	Pacific Palisades to Downtown	Sunset Blvd	Le Conte Ave at Westwood Blvd	0.34	11-13	13-17
4	E/W	Local	Santa Monica to Downtown	Santa Monica Blvd, Sunset Blvd	Santa Monica Blvd at Westwood Blvd	0.98	11-12	12-18
20	E/W	Local	Santa Monica to Downtown	Wilshire Blvd	Wilshire Blvd at Westwood Blvd	0.27	9-11	17-21
234	N/S	Local	Sylmar to Westwood	Sepulveda Blvd	Lindbrook Dr at Westwood Blvd	0.21	-	24-30
302	E/W	Rapid	Pacific Palisades to Downtown	Sunset Blvd	Le Conte Ave at Westwood Blvd	0.34	10-11	-
704	E/W	Rapid	Santa Monica to Downtown	Santa Monica Blvd	Santa Monica Blvd at Westwood Blvd	0.98	11-17	21-24
720	E/W	Rapid	Santa Monica to Downtown, Commerce	Wilshire Blvd, Whittier Blvd	Wilshire Blvd at Westwood Blvd	0.27	3-9	7-15
728	E/W	Rapid	Century City to Downtown	West Olympic Blvd	Constellation Blvd at Century Park West	2.39	9-13	-
734	N/S	Rapid	Sylmar to Westwood	Sepulveda Blvd	Lindbrook Dr at Westwood Blvd	0.21	16-21	-
761	N/S	Rapid	Pacoima to Westwood	Van Nuys Blvd, Sepulveda Blvd	Lindbrook Dr at Westwood Blvd	0.21	12-19	29-31
788	N/S	Express	Arleta to Westwood	Van Nuys Blvd, San Diego Fwy (I-405)	Lindbrook Dr at Westwood Blvd	0.21	19-21	-
LADOT Commuter Express Bus								
431	E/W	Express	Westwood, Palms to Downtown	Santa Monica Fwy (I-10)	Wilshire Blvd at Westwood Blvd	0.27	29-32	-
534	E/W	Express	Downtown to Westwood	Olympic Blvd	Wilshire Blvd at Veteran Ave	0.22	25-30	-
573	N/S	Express	Mission Hills to Westwood	San Diego Fwy (I-405)	Wilshire Blvd at Glendon Ave	0.35	14-15	-
Big Blue Bus (Santa Monica)								
1	E/W	Local	Venice, Santa Monica to Westwood	Santa Monica Blvd	Westwood Blvd at Lindbrook Dr	0.21	11-12	15-29
2	E/W	Local	Santa Monica to Westwood	Wilshire Blvd	Westwood Blvd at Lindbrook Dr	0.21	15-20	20-30
3M	E/W	Local	Santa Monica to Westwood	Montana Ave	Westwood Blvd at Lindbrook Dr	0.21	20-29	30-60*
7R	E/W	Rapid	Santa Monica to Metro Purple Line Station	Pico Blvd	Westwood Blvd at Pico Blvd	1.83	6-12	29-31
8	E/W	Local	Santa Monica to Westwood	Ocean Park Blvd	Westwood Blvd at Lindbrook Dr	0.21	16-17	30
12	N/S	Local	Culver City to Westwood	Westwood Blvd, Palms Blvd	Westwood Blvd at Lindbrook Dr	0.21	12-16	30
12R	N/S	Rapid	Culver City to Westwood	Westwood Blvd, Palms Blvd	Westwood Blvd at Lindbrook Dr	0.21	19	-
Culver City Bus								
6	N/S	Local	Metro Green Line Station, LAX to Westwood	Sepulveda Blvd	Westwood Blvd at Lindbrook Dr	0.21	18-20	20-22
R6	N/S	Rapid	Metro Green Line Station, LAX to Westwood	Sepulveda Blvd	Westwood Blvd at Lindbrook Dr	0.21	15-20	-
Antelope Valley Transit Authority								
786	N/S	Express	Lancaster, Palmdale to Westwood, Century City	Antelope Valley Fwy (SR-14), San Diego Fwy (I-405)	Wilshire Blvd at Westwood Blvd	0.27	25	-
Santa Clarita Transit								
792	N/S	Express	Century City, Westwood to Santa Clarita	San Diego Fwy (I-405)	Weyburn Ave at Westwood Blvd	0.26	39-40	-
797	N/S	Express	Santa Clarita to Westwood, Century City	San Diego Fwy (I-405)	Weyburn Ave at Westwood Blvd	0.26	23-29	-
LAX FlyAway Bus Service								
Westwood	N/S	Express	Westwood to LAX	San Diego Fwy (I-405)	Kinross Ave at Weyburn Pl	0.07	60	60

*Route terminates before reaching Westwood on Sundays

16. Gayley Avenue & Kinross Avenue
17. Westwood Boulevard & Kinross Avenue
18. Gayley Avenue & Lindbrook Drive
19. Westwood Boulevard & Lindbrook Drive
20. Glendon Avenue/Tiverton Avenue & Lindbrook Drive
21. Sepulveda Boulevard & Wilshire Boulevard
22. Veteran Avenue & Wilshire Boulevard
23. Gayley Avenue/Midvale Avenue & Wilshire Boulevard
24. Westwood Boulevard & Wilshire Boulevard
25. Glendon Avenue & Wilshire Boulevard
26. Selby Avenue & Wilshire Boulevard
27. Westwood Boulevard & Rochester Avenue
28. Veteran Avenue & Ohio Avenue
29. Westwood Boulevard & Ohio Avenue
30. Veteran Avenue & Santa Monica Boulevard
31. Westwood Boulevard & Santa Monica Boulevard

These study intersections are the locations expected to experience the large majority of Project trips and, therefore, where potential Project impacts would most likely occur. All of the study intersections are signalized and operate with LADOT's Adaptive Traffic Control System (ATCS), an upgrade of the Automated Traffic Surveillance and Control System (ATSAC). LADOT estimates that ATSAC/ATCS improves the overall intersection capacity by an average of 10 percent.

Although UCLA is not required to follow the LADOT Traffic Study Policies and Procedures, August 2014, this traffic study incorporates these guidelines in the analysis, where applicable. The methodology used in this study for the analysis and evaluation of each study intersection is based on procedures outlined in <u>Circular Number 212</u>, published in 1980 by the Transportation Research Board. In the discussion of Critical Movement Analysis for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of critical signal phases and traffic lanes.

The term "Level of Service" (LOS) describes the quality of traffic flow, ranging from excellent conditions at LOS A to failure conditions at LOS F. LOS D is recognized by the City of Los Angeles, and thereby by UCLA, as an acceptable service level in urban areas. LOS E is recognized by some cities as an acceptable standard in downtown areas, major commercial areas, and at freeway ramp intersections.

Determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the critical movement volumes have been summed, the values indicated in Table 2 can be used to determine the applicable LOS.

Table 2
Critical Movement Volume Ranges*
For Determining Levels of Service

	Maximum Sum of Critical Volumes (Vehicles Per Hour)		
Level of Service	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	----------- Not Applicable ---------		

* For planning applications only, i.e., not appropriate for operations and design applications.

"Capacity" represents the maximum total hourly volume of vehicles, i.e., vehicles per hour (VPH), in the critical lanes that is reasonably expected to proceed through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of LOS E, as indicated in Table 2. The volume-to-capacity (V/C) ratios used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Table 3 presents the LOS corresponding to a range of V/C ratios.

Information pertaining to intersection traffic lane configurations and signal operations were obtained from City engineering plans, on-line aerial photographs and field checks. This information, together with the study intersection volumes in Figures 3(a) and 3(b) were analyzed using the above procedures and established traffic engineering techniques. The V/C ratios and the corresponding service levels for existing traffic conditions at the study intersections were thus determined. Per LADOT policy, the V/C ratios were reduced by 0.100 in order to approximate the 10 percent increase in intersection capacity attributable to ATSAC/ATCS. (The study intersection lane configurations and signal controls are provided in Appendix B.)

Table 3
Level of Service
As a Function of V/C Ratios

Level of Service	Description of Operating Characteristics	Range of V/C Ratios
A	Excellent. No vehicle waits longer than one red light.	0.000 - 0.600
B	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.601 - 0.700
C	Good. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701 - 0.800
D	Fair. Delays may be substantial during portions of the rush hour, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.801 - 0.900
E	Poor. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901 - 1.000
F	Failure. Backups from nearby intersections or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 1.000

Following recent traffic studies in the project vicinity, additional adjustments to the CMA methodology were made in order to better account for the existing traffic congestion blocking intersections along Wilshire Boulevard and Westwood Boulevard. Intersection capacities at five Wilshire Boulevard and three Westwood Boulevard study intersections were reduced as follows:

<u>15 percent capacity reduction during peak hours</u>

- Gayley Avenue/Midvale Avenue & Wilshire Boulevard (Intersection 23)

25 percent capacity reduction during the peak hours

- Westwood Boulevard & Weyburn Avenue (Intersection 12)
- Westwood Boulevard & Kinross Avenue (Intersection 17)
- Westwood Boulevard & Lindbrook (Intersection 19)
- Sepulveda Boulevard & Wilshire Boulevard (Intersection 21)
- Veteran Avenue & Wilshire Boulevard (Intersection 22)
- Westwood Boulevard & Wilshire Boulevard (Intersection 24)
- Glendon Avenue & Wilshire Boulevard (Intersection 25)

An additional intersection capacity reduction of 33 percent was made in order to account for the all-pedestrian signal phase operations:

- Westwood Plaza/Westwood Boulevard & Le Conte Avenue (Intersection 7)

The LOS and V/C ratios determined for Existing conditions are included in Table 8, on pages 74-75. Twenty-four of the 31 study intersections analyzed are operating at excellent to good LOS, i.e., LOS A, B or C, during both peak hours. The intersection of Gayley Avenue/Midvale Avenue and Wilshire Boulevard is operating at LOS D, a fair level of service, during the AM peak hour and LOS C during the PM peak hour. The remaining six intersections are experiencing poor or failing service levels during one or both peak hours, which are the following:

- Veteran Avenue and Montana Avenue/Gayley Avenue (Intersection 1) is at LOS C during the AM peak hour and LOS E, a poor service level, during the PM peak hour;
- Westwood Boulevard and Santa Monica Boulevard (Intersection 31) is operating at LOS E during the AM peak hour and LOS D during the PM peak hour;
- Glendon Avenue and Wilshire Boulevard (Intersection 25) is experiencing LOS D during the AM peak hour and LOS F, a failing service level, during the PM peak hour;
- Westwood Boulevard and Wilshire Boulevard (Intersection 24) is at LOS E during the AM and PM peak hours;
- Sepulveda Boulevard and Wilshire Boulevard (Intersection 21) is experiencing LOS F during the AM and PM peak hours; and
- Veteran Avenue and Wilshire Boulevard (Intersection 22), is experiencing LOS F during the AM and PM peak hours.

It should be noted that many of the poor and failing levels of service are due to the standing freeway traffic back-ups reducing capacity of the intersection, further decreasing intersection capacity. Hence reductions in capacity have been incorporated into the baseline of the Existing condition at the affected intersections along Wilshire Boulevard stated above. The LOS analysis worksheets for Existing conditions are provided in Appendix C.

PROJECT TRAFFIC

The following section describes the methodology used to determine the Project trip generation, the geographic distribution of the Project trips, and lastly the Project trips that were assigned to specific roadways and study intersections.

Project Trip Generation

Trip generation estimates of the proposed Project uses and the existing site uses were calculated for the daily weekday, AM peak-hour, and PM peak-hour trips. The following is an explanation of the two sources for the rates and in which cases each was used:

- Trip generation rates from the current Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, were utilized for the overall Project trip generation that includes the Geffen Academy site and the Occidental employees vacating the Oxy Building. This is the nationally recognized standard source for rates and contains compilations of traffic generation rates based on counts conducted at sites through the nation. The rates tend to be for suburban locations. Therefore, Trip Generation Manual recommends that adjustment factors be applied to reflect the alternative modes that may be available in the Project area. However, to be conservative, the ITE rates were not adjusted for the Project despite the resources that would be available through the UCLA TDM program. Additionally, credit for the employees vacating the Oxy Building was decreased by using the standard LADOT adjustment factors for transit use and other TDM by 15 percent each to be on the conservative side. These factors were applied to the below ITE rates, thereby reducing the credit and assuming that the Occidental Petroleum employees took full advantage of the alternative modes available.
- The trip generation rates from the 2008 UCLA LRPD Amendment (LRDP) were utilized for UCLA faculty and staff and for the UCLA commuter students using the parking spaces no longer needed for the relocated administrative staff. These rates are specific to UCLA and are based on counts of the actual trip generation at the UCLA Main Campus.

The applicable trip rates used in this study are summarized in Table 4.

Table 4
Project Proposed and Existing Uses Trip Generation Rates

“Middle School/Junior High School” (ITE Land Use 522)*

Daily:	T = 1.62(S)
AM Peak Hour:	T = 0.54(S); 55% I/B, 45% O/B
PM Peak Hour*:	T = 0.30(S); 45% I/B, 55% O/B

“High School” (ITE Land Use 530)*

Daily:	T = 1.71(S)
AM Peak Hour :	T = 0.43(S); 68% I/B, 32% O/B
PM Peak Hour*:	T = 0.29(S); 33% I/B, 67% O/B

“General Office Building” (ITE Land Use 710)**

Daily:	T = 3.32(E)
AM Peak Hour:	T = 0.48(E); 88% I/B, 12% O/B
PM Peak Hour:	T = 0.46(E); 17% I/B, 83% O/B

“UCLA Faculty and Staff” (UCLA LRDP 2008 Addendum)

Daily:	T = 3.293(PS)
AM Peak Hour:	T = 0.289(PS); 80% I/B, 20% O/B
PM Peak Hour:	T = 0.383(PS); 30% I/B, 70% O/B

“UCLA Commuter Students” (UCLA LRDP 2008 Addendum)

Daily:	T = 3.716(PS)
AM Peak Hour *:	T = 0.304(PS); 80% I/B, 20% O/B
PM Peak Hour:	T = 0.356(PS); 30% I/B, 70% O/B

Where:	T = Trip ends	E = Employees
	O/B = Outbound	S = Students
	I/B = Inbound	PS = Parking Spaces

* The Peak Hour of the Generator rates were used for Geffen Academy as the School’s dismissal time will occur within the LADOT defined evening peak hour times of 3:00 to 6:00 PM.

** The General Office Building rates were reduced by 15 percent to factor for transit use and TDM prior to application to the Occidental Petroleum use vacating the Oxy Building in the trip generation calculations.

To allow for the distribution and assignment of the Project trips, the overall school trip generation estimates were subdivided into subcategories for faculty and staff and students. Student trip generation categories were as follows:

- Students Bused
- Students With Parking (three-student carpool)

- Transit/BruinBus/Walk
- Drop-Off/Pick-Up By Automobile*:
    - Single Purpose Trips
    - Off-Campus Linked Trips
    - Main Campus Linked Trips

* Specifically, to follow standard ITE procedures, it was necessary to separate the base "single purpose" trips (e.g. for a non-UCLA affiliated parents dropping off a carpool and then returning home) from a "linked-diverted trip" (e. g. from a UCLA parent dropping off a carpool on their way to the UCLA Main Campus).

The Geffen Academy faculty and staff will receive the same incentives to rideshare as the other UCLA faculty and staff. The UCLA faculty and staff generation rates from the LRDP were determined to be most appropriate for estimation of the share of trips attributable to the 109 Geffen Academy faculty and staff. The 25 Geffen Academy students assigned parking spaces were assumed to arrive in the morning peak hour and depart in the evening peak hour, along with their required 50 carpool passengers. It should be noted that under the California Driver Handbook, an exception is made allowing minors to drive for schooling or school-authorized activity as along as a note is signed by the school principal, dean, or designee. Four buses, carrying 120 students (an average of 30 students per bus), were assumed to arrive and depart from the site during the peak hours. These vehicle trips were all assumed to be single purpose trips. Additionally, an estimated 75 students (12 percent of the 620 total students) were assumed to ride public transit, ride BruinBus from Main Campus, bicycle, or walk, and thereby not generate any vehicle trips.

The remaining 350 of the 620 total students were all assumed to be dropped-off/picked-up at the Geffen Academy. One-quarter (88 students) were assumed to be in a parent carpool (shown as "single-purpose trips" on Table 5) with an AVR (average vehicle ridership) of 2.9 students, with the trips made for the single purpose of transporting the students to and from the Geffen Academy. Another one-quarter of the dropped-off/picked-up students (88 students) were assumed to be driven in a parent/guardian carpool with 2.9 AVR of students that would be passing by the site on their way to a non-UCLA destination. The final one-half (175 students) were assumed to be in carpools driven by a parent continuing on to the UCLA Main Campus as part on an existing trip. It should be noted that the carpool size of 2.9 students AVR per vehicle was back-calculated with the total trips matching the estimates based on the ITE rates, and determined to be an appropriate estimated carpool size.

A total of 212 Administrative staff will be relocated from the Kinross Building to the Oxy Building as part of the Project. Based on the rates in the LRDP, they are estimated to be using

112 spaces in Lot 36 that would be freed for other uses. Based on the estimated Geffen Academy faculty and staff size of 109 persons and the LRDP rates, 58 of the spaces will be used. In addition, 25 of the spaces will be used by Geffen Academy students. The remaining 29 spaces will be reserved for Geffen Academy visitors or removed to construct the fence and maintain circulation in Lot 36. Therefore, no spaces will be available to reduce the current UCLA commuter student parking permit waiting list.

The analysis of the net trip impact on the Geffen Academy site considered the new Academy uses to be added to the site and the existing administrative employees in the Kinross Building that are to be relocated to the Oxy Building. For the net trip impact on the Oxy Building site, the consideration of the relocation of the administrative staff from the Southwest Campus site to the Oxy Building was taken in addition to the vacation of the existing Oxy Building staff. The relocated administrative employees will utilize approximately three of the 10 floors being vacated by the estimated 300 Occidental staff. Therefore, a credit for the trip reduction from 30 percent of the 300 Occidental staff, or 90 employees, was taken. The ITE rates were utilized to estimate the Occidental staff trips. Additional adjustments that were incorporated into the analysis included a 15 percent adjustment to account for public transit available at the Oxy Building site, and another 15 percent adjustment for other TDM incentives that were offered by Occidental Petroleum.

As shown in Table 5, utilizing the above rates and procedures, it is estimated that the Project would generate 824 net daily trips, including 260 net trips during the AM peak hour and 153 net trips during the PM peak hour. Of these, 671 daily trips, 259 AM Peak Hour trips, and 140 PM peak-hour trips would occur to or from the Southwest Campus, including Geffen Academy site, with the remainder from the Oxy Building site. Only 269 of the daily trips, 79 of the AM peak-hour trips, and 57 of the PM peak-hour trips, would be new trips to the area.

In an effort to provide the most conservative analysis, it should be noted that the trip generation associated with the Geffen Academy has been accounted for twice. Once as a separate stand-alone Project and secondly as part of the 2008 LRDP, which has been included as a Related Project. No Project trips were removed from the overall 2008 LRDP trip generation calculations that are included in the Year 2020 traffic projections.

Table 5
Project Trip Generation

Category	% of Total (Population)	Persons (Population)	Parking Spaces	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Trip Distribution & Assignment[5]
Southwest Campus Trip Generation											
Geffen Faculty/Staff (109 Persons)			58	191	14	3	17	7	15	22	A
Geffen Students											
Bused	19.4%	120	0	16	4	4	8	4	4	8	A
Students With Parking	12.1%	75	25	93	25	0	25	0	25	25	A
Transit/BruinBus/Bike/Walk	12.1%	75	0	0	0	0	0	0	0	0	N/A
Off-Peak/Absent	0.0%	0	0	0	0	0	0	0	0	0	N/A
Drop-Off/Pick-up By Automobile											
Single Purpose Trips[2]	14.1%	88	0	185	30	30	60	16	16	32	B
Off-Campus Linked Trips[3]	14.1%	88	0	185	30	30	60	16	16	32	C[6]
Main Campus Linked Trips[3]	28.2%	175	0	370	61	60	121	32	32	64	D[6]
Geffen Subtotal[4]	100%	620	83	1,040	164	127	291	75	108	183	
Change in Commuter Students Spaces[7]		0	0	0	0	0	0	0	0	0	A
Admin. Staff Shifted from Kinross to Oxy		-211	-112	-369	-26	-6	-32	-13	-30	-43	A
Southwest Campus Net Trips											
Net Driveway/Cordon Trips			**-29**	**671**	**138**	**121**	**259**	**62**	**78**	**140**	
Net Trips w/o Linked Trips			**-29**	**116**	**47**	**31**	**78**	**14**	**30**	**44**	
Oxy Building Trip Generation											
Admin. Staff Shifted from Kinross to Oxy		211	112	369	26	6	32	13	30	43	E
Vacating Occidental Staff		-90	-121	-216	-27	-4	-31	-5	-25	-30	E
Oxy Building Net Trips			**-9**	**153**	**-1**	**2**	**1**	**8**	**5**	**13**	
Project Total For Both Sites				**824**	**137**	**123**	**260**	**70**	**83**	**153**	
Non-Linked Trips for Both Sites				**269**	**46**	**33**	**79**	**22**	**35**	**57**	
Assignment Pattern for Trips	Daily	AM PH	PM PH								
Park on Southwest Campus[8]	-8.4%	6.9%	7.8%	-69	17	1	18	-2	14	12	A
Single Purp. Drop-off/Pick-up	22.5%	23.1%	20.9%	185	30	30	60	16	16	32	B
Off-Campus Linked Trips	22.5%	23.1%	20.9%	185	30	30	60	16	16	32	C
Campus Linked Trips	44.9%	46.5%	41.8%	370	61	60	121	32	32	64	D
Park at Occidental Building	18.6%	0.4%	8.5%	153	-1	2	1	8	5	13	E
Total[9]	100%	100%	100%	**824**	**137**	**123**	**260**	**70**	**83**	**153**	

Table 5 (continued)
Project Trip Generation

Notes

1 Table assumes 2008 LRDP Amendment EIR Campus-wide rates for parking and trip generation. Uses rates projected for 2013 in the EIR.

2 Single Purpose trips are only for pick-up or drop-off of students and do not serve as an intermediate stop on a parent's commute trip.

3 Linked trips are being made for another purpose with the student drop-off or pick-up made during an intermediate

4 Geffen subtotal of trips conservatively based on unadjusted ITE Middle/Junior High School & High School rates.

5 Trip Distribution/Assignments:

- A Distribution taken from the 2008 LRDP Amendment EIR (Standard Distribution).
- B Distribution based on Lab School student residence zip codes.
- C Standard employment distribution not affiliated with UCLA.
- D Standard Distribution adjusted to reflects main campus parking locations.
- E Standard Distribution adjusted in the immediate vicinity of the Oxy building.

6 Linked trips will only have impacts from the re-routed portion of trips at local intersections.

7 The number of commuter student spaces are expected to be reduced due to the Geffen Academy Project. However, to remain conservative for this analysis, no reductions in trip generation have been taken under this category.

8 This estimated assignment pattern is used for the Geffen Faculty & Staff, Students, and Buses, as well as the Kinross Bldg. Admin. Staff who currently park on Southwest Campus.

9 Due to the closure of the existing recreation center, library conservation lab, and archaeological collections storage in the Kinross Building, the work location for staff members would be shifted from the Kinross Building to other buildings, but that shift would not affect traffic generation or routing.

Project Trip Distribution

Estimation of the geographic distribution of Project trips, as the next step in the analytical process, considered the nature of the Project uses, current traffic patterns, characteristics of the surrounding roadway system, location of the Project sites and their proximity to freeways and major travel routes, and areas from which students and employees would likely be drawn. The LRDP distribution was used for the single purpose employee, carpooled student driver, and bus trips. This was considered the best estimate of trips to and from the area and parking on campus or elsewhere in the Westwood area. The zip codes of the students attending the UCLA Lab School were aggregated for use for the single-purpose student drop-off/pick-up trips. This was considered the best estimate of the location of the other end of trips made for the sole purpose of drop-off/pick-up of a student. Based on the above factors, the distributions from these two data sources were determined to be reasonable. Estimates were made of the overall geographic trip distribution percentages, which are shown in Table 6.

Table 6
Project Geographic Trip Distribution Percentages

For Employee/Student Driver/Bus/Linked Trips	I-405 North	28%	I-405 South	39%
	Surface North	1%	Surface South	8%
	Surface East	9%	Surface West	15%
For Single Purpose Student Drop-Off/Pick-Up Trips	I-405 North	6%	I-405 South	13%
	Surface North	4%	Surface South	21%
	Surface East	26%	Surface West	30%

Project Trip Assignment

The estimated Project trip assignment percentages for the specific streets and intersections expected to be used to access the site were developed from the general distribution percentages in Table 6. The trip distribution percentages in the LRDP were also used for the trip assignment, as well as the student home locations data for students attending the UCLA Lab School.

Inbound and outbound trip assignments were developed for each study intersection, and are illustrated in Figures 5(a) through 5(g). The percentages are separated by trip type, with separate Project trip assignments developed for the following:

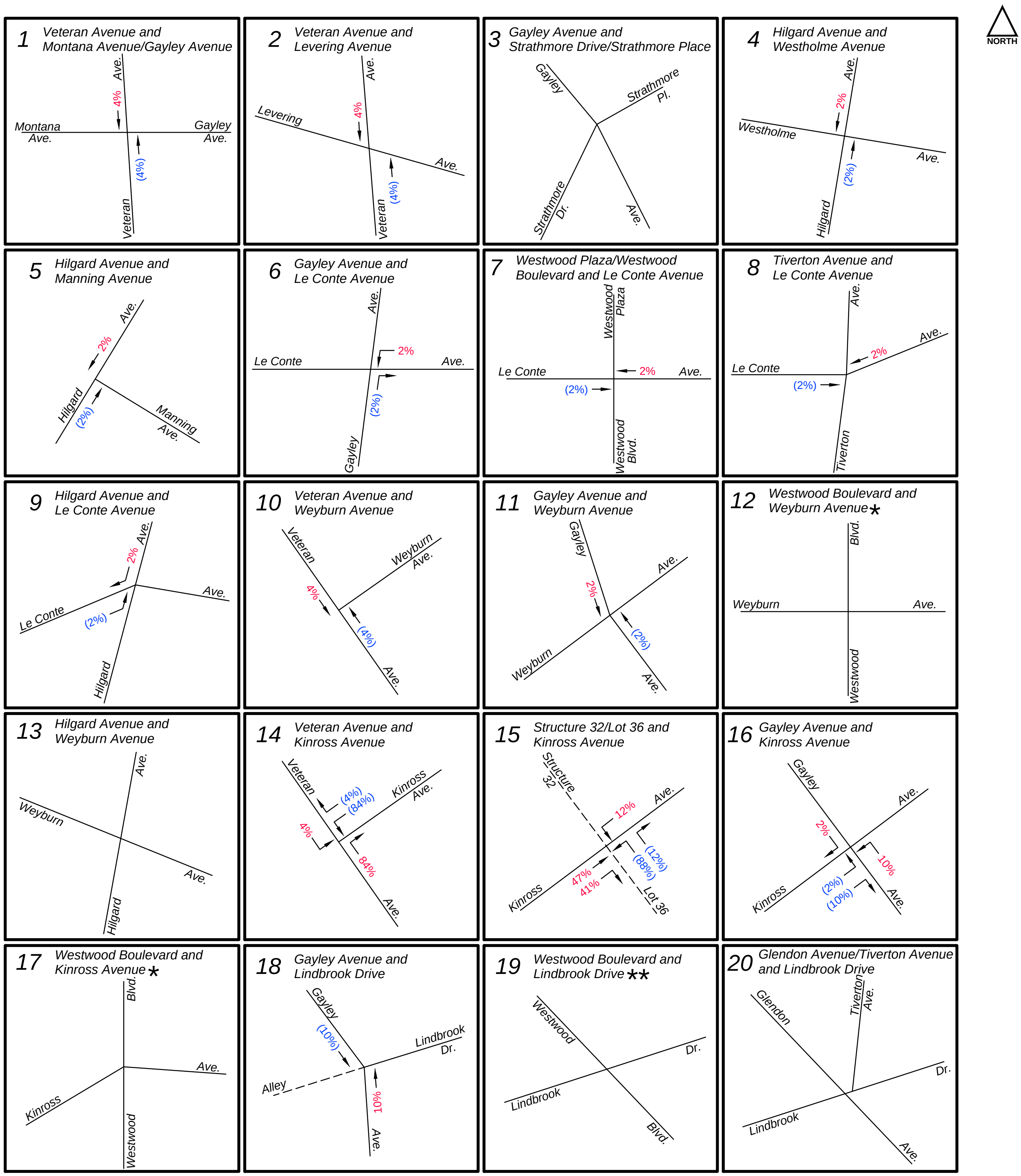
A. Employee/Student Driver/Bus Trips;
B. Single Purpose Student Drop-Off/Pick-Up Trips;
C. Added route for linked trips with non-UCLA destination;
D. Added route for linked trips with UCLA Main Campus destination; and
E. Distribution A except for local turning movement differences surrounding the Oxy Building and Southwest Campus (current Kinross Building).

Applying these percentages to the Project trips in Table 5, Project traffic volumes at the 31 study intersections were determined for the AM and PM peak hours, and are shown in Figures 6(a) and 6(b).

Project Parking

The Project is anticipated to reduce the existing parking supply at the Southwest Campus (i.e. Lot 36). A total of approximately 29 permit spaces are expected to be reduced by the installation of the fence with associated circulation route adjustments, and the provision of Geffen Academy visitor parking. This is in addition to the 25 spaces to be used for Geffen student carpools, for a total of approximately 54 spaces to be removed from Lot 36. The Project will not affect the parking supply at the Oxy Building site. The Oxy Building provides a total of 404 spaces for the office portion of the building functions. Factored by 30 percent for the three of 10 floors to be occupied by the relocated Kinross Building staff, 121 spaces are available.

The Project will change the parking demand at both sites. Based on the parking rates in the LRDP, it is estimated that the 211 administrative staff in the Kinross Building currently has an estimated demand of 112 parking spaces. The removal of this parking demand in Lot 36 will be partially filled by the 109 Geffen Academy faculty and staff that, based on the LRDP rates, are expected to utilize 58 parking spaces. The net reduction in parking demand for Lot 36 due to this relocation will be 54 spaces from the administrative staff relocating to the Oxy Building (112 spaces - 58 spaces = 54 spaces). This 54-space demand reduction for Lot 36 is the same amount by which the Lot 36 capacity will be reduced due to the reconfiguration of Lot 36 to



Notes:

* **Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

** **Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

FIGURE 5(a)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(FACULTY_STAFF)

PROJECT DISTRIBUTION PERCENTAGES
FACULTY/STAFF AND STUDENTS
PARKED IN LOT 36 OR GEFFEN ACADEMY PARKING LOT

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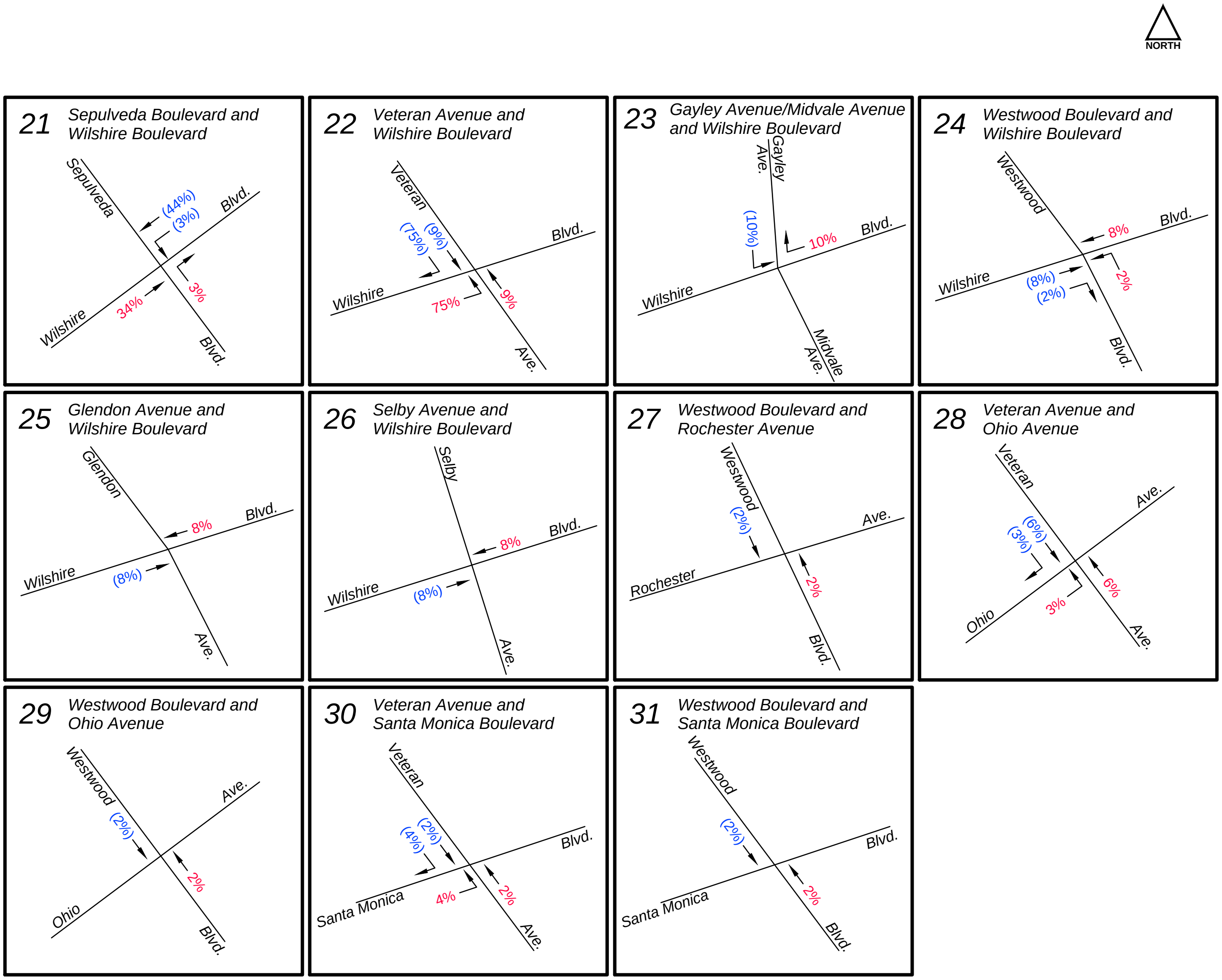

LEGEND:

XX% INBOUND PERCENTAGE

(XX%) OUTBOUND PERCENTAGE

FIGURE 5(a)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(FACULTY_STAFF)

PROJECT DISTRIBUTION PERCENTAGES
FACULTY/STAFF AND STUDENTS
PARKED IN LOT 36 OR GEFFEN ACADEMY PARKING LOT

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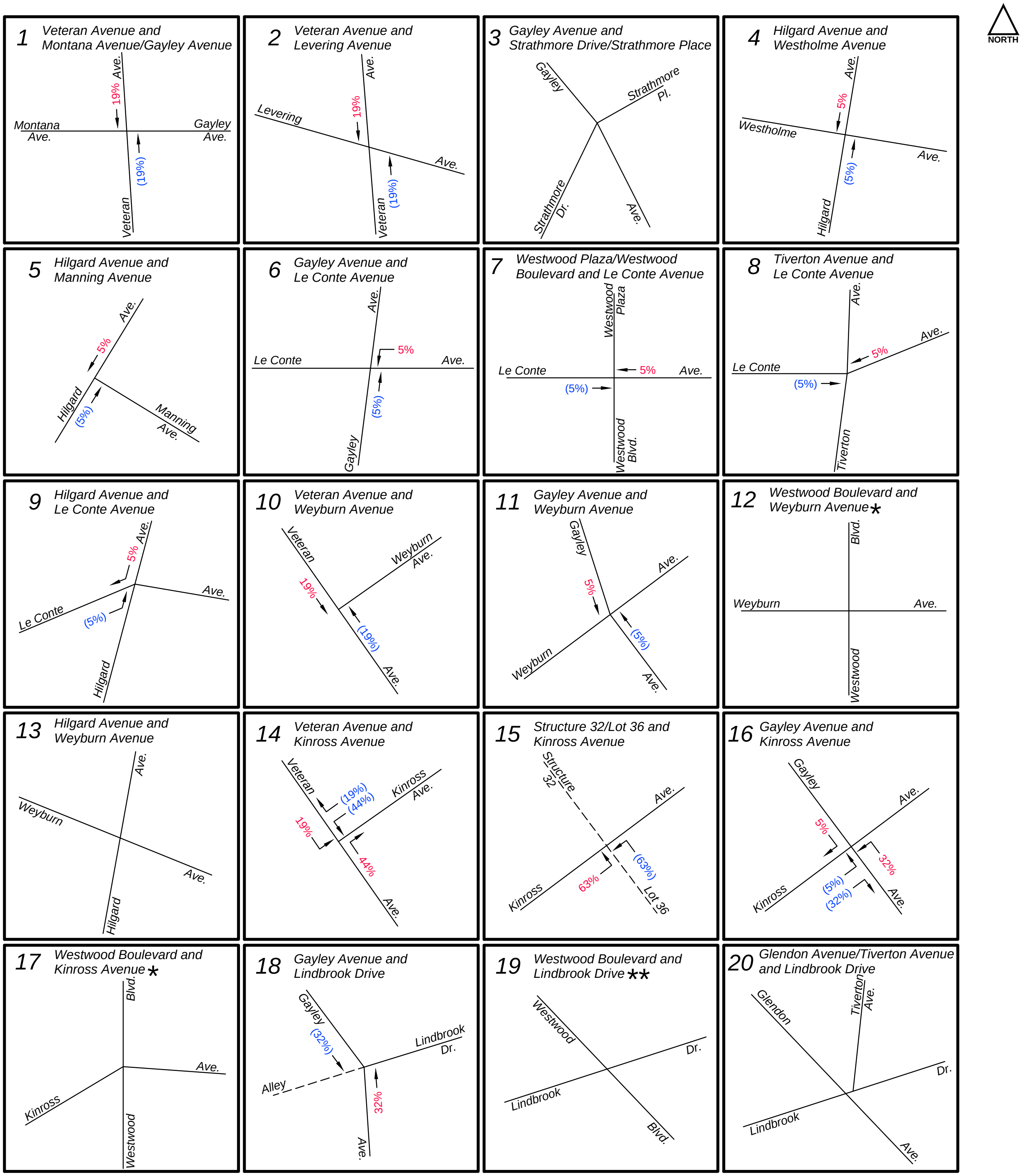

Notes:

* **Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

** **Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

FIGURE 5(b)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(DROP-OFF_PICK-UP)

PROJECT DISTRIBUTION PERCENTAGES
SINGLE PURPOSE DROP-OFF/PICK-UP TRIPS
TO/FROM STUDENT PASSENGER LOADING ZONE

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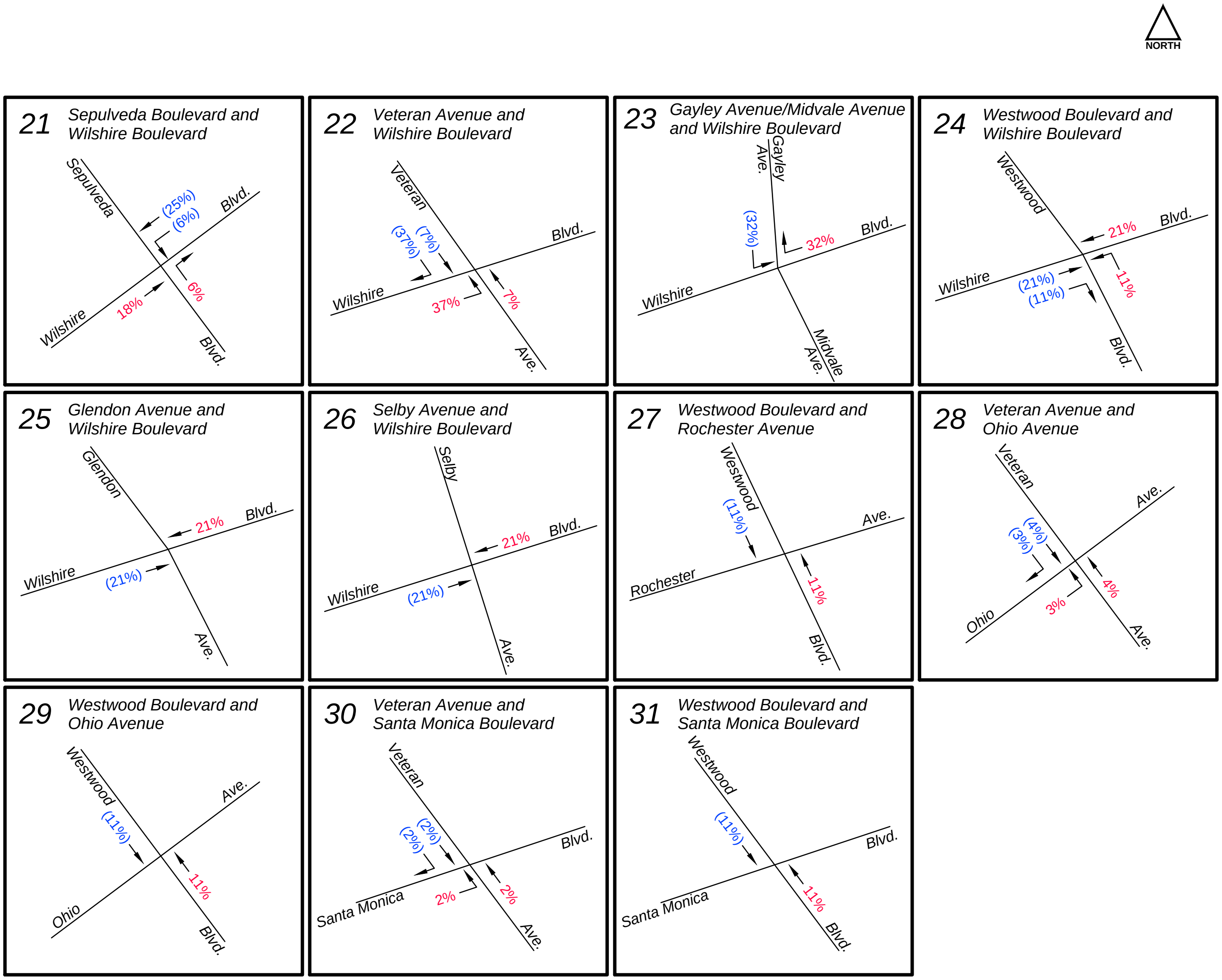

LEGEND:

XX% INBOUND PERCENTAGE

(XX%) OUTBOUND PERCENTAGE

FIGURE 5(b)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(DROP-OFF_PICK-UP)

PROJECT DISTRIBUTION PERCENTAGES
SINGLE PURPOSE DROP-OFF/PICK-UP TRIPS
TO/FROM STUDENT PASSENGER LOADING ZONE

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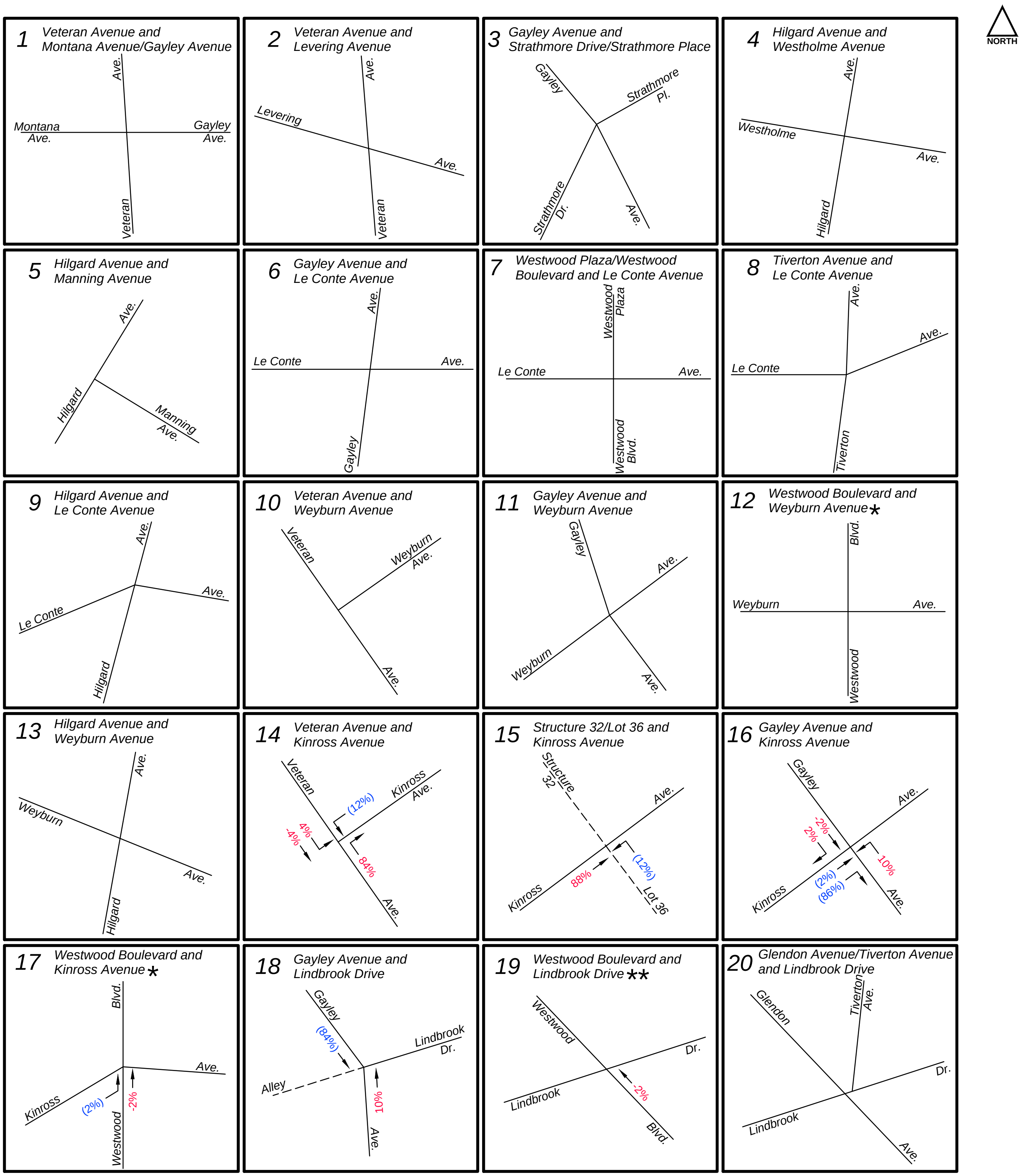

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 5(c)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE OFF-CAMPUS_AM)

PROJECT DISTRIBUTION TRIP PERCENTAGES
STUDENT DROP-OFFS
LINKED TO OFF-CAMPUS TRIPS
AM PEAK HOUR

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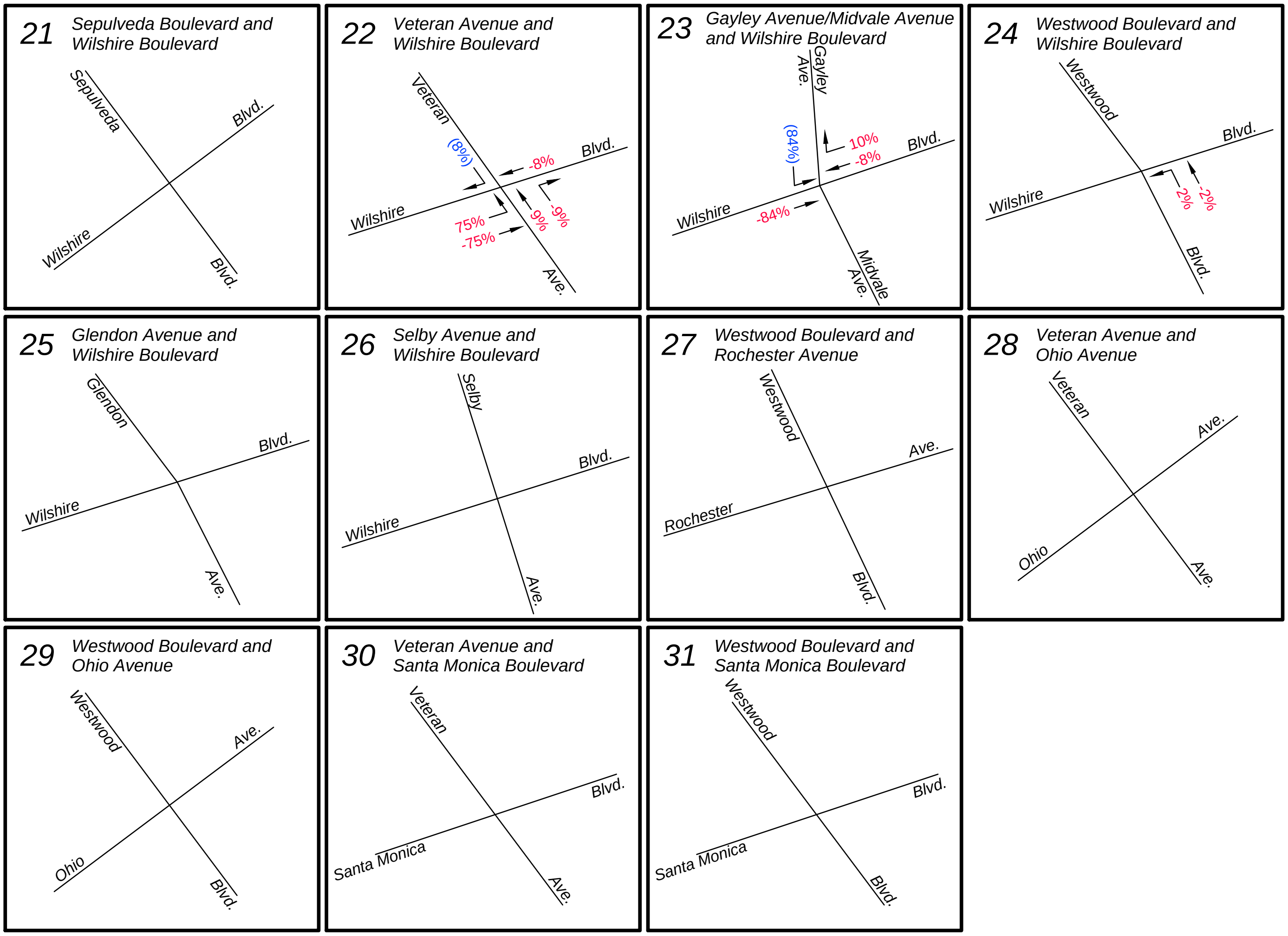
NORTH



LEGEND:
XX% INBOUND PERCENTAGE
(XX%) OUTBOUND PERCENTAGE

FIGURE 5(c)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE OFF-CAMPUS_AM)

PROJECT DISTRIBUTION TRIP PERCENTAGES
STUDENT DROP-OFFS
LINKED TO OFF-CAMPUS TRIPS
AM PEAK HOUR

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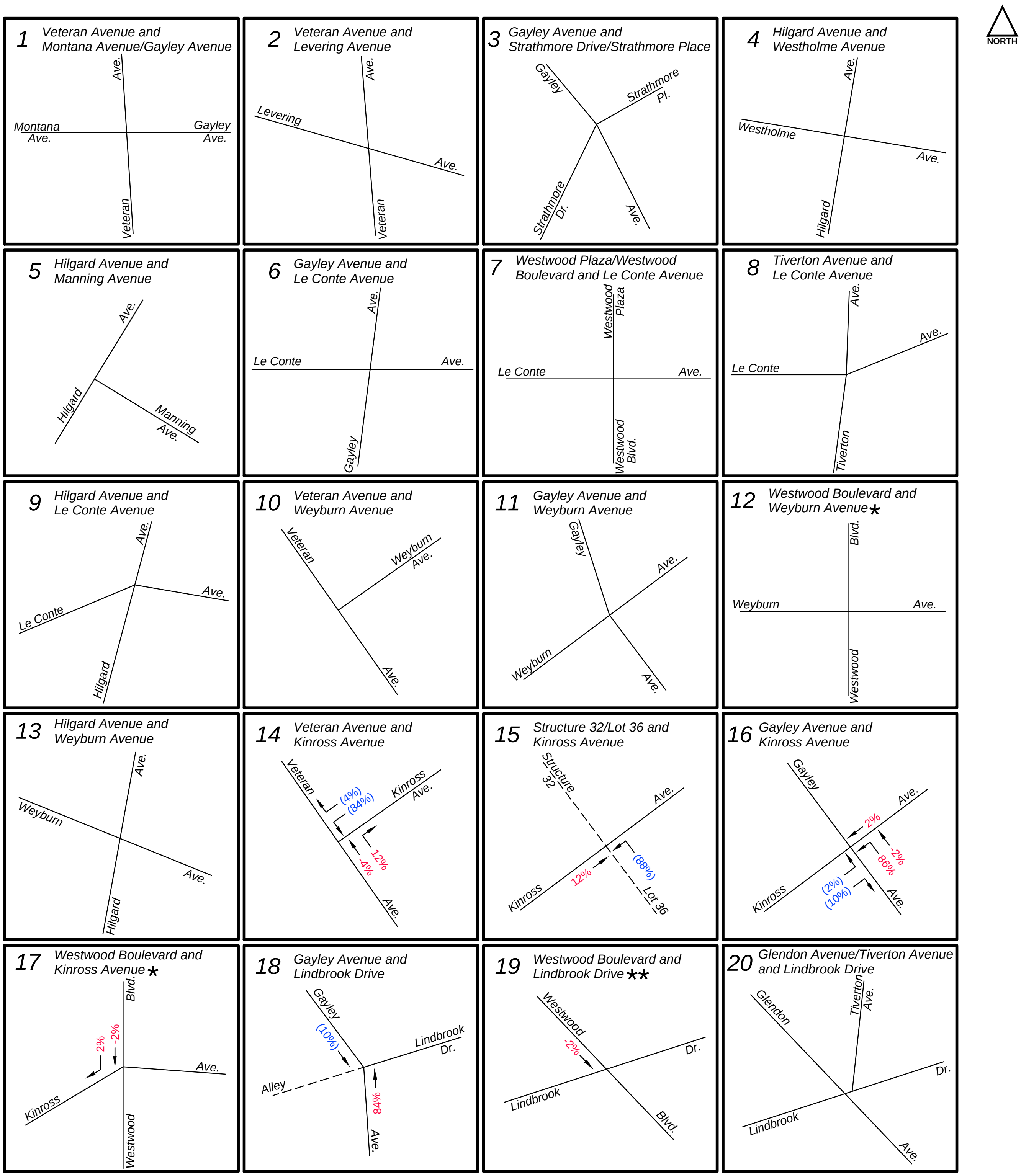

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 5(d)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE OFF-CAMPUS_PM)

PROJECT DISTRIBUTION TRIP PERCENTAGES
STUDENT PICK-UPS
LINKED TO OFF-CAMPUS TRIPS
PM PEAK HOUR

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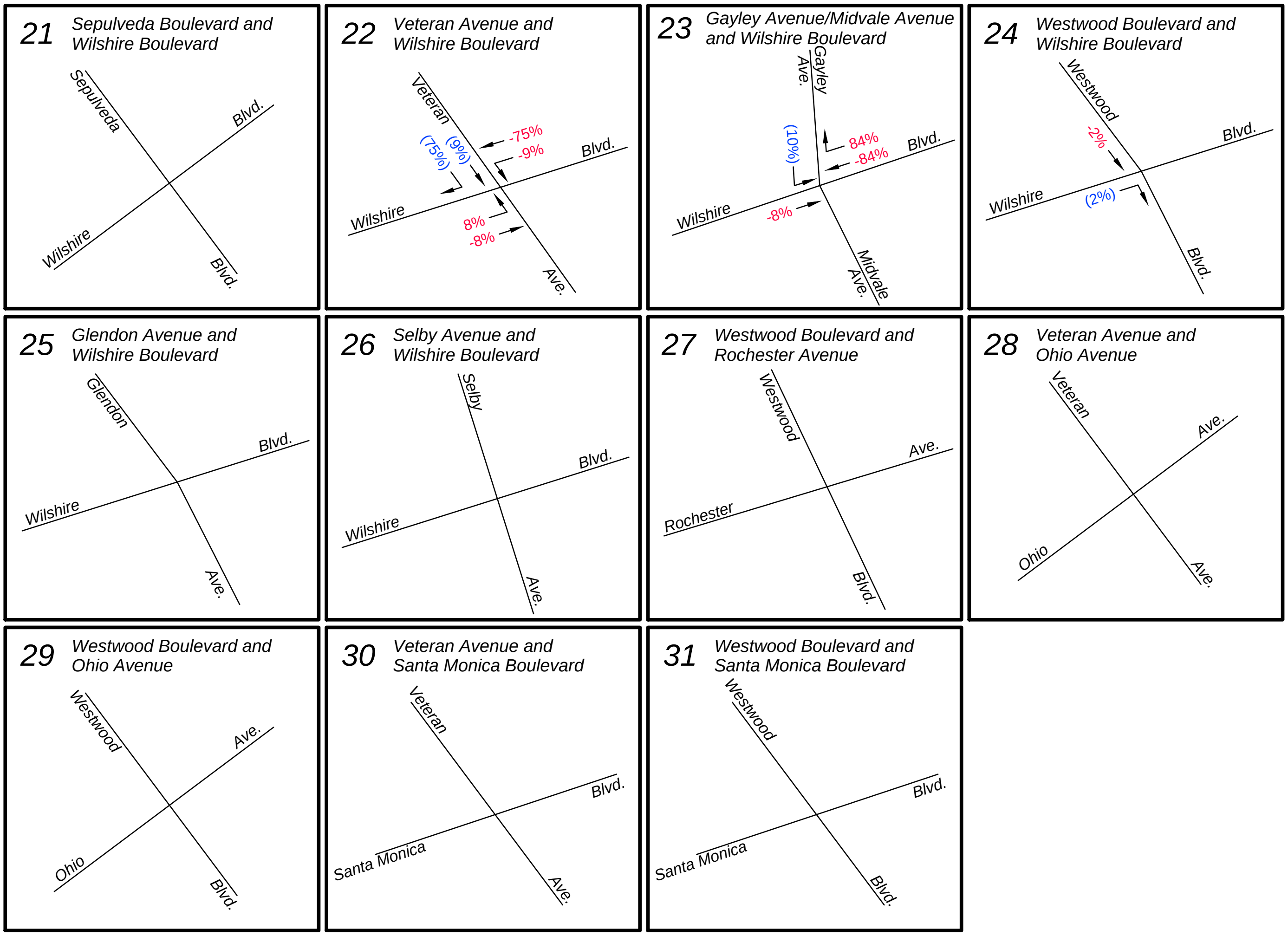

LEGEND:
XX% INBOUND PERCENTAGE
(XX%) OUTBOUND PERCENTAGE

FIGURE 5(d)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE OFF-CAMPUS_PM)

PROJECT DISTRIBUTION TRIP PERCENTAGES
STUDENT PICK-UPS
LINKED TO OFF-CAMPUS TRIPS
PM PEAK HOUR

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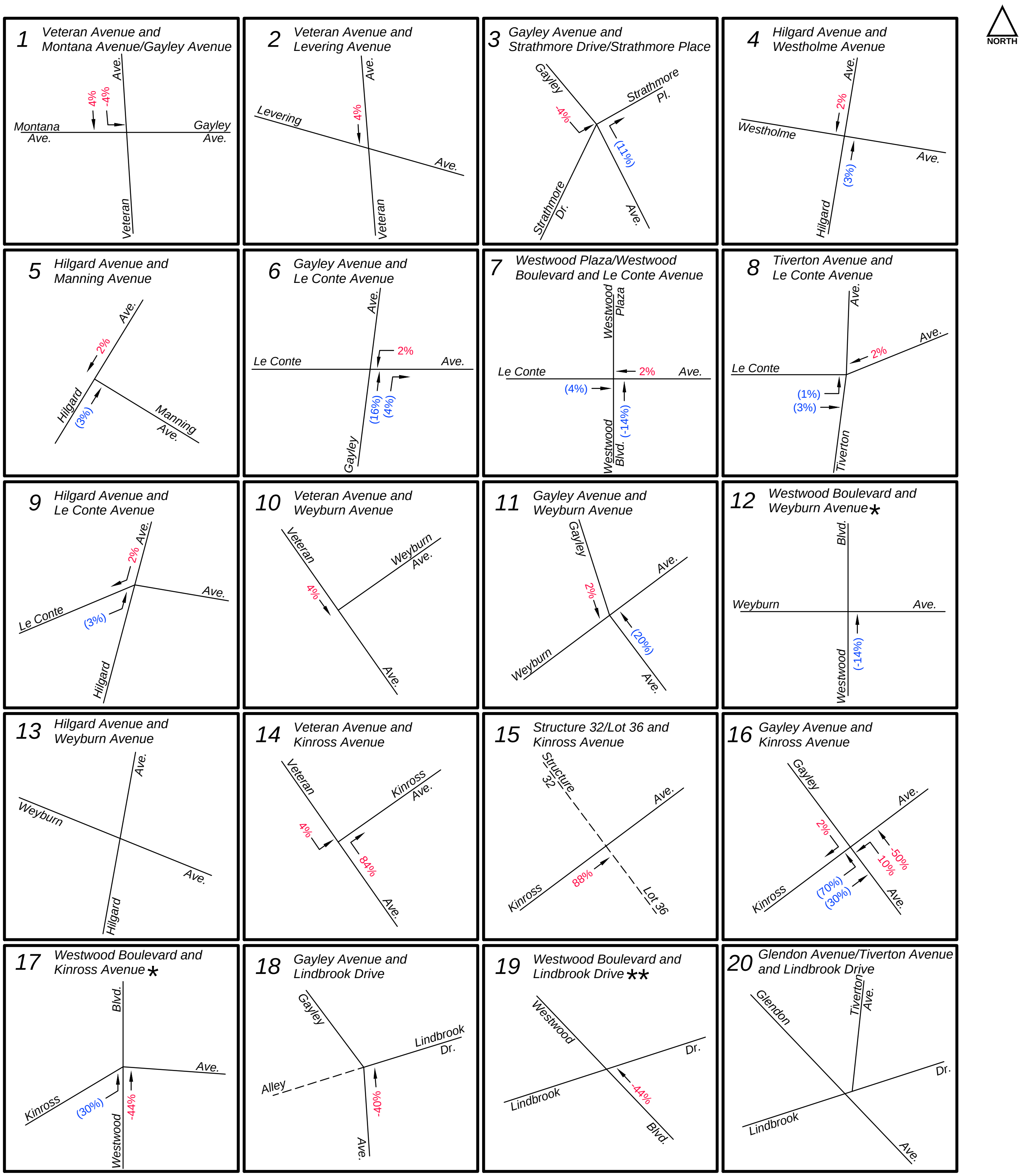

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 5(e)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE_AM)

PROJECT DISTRIBUTION PERCENTAGES
STUDENT DROP-OFFS
LINKED TO UCLA MAIN CAMPUS TRIPS
AM PEAK HOUR

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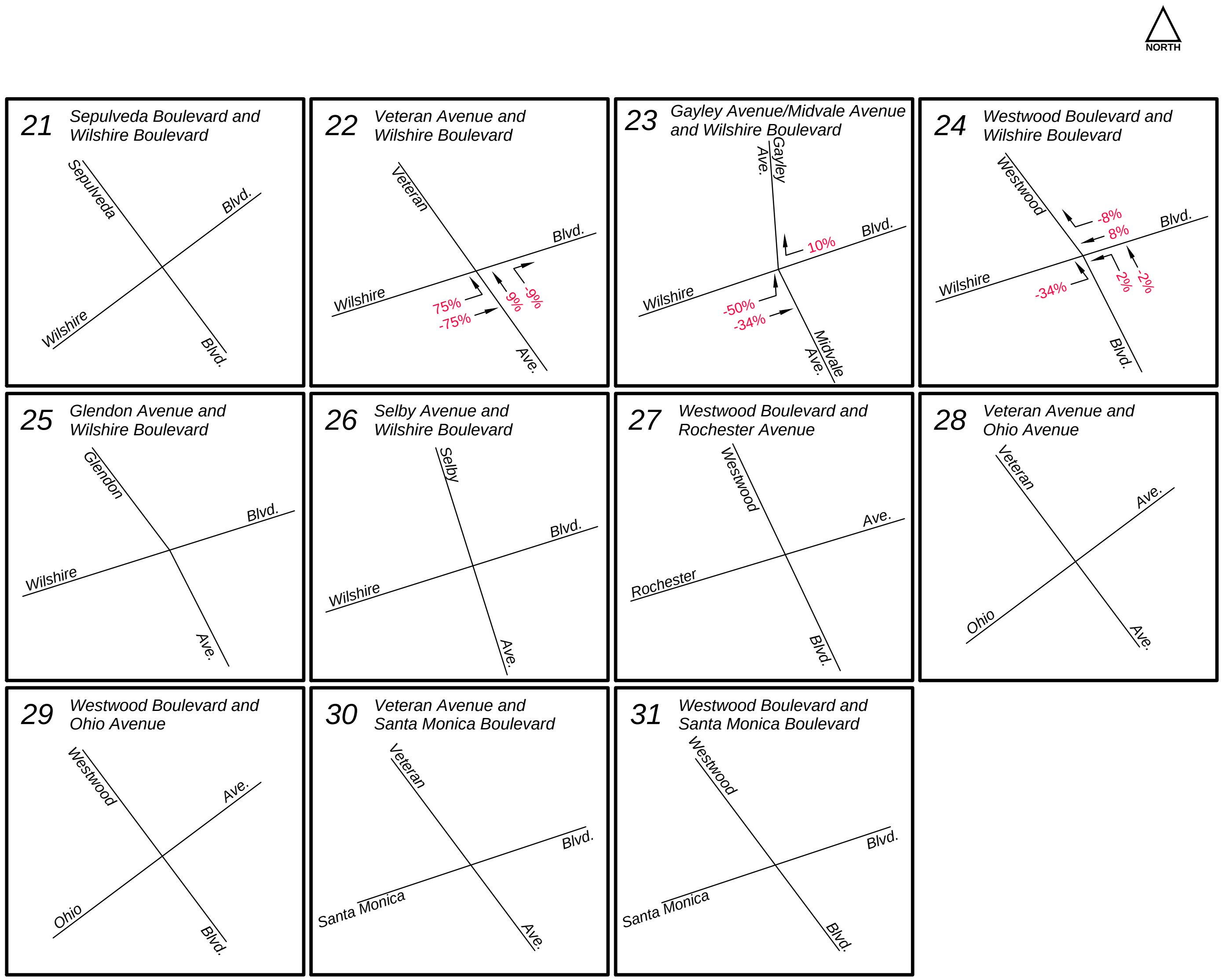

LEGEND:
XX% INBOUND PERCENTAGE
(XX%) OUTBOUND PERCENTAGE

FIGURE 5(e)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE_AM)

PROJECT DISTRIBUTION PERCENTAGES
STUDENT DROP-OFFS
LINKED TO UCLA MAIN CAMPUS TRIPS
AM PEAK HOUR

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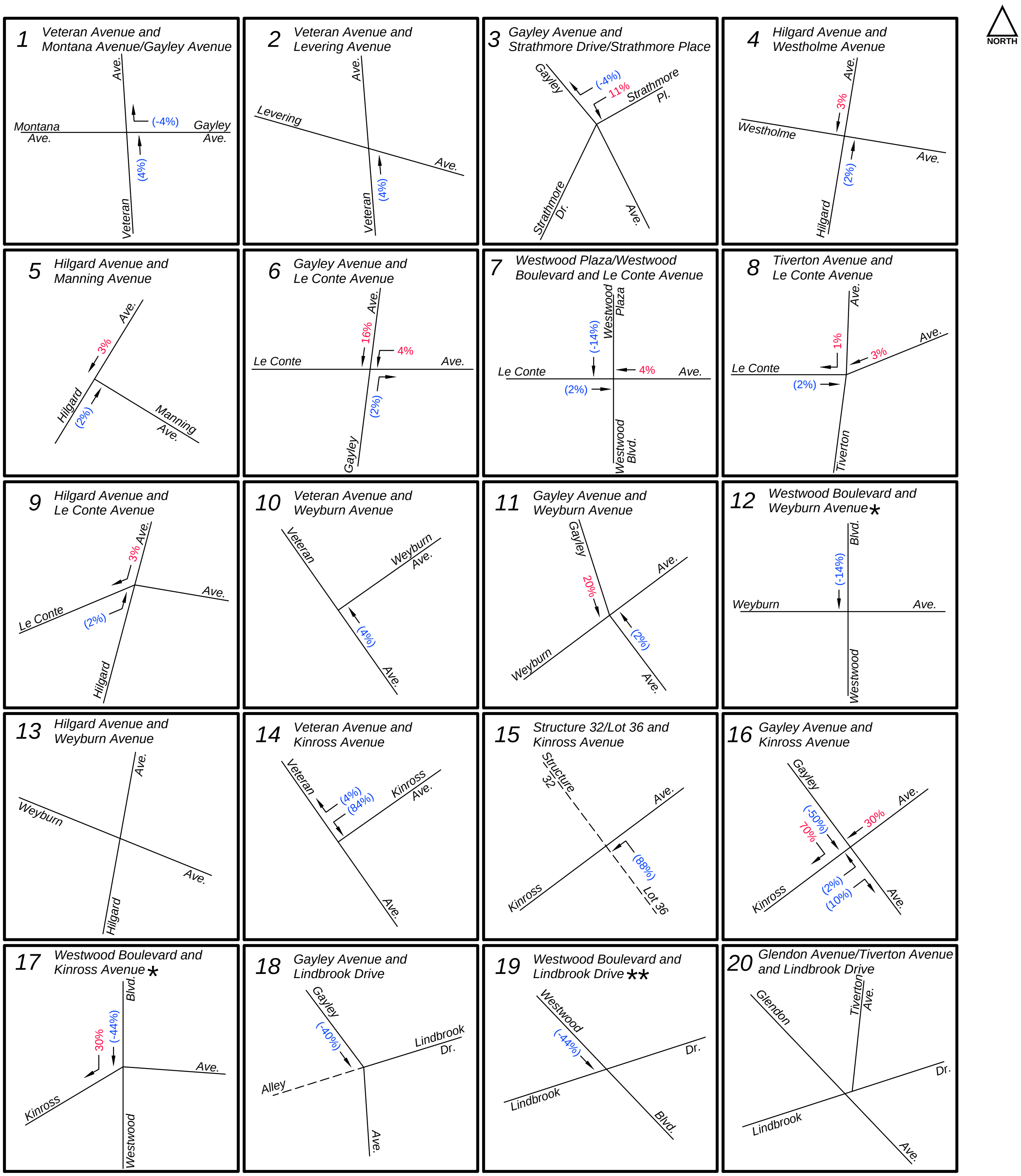

Notes:

* Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 5(f)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE_PM)

PROJECT DISTRIBUTION PERCENTAGES
STUDENT PICK-UPS
LINKED TO UCLA MAIN CAMPUS TRIPS
PM PEAK HOUR

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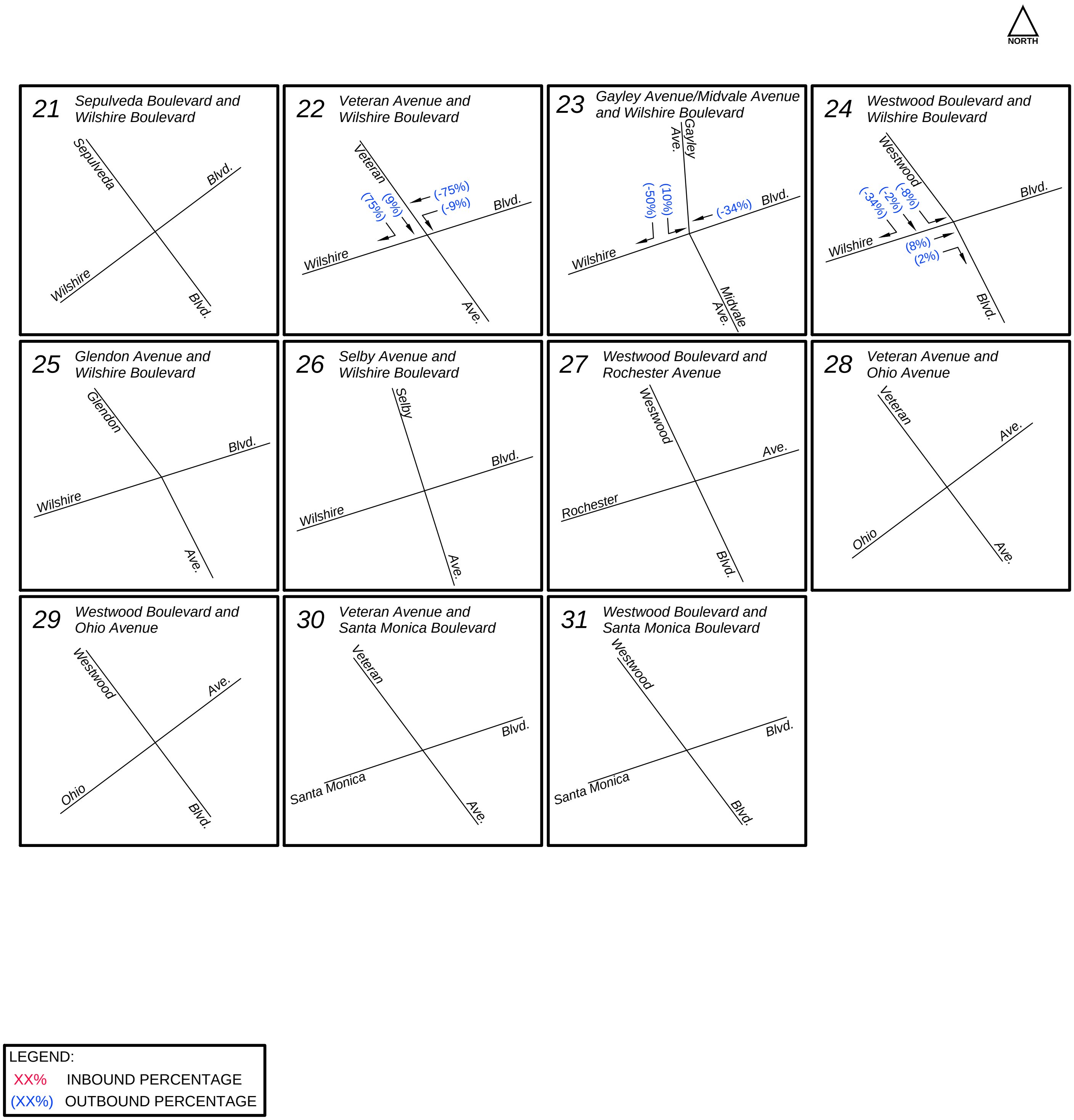

FIGURE 5(f)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(STUDENT LOADING ZONE_PM)

PROJECT DISTRIBUTION PERCENTAGES
STUDENT PICK-UPS
LINKED TO UCLA MAIN CAMPUS TRIPS
PM PEAK HOUR

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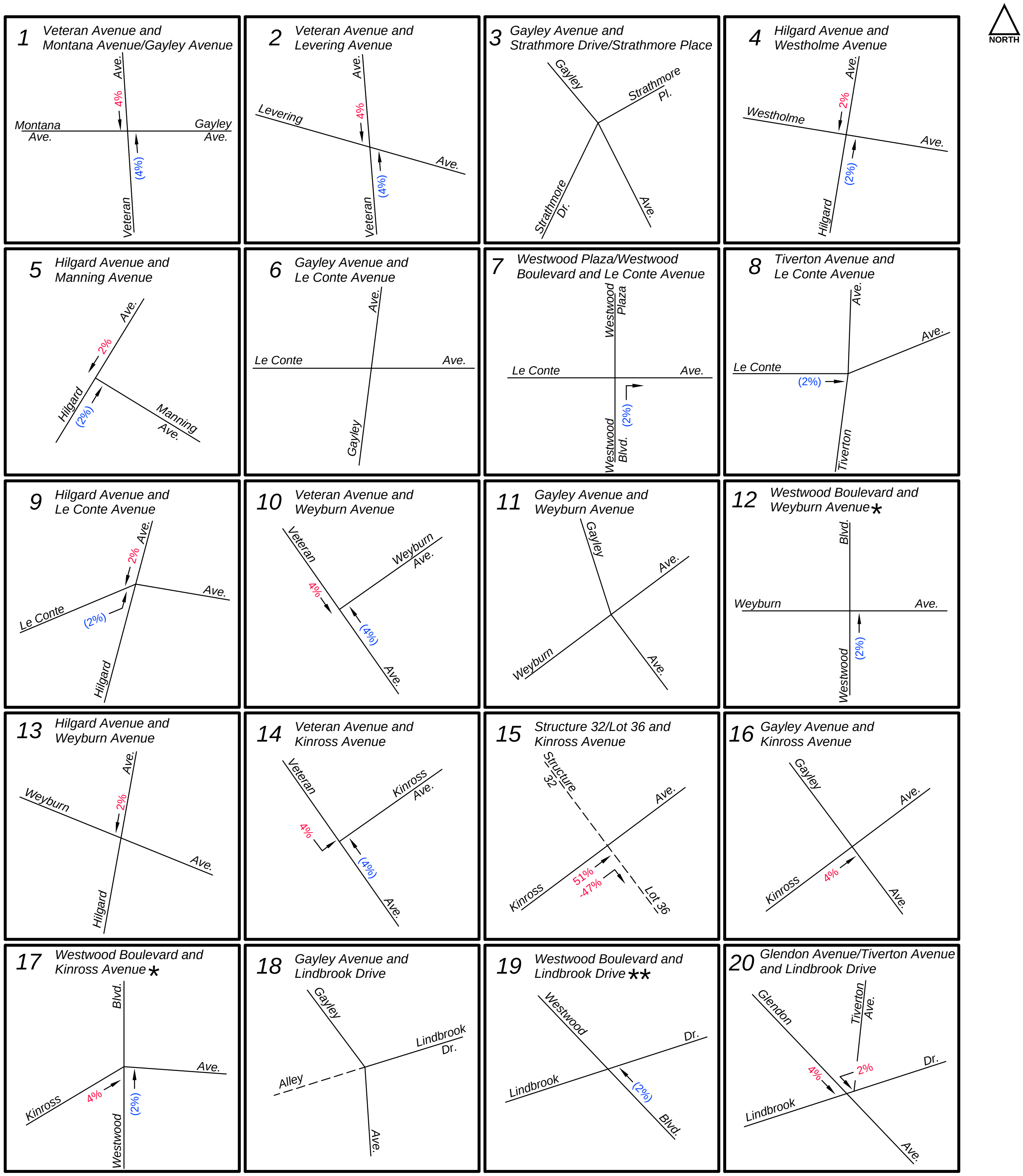

Notes:

* **Southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

** **Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm**

FIGURE 5(g)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(ADMINISTRATIVE)

PROJECT TRIP DISTRIBUTION PERCENTAGES
ADMINISTRATIVE STAFF RELOCATION
FROM KINROSS BLDG. TO OXY BLDG.

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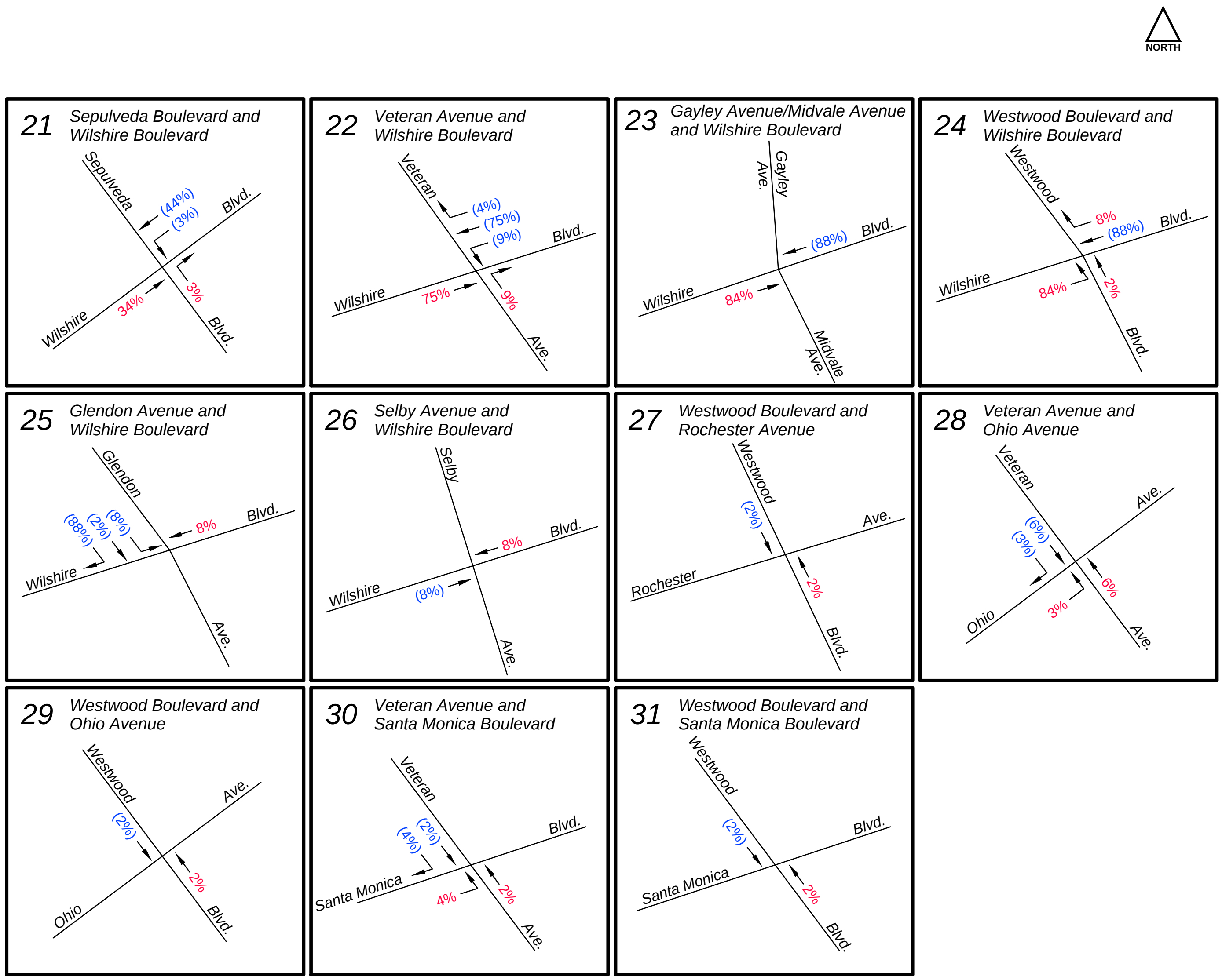

LEGEND:

XX% INBOUND PERCENTAGE

(XX%) OUTBOUND PERCENTAGE

FIGURE 5(g)

4/21/2016

FN: UCLAGeffenAcademy\PROJ-DIST(ADMINISTRATIVE)

PROJECT TRIP DISTRIBUTION PERCENTAGES
ADMINISTRATIVE STAFF RELOCATION
FROM KINROSS BLDG. TO OXY BLDG.

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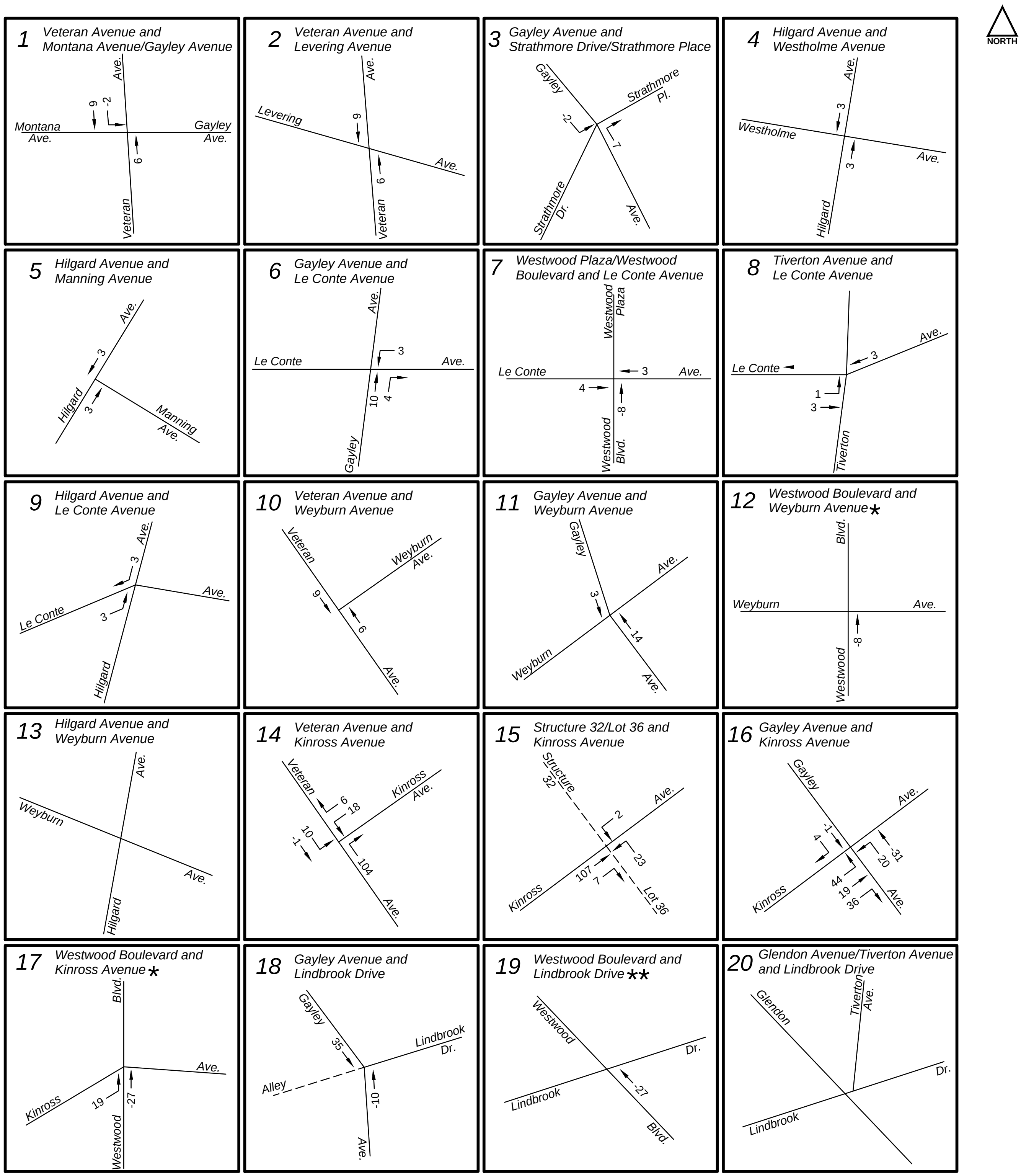

Notes:

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** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 6(a)

4/21/2016

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PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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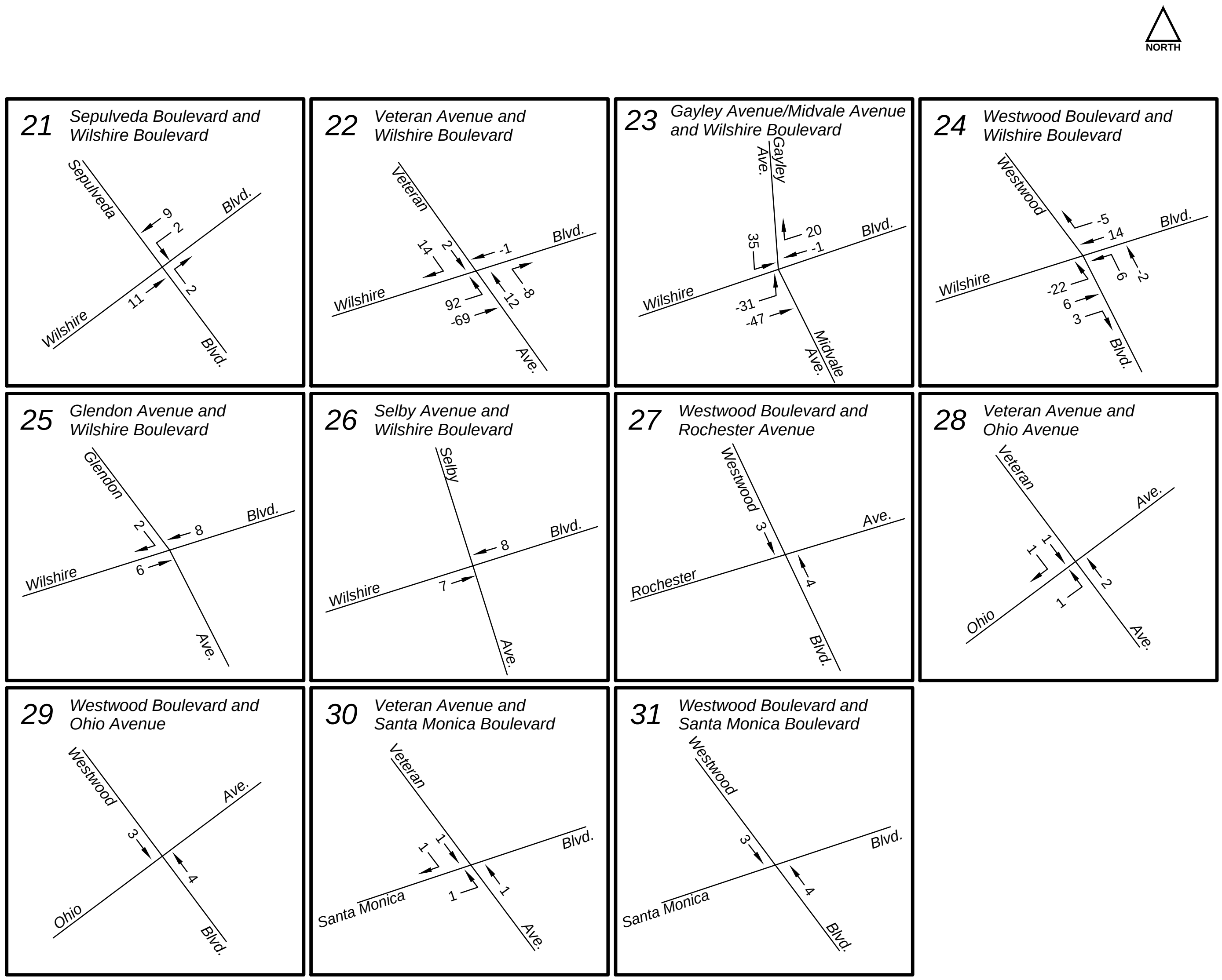

FIGURE 6(a)

4/21/2016

FN: UCLAGeffenAcademy\AMPRJVOL

PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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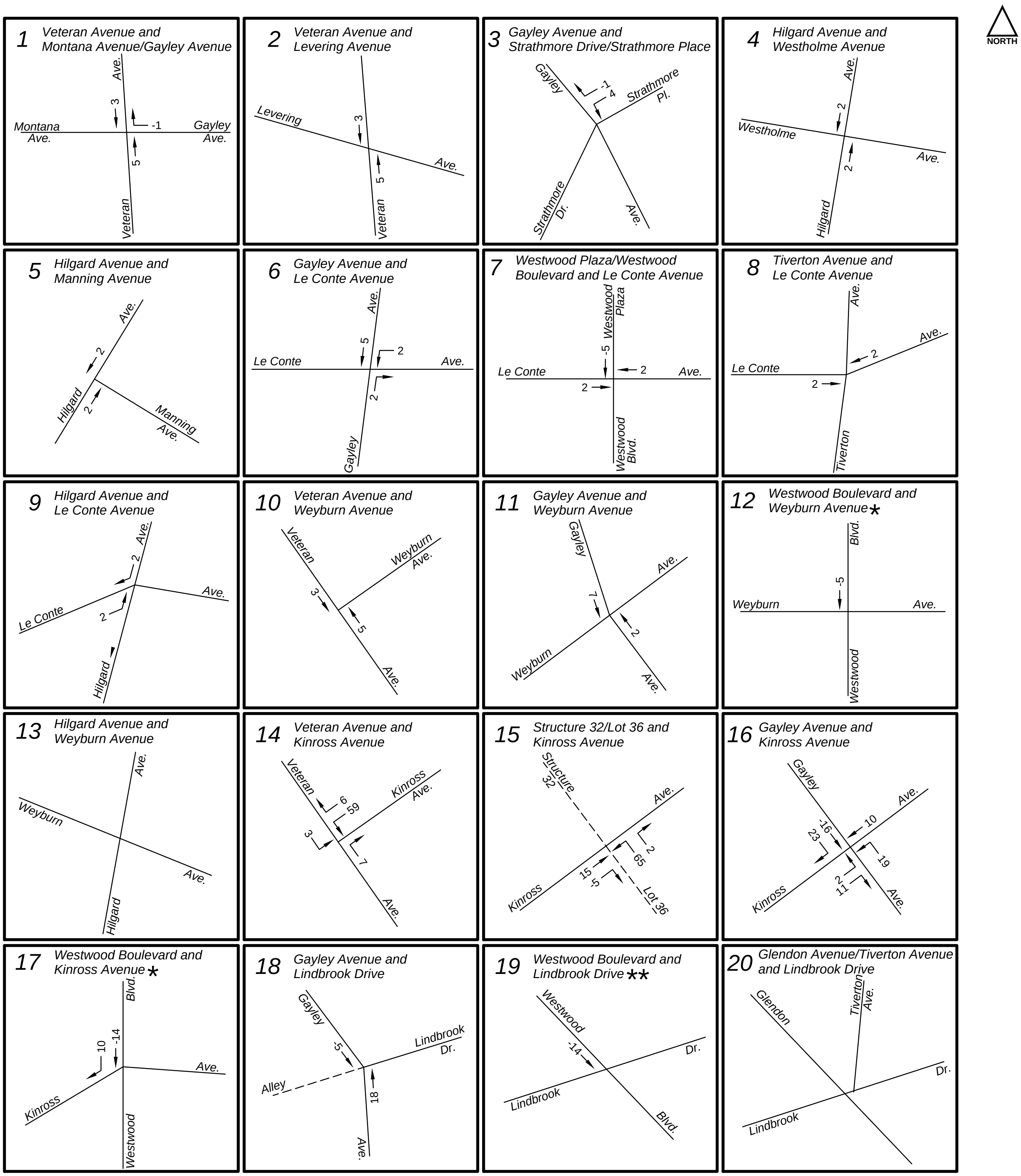

Notes:

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FIGURE 6(b)

4/21/2016

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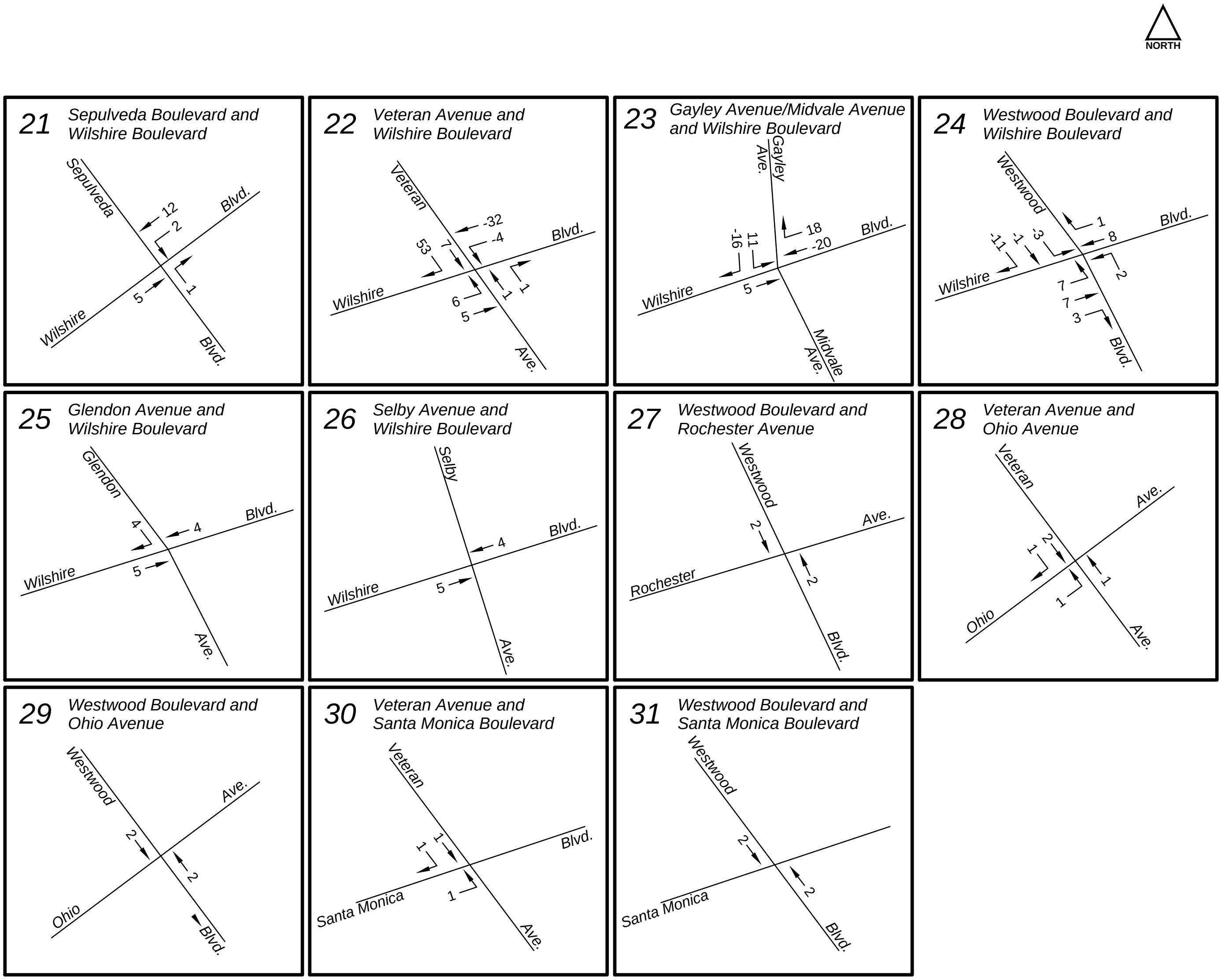

FIGURE 6(b)

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PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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accommodate the Project. Therefore, no parking spaces are anticipated to be available to reduce the commuter student parking waiting list.

The Oxy Building demand from the vacating Occidental Petroleum employees will be replaced by the demand from the relocated Kinross Building administrative staff. The relocating administrative staff demand is estimated to be 112 spaces, which is slightly less than the approximately 120 parking spaces available at the Oxy Building for the three floors they will occupy (i.e. 404 spaces for 10 floors, or about 40 parking spaces per floor, times three floors).

Project Access/Egress

Access to the Geffen Academy drop-off/pick-up zone and on-site parking will be provided via the alley between the Kinross Building and the commercial uses along the west side of Gayley Avenue, which runs south from Kinross Avenue on the east side of the Project site. Turns from either eastbound or westbound Kinross Avenue are permitted at this alley. It should be noted that no access was assumed to be provided directly from the Gayley Avenue and Lindbrook Drive intersection as the alley that forms the westerly approach to this intersection is proposed to be vacated and closed.

Exiting vehicles from the Project site will be able to use a new right-turn exit-only driveway to turn onto eastbound Kinross Avenue. During peak hours they will also be able to circulate through a secondary egress-only gate that connects with Lot 36 and circulate onto westbound Kinross Avenue at the existing signalized Lot 36 driveway. This controlled secondary egress gate will serve to minimize intersection impacts by vehicles destined to areas west of the Project site. Figure 7 illustrates the conceptual drop-off/pick-up for the Project site.

Access to and egress from the Oxy Building will remain unchanged, which is provided by two driveways – one on Westwood Boulevard and one on Glendon Avenue. A center median islands restricts turns at both the Westwood Boulevard and Glendon Avenue driveways to right-turns in and right-turns out only. The Project does not anticipate alterations to the current access and egress configuration for the Oxy Building.

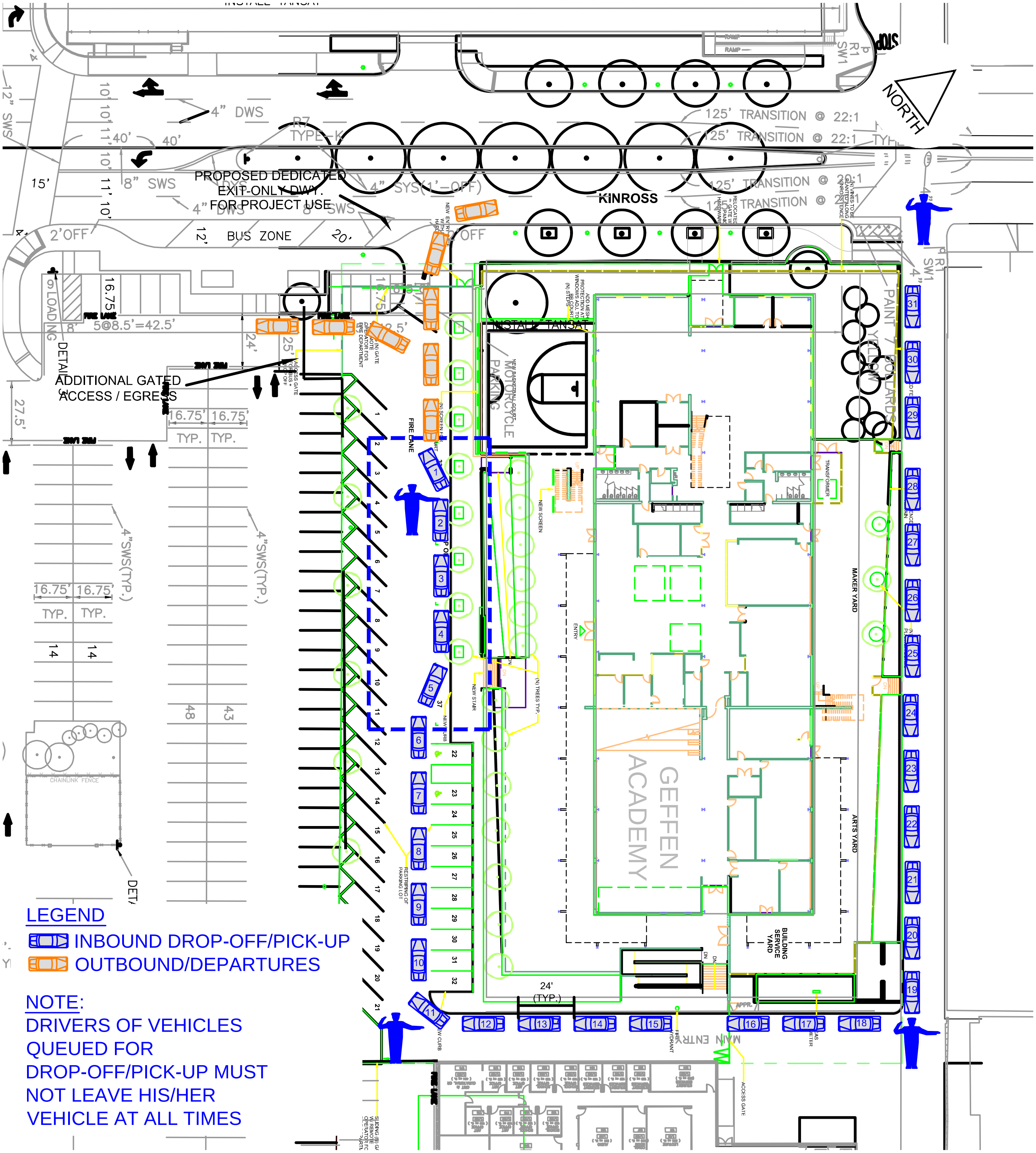

FIGURE 7

4/21/2016

FN: UCLAGeffenAcademy\CAR-QUEUEING20160314

UCLA GEFFEN ACADEMY
CONCEPTUAL DROP-OFF/PICK-UP ROUTE & QUEUING
FOR PASSENGER VEHICLES

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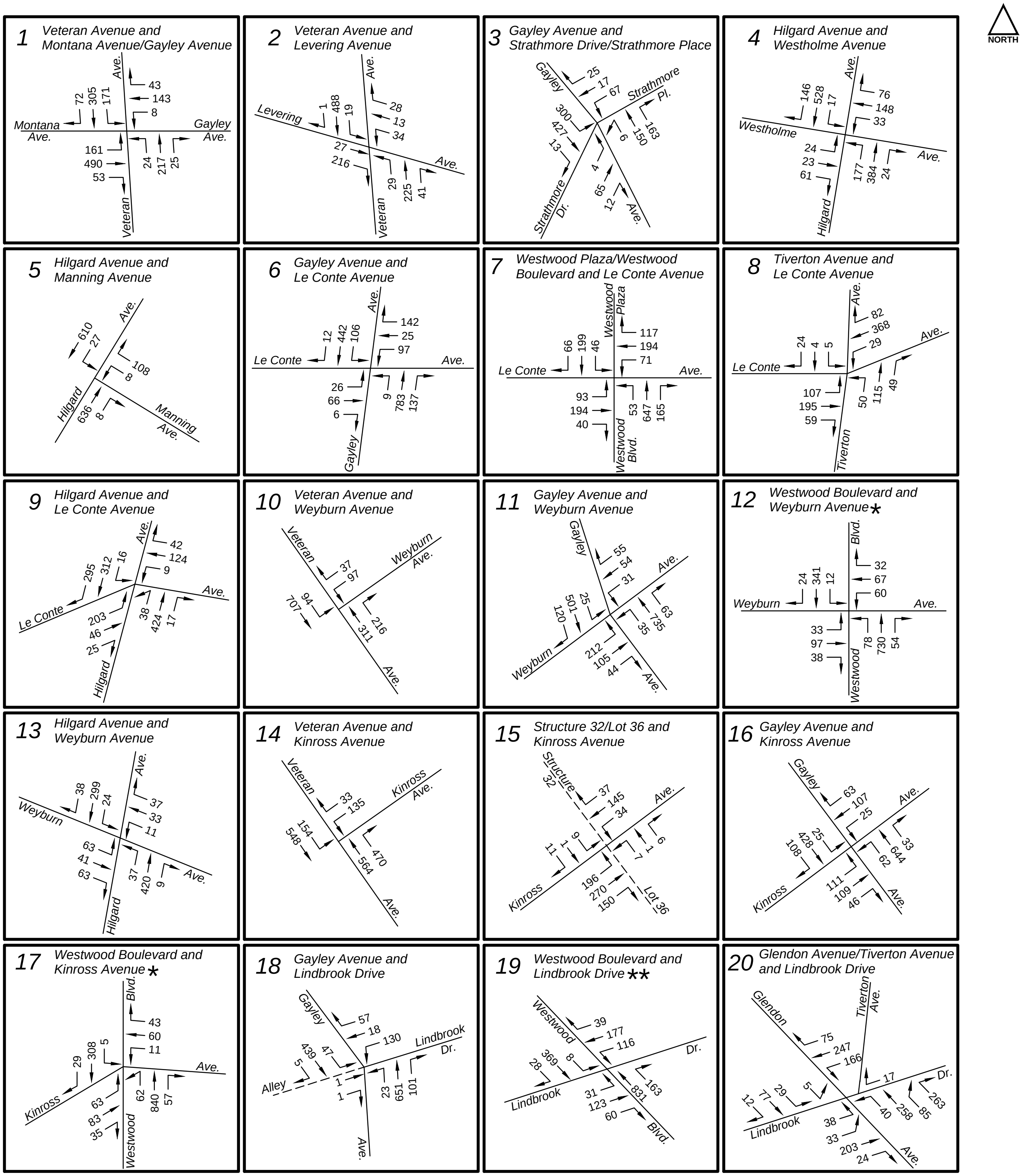
EXISTING PLUS PROJECT TRAFFIC CONDITIONS

The “Existing Plus Project Traffic” conditions are defined by the traffic volumes, roadways, and intersection configurations and controls that currently exist in the year 2016 and the addition of traffic that would be generated by the completed Project. The Project-only traffic volumes that were described in the previous section, which are shown in Figures 6(a) and 6(b), were added to the Existing traffic volumes in Figures 3(a) and 3(b). The Existing Plus Project peak-hour traffic volumes were determined by overlaying the Project traffic volumes in Figures 6(a) and 6(b) onto the existing volumes in Figures 3(a) and 3(b). The combined volumes are presented in Figures 8(a) and 8(b), and were analyzed in accordance with the CMA procedures previously discussed. The Existing Plus Project traffic volumes were used to determine the impacts attributable to the Project, relative to existing volumes. (The LOS analysis worksheets for Existing Plus Project conditions are provided in Appendix C.) Ambient and Related Projects traffic growth, and any future roadways or infrastructure improvements, were not included in this analysis, as this analysis is of the Existing condition for the year 2016.

As shown in Table 8, pages 74-75, the addition of Project traffic volumes to existing volumes would increase the study intersection V/C ratios during both peak hours. There would be no change to the LOS designations at any of the study intersections. However, there would be one significant impact during the PM peak-hour at the intersection of Veteran Avenue and Wilshire Boulevard (Intersection 22) due to the Project. The definition of a significant traffic impact and its determination are described in Table 9, page 76. The intersection of Veteran Avenue and Wilshire Boulevard being identified as impacted under Existing conditions is consistent with this intersection being one of the locations impacted under Future conditions. Additionally, this intersection is identified in the 2008 LRDP EIR as being significantly impacted.



Notes:

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** Northbound left-turn movement prohibited from 7:00 am - 10:00 am, 3:00 pm - 7:00 pm; southbound left-turn movement prohibited from 4:00 pm - 7:00 pm

FIGURE 8(a)

4/21/2016

FN: UCLAGeffenAcademy\AM2016WP

EXISTING (2016) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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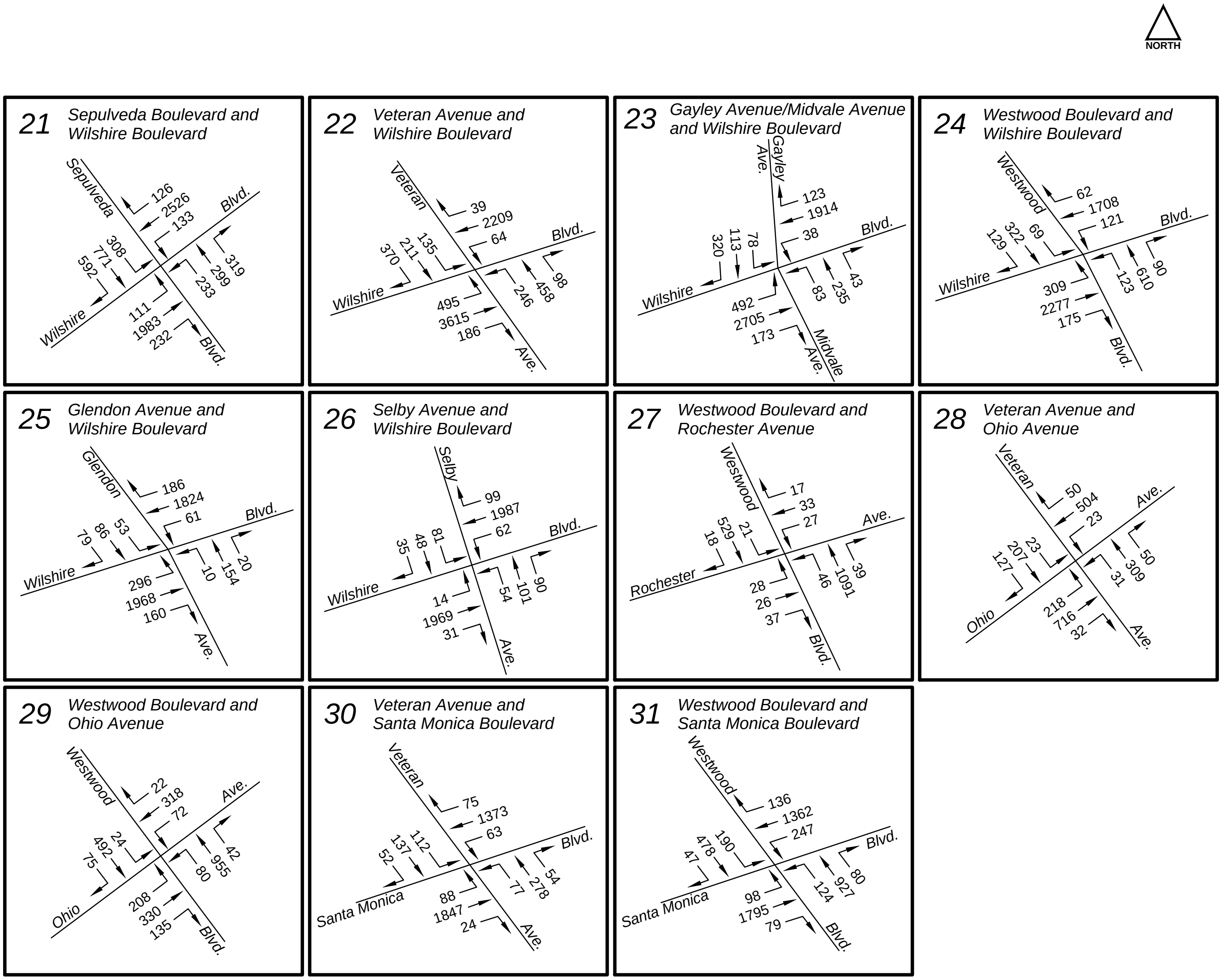

FIGURE 8(a)

4/21/2016

FN: UCLAGeffenAcademy\AM2016WP

EXISTING (2016) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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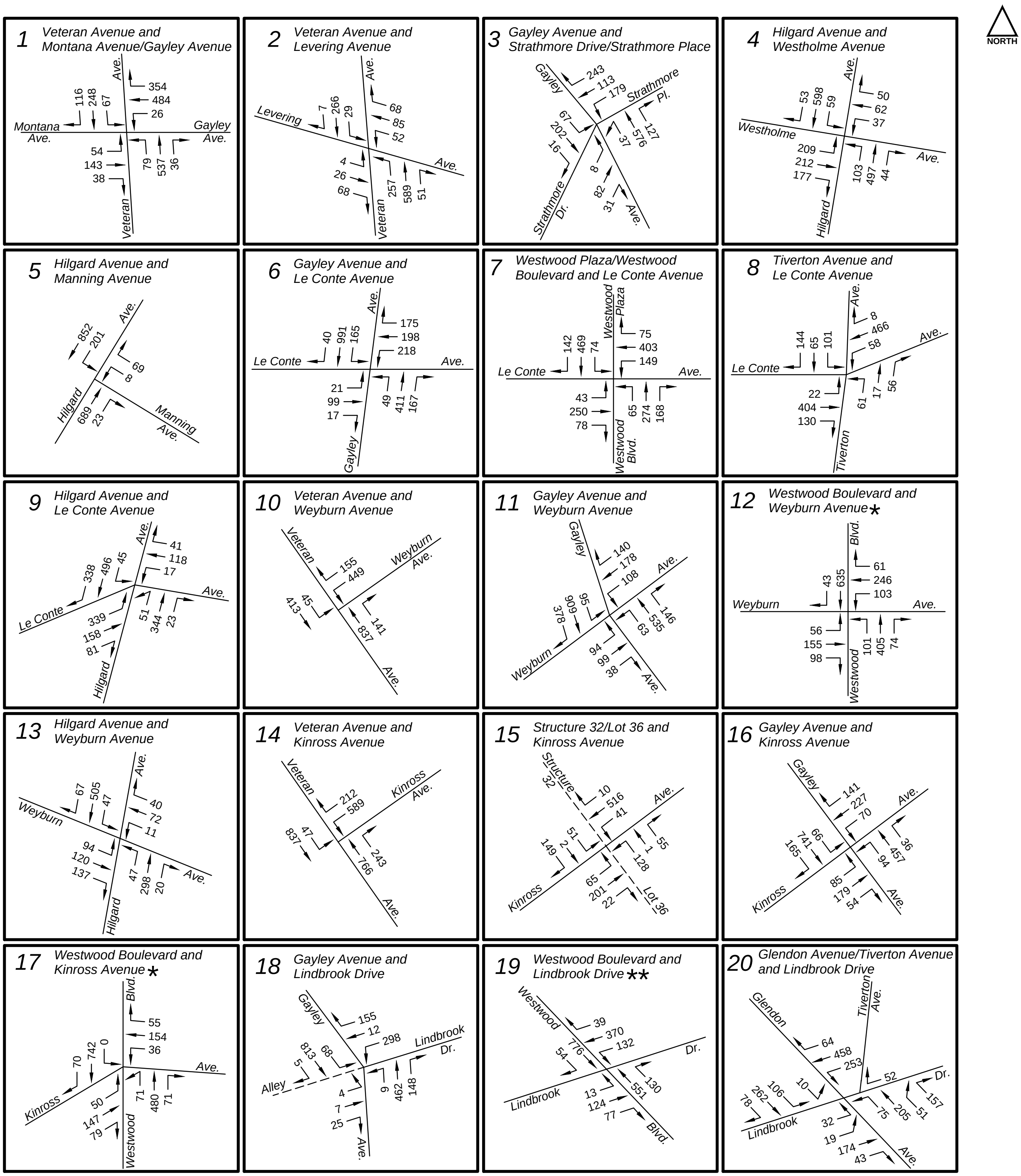

Notes:

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FIGURE 8(b)

4/21/2016

FN: UCLAGeffenAcademy\PM2016WP

EXISTING (2016) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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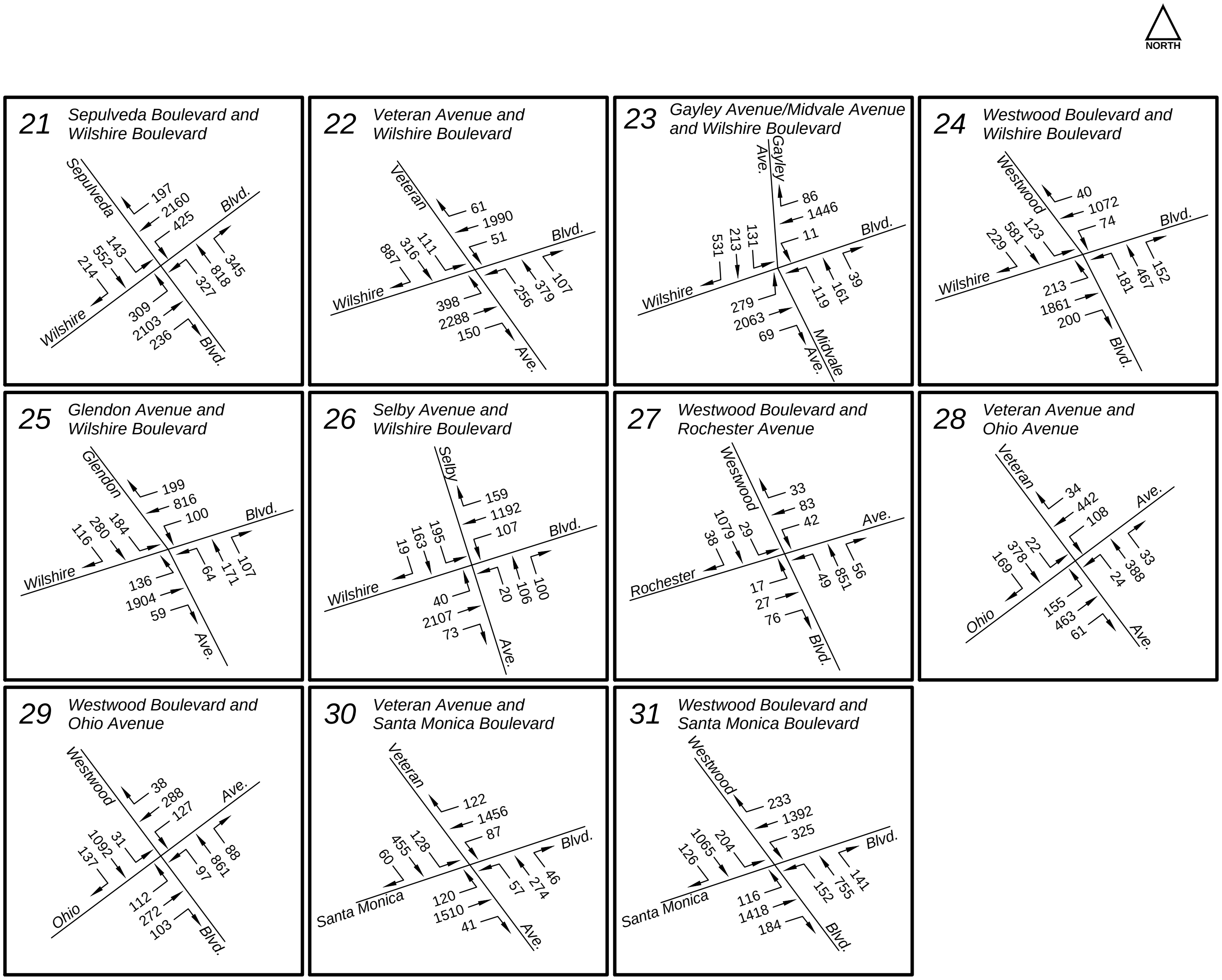

FIGURE 8(b)

4/21/2016

FN: UCLAGeffenAcademy\PM2016WP

EXISTING (2016) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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FUTURE TRAFFIC CONDITIONS

Existing traffic is forecast to increase due to traffic growth from two sources. One source is the ambient growth in traffic, which reflects increases in traffic due to regional growth, comprised of not yet proposed projects in the study area and development outside the study area. The other source is traffic attributable to projects in the vicinity of the study area that are proposed, entitled or under construction, commonly referred to as "Related Projects." The combined traffic volume increases from these two sources provided the basis for the analysis of the "Future Without Project" condition. Project traffic was then analyzed as an incremental addition to the Future Without Project traffic volumes, forming the traffic volumes for the "Future With Project" condition.

Ambient Traffic Growth

An ambient growth factor of 1.0 percent per year was applied to the Existing (2016) traffic volumes to reflect the effects of regional growth and development over a four-year period through the study year of 2020. This is the year the Project is anticipated to be complete. This growth-factoring established the future baseline volumes for the analysis.

Related Projects Traffic

This study also considered the impacts of the Project relative to Related Projects proposed, approved or under construction in the study area that could contribute traffic volumes to the study intersections through the year 2020. A listing of current Related Projects within approximately 1.5 miles of the Project site was provided by LADOT. Additional research was conducted on the City of Los Angeles Department of City Planning website, on the Los Angeles Unified School District website, and in discussion with UCLA. A total of 19 Related Projects were identified as contributors of potentially significant traffic volumes to the study intersections. The locations of the 19 Related Projects are illustrated in Figure 9.

The descriptions and trip generations of the Related Projects are summarized in Table 7. The Related Projects listing obtained from LADOT also contained the corresponding AM and PM peak-hour trip generations, which were used in the analysis. In addition to the LADOT trip generations, Related Projects peak-hour trip generations were applied from several traffic studies that included the Lindbrook Avenue and Gayley Mixed-Use Project, Le Conte Avenue and Gayley Mixed-Use Project, Wilshire Gayley Project, Veterans Affair West Los Angeles

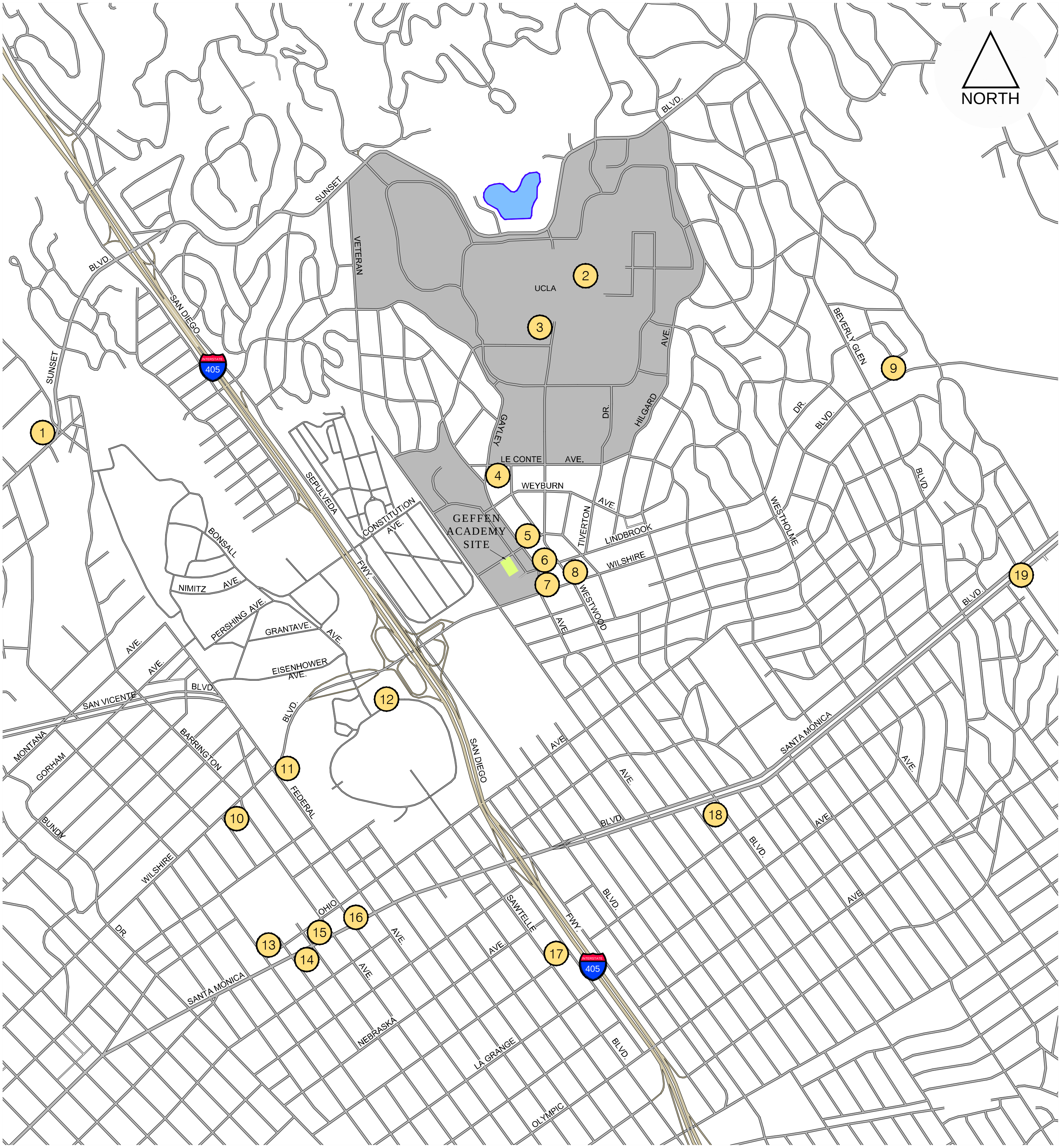

FIGURE 9

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FN: UCLAGeffenAcademy\RELPROJS

RELATED PROJECTS LOCATION MAP

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Table 7
Related Projects Descriptions and Trip Generations

	PROJECT NAME	ADDRESS	SIZE		PROJECT DESCRIPTION	DAILY	AM PK HR IN	AM PK HR OUT	AM PK HR TOTAL	PM PK HR IN	PM PK HR OUT	PM PK HR TOTAL
1.	Archer School for Girls	11725 W Sunset Boulevard [1]	518	stu	School	1,184	61	43	104	174	42	216
2.	UCLA Northwest Housing Infill Project & LRDP Amendment	UCLA	550,000	sf	School	6,397	358	89	447	177	413	590
3.	UCLA Meyer & Renee Luskin Conference Center	UCLA (PS 6), corner of Westwood Plaza & Strathmore Drive	255,000	sf	Conference Center	870	70	29	99	57	97	154
	& Guest Center Project				Guest Center							
4.	Le Conte/Gayley Mixed-Use Project	10970 Le Conte Avenue [4]	32,803	sf	Medical-Dental Office	627	25	(5)	20	10	60	70
			5,736	sf	Specialty Retail							
5.	Cava Grill Restaurant	1073 S Broxton Avenue [5]	2,328	sf	Retail	449	0	0	0	8	7	15
6.	Lindbrook/Gayley Mixed-Use Project	10925 Lindbrook Drive/1130 S Gayley Avenue [6]	34	du	Apartments	459	7	17	24	22	21	43
			5,250	sf	Specialty Retail							
7.	Westwood Hotel	10955 W Wilshire Boulevard [7]	7,265	sf	Other	2,094	51	36	87	(32)	125	93
			134	rm	Other							
			10	du	Condominiums							
			6,510	sf	Retail							
			9,975	sf	Other							
			250	du	Apartments							
8.	Oxy Building	10899 Wilshire Boulevard[8]	166,000	sf	General Office	1,831	228	31	259	42	205	247
9.	Apartments	888 S Devon Avenue [5]	32	du	Apartments	213	3	13	16	10	6	16
10.	Landmark Apartments	11750 W Wilshire Boulevard [5]	376	du	Mixed Use	(400)	(22)	99	77	(22)	(64)	(86)
11.	Office Project	11600 W Wilshire Boulevard [9]	120,160	sf	Office	1,280	34	9	43	38	97	135
			120,874	sf	Other							
12.	VA West Los Angeles Medical Center	VA West Los Angeles [10]	1,840	du	Apartments	8,510	(82)	649	567	405	(162)	243
			797	bd	Assisted Living							
			6,280	sf	Community Center							
			4,100	sf	General Office							
			450,000	sf	Hospital/Research							
			7	ac	Other							
13.	YMCA	1466 S Westgate Avenue [5]	65,000	sf	Other	1,204	52	33	85	27	46	73
14.	Mixed-Use Project	11800 W Santa Monica Boulevard [5]	175	du	Apartments	1,824	13	64	77	115	89	204
			45,000	sf	Retail							
15.	Mixed-Use Project	11701 W. Santa Monica Boulevard [8]	53	du	Apartments	251	0	18	18	12	3	15
			1,500	sf	Retail							
16.	Vons Supermarket	11660 W Santa Monica Boulevard [9]	53,230	sf	Supermarket	1,946	51	32	83	37	36	73
17.	Mixed-Use Project	1900 S Sawtelle Boulevard [5]	52	du	Mixed Use	327	13	28	41	25	13	38
18.	Mixed-Use Project	1855 Westwood Boulevard [5]	30	du	Mixed Use	200	2	12	14	20	16	36
19.	Century City Shopping Center	10250 W Santa Monica Boulevard [5]	73,008	sf	Retail	1,350	16	10	26	69	75	144
						30,616	**881**	**1,206**	**2,087**	**1,194**	**1,125**	**2,319**

Source:

[1] Archer Forward: Campus Preservation and Improvement Plan Transportation Analysis Report, prepared by Fehr & Peers on 2/2014.

[2] Traffic Impact Study UCLA NHIP & LRDP Amendment, prepared by Iteris on 10/2008.

[3] Traffic Impact Study for UCLA Meyer & Renee Luskin Conference & Guest Center, prepared by Iteris on 5/2012.

[4] Traffic Impact Study for Le Conte/Gayley Mixed-Use Project in Westwood Village, prepared by Crain & Associates on 5/5/2014.

[5] Trip generation from LADOT database.

[6] Traffic Assessment of Lindbrook/Gayley Mixed-Use Project in Westwood, prepared by Crain & Associates on 1/28/2013.

[7] Traffic Study for Wilshire Gayley Project, prepared by Fehr & Peers on 3/2009.

[8] ITE Trip Generation Manual, 9th Edition including standard adjustments adopted by LADOT.

[9] Trip generation from LADOT database; AM and PM inbound/outbound split not provided, splits generated from ITE Trip Generation Manual, 9th Edition.

[10] Traffic and Parking Analysis for Department of Veteran Affairs West LA Medical Center Master Plan Development, prepared by Crain & Associates on 12/4/2015.

ac	Acre	rm	Room
bd	Bed	sf	Square feet
du	Dwelling unit	stu	Student

Medical Center Master Plan Development, and Archer Forward: Campus Preservation and Improvement Plan Transportation Analysis Report. Additionally, two UCLA Related Projects were included as part of the analysis. These included the 2008 UCLA NHIP and LRDP Amendment and the 2012 UCLA Meyer and Renee Luskin Conference and Guest Center Project. The trip generation estimates for these two projects was taken from the EIRs for these projects. It should be noted that the Luskin Conference and Guest Center, as well as the Geffen Academy, have been accounted for in the 2008 LRDP analysis. Therefore, these projects have been incorporated as separate stand-alone projects along with the inclusion into the overall LRDP in an effort to provide the most conservative analysis.

The distribution and assignment of the Related Projects trips to the study area street system were estimated using assumptions and procedures similar to those previously described for the Project trips and/or applied from the traffic studies noted previously. The total Related Projects volumes at the study intersections are depicted in Figures 10(a) and 10(b) for the respective AM and PM peak hours.

Highway System Improvements

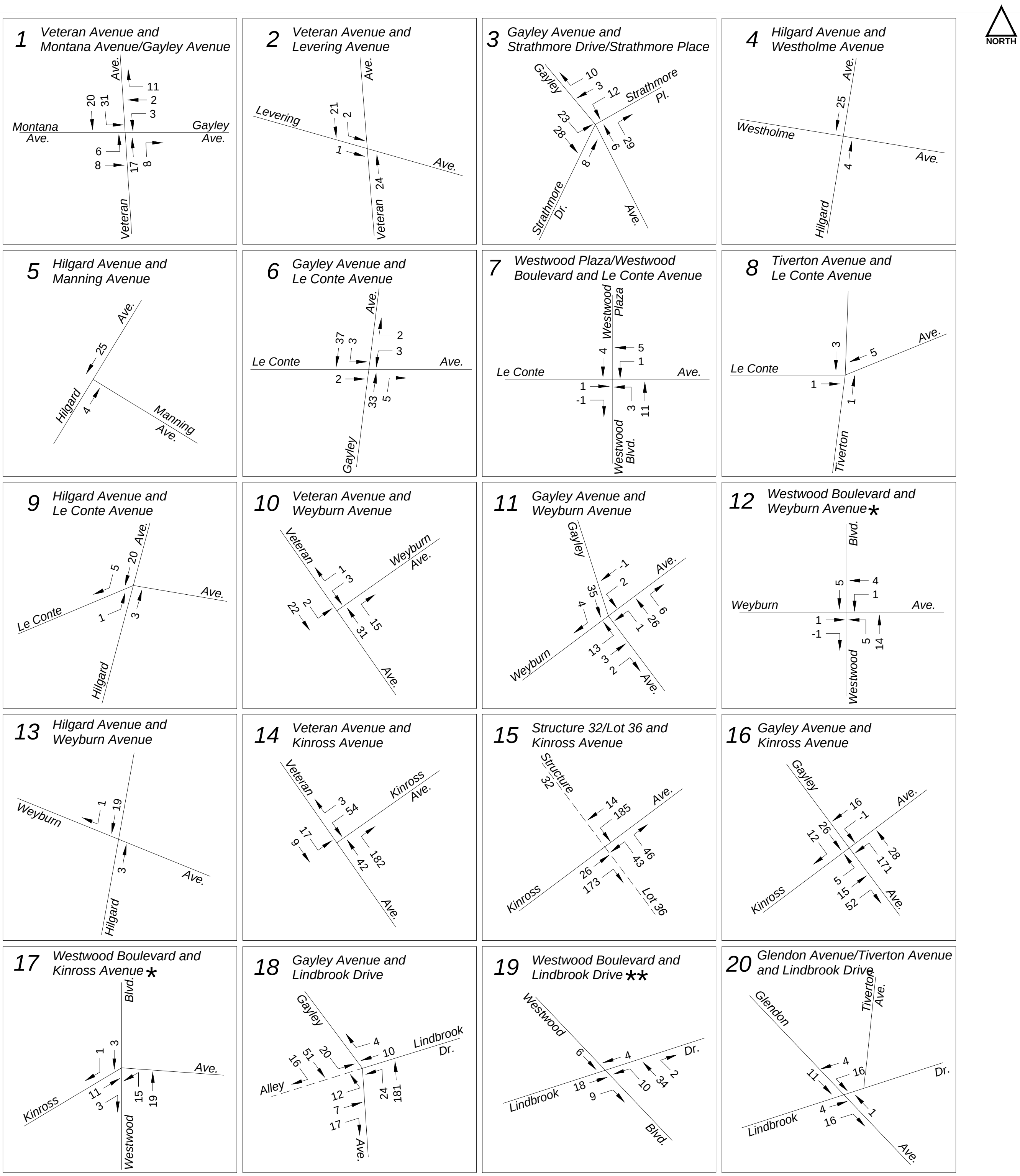
As previously discussed, all of the study intersections are operating under ATSAC/ATCS. The intersection capacity improvement attributable to ATSAC/ATCS has been incorporated into the analysis of existing and future conditions.

The analysis of Future conditions included a review of the Bureau of Engineering's "Uniform Project Reporting System" website for potential street improvements that could affect capacity at the study intersections. Based on a review of future improvements, no highway system improvements are expected in the study area in future conditions.

Analysis of Future Traffic Conditions, Without and With Project

The analysis of traffic conditions at the study intersections for the future study year of 2020 was performed using the analysis procedures previously described. The current traffic lane configurations and signal operations at the study intersections were assumed to prevail in the future year.

Traffic volumes for the Future Without Project condition are shown in Figures 11(a) and 11(b). These volumes were determined by combining the ambient growth-factored existing volumes with the total Related Projects volumes.



Notes:

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** **Northbound left-turn movement prohibited from 7:00am - 10:00am, 3:00pm - 7:00pm; southbound left-turn movements prohibited from 4:00pm - 7:00pm**

FIGURE 10(a)

4/21/2016

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RELATED PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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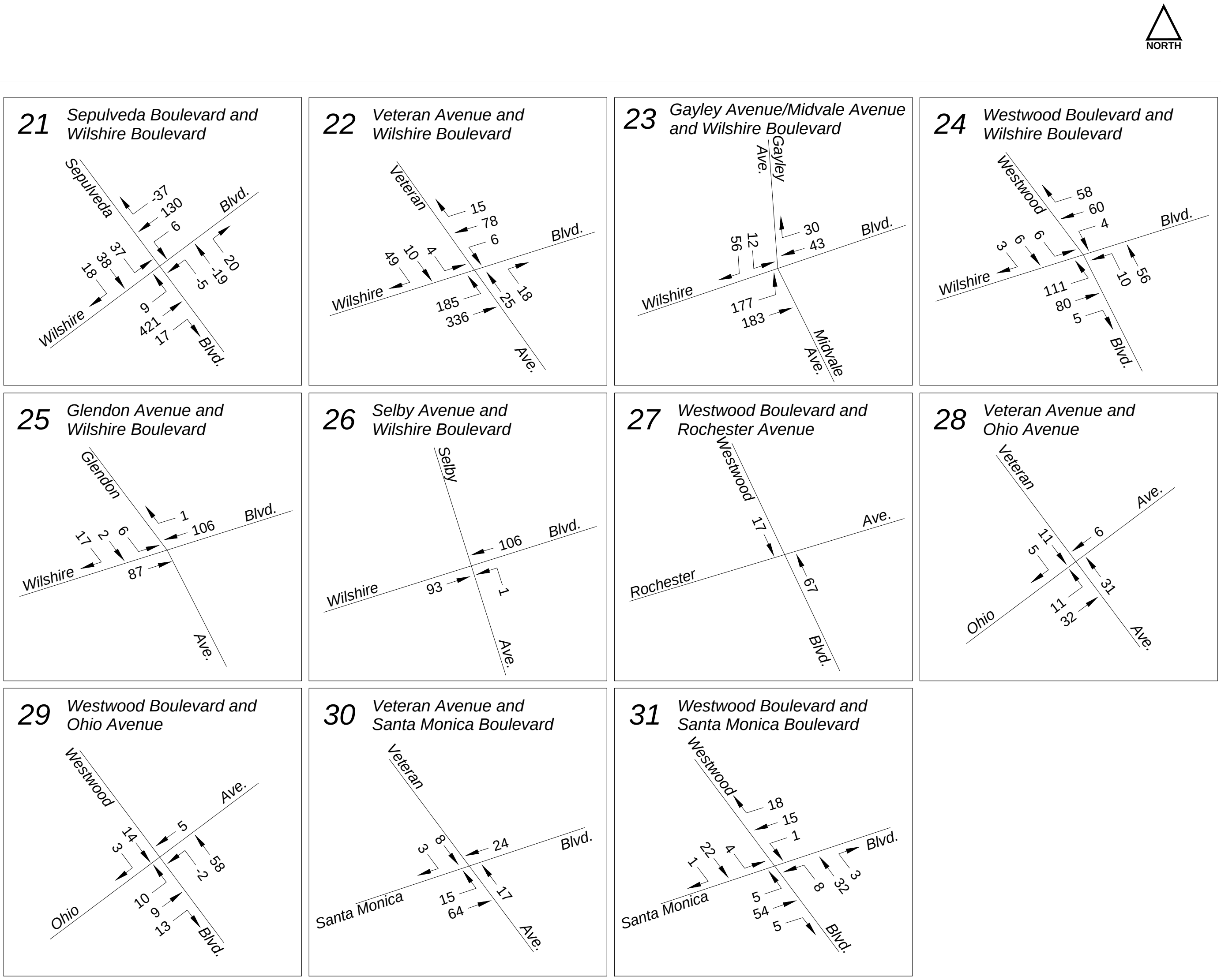

FIGURE 10(a)

4/21/2016

UCLAGeffenAcademy\AMRELPRJS

RELATED PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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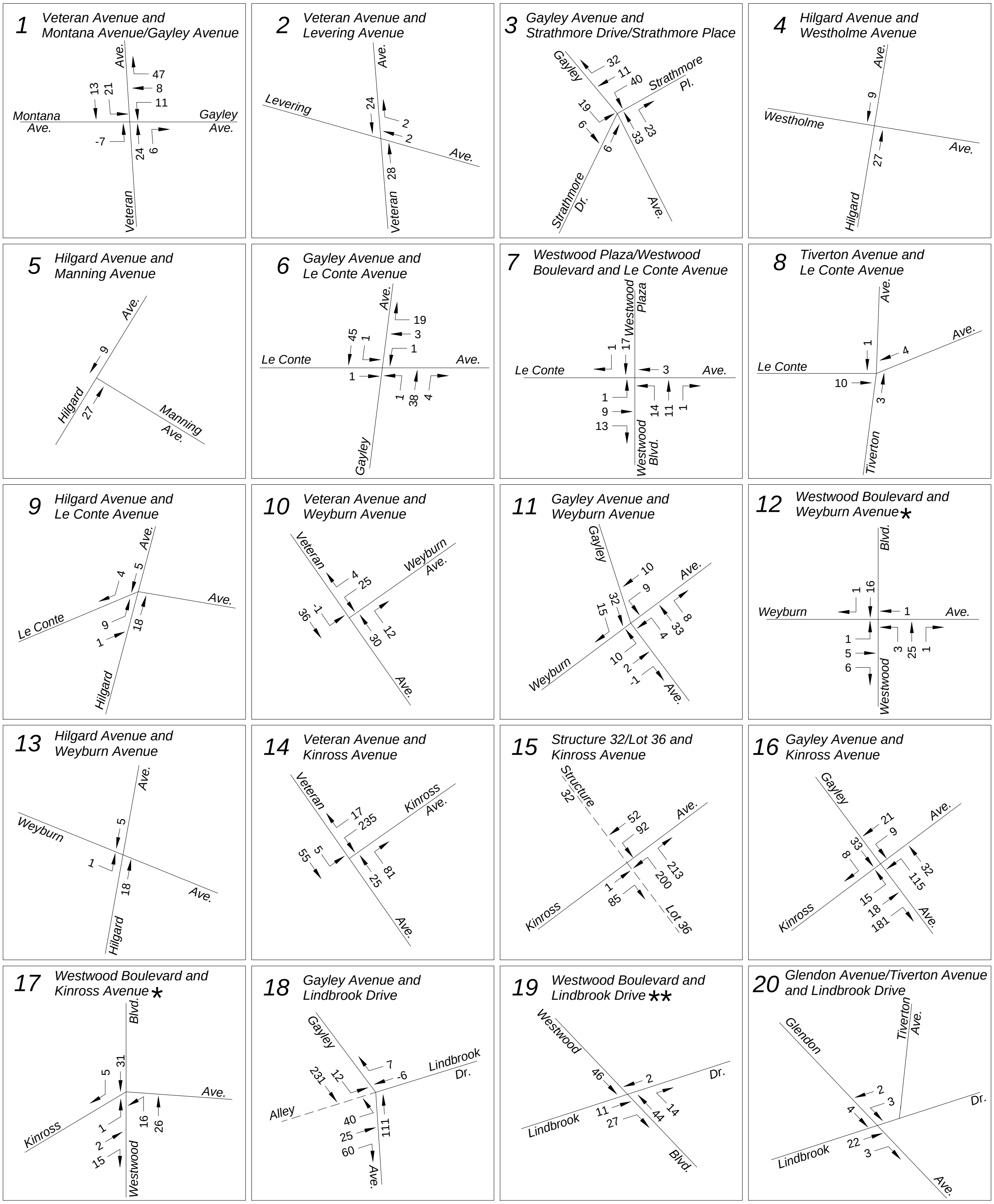

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FIGURE 10(b)

4/21/2016

UCLAGeffenAcademy\PMRELPRJS

RELATED PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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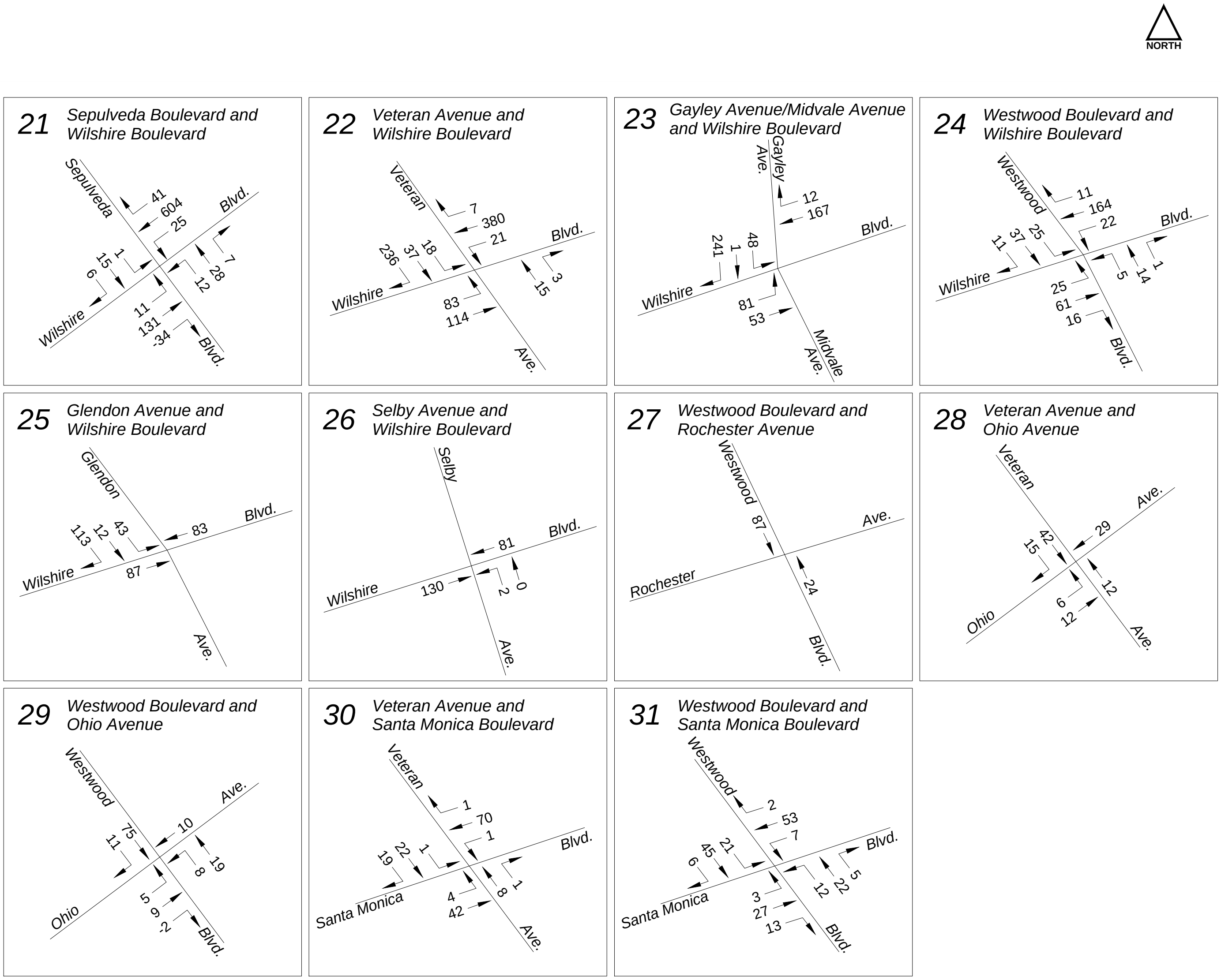

FIGURE 10(b)

4/21/2016

UCLAGeffenAcademy\PMRELPRJS

RELATED PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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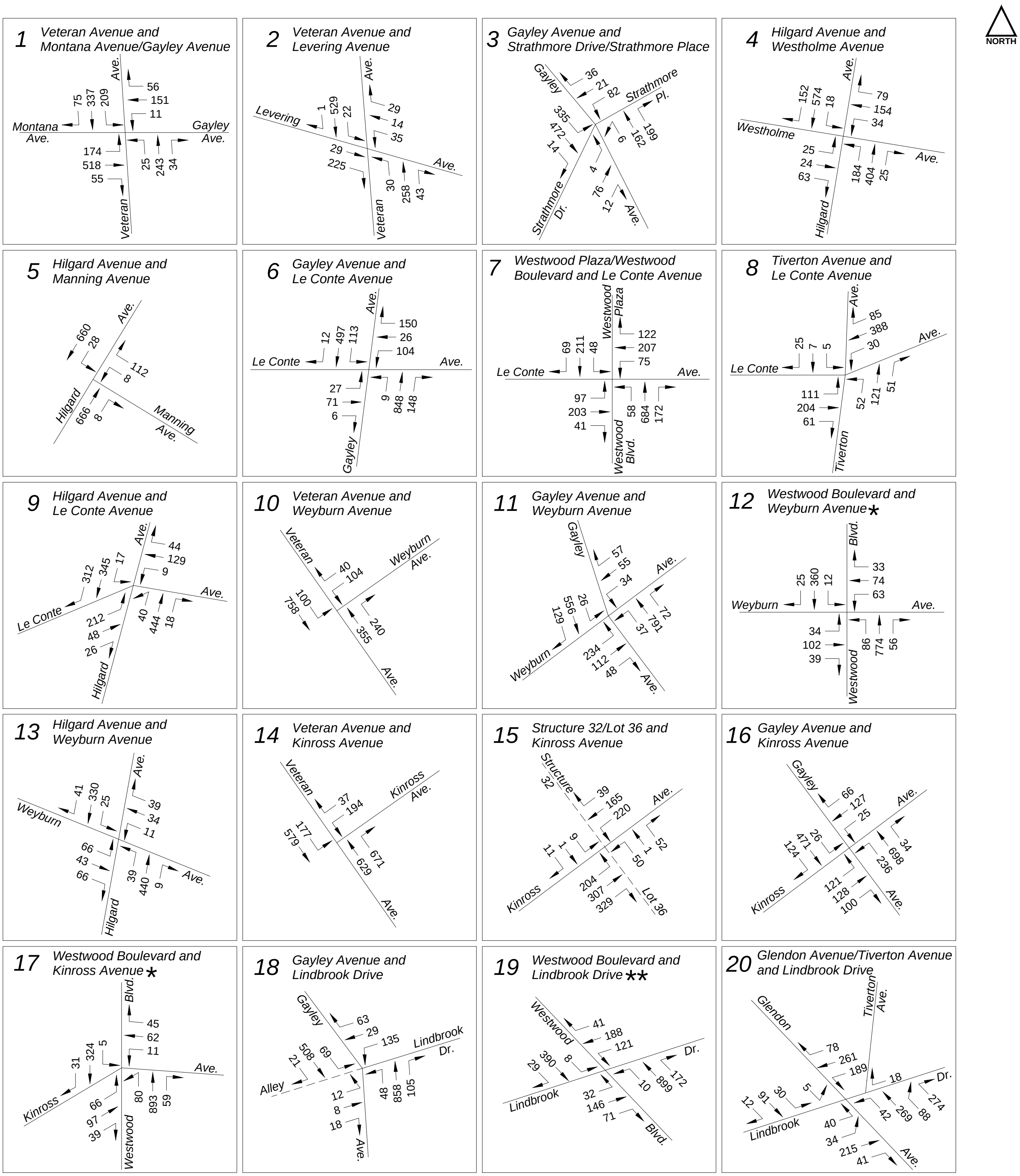

Notes:

* **Southbound left-turn movement prohibited from 4:00pm - 7:00pm**

** **Northbound left-turn movement prohibited from 7:00am - 10:00am, 3:00pm - 7:00pm; southbound left-turn movements prohibited from 4:00pm - 7:00pm**

FIGURE 11(a)

4/21/2016

UCLAGeffenAcademy\AM2020WO

FUTURE (2020) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

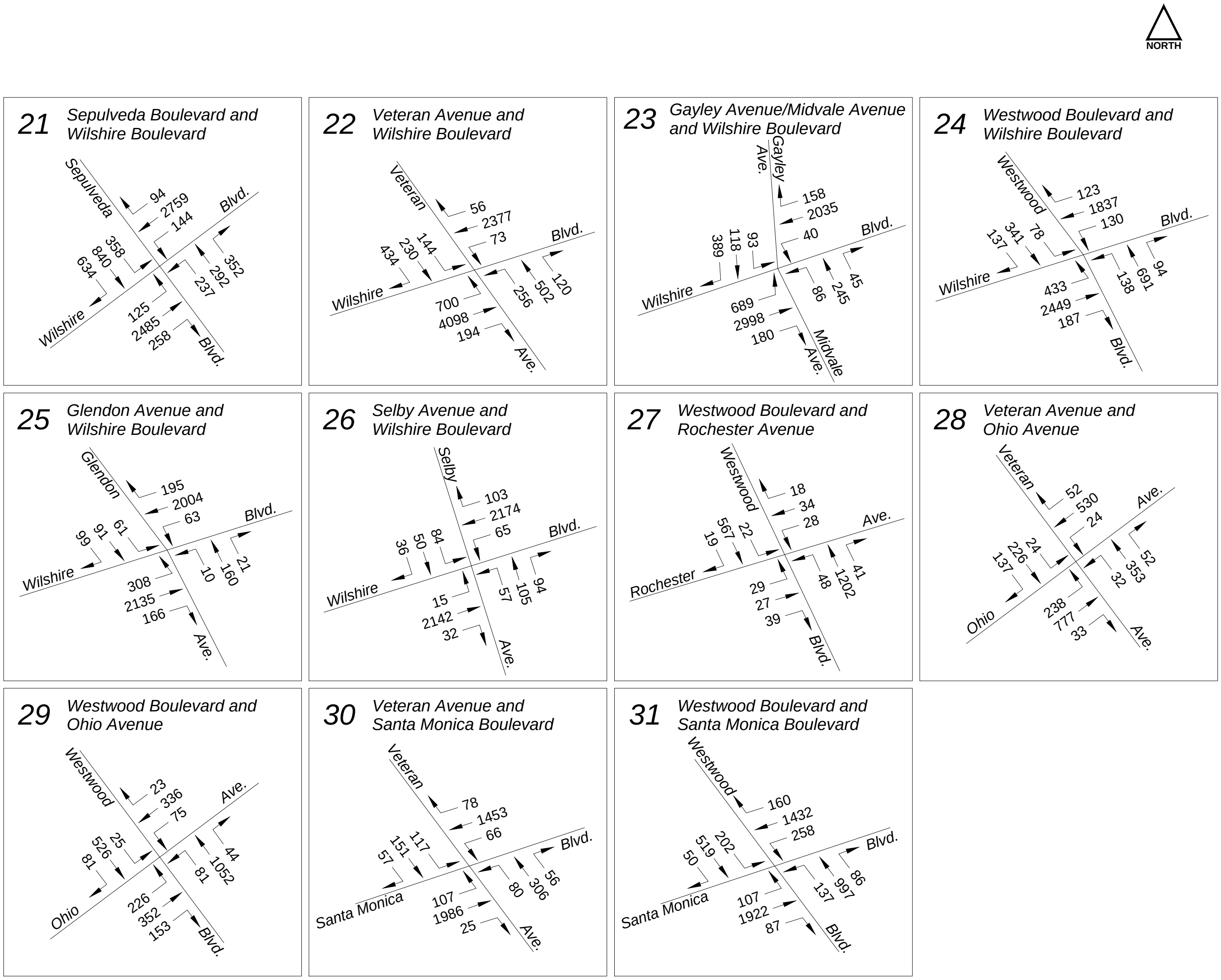

FIGURE 11(a)

4/21/2016

UCLAGeffenAcademy\AM2020WO

FUTURE (2020) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

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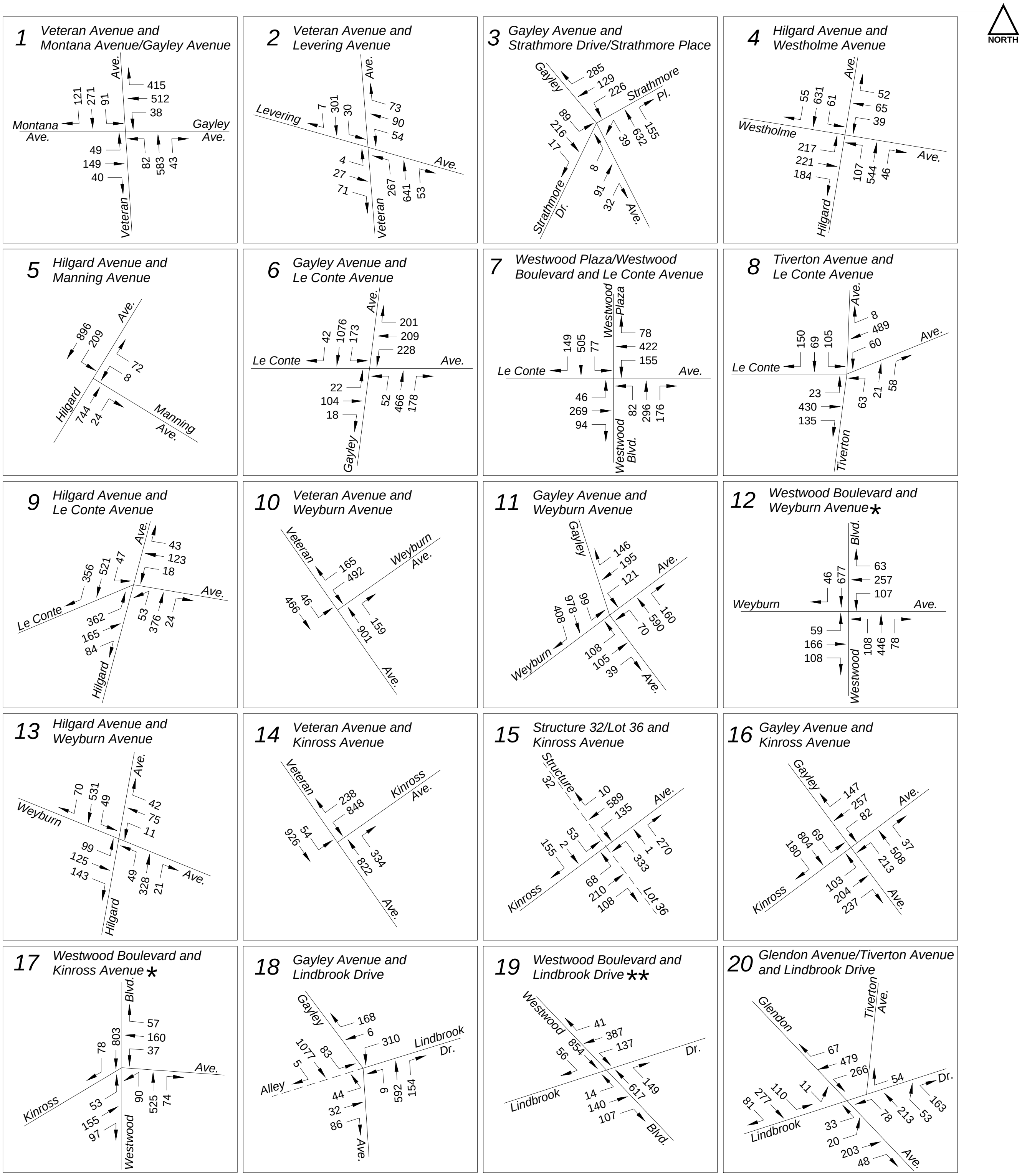

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FIGURE 11(b)

4/21/2016

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FUTURE (2020) TRAFFIC VOLUMES WITHOUT PROJECT PM PEAK HOUR

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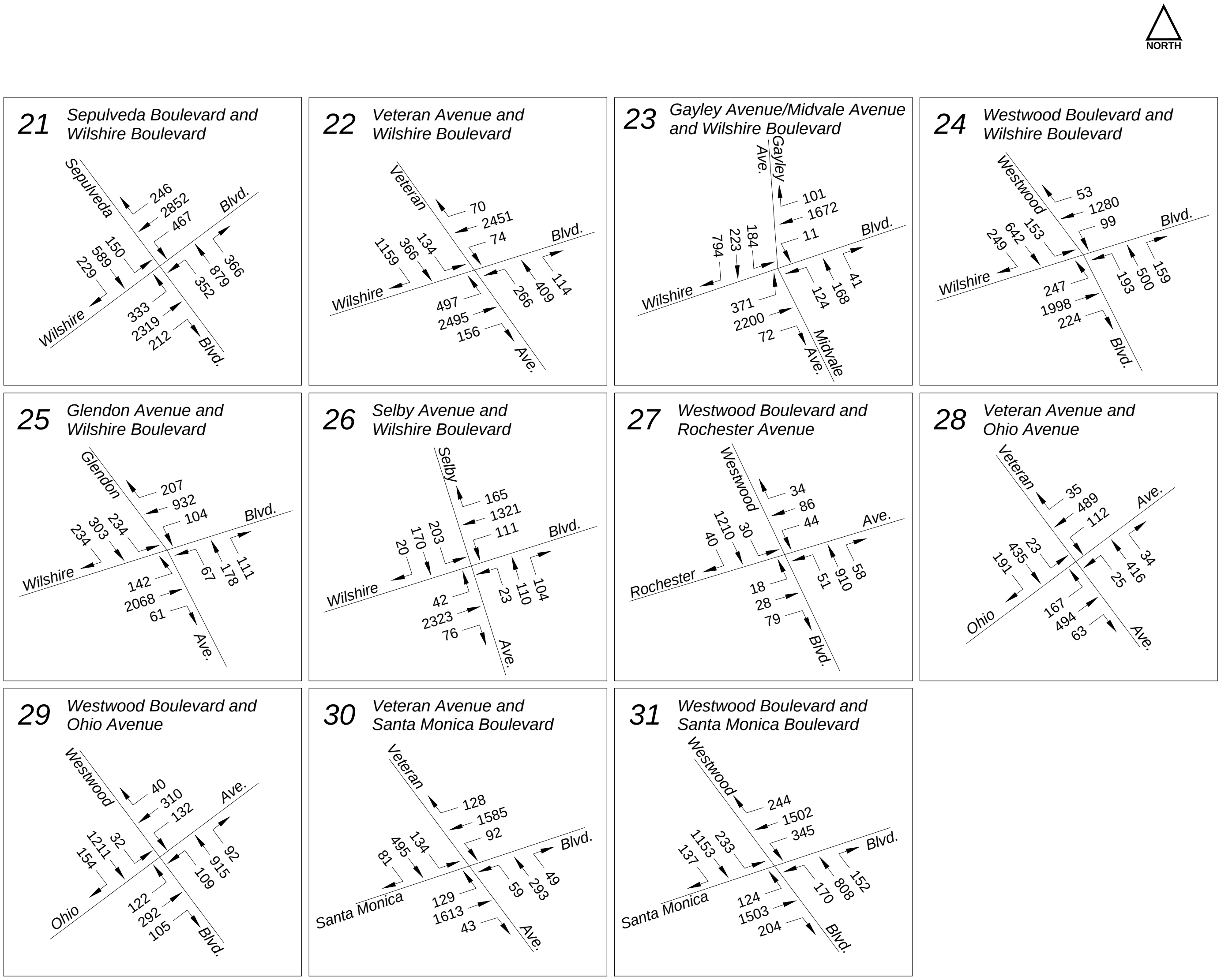

FIGURE 11(b)

4/21/2016

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FUTURE (2020) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

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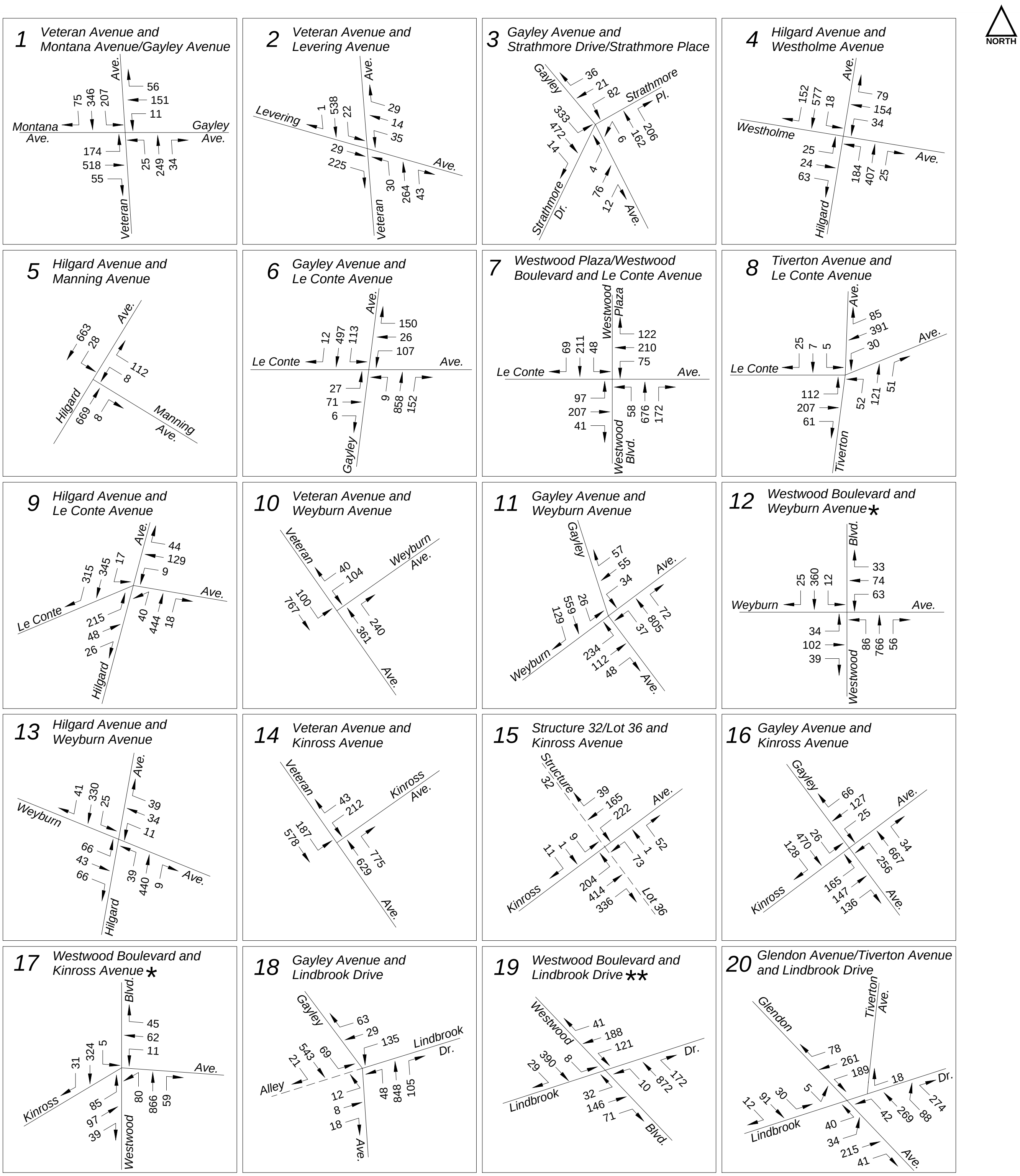
Project volumes, as determined earlier, were added to the above Future Without Project volumes, producing the Future With Project volumes, which are provided in Figures 12(a) and 12(b). The Future With Project volumes were the basis for calculating the traffic impacts attributable to the Project, relative to the Future Without Project volumes.

The results of the Future conditions analysis are presented in Table 8. As shown, service levels are forecast to worsen at some intersections. Under Future Without Project conditions, the following study intersections would be operating at poor or failing service levels during one or more peak hours:

- Gayley Avenue/Midvale Avenue and Wilshire Boulevard (Intersection 23) would be operating at LOS E during the AM peak hour and LOS D during the PM peak hour;
- Veteran Avenue and Montana Avenue/Gayley Avenue (Intersection 1) would be at LOS C during the AM peak hour and LOS F during the PM peak hour;
- Westwood Boulevard and Santa Monica Boulevard (Intersection 31) would be operating at LOS F during the AM peak hour and LOS E during the PM peak hour;
- Glendon Avenue and Wilshire Boulevard (Intersection 25) would be operating at LOS E during the AM peak hour and LOS F during the PM peak hour; and
- Sepulveda Boulevard and Wilshire Boulevard (Intersection 21), Veteran Avenue and Wilshire Boulevard (Intersection 22), and Westwood Boulevard and Wilshire Boulevard (Intersection 24) would be operating at LOS F during the AM and PM peak hours.

The remaining 24 study intersections would be operating at service levels, LOS D or better during the peak hours.

Under Future With Project conditions, the study intersections would generally worsen within the same level of service as compared to the Future Without Project conditions. Of the seven study intersections operating at poor or failing service levels in the Future Without Project conditions, only the intersection of Galey Avenue/Midvale Avenue and Wilshire Boulevard (Intersection 23) would degrade from LOS E to LOS F during the AM peak hour. The remaining six intersections would continue to operate within the same service levels of poor or failing service. The LOS analysis worksheets for Future conditions are provided in Appendix C.



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** Northbound left-turn movement prohibited from 7:00am - 10:00am, 3:00pm - 7:00pm; southbound left-turn movements prohibited from 4:00pm - 7:00pm

FIGURE 12(a)

4/21/2016

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FUTURE (2020) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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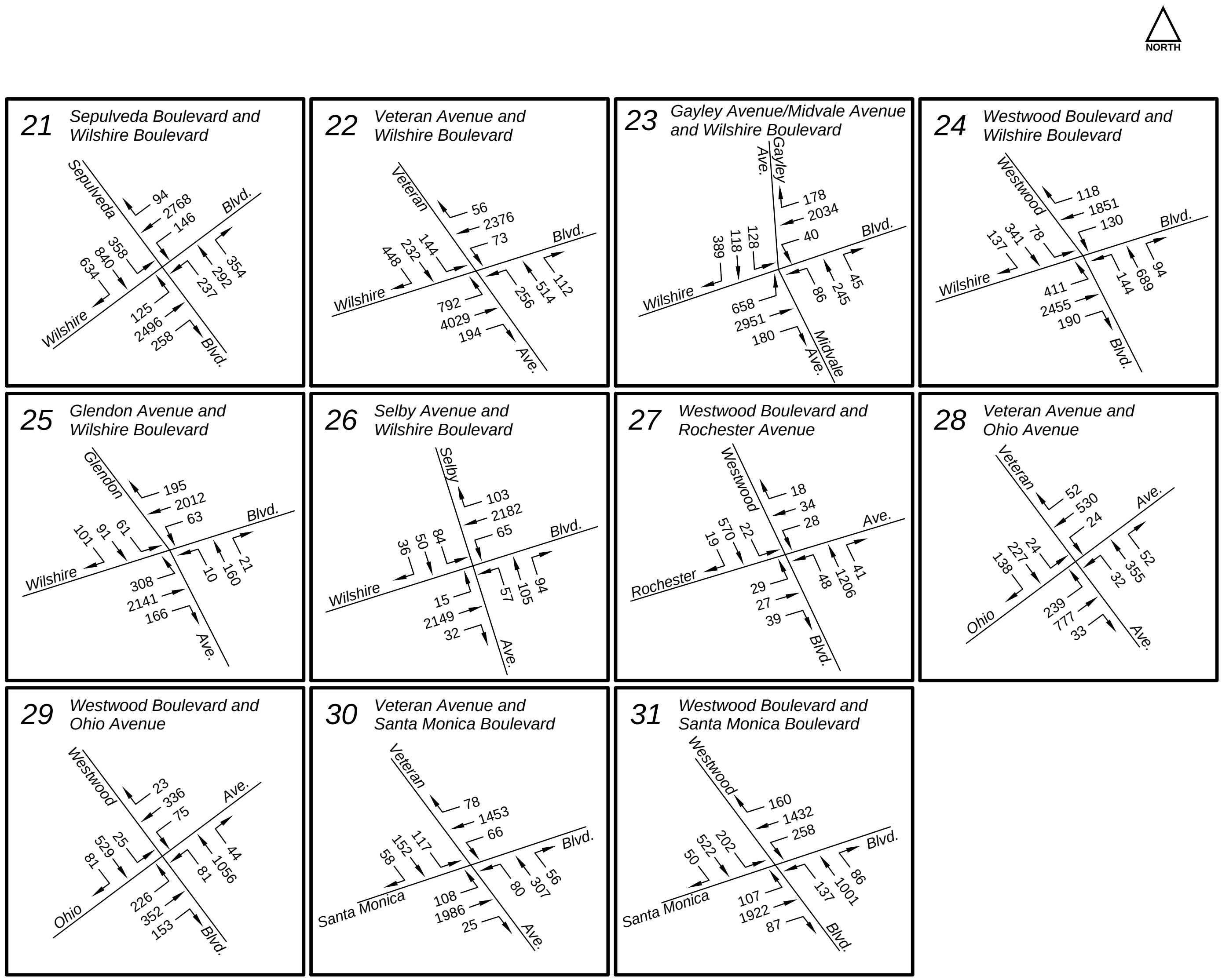

FIGURE 12(a)

4/21/2016

UCLAGeffenAcademy\AM2020WP

FUTURE (2020) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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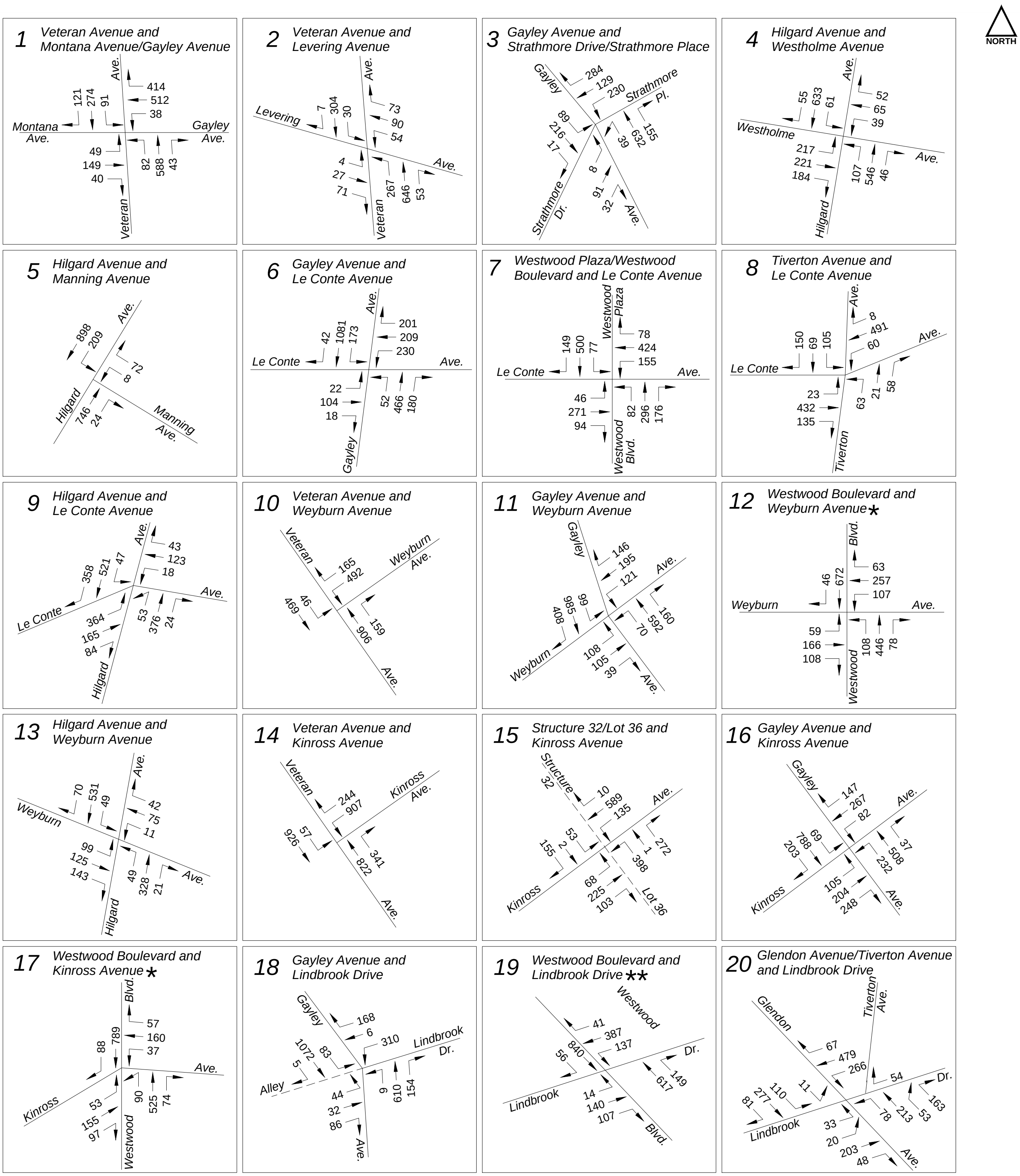

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FIGURE 12(b)

4/21/2016

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FUTURE (2020) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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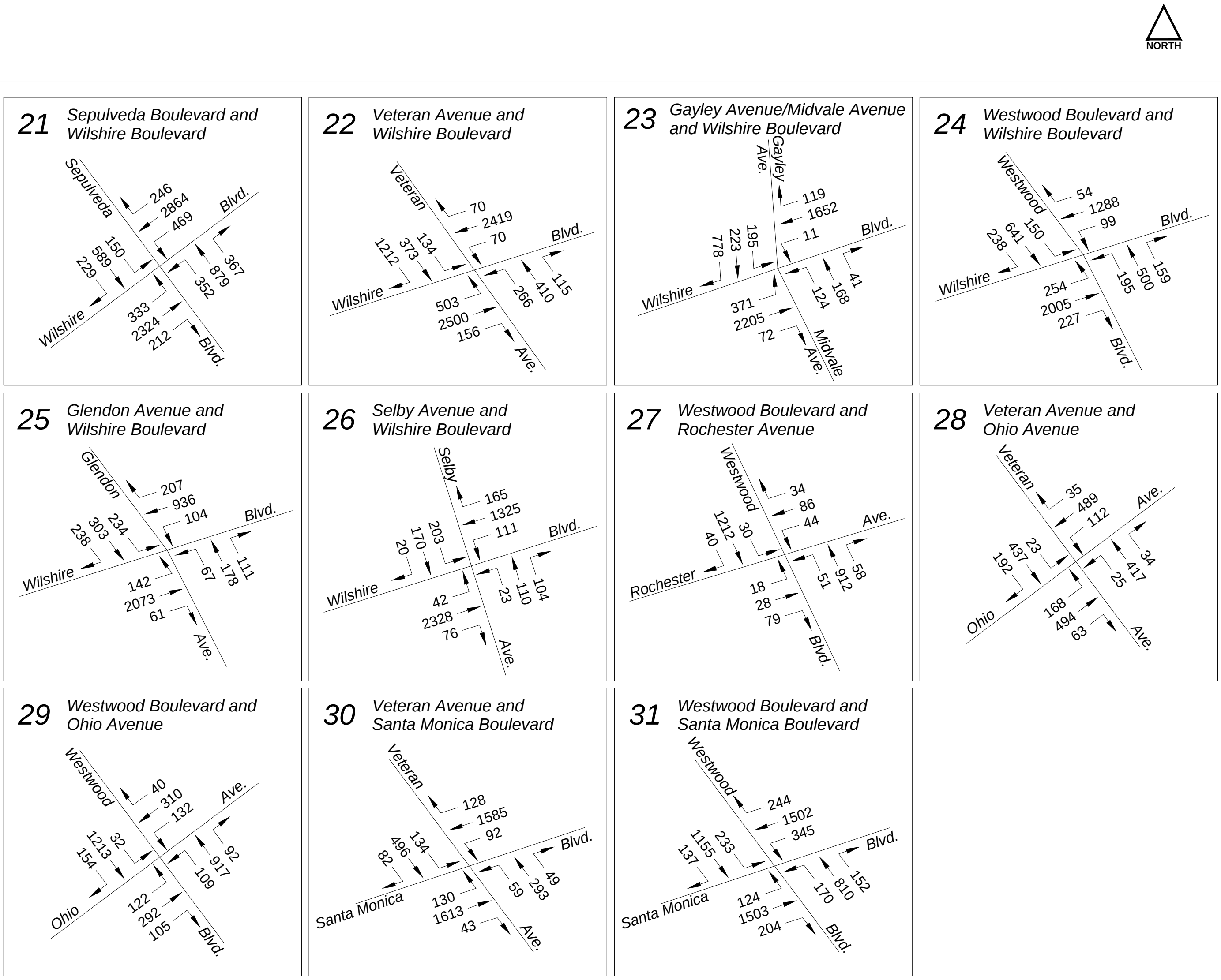

FIGURE 12(b)

4/21/2016

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FUTURE (2020) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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Table 8
Level of Service (LOS) Analysis Summary
Existing (2016) and Future (2020) Traffic Conditions, Without and With Project

			Existing (2016)Conditions					Future (2020) Conditions				
		Peak	Existing		w/ Project		Change in v/c	w/o Project		w/ Project		Change in v/c
No.	Intersection	Hour	CMA	LOS	CMA	LOS	due to Project	CMA	LOS	CMA	LOS	due to Project
1	Veteran Avenue	AM	0.708	C	0.713	C	0.005	0.786	C	0.791	C	0.005
	Montana Avenue/Gayley Avenue	PM	0.991	E	0.994	E	0.003	1.109	F	1.111	F	0.002
2	Veteran Avenue	AM	0.443	A	0.449	A	0.006	0.481	A	0.487	A	0.006
	Levering Avenue	PM	0.623	B	0.626	B	0.003	0.673	B	0.676	B	0.003
3	Gayley Avenue	AM	0.320	A	0.318	A	-0.001	0.371	A	0.372	A	0.001
	Strathmore Drive/Strathmore Place	PM	0.562	A	0.565	A	0.003	0.656	B	0.659	B	0.003
4	Hilgard Avenue	AM	0.430	A	0.431	A	0.001	0.459	A	0.461	A	0.002
	Westholme Avenue	PM	0.491	A	0.492	A	0.001	0.518	A	0.519	A	0.001
5	Hilgard Avenue	AM	0.210	A	0.211	A	0.001	0.223	A	0.225	A	0.002
	Manning Avenue	PM	0.323	A	0.323	A	0.001	0.349	A	0.349	A	0.000
6	Gayley Avenue	AM	0.406	A	0.411	A	0.005	0.443	A	0.447	A	0.004
	Le Conte Avenue	PM	0.539	A	0.541	A	0.001	0.595	A	0.597	A	0.002
7	Westwood Plaza/Westwood Boulevard	AM	0.710	C	0.709	C	-0.001	0.754	C	0.753	C	-0.001
	Le Conte Avenue	PM	0.760	C	0.759	C	-0.001	0.823	D	0.821	D	-0.002
8	Tiverton Avenue	AM	0.365	A	0.368	A	0.003	0.390	A	0.393	A	0.003
	Le Conte Avenue	PM	0.495	A	0.496	A	0.001	0.527	A	0.529	A	0.002
9	Hilgard Avenue	AM	0.425	A	0.426	A	0.001	0.449	A	0.450	A	0.001
	Le Conte Avenue	PM	0.570	A	0.571	A	0.001	0.605	B	0.605	B	0.000
10	Veteran Avenue	AM	0.215	A	0.219	A	0.004	0.251	A	0.255	A	0.004
	Weyburn Avenue	PM	0.689	B	0.693	B	0.003	0.751	C	0.754	C	0.003
11	Gayley Avenue	AM	0.397	A	0.401	A	0.005	0.436	A	0.441	A	0.005
	Weyburn Avenue	PM	0.646	B	0.648	B	0.002	0.708	C	0.711	C	0.003
12	Westwood Boulevard	AM	0.432	A	0.429	A	-0.004	0.461	A	0.457	A	-0.004
	Weyburn Avenue	PM	0.687	B	0.684	B	-0.003	0.729	C	0.727	C	-0.002
13	Hilgard Avenue	AM	0.321	A	0.321	A	0.000	0.340	A	0.340	A	0.000
	Weyburn Avenue	PM	0.509	A	0.509	A	0.000	0.539	A	0.539	A	0.000
14	Veteran Avenue	AM	0.338	A	0.418	A	0.080	0.495	A	0.575	A	0.080
	Kinross Avenue	PM	0.429	A	0.454	A	0.025	0.553	A	0.579	A	0.026
15	Structure 32/Lot 36	AM	0.104	A	0.130	A	0.026	0.293	A	0.355	A	0.062
	Kinross Avenue	PM	0.305	A	0.348	A	0.043	0.472	A	0.515	A	0.043
16	Gayley Avenue	AM	0.282	A	0.303	A	0.021	0.409	A	0.453	A	0.044
	Kinross Avenue	PM	0.467	A	0.487	A	0.020	0.641	B	0.661	B	0.020

Table 8 (continued)
Level of Service (LOS) Analysis Summary
Existing (2016) and Future (2020) Traffic Conditions, Without and With Project

			Existing (2016)Conditions						Future (2020) Conditions					
		Peak	Existing		w/ Project		Change in v/c		w/o Project		w/ Project		Change in v/c	
No.	Intersection	Hour	CMA	LOS	CMA	LOS	due to Project		CMA	LOS	CMA	LOS	due to Project	
17	Westwood Boulevard	AM	0.452	A	0.457	A	0.005		0.496	A	0.501	A	0.005	
	Kinross Avenue	PM	0.537	A	0.536	A	-0.002		0.594	A	0.592	A	-0.002	
18	Gayley Avenue	AM	0.289	A	0.286	A	-0.004		0.408	A	0.405	A	-0.003	
	Lindbrook Drive	PM	0.428	A	0.426	A	-0.001		0.617	B	0.616	B	-0.001	
19	Westwood Boulevard	AM	0.475	A	0.463	A	-0.012		0.535	A	0.522	A	-0.013	
	Lindbrook Drive	PM	0.521	A	0.515	A	-0.006		0.568	A	0.562	A	-0.006	
20	Glendon Avenue	AM	0.445	A	0.445	A	0.000		0.481	A	0.481	A	0.000	
	Lindbrook Drive	PM	0.467	A	0.467	A	0.000		0.506	A	0.506	A	0.000	
21	Sepulveda Boulevard	AM	1.099	F	1.103	F	0.004		1.262	F	1.266	F	0.004	
	Wilshire Boulevard	PM	1.168	F	1.170	F	0.002		1.283	F	1.286	F	0.003	
22	Veteran Avenue	AM	1.456	F	1.439	F	-0.016		1.647	F	1.630	F	-0.017	
	Wilshire Boulevard	PM	1.176	F	1.201	F	0.024	*	1.387	F	1.408	F	0.021	*
23	Gayley Avenue/Midvale Avenue	AM	0.872	D	0.888	D	0.016		0.989	E	1.004	F	0.015	*
	Wilshire Boulevard	PM	0.782	C	0.783	C	0.001		0.856	D	0.844	D	-0.012	
24	Westwood Boulevard	AM	0.994	E	0.996	E	0.002		1.091	F	1.092	F	0.001	
	Wilshire Boulevard	PM	0.914	E	0.916	E	0.002		1.002	F	1.003	F	0.001	
25	Glendon Avenue	AM	0.843	D	0.846	D	0.003		0.919	E	0.922	E	0.003	
	Wilshire Boulevard	PM	1.080	F	1.081	F	0.001		1.194	F	1.196	F	0.002	
26	Selby Avenue	AM	0.569	A	0.572	A	0.002		0.619	B	0.621	B	0.002	
	Wilshire Boulevard	PM	0.733	C	0.734	C	0.001		0.799	C	0.800	D	0.001	
27	Westwood Boulevard	AM	0.369	A	0.371	A	0.001		0.411	A	0.413	A	0.002	
	Rochester Avenue	PM	0.422	A	0.423	A	0.001		0.472	A	0.473	A	0.001	
28	Veteran Avenue	AM	0.690	B	0.692	B	0.002		0.763	C	0.765	C	0.002	
	Ohio Avenue	PM	0.717	C	0.719	C	0.002		0.810	D	0.813	D	0.003	
29	Westwood Boulevard	AM	0.614	B	0.615	B	0.001		0.672	B	0.673	B	0.001	
	Ohio Avenue	PM	0.709	C	0.710	C	0.001		0.781	C	0.781	C	0.000	
30	Veteran Avenue	AM	0.620	B	0.621	B	0.001		0.678	B	0.680	B	0.002	
	Santa Monica Boulevard	PM	0.756	C	0.758	C	0.002		0.840	D	0.842	D	0.002	
31	Westwood Boulevard	AM	0.939	E	0.940	E	0.001		1.011	F	1.012	F	0.001	
	Santa Monica Boulevard	PM	0.872	D	0.873	D	0.001		0.946	E	0.947	E	0.001	

* Indicates a significant impact.

The results for the study intersections operating at LOS E or F during one or more peak hour are generally consistent with the 2008 LRDP EIR results for the future conditions. The 2008 LRDP EIR identified that 28 of the 58 study intersections in that analysis would operate at LOS E or F during one or both the AM and PM peak hours during the future conditions.

Significant Intersection Traffic Impact Criteria

As noted earlier, this analysis utilizes the significance criteria defined by LADOT to determine the Project traffic impacts. LADOT defines a significant project traffic impact according to a "stepped scale," with intersections having high V/C ratios being more sensitive to additional traffic than those with small V/C ratios, which have more available capacity. The LADOT significant impact criteria, which affect LOS C, D, E and F, are summarized in Table 9. No significant impacts are deemed to occur at LOS A and B, as these conditions exhibit sufficient surplus capacities to accommodate large traffic volumes with little effect on traffic delay.

Table 9
LADOT Criteria for Significant Intersection Traffic Impact

LOS	Final V/C Ratio	Project-Related Increase in V/C Ratio
C	0.700 - 0.800	equal to or greater than 0.0400
D	> 0.800 - 0.900	equal to or greater than 0.0200
E, F	> 0.900	equal to or greater than 0.0100

Based on these criteria and the results in Table 8, the Project is expected to significantly impact two study intersections. These significant impacts occur at Wilshire Boulevard and Veteran Avenue during the PM peak-hour under Existing (2016) with Project conditions, and under the Future (2020) with Project conditions, where two significant impacts are expected at Wilshire Boulevard and Veteran Avenue (Intersection 22) during the PM peak-hour, and Wilshire Boulevard and Gayley Avenue/Midvale Avenue (Intersection 23) during the AM peak-hour. These two intersections were identified in the 2008 LRDP EIR as having significant impacts. Therefore, the results of this analysis are consistent with the conclusions of the 2008 LRDP EIR.

Regional Transportation System Impact Analysis

The traffic impact guidelines of the Congestion Management Program (CMP) for Los Angeles County require analysis of all CMP arterial monitoring locations where a project could add a total of 50 or more trips during either peak hour. Additionally, all freeway monitoring locations where a project could add 150 or more trips in either direction during the peak hours are to be analyzed.

Arterial Monitoring Location Analysis

The nearest CMP arterial monitoring locations within the study area are the intersections of Wilshire Boulevard / Sepulveda Boulevard, Wilshire Boulevard / Beverly Glen Boulevard and Santa Monica Boulevard / Westwood Boulevard, which are approximately 0.5 to 1.3 miles from the Project site. Based on a review of the net Project trip generations and extrapolation of the Project trip assignment pattern, it is estimated that at most, the Project would contribute 24 peak-hour trips to the intersection of Wilshire Boulevard / Sepulveda Boulevard; 15 peak-hour trips to the intersection of Wilshire Boulevard / Beverly Glen Boulevard; and 7 peak-hour trips to the intersection of Santa Monica Boulevard / Westwood Boulevard. These levels of Project trips are substantially less than the CMP threshold of 50 peak-hour trips for arterial monitoring locations. Therefore, no further CMP analysis of these intersections is warranted.

Freeway Segment Analysis

An examination was also made of the potential for Project-related freeway impacts. The closest CMP freeway monitoring locations are I-405 south of Mulholland Drive, I-405 north of Venice Boulevard. These locations are approximately 3.0 to 5.5 miles from the Project site. Based on a review of the Project's regional trip distribution pattern and Project trip generation, it is estimated that the Project volumes would be below the CMP freeway analysis threshold of 150 trips per direction. Therefore, no detailed CMP freeway analysis is warranted.

Public Transit Analysis

Of the 109 Geffen faculty and staff, 58 are expected to use parking spaces. Using the 2010 CMP guidelines, a 1.4 factor should be applied for a total of 81 persons arriving by automobile. It is conservatively estimated that the remaining 28 will all arrive by public transit. At total of 75 students are estimated to arrive by public transit, BruinBus, bicycle or walking. For purposes of this analysis, all 75 were conservatively assumed top arrive by bus. In the trip generation analysis, the relocated administrative staff are not anticipated to change the number using public transit. No credit is being taken for the Occidental Petroleum employees who will no longer use public transit to and from the site. Further, it was assumed that all Geffen Academy faculty, staff and students would arrive in a single hour and depart in a single hour. Based on these assumptions, the Project could result in 103 additional passengers arriving in the morning and 103 additional passengers departing in the evening.

A review of the existing bus transit lines and service summarized in Table 4 indicates that an average of approximately 112 buses operate during the AM and PM peak hours access the bus stops within a walkable distance of approximately 0.25 miles from the Project site. This means that the net Project person trips added to transit would average less than 0.92 persons per bus during the peak hours. This minor addition of Project person trips to transit would not be expected to result in a significant transit impact.

MITIGATION RECOMMENDATIONS

As indicated in the preceding analyses, the Project is expected to significantly impact two study intersections, but is not expected to significantly impact any CMP monitoring locations (i.e. arterial, freeway) or public transit. The following transportation-related mitigation measures are recommended for implementation by the Project to offset the significant impacts.

Intersection Capacity Enhancements

The volume to capacity ratio at the significantly impacted intersections can be improved by capacity enhancements. The existing signal and roadway infrastructure were reviewed for potential capacity increases. This included a review of the field conditions and the potential mitigation measures discussed in the 2008 LRDP and the improvements in the current West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) and the proposed update. Review of the field conditions noted that an I-405/Wilshire Boulevard interchange rebuilding was part of the I-405 Sepulveda Pass Improvement Program implemented by Metro and completed in 2015. This program fully developed the roadways at the impacted intersections within the limits of the available rights-of-way and no additional feasible roadway widenings or similar capacity enhancements were identified. Additional review of the 2008 LRDP EIR noted that no feasible mitigations measures were identified for the two significantly impacted intersections due to the built-out conditions at these intersections. Further, no physical measures to increase the capacity of either of the two significantly impacted intersections were identified in the review of the WLA TIMP.

The WLA TIMP does contain reference to area-wide signal system improvements. However, the signal systems at the intersections that will be significantly impacted have already been enhanced to the state-of-the-art City of Los Angeles Adaptive Traffic Control System (ATCS). Therefore, consistent with the 2008 LRDP EIR and WLA TIMP, no remaining feasible capacity enhancements were identified for the significantly impacted intersections through this review.

Transportation Demand Management (TDM) Measures

The volume to capacity ratio at the significantly impacted intersections can be also improved by volume reductions. The WLA TIMP contains programs, such as installation of bus priority lanes and of bike lanes, which will promote the use of alternative travel modes throughout the West Los Angeles area. To reduce traffic volumes in the Westwood area, UCLA has an extensive TDM program serving all portions of the existing Main Campus, Southwest Campus, Wilshire Center, and various off-campus housing sites. The UCLA TDM program includes:

- An extensive outreach and marketing program that includes the Bruin Commuter Club;
- Bus stops for public transit located conveniently throughout the campus, with a central terminal (Ackerman Plaza) and an additional terminal serving the Academic Core (Hilgard Terminal);
- A circulator shuttle service (BruinBus) that includes routes from the Main Campus to the Southwest Campus, along with routes to off-campus employment centers and off-campus housing locations;
- An extensive vanpool program serving housing throughout the region with over 160 vans in service;
- A carpool matching program to assist in the formation of carpools;
- Bike lanes and bike racks serving both travel within the campus and to off-campus destinations;
- Provision of a stop on campus for the Los Angeles World Airports shuttle link directly to LAX; and
- Pedestrian facility upgrades throughout the Main Campus, including pedestrian plazas and signalized crosswalks for major vehicular/pedestrian conflict locations.

The TDM program is administered by UCLA Transportation. As part of the Project, the existing TDM program will be made available to the new Geffen Academy students, faculty and staff. Additionally, the Project plans to provide school buses for student travel to and from the Project site and restrict student parking to carpools. To ensure the effectiveness of the TDM program, the following specific measures are recommended:

- Ridesharing information kiosks should be developed in the lobbies or other visible locations in the Geffen Academy and Oxy Building;
- Information on ridesharing options and services should be included in all Geffen Academy student enrollment packages, and Geffen Academy new hire packages for employees;
- Short-term and long-term bicycle parking should be upgraded at the Geffen Academy and Oxy Building to meet City of Los Angeles requirements for a newly constructed building and/or actual demand, whichever is greater;
- All students should be required to, as part of registering to Geffen Academy each year,

indicate agreement of use of an alternative mode for travel to campus. Alternative modes of transportation could include the following:

  - Use of a school bus;
  - Use of public transit;
  - Use of the BruinBus;
  - Carpooling with a parent to their UCLA On-Campus work location;
  - Participation in a student carpool that is driven by a licensed student and includes at least two other students;
  - Participation in a parent carpool dropping-off/picking-up at least three students;
  - Participation in a vanpool serving the UCLA Campus; and
  - Walking or bicycling to school.

- Bicycle, carpool, and electric vehicle parking in the Oxy Building should be reviewed and upgraded as feasible to meet the current City of Los Angeles requirements as applicable to a newly constructed building; and
- Geffen Academy students should be required to pay at least the same rate for a parking permit as is charged to UCLA students. (Geffen faculty and staff who park will be required to pay for permits at the same rate as UCLA faculty and staff.)

It should be noted that some student, faculty and staff trips may involve use of more than one alternative mode (e. g., bicycling from a transit stop on Santa Monica Boulevard). Also, other alternative modes may need to be added to the student alternatives list, especially since new alternative modes are likely to develop over the life of the Project.

In conclusion, since no capacity enhancements are available for the significantly impacted intersections, demand reduction measures listed above are recommended. These measures are anticipated to reduce Project trip generation to the degree feasible. However, the Project impacts at the intersections of Wilshire Boulevard and Veteran Avenue and Wilshire Boulevard (Intersection 22) and Gayley Avenue/Midvale Avenue (Intersection 23) may remain significant. These recommendations and findings are consistent with the 2008 LRDP EIR.

APPENDIX A

TRAFFIC COUNT DATA SHEETS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-001 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Montana Ave			Montana Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
7:00 AM	4	23	9	43	36	5	18	83	7	8	23	9	268
7:15 AM	6	38	4	42	55	8	21	86	8	2	20	8	298
7:30 AM	5	52	4	44	75	13	33	131	15	1	52	17	442
7:45 AM	6	55	7	47	77	14	40	128	13	1	34	10	432
8:00 AM	4	48	9	32	82	21	52	126	13	5	26	10	428
8:15 AM	9	62	5	48	71	24	36	105	12	1	31	6	410
8:30 AM	11	55	3	69	100	16	39	77	18	3	20	16	427
8:45 AM	5	58	6	38	95	11	36	114	12	5	17	17	414
9:00 AM	7	54	9	44	98	9	40	92	23	3	16	12	407
9:15 AM	4	49	6	44	92	13	29	91	20	3	18	18	387
9:30 AM	7	47	10	36	97	21	38	88	10	3	18	16	391
9:45 AM	2	44	8	41	90	19	32	89	11	7	20	19	382

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	70	585	80	528	968	174	414	1210	162	42	295	158	4686
APPROACH %'s :	9.52%	79.59%	10.88%	31.62%	57.96%	10.42%	23.18%	67.75%	9.07%	8.48%	59.60%	31.92%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	24	217	25	171	305	72	161	490	53	8	143	43	1712
PEAK HR FACTOR :		0.875			0.958			0.921			0.693		0.968

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-001 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Montana Ave			Montana Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
3:00 PM	29	78	5	16	61	17	18	35	4	13	103	53	432
3:15 PM	20	89	13	18	55	15	11	27	4	4	86	44	386
3:30 PM	24	104	12	21	62	21	17	27	10	7	127	64	496
3:45 PM	17	114	13	23	50	18	17	27	11	11	83	70	454
4:00 PM	17	130	12	22	45	15	19	36	15	9	109	84	513
4:15 PM	19	135	7	28	39	18	18	26	8	3	121	86	508
4:30 PM	15	113	10	24	45	24	21	31	11	7	96	93	490
4:45 PM	14	143	11	18	53	34	20	35	8	3	97	99	535
5:00 PM	26	132	9	14	68	23	13	31	14	5	117	77	529
5:15 PM	18	140	8	14	58	33	11	41	10	11	126	104	574
5:30 PM	21	122	8	21	69	26	10	36	6	7	144	74	544
5:45 PM	25	135	11	15	60	25	12	35	8	6	95	82	509

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	245	1435	119	234	665	269	187	387	109	86	1304	930	5970
APPROACH %'s :	13.62%	79.77%	6.61%	20.03%	56.93%	23.03%	27.38%	56.66%	15.96%	3.71%	56.21%	40.09%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	79	537	36	67	248	116	54	143	38	26	484	354	2182
PEAK HR FACTOR :		0.970			0.929			0.933			0.896		0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-002

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Levering Ave			Levering Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
7:00 AM	2	35	0	1	56	0	0	4	29	10	1	5	143
7:15 AM	2	44	3	4	65	0	0	4	27	10	3	3	165
7:30 AM	5	53	6	3	100	0	0	3	30	5	1	4	210
7:45 AM	4	56	5	7	101	1	0	8	44	6	1	4	237
8:00 AM	7	54	3	5	101	2	0	13	51	5	0	1	242
8:15 AM	5	66	16	3	86	2	0	2	42	15	2	5	244
8:30 AM	6	57	7	4	124	1	0	5	40	10	6	10	270
8:45 AM	6	56	13	5	114	0	0	5	58	12	2	9	280
9:00 AM	8	65	9	4	138	0	0	9	71	7	3	4	318
9:15 AM	9	47	12	6	112	0	0	8	47	5	2	5	253
9:30 AM	6	54	2	4	107	1	0	3	39	4	3	6	229
9:45 AM	11	44	18	9	103	0	0	4	29	9	2	10	239

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	71	631	94	55	1207	7	0	68	507	98	26	66	2830
APPROACH %'s :	8.92%	79.27%	11.81%	4.33%	95.11%	0.55%	0.00%	11.83%	88.17%	51.58%	13.68%	34.74%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	29	225	41	19	488	1	0	27	216	34	13	28	1121
PEAK HR FACTOR :		0.899			0.894			0.759			0.721		0.881

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-002 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Levering Ave			Levering Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
3:00 PM	43	99	17	4	77	1	2	4	7	9	12	19	294
3:15 PM	41	104	9	2	57	0	0	4	25	11	19	13	285
3:30 PM	41	124	9	5	84	0	0	6	19	11	12	15	326
3:45 PM	48	135	11	2	62	2	0	3	16	14	14	13	320
4:00 PM	50	153	6	5	58	0	1	1	13	6	11	16	320
4:15 PM	57	141	10	4	50	1	0	3	13	10	17	12	318
4:30 PM	38	129	7	3	49	2	1	3	7	12	17	18	286
4:45 PM	63	164	5	8	63	1	0	6	12	6	24	11	363
5:00 PM	73	141	14	5	78	0	1	4	16	16	18	15	381
5:15 PM	49	160	15	9	62	3	1	7	22	14	26	23	391
5:30 PM	78	123	10	9	66	2	1	9	15	11	24	16	364
5:45 PM	57	165	12	6	60	2	1	6	15	11	17	14	366

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	638	1638	125	62	766	14	8	56	180	131	211	185	4014
APPROACH %'s :	26.57%	68.22%	5.21%	7.36%	90.97%	1.66%	3.28%	22.95%	73.77%	24.86%	40.04%	35.10%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	257	589	51	29	266	7	4	26	68	52	85	68	1502
PEAK HR FACTOR :		0.958			0.910			0.817			0.813		0.960

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-003 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Streathmore Dr			Streathmore Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	0	1	0	1	1	1	
7:00 AM	4	23	38	47	81	1	1	7	2	17	3	9	233
7:15 AM	4	22	40	48	87	4	1	16	8	16	1	8	255
7:30 AM	3	47	33	76	96	4	2	19	5	16	5	8	314
7:45 AM	0	42	52	85	118	6	0	27	1	13	3	6	353
8:00 AM	3	28	48	64	109	2	2	8	3	22	5	8	302
8:15 AM	0	33	30	75	104	1	0	11	3	16	4	3	280
8:30 AM	2	32	33	59	92	5	0	13	4	7	1	3	251
8:45 AM	3	24	30	67	88	11	4	10	9	12	2	7	267
9:00 AM	0	21	31	63	100	3	1	20	5	8	2	4	258
9:15 AM	2	26	31	46	92	12	0	15	14	14	3	2	257
9:30 AM	2	27	29	59	92	5	2	21	6	9	4	9	265
9:45 AM	2	37	36	52	88	6	0	12	7	12	3	7	262

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	25	362	431	741	1147	60	13	179	67	162	36	74	3297
APPROACH %'s :	3.06%	44.25%	52.69%	38.04%	58.88%	3.08%	5.02%	69.11%	25.87%	59.56%	13.24%	27.21%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	6	150	163	300	427	13	4	65	12	67	17	25	1249
PEAK HR FACTOR :		0.848			0.885			0.723			0.779		0.885

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-003 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Streathmore Dr			Streathmore Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	2	0	0	1	0	1	1	1	
3:00 PM	5	105	21	17	45	9	1	13	8	25	12	53	314
3:15 PM	12	102	23	19	38	5	0	3	7	23	16	33	281
3:30 PM	7	129	32	17	40	10	4	11	4	37	26	81	398
3:45 PM	7	105	28	22	40	3	1	9	7	35	14	51	322
4:00 PM	4	134	28	15	53	3	2	13	10	35	22	56	375
4:15 PM	4	139	26	12	40	5	2	16	4	38	17	65	368
4:30 PM	5	147	23	19	44	5	3	10	4	36	8	65	369
4:45 PM	5	142	46	24	49	4	5	18	10	37	15	46	401
5:00 PM	10	147	22	10	45	7	0	12	9	58	25	62	407
5:15 PM	5	160	37	15	49	0	2	14	7	43	34	87	453
5:30 PM	9	131	30	22	53	3	3	27	10	41	30	55	414
5:45 PM	13	138	38	20	55	6	3	29	5	37	24	39	407

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	86	1579	354	212	551	60	26	175	85	445	243	693	4509
APPROACH %'s :	4.26%	78.21%	17.53%	25.76%	66.95%	7.29%	9.09%	61.19%	29.72%	32.22%	17.60%	50.18%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	37	576	127	67	202	16	8	82	31	179	113	243	1681
PEAK HR FACTOR :		0.916			0.880			0.756			0.816		0.928

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-004 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Westholme Ave			Westholme Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	0	1	0	
7:00 AM	17	40	1	7	101	17	2	1	5	10	9	8	218
7:15 AM	24	44	3	5	130	27	1	1	6	6	21	10	278
7:30 AM	33	55	4	3	146	37	3	2	7	5	35	9	339
7:45 AM	47	76	4	5	119	44	3	6	14	7	36	30	391
8:00 AM	31	77	26	11	149	43	5	9	15	16	44	22	448
8:15 AM	35	53	6	4	154	42	4	2	10	21	32	15	378
8:30 AM	34	77	7	4	151	35	5	6	11	15	36	19	400
8:45 AM	49	100	6	4	106	37	5	7	13	8	45	24	404
9:00 AM	46	111	5	5	124	44	3	4	21	5	32	19	419
9:15 AM	48	96	6	4	147	30	11	6	16	5	35	14	418
9:30 AM	40	71	7	6	106	37	4	7	18	3	38	9	346
9:45 AM	36	67	5	2	126	41	6	4	22	10	22	13	354

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	440	867	80	60	1559	434	52	55	158	111	385	192	4393
APPROACH %'s :	31.72%	62.51%	5.77%	2.92%	75.94%	21.14%	19.62%	20.75%	59.62%	16.13%	55.96%	27.91%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	177	384	24	17	528	146	24	23	61	33	148	76	1641
PEAK HR FACTOR :		0.903			0.909			0.818			0.834		0.979

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-004 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Westholme Ave			Westholme Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	0	1	0	
3:00 PM	16	85	6	6	90	8	17	10	16	8	5	15	282
3:15 PM	21	119	9	13	128	8	24	12	25	11	6	9	385
3:30 PM	20	96	7	7	124	6	36	25	24	9	9	13	376
3:45 PM	15	82	2	6	114	7	26	23	29	4	9	15	332
4:00 PM	18	106	8	12	109	9	40	40	41	0	9	11	403
4:15 PM	17	84	10	8	106	8	51	31	31	5	14	9	374
4:30 PM	21	136	6	14	103	9	44	34	34	10	11	12	434
4:45 PM	23	120	10	13	144	12	42	41	48	9	15	12	489
5:00 PM	25	120	12	14	171	14	74	67	53	5	9	11	575
5:15 PM	26	142	14	19	158	7	53	65	38	11	17	16	566
5:30 PM	29	115	8	13	125	20	40	39	38	12	21	11	471
5:45 PM	27	129	13	9	119	16	31	41	48	9	16	9	467
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	1334	105	134	1491	124	478	428	425	93	141	143	5154
APPROACH %'s :	15.20%	78.61%	6.19%	7.66%	85.25%	7.09%	35.91%	32.16%	31.93%	24.67%	37.40%	37.93%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	103	497	44	59	598	53	209	212	177	37	62	50	2101
PEAK HR FACTOR :		0.885			0.892			0.771			0.847		0.913

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-005 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Manning Ave			Manning Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	0	1	0	
7:00 AM	0	83	2	3	95	0	0	0	0	2	0	14	199
7:15 AM	0	112	0	7	111	0	0	0	0	0	0	12	242
7:30 AM	0	117	1	7	149	0	0	0	0	0	0	28	302
7:45 AM	0	168	3	6	122	0	0	0	0	0	0	30	329
8:00 AM	0	171	3	11	155	0	0	0	0	0	0	22	362
8:15 AM	0	126	2	7	177	0	0	0	0	2	0	31	345
8:30 AM	0	152	2	3	167	0	0	0	0	4	0	24	352
8:45 AM	0	187	1	6	111	0	0	0	0	2	0	31	338
9:00 AM	0	175	0	10	148	0	0	0	1	1	0	21	356
9:15 AM	0	172	1	5	148	0	0	0	0	1	0	23	350
9:30 AM	0	141	1	5	120	0	0	0	0	2	0	12	281
9:45 AM	0	133	2	8	144	0	0	0	0	1	0	16	304

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1737	18	78	1647	0	0	0	1	15	0	264	3760
APPROACH %'s :	0.00%	98.97%	1.03%	4.52%	95.48%	0.00%	0.00%	0.00%	100.00%	5.38%	0.00%	94.62%	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	636	8	27	610	0	0	0	0	8	0	108	1397
PEAK HR FACTOR :		0.856			0.865			0.000			0.879		0.965

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-005

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

PM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Manning Ave			Manning Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	0	1	0	
3:00 PM	0	109	3	16	116	0	0	0	0	1	0	13	258
3:15 PM	0	154	1	16	172	0	0	0	0	0	0	9	352
3:30 PM	0	123	4	31	187	0	0	0	0	1	0	10	356
3:45 PM	0	118	6	22	171	0	0	0	0	3	0	7	327
4:00 PM	0	135	3	41	167	0	0	0	0	0	0	7	353
4:15 PM	0	110	5	21	169	0	0	0	0	5	0	15	325
4:30 PM	0	176	4	29	167	0	0	0	0	1	0	12	389
4:45 PM	0	159	3	26	202	0	0	0	0	4	0	21	415
5:00 PM	0	146	6	66	266	0	0	0	0	2	0	18	504
5:15 PM	0	195	7	45	234	0	0	0	0	2	0	14	497
5:30 PM	0	153	5	45	181	0	0	0	0	1	0	19	404
5:45 PM	0	195	5	45	171	0	0	0	0	3	0	18	437
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1773	52	403	2203	0	0	0	0	23	0	163	4617
APPROACH %'s :	0.00%	97.15%	2.85%	15.46%	84.54%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	12.37%	0.00%	87.63%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	689	23	201	852	0	0	0	0	8	0	69	1842
PEAK HR FACTOR :	0.881			0.793			0.000			0.917			0.914

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-006 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	1	2	0	
7:00 AM	1	180	33	28	63	4	2	5	1	25	11	31	384
7:15 AM	2	186	33	15	90	4	5	11	2	17	5	25	395
7:30 AM	0	198	31	26	153	1	4	16	1	27	7	35	499
7:45 AM	2	213	38	35	126	7	11	15	1	27	5	40	520
8:00 AM	5	186	35	30	73	0	6	24	2	26	8	42	437
8:15 AM	4	149	29	32	54	2	7	14	2	33	13	34	373
8:30 AM	2	133	32	26	64	4	5	16	0	33	12	35	362
8:45 AM	0	125	29	23	70	1	6	21	0	39	15	23	352
9:00 AM	3	121	30	30	73	2	8	12	1	28	12	20	340
9:15 AM	0	108	29	24	69	2	3	12	3	28	15	25	318
9:30 AM	0	98	27	23	55	3	6	9	2	30	13	19	285
9:45 AM	1	106	31	29	70	2	1	14	1	27	16	23	321

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	20	1803	377	321	960	32	64	169	16	340	132	352	4586
APPROACH %'s :	0.91%	81.95%	17.14%	24.45%	73.12%	2.44%	25.70%	67.87%	6.43%	41.26%	16.02%	42.72%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	9	783	137	106	442	12	26	66	6	97	25	142	1851
PEAK HR FACTOR :		0.918			0.778			0.766			0.868		0.890

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-006 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	1	2	0	
3:00 PM	6	85	44	21	170	9	2	15	6	50	34	42	484
3:15 PM	8	91	47	32	153	10	6	19	3	51	25	30	475
3:30 PM	6	101	58	29	238	9	2	26	3	65	40	54	631
3:45 PM	7	93	50	32	155	2	3	18	4	49	38	25	476
4:00 PM	3	78	44	34	196	9	7	12	6	44	37	35	505
4:15 PM	4	107	47	39	180	10	5	17	4	46	52	46	557
4:30 PM	7	102	29	33	227	13	3	18	6	63	46	36	583
4:45 PM	13	104	37	38	201	12	8	24	4	52	42	35	570
5:00 PM	12	102	40	38	308	12	3	19	6	61	55	37	693
5:15 PM	12	106	38	45	264	8	5	30	5	60	56	47	676
5:30 PM	11	84	39	35	225	6	7	24	1	50	43	38	563
5:45 PM	14	119	50	47	194	14	6	26	5	47	44	53	619

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	103	1172	523	423	2511	114	57	248	53	638	512	478	6832
APPROACH %'s :	5.73%	65.18%	29.09%	13.88%	82.38%	3.74%	15.92%	69.27%	14.80%	39.19%	31.45%	29.36%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	49	411	167	165	991	40	21	99	17	218	198	175	2551
PEAK HR FACTOR :		0.857			0.835			0.856			0.906		0.920

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-007 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	1	0	1	1	0	
7:00 AM	10	106	34	8	27	13	14	34	7	11	34	23	321
7:15 AM	13	130	28	7	39	12	18	30	4	12	33	18	344
7:30 AM	10	155	31	9	56	12	18	43	10	12	57	25	438
7:45 AM	9	206	34	13	53	16	23	45	11	14	43	30	497
8:00 AM	18	160	36	11	40	16	18	53	10	12	47	30	451
8:15 AM	10	150	43	9	49	20	22	52	12	19	54	29	469
8:30 AM	16	131	52	13	57	14	30	44	7	26	50	28	468
8:45 AM	11	138	46	10	47	20	16	40	13	12	49	17	419
9:00 AM	14	137	42	7	66	15	18	46	9	14	42	30	440
9:15 AM	9	166	41	17	64	18	14	40	9	20	55	26	479
9:30 AM	8	142	47	9	71	18	14	44	11	22	56	21	463
9:45 AM	11	134	44	13	59	17	20	44	11	20	33	27	433

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	139	1755	478	126	628	191	225	515	114	194	553	304	5222
APPROACH %'s :	5.86%	73.99%	20.15%	13.33%	66.46%	20.21%	26.35%	60.30%	13.35%	18.46%	52.62%	28.92%	

PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	53	647	165	46	199	66	93	194	40	71	194	117	1885
PEAK HR FACTOR :		0.868			0.926			0.951			0.918		0.948

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-007 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	1	0	1	1	0	
3:00 PM	18	65	45	12	109	35	14	55	15	30	69	20	487
3:15 PM	17	83	53	16	108	31	16	60	13	27	69	16	509
3:30 PM	20	96	41	16	129	43	16	67	13	35	92	23	591
3:45 PM	15	74	45	17	101	26	17	55	26	22	70	20	488
4:00 PM	17	72	40	22	115	30	13	49	22	30	70	25	505
4:15 PM	21	66	47	17	109	22	10	61	23	26	89	21	512
4:30 PM	16	74	46	23	137	39	6	60	17	41	102	16	577
4:45 PM	16	75	34	13	99	23	14	66	23	32	94	26	515
5:00 PM	19	68	47	17	121	41	5	52	24	38	100	15	547
5:15 PM	14	57	41	21	112	39	18	72	14	38	107	18	551
5:30 PM	14	75	38	21	106	39	10	86	13	27	77	13	519
5:45 PM	16	69	48	21	106	23	12	83	14	29	100	23	544

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	203	874	525	216	1352	391	151	766	217	375	1039	236	6345
APPROACH %'s :	12.67%	54.56%	32.77%	11.03%	69.01%	19.96%	13.32%	67.55%	19.14%	22.73%	62.97%	14.30%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	65	274	168	74	469	142	43	250	78	149	403	75	2190
PEAK HR FACTOR :		0.932			0.861			0.892			0.962		0.949

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-008 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Tiverton Ave			Tiverton Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	1	2	0	1	1	0	
7:00 AM	10	23	5	1	2	2	28	38	10	6	62	16	203
7:15 AM	10	26	12	0	1	3	18	31	14	4	73	17	209
7:30 AM	12	25	10	1	1	6	30	35	19	7	91	25	262
7:45 AM	14	42	14	1	3	6	25	49	13	4	86	17	274
8:00 AM	12	22	14	1	0	8	18	61	13	8	87	22	266
8:15 AM	12	26	11	2	0	4	34	50	14	10	104	18	285
8:30 AM	11	17	9	1	2	9	18	57	16	12	90	10	252
8:45 AM	7	28	9	0	1	2	20	56	20	6	69	20	238
9:00 AM	6	13	10	0	1	4	19	69	10	7	80	12	231
9:15 AM	13	16	11	1	1	7	25	57	17	6	93	12	259
9:30 AM	13	13	10	1	2	11	17	58	13	7	62	11	218
9:45 AM	9	16	9	3	4	8	16	59	14	9	70	11	228

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	129	267	124	12	18	70	268	620	173	86	967	191	2925
APPROACH %'s :	24.81%	51.35%	23.85%	12.00%	18.00%	70.00%	25.26%	58.44%	16.31%	6.91%	77.73%	15.35%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	50	115	49	5	4	24	107	195	59	29	368	82	1087
PEAK HR FACTOR :		0.764			0.825			0.921			0.907		0.954

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-008

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

PM

NS/EW Streets:	Tiverton Ave			Tiverton Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	1	2	0	1	1	0	
3:00 PM	12	6	15	8	7	36	4	80	24	7	70	4	273
3:15 PM	10	0	17	4	3	12	7	106	29	12	93	5	298
3:30 PM	14	3	12	9	8	35	8	77	31	10	104	4	315
3:45 PM	12	1	12	12	9	25	14	88	28	9	104	2	316
4:00 PM	17	1	12	17	13	30	4	91	33	8	94	1	321
4:15 PM	17	4	9	13	11	34	10	91	24	11	96	2	322
4:30 PM	25	2	9	29	10	51	7	100	39	10	105	2	389
4:45 PM	6	3	14	13	9	21	5	111	31	9	114	2	338
5:00 PM	14	7	15	30	23	44	5	85	27	21	120	1	392
5:15 PM	16	5	18	29	23	28	5	108	33	18	127	3	413
5:30 PM	16	2	23	9	13	27	4	110	40	9	98	4	355
5:45 PM	13	4	19	18	9	31	6	109	40	13	84	3	349
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	172	38	175	191	138	374	79	1156	379	137	1209	33	4081
APPROACH %'s :	44.68%	9.87%	45.45%	27.17%	19.63%	53.20%	4.89%	71.62%	23.48%	9.93%	87.67%	2.39%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	61	17	56	101	65	144	22	404	130	58	466	8	1532
PEAK HR FACTOR :	0.859			0.799			0.946			0.899			0.927

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-009 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	1.5	0.5	1	1	1	0	
7:00 AM	12	39	1	1	35	56	36	4	6	1	18	4	213
7:15 AM	3	65	6	2	41	68	37	2	1	2	21	8	256
7:30 AM	9	86	4	2	64	84	33	5	4	2	32	9	334
7:45 AM	11	124	0	3	60	59	40	15	9	3	37	10	371
8:00 AM	8	110	4	1	76	69	60	12	5	0	44	13	402
8:15 AM	10	74	6	2	92	92	47	10	8	3	29	9	382
8:30 AM	6	98	2	3	84	81	52	10	7	3	23	10	379
8:45 AM	14	142	5	10	60	53	44	14	5	3	28	10	388
9:00 AM	10	111	5	6	69	70	53	12	11	3	25	6	381
9:15 AM	8	114	2	1	85	72	50	10	8	3	31	13	397
9:30 AM	6	90	7	7	65	55	50	10	7	1	14	7	319
9:45 AM	14	83	3	3	82	63	49	8	10	2	18	6	341

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	111	1136	45	41	813	822	551	112	81	26	320	105	4163
APPROACH %'s :	8.59%	87.93%	3.48%	2.45%	48.51%	49.05%	74.06%	15.05%	10.89%	5.76%	70.95%	23.28%	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	38	424	17	16	312	295	203	46	25	9	124	42	1551
PEAK HR FACTOR :		0.744			0.837			0.890			0.768		0.965

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-009 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Le Conte Ave			Le Conte Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	1.5	0.5	1	1	1	0	
3:00 PM	9	49	3	3	59	55	54	27	17	4	19	6	305
3:15 PM	13	62	5	4	102	74	82	36	13	2	24	9	426
3:30 PM	5	66	7	10	101	79	53	21	23	5	31	8	409
3:45 PM	13	58	5	8	81	84	67	26	16	4	20	4	386
4:00 PM	7	60	3	8	83	69	75	31	13	2	25	5	381
4:15 PM	8	46	4	7	103	67	59	34	14	4	32	10	388
4:30 PM	10	81	0	8	85	78	99	24	19	0	27	7	438
4:45 PM	16	75	6	14	103	81	89	29	17	4	31	4	469
5:00 PM	8	83	6	13	152	117	64	46	14	6	21	10	540
5:15 PM	21	95	8	12	134	87	93	42	24	4	30	13	563
5:30 PM	15	73	4	9	110	71	89	33	22	3	33	6	468
5:45 PM	7	93	5	11	100	63	93	37	21	4	34	12	480
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	132	841	56	107	1213	925	917	386	213	42	327	94	5253
APPROACH %'s :	12.83%	81.73%	5.44%	4.77%	54.03%	41.20%	60.49%	25.46%	14.05%	9.07%	70.63%	20.30%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	51	344	23	45	496	338	339	158	81	17	118	41	2051
PEAK HR FACTOR :		0.843			0.779			0.909			0.880		0.911

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-010 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	49	69	13	93	0	0	0	0	17	0	3	244
7:15 AM	0	63	76	19	96	0	0	0	0	30	0	8	292
7:30 AM	0	78	77	15	130	0	0	0	0	30	0	5	335
7:45 AM	0	85	73	19	164	0	0	0	0	38	0	6	385
8:00 AM	0	67	73	15	155	0	0	0	0	25	0	9	344
8:15 AM	0	83	53	21	136	0	0	0	0	23	0	16	332
8:30 AM	0	67	55	24	166	0	0	0	0	32	0	15	359
8:45 AM	0	82	52	29	168	0	0	0	0	22	0	9	362
9:00 AM	0	82	58	22	200	0	0	0	0	27	0	7	396
9:15 AM	0	80	51	19	173	0	0	0	0	16	0	6	345
9:30 AM	0	66	59	22	148	0	0	0	0	27	0	12	334
9:45 AM	0	78	42	19	132	0	0	0	0	19	0	7	297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	880	738	237	1761	0	0	0	0	306	0	103	4025
APPROACH %'s :	0.00%	54.39%	45.61%	11.86%	88.14%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	74.82%	0.00%	25.18%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	0	311	216	94	707	0	0	0	0	97	0	37	1462
PEAK HR FACTOR :		0.941			0.902			0.000			0.713		0.923

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-010 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	152	36	6	99	0	0	0	0	66	0	22	381
3:15 PM	0	142	39	14	96	0	0	0	0	69	0	36	396
3:30 PM	0	151	42	25	108	0	0	0	0	92	0	37	455
3:45 PM	0	171	30	11	103	0	0	0	0	81	0	35	431
4:00 PM	0	208	33	11	75	0	0	0	0	82	0	39	448
4:15 PM	0	202	28	8	94	0	0	0	0	90	0	26	448
4:30 PM	0	171	30	8	69	0	0	0	0	111	0	20	409
4:45 PM	0	225	23	10	89	0	0	0	0	97	0	28	472
5:00 PM	0	203	39	11	110	0	0	0	0	127	0	47	537
5:15 PM	0	215	34	14	101	0	0	0	0	127	0	38	529
5:30 PM	0	192	33	12	112	0	0	0	0	107	0	31	487
5:45 PM	0	227	35	8	90	0	0	0	0	88	0	39	487

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2259	402	138	1146	0	0	0	0	1137	0	398	5480
APPROACH %'s :	0.00%	84.89%	15.11%	10.75%	89.25%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	74.07%	0.00%	25.93%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	837	141	45	413	0	0	0	0	449	0	155	2040
PEAK HR FACTOR :		0.933			0.923			0.000			0.868		0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-011 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	1	1	0	
7:00 AM	4	152	22	5	81	17	64	15	7	10	6	11	394
7:15 AM	6	174	16	2	104	21	55	25	9	10	16	17	455
7:30 AM	14	183	12	7	172	25	51	33	10	9	20	7	543
7:45 AM	7	208	17	9	134	47	59	27	10	10	8	13	549
8:00 AM	8	170	18	7	91	27	47	20	15	2	10	18	433
8:15 AM	12	147	20	8	87	22	40	26	16	16	13	9	416
8:30 AM	9	130	18	5	82	35	48	28	8	5	11	7	386
8:45 AM	5	113	28	6	108	24	48	26	16	9	8	8	399
9:00 AM	9	122	34	10	93	29	44	31	13	10	9	8	412
9:15 AM	4	132	28	10	103	17	38	30	8	12	7	6	395
9:30 AM	6	129	26	7	94	25	36	37	12	17	6	6	401
9:45 AM	10	119	36	11	80	21	32	26	12	16	7	8	378

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	1779	275	87	1229	310	562	324	136	126	121	118	5161
APPROACH %'s :	4.38%	82.82%	12.80%	5.35%	75.58%	19.07%	54.99%	31.70%	13.31%	34.52%	33.15%	32.33%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	35	735	63	25	501	120	212	105	44	31	54	55	1980
PEAK HR FACTOR :		0.898			0.792			0.940			0.814		0.902

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-011 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	1	1	0	
3:00 PM	15	120	40	11	174	67	26	17	8	22	22	28	550
3:15 PM	10	129	30	12	182	63	27	17	16	24	26	25	561
3:30 PM	18	126	37	9	214	76	27	35	8	22	40	20	632
3:45 PM	12	127	34	20	184	78	25	18	11	22	44	24	599
4:00 PM	15	125	39	24	198	66	23	22	5	29	43	24	613
4:15 PM	19	129	24	16	186	65	22	12	14	23	38	22	570
4:30 PM	12	123	26	18	211	86	19	20	8	31	28	31	613
4:45 PM	13	138	27	25	201	73	14	22	10	26	49	25	623
5:00 PM	19	132	42	24	225	112	23	28	7	27	44	33	716
5:15 PM	17	142	38	22	247	101	22	23	11	24	55	31	733
5:30 PM	11	115	35	21	221	94	26	22	13	31	36	36	661
5:45 PM	16	146	31	28	216	71	23	26	7	26	43	40	673

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	177	1552	403	230	2459	952	277	262	118	307	468	339	7544
APPROACH %'s :	8.30%	72.80%	18.90%	6.32%	67.54%	26.15%	42.16%	39.88%	17.96%	27.56%	42.01%	30.43%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	63	535	146	95	909	378	94	99	38	108	178	140	2783
PEAK HR FACTOR :		0.944			0.934			0.947			0.968		0.949

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-012 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	3	0	0	2	0	0	1	0	
7:00 AM	13	158	11	0	47	3	2	12	4	10	4	4	268
7:15 AM	17	176	13	0	54	4	7	13	4	12	15	5	320
7:30 AM	19	242	13	8	59	8	9	21	8	15	20	12	434
7:45 AM	14	206	12	4	65	3	7	22	6	10	26	9	384
8:00 AM	20	189	7	3	55	6	4	13	5	12	21	6	341
8:15 AM	16	185	7	4	75	4	4	17	8	9	21	5	355
8:30 AM	22	167	14	4	89	0	5	25	4	16	15	12	373
8:45 AM	13	154	11	6	65	5	8	20	11	7	25	9	334
9:00 AM	15	194	16	2	80	4	4	24	9	14	18	9	389
9:15 AM	20	209	14	1	84	8	12	20	7	15	17	5	412
9:30 AM	28	167	10	6	90	4	10	27	12	12	15	11	392
9:45 AM	15	160	14	3	87	8	7	26	10	19	17	7	373

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	212	2207	142	41	850	57	79	240	88	151	214	94	4375
APPROACH %'s :	8.28%	86.18%	5.54%	4.32%	89.66%	6.01%	19.41%	58.97%	21.62%	32.90%	46.62%	20.48%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	78	730	54	12	341	24	33	97	38	60	67	32	1566
PEAK HR FACTOR :		0.887			0.943			0.857			0.924		0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-012

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	3	0	0	2	0	0	1	0	
3:00 PM	37	108	28	6	148	6	8	33	30	32	40	18	494
3:15 PM	28	112	19	4	136	10	8	28	21	20	50	16	452
3:30 PM	27	120	22	6	152	11	16	28	27	25	43	20	497
3:45 PM	32	100	18	6	130	15	5	31	16	24	56	8	441
4:00 PM	29	94	16	0	139	15	10	37	26	25	46	15	452
4:15 PM	36	111	21	2	142	8	11	22	11	19	59	12	454
4:30 PM	28	112	19	1	183	9	16	29	22	20	51	17	507
4:45 PM	25	105	23	5	141	10	16	34	28	22	60	12	481
5:00 PM	22	106	16	0	161	16	10	45	24	34	65	13	512
5:15 PM	26	82	16	1	143	8	14	47	24	27	70	19	477
5:30 PM	29	109	19	6	124	14	10	45	15	16	58	18	463
5:45 PM	23	98	17	1	139	21	19	43	27	30	80	20	518

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	342	1257	234	38	1738	143	143	422	271	294	678	188	5748
APPROACH %'s :	18.66%	68.58%	12.77%	1.98%	90.57%	7.45%	17.11%	50.48%	32.42%	25.34%	58.45%	16.21%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	101	405	74	7	628	43	56	155	98	103	246	61	1977
PEAK HR FACTOR :		0.912			0.878			0.909			0.884		0.965

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-013 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	0	1	0	0	1	0	
7:00 AM	2	39	1	4	36	9	4	2	12	0	8	11	128
7:15 AM	9	64	3	4	41	7	7	5	5	1	6	7	159
7:30 AM	6	78	1	6	61	9	9	4	13	3	8	7	205
7:45 AM	12	120	2	6	68	13	13	5	16	2	13	15	285
8:00 AM	10	93	3	3	70	9	13	8	11	7	13	14	254
8:15 AM	11	76	3	7	83	18	7	5	16	1	11	6	244
8:30 AM	9	92	2	7	80	9	14	9	14	6	10	9	261
8:45 AM	13	128	2	7	63	8	16	15	14	0	9	14	289
9:00 AM	7	103	1	5	78	12	18	10	17	3	10	5	269
9:15 AM	8	97	4	5	78	9	15	7	18	2	4	9	256
9:30 AM	2	86	3	4	66	7	14	10	23	2	13	6	236
9:45 AM	8	86	1	3	82	7	10	12	14	3	10	8	244
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	97	1062	26	61	806	117	140	92	173	30	115	111	2830
APPROACH %'s :	8.19%	89.62%	2.19%	6.20%	81.91%	11.89%	34.57%	22.72%	42.72%	11.72%	44.92%	43.36%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	37	420	9	24	299	38	63	41	63	11	33	37	1075
PEAK HR FACTOR :		0.815			0.940			0.928			0.810		0.930

CONTROL : Signalized

Intersection Turning Movement
Prepared by:
National Data & Surveying Services

Project ID: 16-5007-013 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Hilgard Ave			Hilgard Ave			Weyburn Ave			Weyburn Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	1	0	1	0	0	1	0	
3:00 PM	10	50	6	7	70	9	14	20	25	0	7	6	224
3:15 PM	10	56	5	8	100	9	20	25	33	3	11	12	292
3:30 PM	3	56	8	10	99	15	18	23	38	1	11	5	287
3:45 PM	7	59	3	8	72	14	20	28	16	4	14	8	253
4:00 PM	12	56	1	13	91	11	13	18	19	0	12	5	251
4:15 PM	11	52	2	8	102	18	13	32	16	1	15	12	282
4:30 PM	11	68	2	12	91	9	16	23	34	2	13	8	289
4:45 PM	8	73	2	12	103	10	19	32	24	4	18	7	312
5:00 PM	15	75	2	10	138	27	27	24	32	2	15	12	379
5:15 PM	11	72	5	10	146	14	24	32	43	4	20	6	387
5:30 PM	12	71	7	14	112	17	20	30	33	3	21	10	350
5:45 PM	9	80	6	13	109	9	23	34	29	2	16	12	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	119	768	49	125	1233	162	227	321	342	26	173	103	3648
APPROACH %'s :	12.71%	82.05%	5.24%	8.22%	81.12%	10.66%	25.51%	36.07%	38.43%	8.61%	57.28%	34.11%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	47	298	20	47	505	67	94	120	137	11	72	40	1458
PEAK HR FACTOR :	0.961			0.884			0.886			0.904			0.942

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-014 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	1	2	0	0	0	0	2	0	1	
7:00 AM	0	113	92	20	91	0	0	0	0	30	0	4	350
7:15 AM	0	127	102	27	101	0	0	0	0	26	0	5	388
7:30 AM	0	154	110	41	120	0	0	0	0	35	0	12	472
7:45 AM	0	149	132	37	164	0	0	0	0	32	0	4	518
8:00 AM	0	132	114	50	134	0	0	0	0	38	0	9	477
8:15 AM	0	129	114	26	130	0	0	0	0	30	0	8	437
8:30 AM	0	116	94	33	176	0	0	0	0	28	0	7	454
8:45 AM	0	123	95	44	140	0	0	0	0	27	0	9	438
9:00 AM	0	125	98	54	172	0	0	0	0	39	0	9	497
9:15 AM	1	119	74	41	150	0	0	0	0	31	0	11	427
9:30 AM	0	120	72	41	143	0	0	0	0	35	0	9	420
9:45 AM	0	104	85	36	119	0	0	0	0	35	0	7	386

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	1511	1182	450	1640	0	0	0	0	386	0	94	5264
APPROACH %'s :	0.04%	56.09%	43.88%	21.53%	78.47%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	80.42%	0.00%	19.58%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	564	470	154	548	0	0	0	0	135	0	33	1904
PEAK HR FACTOR :		0.920			0.873			0.000			0.894		0.919

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-014 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	1	2	0	0	0	0	2	0	1	
3:00 PM	0	145	48	11	155	0	0	0	0	116	0	48	523
3:15 PM	0	157	52	8	161	0	0	0	0	108	0	29	515
3:30 PM	0	141	39	10	184	0	0	0	0	122	0	45	541
3:45 PM	0	167	46	10	175	0	0	0	0	107	0	41	546
4:00 PM	0	183	42	5	155	0	0	0	0	168	0	61	614
4:15 PM	0	166	40	12	178	0	0	0	0	134	0	56	586
4:30 PM	1	164	40	5	180	0	0	0	0	131	0	44	565
4:45 PM	0	181	51	6	179	0	0	0	0	133	0	54	604
5:00 PM	0	185	61	8	231	0	0	0	0	148	0	61	694
5:15 PM	0	182	56	16	215	0	0	0	0	183	0	52	704
5:30 PM	0	186	59	8	220	0	0	0	0	138	0	44	655
5:45 PM	0	213	67	15	171	0	0	0	0	120	0	55	641

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	2070	601	114	2204	0	0	0	0	1608	0	590	7188
APPROACH %'s :	0.04%	77.47%	22.49%	4.92%	95.08%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	73.16%	0.00%	26.84%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	766	243	47	837	0	0	0	0	589	0	212	2694
PEAK HR FACTOR :		0.901			0.925			0.000			0.852		0.957

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-015 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Structure 32_Lot 36			Structure 32_Lot 36			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	1	0.5	0.5	1	2	0	1	2	0	
7:00 AM	0	0	4	0	0	5	42	57	18	5	28	7	166
7:15 AM	1	0	3	4	0	4	38	54	33	4	25	15	181
7:30 AM	3	1	3	3	0	3	53	54	36	15	39	7	217
7:45 AM	1	0	1	3	1	3	62	65	42	6	39	12	235
8:00 AM	3	0	1	2	0	3	46	72	39	9	33	11	219
8:15 AM	0	0	1	1	0	2	35	79	33	4	34	7	196
8:30 AM	3	0	1	4	0	8	42	64	26	7	26	2	183
8:45 AM	3	0	4	4	0	4	33	83	22	4	33	6	196
9:00 AM	2	1	5	3	2	6	40	73	18	4	35	2	191
9:15 AM	1	2	6	3	1	3	33	78	24	7	41	7	206
9:30 AM	4	1	3	2	0	2	25	79	13	5	42	7	183
9:45 AM	1	3	1	2	1	4	21	84	15	3	42	5	182

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	8	33	31	5	47	470	842	319	73	417	88	2355
APPROACH %'s :	34.92%	12.70%	52.38%	37.35%	6.02%	56.63%	28.82%	51.62%	19.56%	12.63%	72.15%	15.22%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	7	1	6	9	1	11	196	270	150	34	145	37	867
PEAK HR FACTOR :		0.500			0.750			0.911			0.885		0.922

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-015 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Structure 32_Lot 36			Structure 32_Lot 36			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	1	0.5	0.5	1	2	0	1	2	0	
3:00 PM	17	1	8	7	2	16	5	43	4	1	129	7	240
3:15 PM	16	0	11	7	1	14	9	49	2	1	123	4	237
3:30 PM	13	1	14	4	0	31	8	35	0	2	132	7	247
3:45 PM	18	0	7	2	1	18	4	44	9	4	116	3	226
4:00 PM	36	1	8	17	0	41	6	45	1	1	145	4	305
4:15 PM	37	0	8	7	1	38	6	36	2	4	112	2	253
4:30 PM	32	0	14	11	0	40	5	45	3	3	117	2	272
4:45 PM	25	0	12	10	0	27	16	46	4	7	103	3	253
5:00 PM	45	1	18	21	1	59	12	52	3	7	140	4	363
5:15 PM	37	0	15	10	0	39	18	48	5	10	138	1	321
5:30 PM	22	0	12	13	1	32	17	51	7	10	116	3	284
5:45 PM	24	0	10	7	0	19	18	50	7	14	122	2	273

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	322	4	137	116	7	374	124	544	47	64	1493	42	3274
APPROACH %'s :	69.55%	0.86%	29.59%	23.34%	1.41%	75.25%	17.34%	76.08%	6.57%	4.00%	93.37%	2.63%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	128	1	55	51	2	149	65	201	22	41	516	10	1241
PEAK HR FACTOR :		0.719			0.623			0.960			0.939		0.855

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-016

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/26/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	0	2	0	
7:00 AM	12	125	3	1	85	14	25	17	9	5	22	10	328
7:15 AM	10	149	8	4	88	20	31	22	9	7	21	14	383
7:30 AM	20	168	8	6	133	37	20	21	7	5	17	10	452
7:45 AM	19	195	7	7	127	32	26	33	13	9	41	25	534
8:00 AM	13	132	10	8	80	19	34	33	17	4	28	14	392
8:15 AM	13	115	12	4	84	15	12	42	9	3	19	14	342
8:30 AM	9	143	16	7	84	20	27	30	9	8	18	15	386
8:45 AM	11	110	6	2	86	26	25	40	12	8	21	22	369
9:00 AM	14	137	10	2	110	16	25	36	14	9	17	16	406
9:15 AM	6	150	7	6	87	17	22	36	10	5	16	11	373
9:30 AM	16	133	10	6	77	17	17	31	8	11	24	18	368
9:45 AM	15	130	15	5	102	19	23	27	9	11	21	12	389

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	158	1687	112	58	1143	252	287	368	126	85	265	181	4722
APPROACH %'s :	8.07%	86.20%	5.72%	3.99%	78.66%	17.34%	36.75%	47.12%	16.13%	16.01%	49.91%	34.09%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	62	644	33	25	428	108	111	109	46	25	107	63	1761
PEAK HR FACTOR :		0.836			0.797			0.792			0.650		0.824

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-016 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/26/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	2	0	0	2	0	
3:00 PM	15	101	13	26	89	42	15	37	10	12	58	29	447
3:15 PM	18	96	10	24	127	33	15	36	7	18	56	34	474
3:30 PM	18	114	8	20	206	51	19	35	13	14	51	28	577
3:45 PM	14	117	14	13	166	29	17	38	12	18	50	37	525
4:00 PM	19	122	9	10	202	33	18	28	10	22	48	27	548
4:15 PM	20	115	9	13	178	31	21	39	15	34	59	22	556
4:30 PM	20	120	10	8	189	31	29	27	15	19	32	27	527
4:45 PM	23	115	9	10	153	35	20	26	7	17	33	25	473
5:00 PM	25	102	6	16	216	43	25	56	24	26	51	41	631
5:15 PM	21	111	8	22	171	49	19	44	10	14	59	30	558
5:30 PM	22	112	12	14	178	35	14	37	14	18	55	32	543
5:45 PM	26	132	10	14	176	38	27	42	6	12	62	38	583
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	241	1357	118	190	2051	450	239	445	143	224	614	370	6442
APPROACH %'s :	14.04%	79.08%	6.88%	7.06%	76.22%	16.72%	28.90%	53.81%	17.29%	18.54%	50.83%	30.63%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	94	457	36	66	741	165	85	179	54	70	227	141	2315
PEAK HR FACTOR :		0.874			0.884			0.757			0.928		0.917

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-017 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	0	2	0	0	2	0	0	2	0	
7:00 AM	18	157	3	0	49	6	11	9	4	1	14	7	279
7:15 AM	14	170	21	2	56	10	11	7	7	2	14	16	330
7:30 AM	12	215	13	1	79	5	17	18	5	1	15	14	395
7:45 AM	19	218	17	1	78	8	13	18	8	4	18	10	412
8:00 AM	18	199	13	0	67	11	17	17	5	1	10	9	367
8:15 AM	13	208	14	3	84	5	16	30	17	5	17	10	422
8:30 AM	13	194	15	0	95	12	13	19	10	4	10	6	391
8:45 AM	10	179	17	2	79	7	13	26	13	4	14	10	374
9:00 AM	6	192	12	5	93	13	18	16	7	1	9	10	382
9:15 AM	11	215	16	5	92	12	8	28	2	2	17	19	427
9:30 AM	11	186	14	6	108	8	14	26	6	2	10	13	404
9:45 AM	10	170	15	3	100	12	11	17	7	3	10	11	369
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	155	2303	170	28	980	109	162	231	91	30	158	135	4552
APPROACH %'s :	5.90%	87.63%	6.47%	2.51%	87.74%	9.76%	33.47%	47.73%	18.80%	9.29%	48.92%	41.80%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	62	840	57	5	308	29	63	83	35	11	60	43	1596
PEAK HR FACTOR :		0.944			0.929			0.718			0.891		0.945

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-017 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Kinross Ave			Kinross Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	0	2	0	0	2	0	0	2	0	
3:00 PM	13	134	20	7	187	11	17	24	16	5	27	24	485
3:15 PM	20	129	20	2	161	16	16	16	19	7	22	19	447
3:30 PM	18	146	15	7	189	18	8	22	10	7	31	20	491
3:45 PM	20	122	18	3	176	16	16	14	17	6	29	20	457
4:00 PM	20	110	19	2	175	22	15	20	24	6	33	21	467
4:15 PM	16	126	12	1	157	16	18	34	19	10	35	20	464
4:30 PM	16	126	24	0	186	16	17	17	19	13	34	14	482
4:45 PM	21	129	11	4	188	16	13	26	12	7	30	13	470
5:00 PM	22	117	13	1	208	19	14	50	22	8	37	15	526
5:15 PM	12	108	23	3	152	19	6	54	26	8	53	13	477
5:30 PM	16	119	16	4	140	18	16	34	18	5	31	17	434
5:45 PM	20	116	27	3	167	25	18	41	13	4	58	14	506

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	214	1482	218	37	2086	212	174	352	215	86	420	210	5706
APPROACH %'s :	11.18%	77.43%	11.39%	1.58%	89.34%	9.08%	23.48%	47.50%	29.01%	12.01%	58.66%	29.33%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	71	480	71	8	734	70	50	147	79	36	154	55	1955
PEAK HR FACTOR :		0.937			0.890			0.802			0.828		0.929

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-018 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	1	1	0	
7:00 AM	5	140	17	9	82	2	0	0	2	10	2	8	277
7:15 AM	4	150	24	5	103	1	1	0	0	19	1	13	321
7:30 AM	5	165	25	9	148	1	0	1	1	24	6	12	397
7:45 AM	5	193	30	15	123	0	0	0	0	31	2	15	414
8:00 AM	9	150	25	8	83	2	0	0	0	36	4	13	330
8:15 AM	4	143	21	15	85	2	0	0	0	39	6	17	332
8:30 AM	4	115	39	10	86	0	0	0	0	29	4	13	300
8:45 AM	1	114	57	16	102	0	0	0	2	24	5	10	331
9:00 AM	2	128	40	20	75	2	0	1	0	37	4	15	324
9:15 AM	1	131	36	20	103	0	0	2	0	38	1	13	345
9:30 AM	1	126	53	13	108	0	0	1	0	33	0	16	351
9:45 AM	1	127	29	10	95	1	0	0	1	30	2	13	309

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	1682	396	150	1193	11	1	5	6	350	37	158	4031
APPROACH %'s :	1.98%	79.34%	18.68%	11.08%	88.11%	0.81%	8.33%	41.67%	50.00%	64.22%	6.79%	28.99%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	23	651	101	47	439	5	0	1	1	130	18	57	1473
PEAK HR FACTOR :		0.850			0.777			0.250			0.827		0.889

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-018 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	1	1	0	
3:00 PM	4	102	37	18	164	1	0	0	7	54	1	33	421
3:15 PM	1	127	30	11	181	0	1	1	1	59	3	24	439
3:30 PM	0	125	31	18	184	1	0	1	1	57	2	21	441
3:45 PM	2	121	35	12	184	1	0	1	4	57	2	36	455
4:00 PM	0	120	34	13	175	0	0	2	2	61	1	31	439
4:15 PM	2	103	29	14	188	0	0	2	6	55	2	32	433
4:30 PM	1	135	44	18	204	0	1	1	4	54	1	38	501
4:45 PM	1	108	25	14	191	1	0	3	5	66	5	37	456
5:00 PM	3	115	34	13	196	2	1	1	12	71	1	28	477
5:15 PM	1	129	41	10	243	0	2	3	6	79	6	34	554
5:30 PM	3	103	36	19	183	1	1	2	2	95	0	41	486
5:45 PM	2	115	37	26	191	2	0	1	5	53	5	52	489

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	20	1403	413	186	2284	9	6	18	55	761	29	407	5591
APPROACH %'s :	1.09%	76.42%	22.49%	7.50%	92.13%	0.36%	7.59%	22.78%	69.62%	63.58%	2.42%	34.00%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	9	462	148	68	813	5	4	7	25	298	12	155	2006
PEAK HR FACTOR :		0.905			0.875			0.643			0.855		0.905

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-019 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	0	2	0	0	2	0	0	2	0	
7:00 AM	3	170	21	2	53	2	1	11	9	15	17	7	311
7:15 AM	0	187	26	0	50	8	5	13	6	12	26	6	339
7:30 AM	2	227	33	1	82	5	4	17	6	24	37	9	447
7:45 AM	0	242	44	1	79	7	7	28	12	20	46	7	493
8:00 AM	1	219	34	4	60	8	1	25	8	17	47	6	430
8:15 AM	1	226	34	2	83	12	2	17	13	20	59	14	483
8:30 AM	1	209	40	2	95	9	7	26	9	37	43	12	490
8:45 AM	0	195	48	2	97	6	9	37	18	24	37	11	484
9:00 AM	0	203	36	1	94	8	4	34	15	27	50	7	479
9:15 AM	0	223	39	3	83	5	11	26	18	28	47	9	492
9:30 AM	0	191	29	1	109	10	12	34	15	18	45	6	470
9:45 AM	2	178	38	3	105	6	6	30	5	21	45	13	452
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	2470	422	22	990	86	69	298	134	263	499	107	5370
APPROACH %'s :	0.34%	85.11%	14.54%	2.00%	90.16%	7.83%	13.77%	59.48%	26.75%	30.26%	57.42%	12.31%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	1	830	163	8	369	28	31	123	60	116	177	39	1945
PEAK HR FACTOR :		0.948			0.955			0.836			0.902		0.988

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-019 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	1	0	2	0	0	2	0	0	2	0	
3:00 PM	1	141	20	4	199	11	6	30	18	30	71	22	553
3:15 PM	2	145	31	4	165	17	6	23	22	34	73	17	539
3:30 PM	0	172	28	2	199	12	5	23	22	35	70	13	581
3:45 PM	1	134	27	3	177	7	8	20	17	18	83	19	514
4:00 PM	2	129	28	2	187	15	9	27	20	34	77	9	539
4:15 PM	0	138	24	2	174	13	1	27	18	29	76	9	511
4:30 PM	1	146	36	1	189	15	4	31	25	26	81	11	566
4:45 PM	0	144	30	5	203	20	2	29	21	29	91	5	579
5:00 PM	2	139	28	1	212	10	4	28	14	46	78	11	573
5:15 PM	0	119	36	1	164	9	3	36	17	31	120	12	548
5:30 PM	0	129	36	2	150	11	7	34	18	27	117	17	548
5:45 PM	1	133	33	0	150	27	5	35	17	28	92	27	548

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	1669	357	27	2169	167	60	343	229	367	1029	172	6599
APPROACH %'s :	0.49%	81.97%	17.53%	1.14%	91.79%	7.07%	9.49%	54.27%	36.23%	23.41%	65.63%	10.97%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	3	548	130	8	768	54	13	124	77	132	370	39	2266
PEAK HR FACTOR :		0.930			0.910			0.892			0.830		0.978

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-120 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Tiverton Ave_Glendon Ave			Tiverton Ave_Glendon Ave			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	0	0	0	0	1	1	0	2	0	
7:00 AM	0	31	0	0	0	0	3	0	0	0	0	1	35
7:15 AM	0	34	0	0	0	0	7	0	0	0	0	1	42
7:30 AM	0	35	0	0	0	0	8	0	0	0	0	1	44
7:45 AM	0	50	0	0	0	0	9	0	0	0	0	6	65
8:00 AM	0	38	0	0	0	0	4	0	0	0	0	3	45
8:15 AM	0	34	0	0	0	0	4	0	0	0	0	6	44
8:30 AM	0	20	0	0	0	0	9	0	0	0	0	4	33
8:45 AM	0	26	0	2	0	0	6	0	0	0	0	4	38
9:00 AM	0	15	0	2	0	0	8	0	0	0	0	5	30
9:15 AM	0	22	0	0	0	0	6	0	0	0	0	1	29
9:30 AM	0	22	0	1	0	0	13	0	0	0	0	7	43
9:45 AM	0	18	0	1	0	0	11	0	0	0	0	5	35

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	345	0	6	0	0	88	0	0	0	0	44	483
APPROACH %'s :	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	157	0	0	0	0	25	0	0	0	0	16	198
PEAK HR FACTOR :		0.785			0.000			0.694			0.667		0.762

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-120 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Tiverton Ave_Glendon Ave			Tiverton Ave_Glendon Ave			Lindbrook Dr			Lindbrook Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	0	0	0	0	1	1	0	2	0	
3:00 PM	0	9	0	0	0	0	11	0	0	0	0	3	23
3:15 PM	0	15	0	1	0	0	8	0	0	0	0	7	31
3:30 PM	0	10	0	4	0	0	6	0	0	0	0	9	29
3:45 PM	0	15	0	0	0	0	8	0	0	0	0	4	27
4:00 PM	0	7	0	1	0	0	5	0	0	0	0	7	20
4:15 PM	0	11	0	1	0	0	11	0	0	0	0	7	30
4:30 PM	0	13	0	0	0	0	9	0	0	0	0	4	26
4:45 PM	0	13	0	3	0	0	8	0	0	0	0	4	28
5:00 PM	0	14	0	3	0	0	4	0	0	0	0	10	31
5:15 PM	0	16	0	2	0	0	5	0	0	0	0	11	34
5:30 PM	0	8	0	4	0	0	3	0	0	0	0	13	28
5:45 PM	0	13	0	1	0	0	7	0	0	0	0	18	39

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	144	0	20	0	0	85	0	0	0	0	97	346
APPROACH %'s :	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	51	0	10	0	0	19	0	0	0	0	52	132
PEAK HR FACTOR :	0.797			0.625			0.679			0.722			0.846

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-021 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	S Sepulveda Blvd			S Sepulveda Blvd			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	2	1	2	2	1	1	4	0	2	5	1	
7:00 AM	45	47	41	35	102	56	10	427	31	9	546	39	1388
7:15 AM	59	58	58	38	98	81	14	499	22	18	705	35	1685
7:30 AM	37	71	67	60	109	103	23	621	31	23	682	34	1861
7:45 AM	60	91	73	51	112	126	30	555	39	35	682	42	1896
8:00 AM	60	85	92	69	131	127	41	499	37	32	681	33	1887
8:15 AM	68	81	80	59	149	148	23	486	37	36	616	29	1812
8:30 AM	59	73	86	98	189	160	26	496	71	35	652	39	1984
8:45 AM	66	79	75	73	215	130	29	516	60	34	636	34	1947
9:00 AM	40	66	78	78	218	154	33	485	64	28	622	24	1890
9:15 AM	71	73	82	75	150	121	28	442	42	34	650	26	1794
9:30 AM	52	94	75	67	127	115	30	545	27	25	614	20	1791
9:45 AM	45	95	66	58	152	93	61	455	37	22	647	19	1750

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	662	913	873	761	1752	1414	348	6026	498	331	7733	374	21685
APPROACH %'s :	27.04%	37.30%	35.66%	19.38%	44.61%	36.01%	5.06%	87.69%	7.25%	3.92%	91.64%	4.43%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	233	299	319	308	771	592	111	1983	232	133	2526	126	7633
PEAK HR FACTOR :		0.929			0.928			0.961			0.959		0.962

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-021 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	S Sepulveda Blvd			S Sepulveda Blvd			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	2	1	2	2	1	1	4	0	2	5	1	
3:00 PM	50	146	49	15	57	25	73	533	35	55	537	72	1647
3:15 PM	61	178	53	32	54	58	66	531	40	50	578	82	1783
3:30 PM	55	160	54	23	83	40	92	628	55	53	548	74	1865
3:45 PM	43	187	77	29	88	39	88	579	44	56	520	40	1790
4:00 PM	58	208	65	19	73	39	82	522	40	53	479	43	1681
4:15 PM	57	179	57	30	125	42	77	550	54	72	544	61	1848
4:30 PM	74	184	69	30	112	35	83	557	50	74	465	47	1780
4:45 PM	79	191	75	34	96	38	67	565	60	97	518	49	1869
5:00 PM	88	203	86	25	118	57	75	526	55	95	537	44	1909
5:15 PM	76	207	110	34	129	56	89	486	47	108	556	40	1938
5:30 PM	75	196	83	47	135	45	71	546	68	117	547	48	1978
5:45 PM	88	212	66	37	170	56	74	545	66	105	520	65	2004

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	804	2251	844	355	1240	530	937	6568	614	935	6349	665	22092
APPROACH %'s :	20.62%	57.73%	21.65%	16.71%	58.35%	24.94%	11.54%	80.90%	7.56%	11.76%	79.87%	8.37%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	327	818	345	143	552	214	309	2103	236	425	2160	197	7829
PEAK HR FACTOR :		0.948			0.864			0.966			0.977		0.977

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-022

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	4	0	2	4	0	2	4	0	
7:00 AM	31	70	8	12	26	78	97	673	43	8	437	5	1488
7:15 AM	46	75	12	10	39	84	125	699	46	14	585	11	1746
7:30 AM	55	101	14	22	37	95	130	801	47	16	542	13	1873
7:45 AM	50	112	30	42	51	105	141	816	52	13	579	14	2005
8:00 AM	74	121	23	22	45	100	146	916	43	12	547	13	2062
8:15 AM	63	137	22	35	48	72	111	931	43	22	561	5	2050
8:30 AM	59	88	23	36	67	93	97	952	48	17	522	7	2009
8:45 AM	41	111	35	28	58	78	135	870	50	12	526	11	1955
9:00 AM	43	108	21	36	84	88	100	795	64	22	474	8	1843
9:15 AM	64	90	32	33	63	94	93	751	49	18	524	8	1819
9:30 AM	43	103	32	33	58	91	89	817	63	12	522	6	1869
9:45 AM	45	71	30	24	50	78	113	777	58	9	539	12	1806

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	614	1187	282	333	626	1056	1377	9798	606	175	6358	113	22525
APPROACH %'s :	29.48%	56.99%	13.54%	16.53%	31.07%	52.41%	11.69%	83.17%	5.14%	2.63%	95.67%	1.70%	

PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	246	458	98	135	211	370	495	3615	186	64	2209	39	8126
PEAK HR FACTOR :		0.903			0.904			0.972			0.954		0.985

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-022

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	4	0	2	4	0	2	4	0	
3:00 PM	51	91	20	27	68	229	99	549	41	15	524	15	1729
3:15 PM	63	91	27	24	73	212	115	589	48	15	543	19	1819
3:30 PM	82	97	35	24	92	232	87	605	33	5	499	9	1800
3:45 PM	60	100	25	36	83	214	97	545	28	16	424	18	1646
4:00 PM	70	129	22	26	88	189	85	472	32	11	349	5	1478
4:15 PM	65	107	32	25	79	198	96	503	25	8	426	12	1576
4:30 PM	55	128	25	16	89	193	69	503	28	11	376	8	1501
4:45 PM	60	142	36	15	105	203	92	498	32	14	456	19	1672
5:00 PM	66	154	33	24	108	197	63	452	23	11	437	13	1581
5:15 PM	57	129	41	16	123	230	78	504	29	20	426	13	1666
5:30 PM	57	137	39	27	118	175	74	476	37	10	389	10	1549
5:45 PM	54	161	28	17	81	165	85	470	25	19	376	13	1494

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	740	1466	363	277	1107	2437	1040	6166	381	155	5225	154	19511
APPROACH %'s :	28.80%	57.07%	14.13%	7.25%	28.97%	63.78%	13.71%	81.27%	5.02%	2.80%	94.42%	2.78%	

PEAK HR START TIME :	300 PM												TOTAL
PEAK HR VOL :	256	379	107	111	316	887	398	2288	150	51	1990	61	6994
PEAK HR FACTOR :		0.867			0.944			0.943			0.911		0.961

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-023 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Gayley Ave			Gayley Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	1	2	2	4	0	1	4	0	
7:00 AM	19	46	8	14	18	72	118	512	25	15	394	14	1255
7:15 AM	21	48	5	10	17	64	131	512	34	9	522	26	1399
7:30 AM	18	58	5	16	23	75	138	609	34	10	459	35	1480
7:45 AM	22	86	7	16	23	75	124	651	39	12	491	33	1579
8:00 AM	16	51	19	15	34	73	131	674	30	9	484	30	1566
8:15 AM	25	46	5	20	37	84	145	653	65	9	500	31	1620
8:30 AM	20	52	12	27	19	88	92	727	39	8	439	29	1552
8:45 AM	24	72	7	27	31	72	128	647	53	14	459	24	1558
9:00 AM	15	45	10	17	42	87	82	679	45	4	432	31	1489
9:15 AM	16	25	7	18	32	56	115	679	71	10	440	19	1488
9:30 AM	24	53	14	17	32	43	108	684	33	10	490	32	1540
9:45 AM	18	46	10	18	16	50	102	633	50	9	441	34	1427

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	238	628	109	215	324	839	1414	7660	518	119	5551	338	17953
APPROACH %'s :	24.41%	64.41%	11.18%	15.60%	23.51%	60.89%	14.74%	79.86%	5.40%	1.98%	92.39%	5.63%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	83	235	43	78	113	320	492	2705	173	38	1914	123	6317
PEAK HR FACTOR :		0.785			0.906			0.976			0.961		0.975

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-023 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Gayley Ave			Gayley Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	1	2	2	4	0	1	4	0	
3:00 PM	26	48	10	32	50	97	90	538	18	3	358	21	1291
3:15 PM	28	40	13	41	40	176	73	506	20	5	372	20	1334
3:30 PM	41	32	11	24	65	124	59	499	12	3	353	21	1244
3:45 PM	24	41	5	34	58	134	57	520	19	0	363	24	1279
4:00 PM	23	29	12	46	67	129	74	504	22	9	259	33	1207
4:15 PM	31	38	16	37	67	89	76	515	20	9	311	35	1244
4:30 PM	17	48	17	43	65	64	80	491	20	8	308	16	1177
4:45 PM	27	52	21	38	53	121	79	519	22	7	330	16	1285
5:00 PM	54	50	23	46	63	108	55	476	27	2	282	11	1197
5:15 PM	45	46	15	38	89	94	74	528	27	5	300	17	1278
5:30 PM	54	64	24	40	69	94	82	460	26	10	293	14	1230
5:45 PM	37	52	24	43	54	70	91	417	34	3	314	34	1173

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	407	540	191	462	740	1300	890	5973	267	64	3843	262	14939
APPROACH %'s :	35.76%	47.45%	16.78%	18.47%	29.58%	51.96%	12.48%	83.77%	3.74%	1.54%	92.18%	6.28%	

PEAK HR START TIME :	300 PM												TOTAL
PEAK HR VOL :	119	161	39	131	213	531	279	2063	69	11	1446	86	5148
PEAK HR FACTOR :		0.949			0.851			0.933			0.972		0.965

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-024

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2.5	0.5	1	2.5	1.5	2	4	0	2	4	0	
7:00 AM	36	93	15	8	42	29	88	381	31	10	333	24	1090
7:15 AM	23	125	19	11	31	29	78	429	27	26	555	16	1369
7:30 AM	28	148	23	19	50	42	104	522	28	26	415	14	1419
7:45 AM	46	165	22	18	55	35	99	533	30	26	473	18	1520
8:00 AM	41	151	33	16	49	14	100	519	26	24	416	12	1401
8:15 AM	33	139	27	19	56	27	86	532	35	28	469	20	1471
8:30 AM	25	158	17	11	85	30	51	612	32	34	446	15	1516
8:45 AM	28	153	27	23	78	36	60	585	57	26	389	16	1478
9:00 AM	31	143	20	18	75	43	95	525	54	28	418	15	1465
9:15 AM	39	156	26	17	84	20	103	555	32	33	455	16	1536
9:30 AM	18	114	30	26	73	29	95	499	50	28	406	20	1388
9:45 AM	37	130	37	22	59	31	85	526	53	23	484	21	1508

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	385	1675	296	208	737	365	1044	6218	455	312	5259	207	17161
APPROACH %'s :	16.34%	71.10%	12.56%	15.88%	56.26%	27.86%	13.53%	80.58%	5.90%	5.40%	91.02%	3.58%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	123	610	90	69	322	129	309	2277	175	121	1708	62	5995
PEAK HR FACTOR :		0.931			0.949			0.983			0.938		0.976

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-024 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2.5	0.5	1	2.5	1.5	2	4	0	2	4	0	
3:00 PM	45	107	39	38	137	58	53	485	62	21	302	13	1360
3:15 PM	50	123	38	28	147	57	57	476	46	22	293	10	1347
3:30 PM	46	127	39	26	153	60	56	466	42	19	250	11	1295
3:45 PM	40	110	36	31	144	54	47	434	50	12	227	6	1191
4:00 PM	35	119	32	35	155	46	35	430	46	21	188	8	1150
4:15 PM	39	108	29	36	140	38	47	452	52	13	220	14	1188
4:30 PM	38	135	32	42	149	56	53	421	42	22	210	8	1208
4:45 PM	46	116	36	41	185	51	47	473	40	21	238	5	1299
5:00 PM	48	125	32	31	169	45	36	366	41	23	225	11	1152
5:15 PM	44	107	43	41	121	37	45	466	45	5	169	7	1130
5:30 PM	39	132	34	24	111	49	47	331	53	19	353	20	1212
5:45 PM	51	121	27	18	107	47	49	306	48	23	356	22	1175

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	521	1430	417	391	1718	598	572	5106	567	221	3031	135	14707
APPROACH %'s :	22.00%	60.39%	17.61%	14.44%	63.47%	22.09%	9.16%	81.76%	9.08%	6.52%	89.49%	3.99%	

PEAK HR START TIME :	300 PM												TOTAL
PEAK HR VOL :	181	467	152	123	581	229	213	1861	200	74	1072	40	5193
PEAK HR FACTOR :		0.943			0.976			0.948			0.882		0.955

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-025

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

AM

NS/EW Streets:	Glendon Ave			Glendon Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	1	2	4	0	1	4	0	
7:00 AM	3	12	5	5	3	20	50	330	23	9	416	33	909
7:15 AM	3	22	4	6	11	19	72	365	20	12	508	51	1093
7:30 AM	0	30	10	7	17	28	77	465	19	11	458	54	1176
7:45 AM	2	50	7	16	12	27	93	452	30	10	474	41	1214
8:00 AM	3	42	5	14	18	31	74	457	33	11	441	43	1172
8:15 AM	4	33	5	12	24	21	68	491	29	17	478	50	1232
8:30 AM	1	37	6	11	19	16	78	494	50	18	460	37	1227
8:45 AM	2	42	4	16	25	11	76	526	48	15	445	56	1266
9:00 AM	8	40	11	18	24	16	65	444	48	14	414	41	1143
9:15 AM	3	38	8	15	24	31	79	469	40	23	484	43	1257
9:30 AM	4	43	5	15	22	21	79	458	44	16	435	40	1182
9:45 AM	4	27	14	13	10	42	70	496	33	17	463	37	1226

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	37	416	84	148	209	283	881	5447	417	173	5476	526	14097
APPROACH %'s :	6.89%	77.47%	15.64%	23.13%	32.66%	44.22%	13.06%	80.76%	6.18%	2.80%	88.68%	8.52%	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	10	154	20	53	86	79	296	1968	160	61	1824	186	4897
PEAK HR FACTOR :		0.920			0.865			0.932			0.950		0.967

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-025 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Glendon Ave			Glendon Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	1	1	2	4	0	1	4	0	
3:00 PM	9	31	25	24	46	38	22	511	22	21	265	32	1046
3:15 PM	9	26	17	37	30	32	36	476	18	19	292	54	1046
3:30 PM	9	30	11	27	40	23	34	480	22	28	252	38	994
3:45 PM	16	25	19	35	63	27	41	451	15	30	202	41	965
4:00 PM	12	26	23	27	52	33	30	454	23	15	156	27	878
4:15 PM	6	38	29	47	66	44	36	455	11	13	257	37	1039
4:30 PM	16	41	34	45	65	11	29	451	12	22	223	31	980
4:45 PM	6	43	28	39	49	42	41	478	13	19	254	37	1049
5:00 PM	20	44	24	47	71	41	34	426	11	23	202	47	990
5:15 PM	10	34	21	57	65	13	34	472	12	28	169	52	967
5:30 PM	17	43	36	39	77	32	27	499	19	19	165	40	1013
5:45 PM	17	50	26	41	67	30	41	507	17	30	280	60	1166

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	147	431	293	465	691	366	405	5660	195	267	2717	496	12133
APPROACH %'s :	16.88%	49.48%	33.64%	30.55%	45.40%	24.05%	6.47%	90.42%	3.12%	7.67%	78.07%	14.25%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	64	171	107	184	280	116	136	1904	59	100	816	199	4136
PEAK HR FACTOR :		0.891			0.912			0.929			0.753		0.887

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-026 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Selby Ave			Selby Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	1	1	3	1	
7:00 AM	17	12	11	5	3	4	4	293	7	6	459	5	826
7:15 AM	13	12	12	10	3	7	8	329	13	12	524	15	958
7:30 AM	20	23	23	13	17	2	4	435	18	17	483	16	1071
7:45 AM	15	36	23	17	13	14	4	447	11	6	511	22	1119
8:00 AM	14	27	24	18	9	6	5	474	7	8	460	29	1081
8:15 AM	9	20	20	19	8	11	2	464	5	17	553	24	1152
8:30 AM	17	35	24	20	13	9	5	529	9	18	461	25	1165
8:45 AM	14	19	22	24	18	9	2	502	10	19	513	21	1173
9:00 AM	7	20	20	25	17	14	12	433	7	16	463	28	1062
9:15 AM	13	19	17	16	8	9	9	449	9	11	549	21	1130
9:30 AM	10	12	20	18	5	8	8	457	8	6	457	19	1028
9:45 AM	10	22	15	18	9	10	9	512	7	16	513	14	1155

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	159	257	231	203	123	103	72	5324	111	152	5946	239	12920
APPROACH %'s :	24.57%	39.72%	35.70%	47.32%	28.67%	24.01%	1.31%	96.68%	2.02%	2.40%	93.83%	3.77%	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	54	101	90	81	48	35	14	1969	31	62	1987	99	4571
PEAK HR FACTOR :		0.806			0.804			0.927			0.904		0.974

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-026 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Selby Ave			Selby Ave			Wilshire Blvd			Wilshire Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	1	1	3	1	
3:00 PM	9	25	29	30	21	4	5	522	11	23	289	35	1003
3:15 PM	5	13	22	33	21	6	7	532	16	20	365	33	1073
3:30 PM	10	16	23	37	30	4	19	479	16	12	362	24	1032
3:45 PM	4	11	18	29	15	3	6	484	12	28	323	35	968
4:00 PM	8	14	26	32	42	4	11	485	13	21	231	47	934
4:15 PM	3	22	22	35	31	2	7	503	10	36	283	36	990
4:30 PM	4	20	22	38	32	6	13	517	12	27	321	37	1049
4:45 PM	2	20	15	36	30	3	10	516	13	27	277	45	994
5:00 PM	5	30	32	58	52	6	11	477	16	19	297	29	1032
5:15 PM	7	26	21	47	40	6	10	538	20	29	301	45	1090
5:30 PM	0	30	30	49	47	5	9	565	16	28	281	41	1101
5:45 PM	8	20	17	41	24	2	10	527	21	31	313	44	1058

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	65	247	277	465	385	51	118	6145	176	301	3643	451	12324
APPROACH %'s :	11.04%	41.94%	47.03%	51.61%	42.73%	5.66%	1.83%	95.43%	2.73%	6.85%	82.89%	10.26%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	20	106	100	195	163	19	40	2107	73	107	1192	159	4281
PEAK HR FACTOR :		0.843			0.813			0.941			0.939		0.972

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-027 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Rochester Ave			Rochester Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	0	1	0	
7:00 AM	5	170	3	0	80	1	1	0	5	1	1	6	273
7:15 AM	9	222	3	4	72	2	0	4	3	3	2	8	332
7:30 AM	11	231	11	3	89	6	3	5	9	10	6	4	388
7:45 AM	11	303	8	0	102	1	6	15	7	2	17	5	477
8:00 AM	10	287	6	3	105	3	2	4	17	3	15	5	460
8:15 AM	13	295	6	3	96	0	9	6	10	4	7	5	454
8:30 AM	15	261	9	7	125	3	5	8	7	9	9	4	462
8:45 AM	10	280	10	5	130	4	10	7	13	7	5	3	484
9:00 AM	12	267	11	4	125	4	8	7	12	4	13	4	471
9:15 AM	9	283	9	5	149	7	5	4	5	7	6	6	495
9:30 AM	10	226	7	8	129	5	6	6	8	4	3	3	415
9:45 AM	8	227	7	5	134	4	4	4	6	3	5	8	415

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	123	3052	90	47	1336	40	59	70	102	57	89	61	5126
APPROACH %'s :	3.77%	93.48%	2.76%	3.30%	93.89%	2.81%	25.54%	30.30%	44.16%	27.54%	43.00%	29.47%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	46	1091	39	21	529	18	28	26	37	27	33	17	1912
PEAK HR FACTOR :		0.977			0.882			0.758			0.875		0.966

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-027

Day: Tuesday

TOTALS

City: Los Angeles

Date: 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Rochester Ave			Rochester Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	0	1	0	
3:00 PM	10	196	12	2	273	8	7	5	12	11	15	13	564
3:15 PM	11	225	12	12	253	8	8	3	14	13	8	4	571
3:30 PM	10	234	10	7	275	13	7	2	21	8	10	15	612
3:45 PM	10	200	15	6	282	6	3	4	21	11	9	8	575
4:00 PM	6	218	21	8	278	7	1	4	28	10	11	5	597
4:15 PM	9	191	15	10	254	8	5	6	17	7	19	10	551
4:30 PM	17	224	12	5	283	11	5	11	19	7	26	10	630
4:45 PM	10	225	17	7	263	9	3	5	23	15	19	4	600
5:00 PM	13	211	12	7	279	10	4	5	17	13	19	9	599
5:15 PM	18	214	12	8	207	8	4	15	18	11	17	9	541
5:30 PM	8	203	15	13	205	6	6	8	20	7	19	5	515
5:45 PM	12	241	13	8	190	13	1	9	13	16	30	11	557

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	134	2582	166	93	3042	107	54	77	223	129	202	103	6912
APPROACH %'s :	4.65%	89.59%	5.76%	2.87%	93.83%	3.30%	15.25%	21.75%	62.99%	29.72%	46.54%	23.73%	

PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	49	851	56	29	1079	38	17	27	76	42	83	33	2380
PEAK HR FACTOR :		0.945			0.958			0.857			0.919		0.944

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-028 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Ohio Ave			Ohio Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	1	0	1	1	0	
7:00 AM	1	38	3	2	23	21	33	64	2	2	65	8	262
7:15 AM	11	44	12	8	19	15	50	122	3	4	76	14	378
7:30 AM	9	61	7	6	28	18	67	165	9	5	128	13	516
7:45 AM	4	90	8	6	36	21	60	187	10	2	159	11	594
8:00 AM	9	93	3	5	24	17	59	160	15	4	143	15	547
8:15 AM	6	90	9	4	27	18	56	166	7	4	108	6	501
8:30 AM	6	87	12	4	54	29	49	188	5	5	123	12	574
8:45 AM	8	81	10	7	48	25	55	151	14	2	147	18	566
9:00 AM	7	72	14	9	57	46	59	190	4	8	129	8	603
9:15 AM	10	69	14	3	48	27	55	187	9	8	105	12	547
9:30 AM	10	77	9	9	43	24	48	163	11	7	126	9	536
9:45 AM	3	59	6	4	37	30	50	144	9	6	98	11	457
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	84	861	107	67	444	291	641	1887	98	57	1407	137	6081
APPROACH %'s :	7.98%	81.84%	10.17%	8.35%	55.36%	36.28%	24.41%	71.86%	3.73%	3.56%	87.88%	8.56%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	31	309	50	23	207	127	218	716	32	23	504	50	2290
PEAK HR FACTOR :		0.929			0.797			0.955			0.864		0.949

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-028 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Ohio Ave			Ohio Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	1	0	1	1	0	
3:00 PM	9	48	7	5	64	35	35	123	4	17	125	15	487
3:15 PM	8	73	3	6	99	43	25	124	7	20	115	8	531
3:30 PM	13	71	10	9	82	31	37	122	8	24	103	8	518
3:45 PM	11	52	26	2	80	45	31	105	22	24	99	13	510
4:00 PM	9	77	4	7	99	34	37	120	9	22	103	7	528
4:15 PM	7	93	10	6	103	48	31	121	10	35	101	9	574
4:30 PM	7	80	5	4	101	33	33	110	14	34	111	7	539
4:45 PM	5	98	11	8	97	38	43	114	14	26	116	14	584
5:00 PM	4	107	8	7	86	38	40	112	23	32	109	8	574
5:15 PM	6	85	9	3	103	44	36	114	14	21	117	7	559
5:30 PM	9	98	5	4	92	49	36	123	10	29	100	5	560
5:45 PM	7	102	11	6	81	44	31	111	10	16	100	4	523
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	95	984	109	67	1087	482	415	1399	145	300	1299	105	6487
APPROACH %'s :	8.00%	82.83%	9.18%	4.10%	66.44%	29.46%	21.18%	71.41%	7.40%	17.61%	76.23%	6.16%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	24	388	33	22	378	169	155	463	61	108	442	34	2277
PEAK HR FACTOR :		0.935			0.948			0.970			0.936		0.975

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-029 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Ohio Ave			Ohio Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	1	0	
7:00 AM	12	162	8	3	67	10	14	32	10	9	41	7	375
7:15 AM	12	198	7	5	51	12	37	53	25	14	44	5	463
7:30 AM	29	192	9	10	91	16	29	84	19	42	88	13	622
7:45 AM	37	283	7	7	115	22	29	60	15	28	87	10	700
8:00 AM	21	250	7	2	102	16	52	76	23	21	86	5	661
8:15 AM	23	252	16	8	103	13	55	79	31	6	67	5	658
8:30 AM	15	261	4	9	120	17	47	99	33	12	81	7	705
8:45 AM	29	234	14	5	117	17	49	78	26	24	83	5	681
9:00 AM	18	228	11	5	126	19	51	83	36	23	84	6	690
9:15 AM	18	232	13	5	129	22	61	70	40	13	70	4	677
9:30 AM	24	184	13	9	128	16	47	64	32	9	70	10	606
9:45 AM	16	213	14	7	107	12	43	73	26	17	65	6	599

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	254	2689	123	75	1256	192	514	851	316	218	866	83	7437
APPROACH %'s :	8.28%	87.70%	4.01%	4.92%	82.47%	12.61%	30.58%	50.62%	18.80%	18.68%	74.21%	7.11%	

PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	80	955	42	24	492	75	208	330	135	72	318	22	2753
PEAK HR FACTOR :		0.962			0.947			0.940			0.912		0.976

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-029 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Ohio Ave			Ohio Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	1	0	
3:00 PM	20	188	18	8	248	30	29	70	30	38	88	19	786
3:15 PM	24	181	17	13	255	30	38	65	23	39	72	21	778
3:30 PM	22	228	19	6	268	33	33	63	32	24	71	12	811
3:45 PM	25	223	17	4	279	33	36	59	28	28	59	7	798
4:00 PM	23	200	19	7	288	25	26	60	31	36	58	5	778
4:15 PM	22	207	27	6	259	36	35	87	25	27	79	6	816
4:30 PM	25	231	17	6	283	29	23	55	31	31	67	11	809
4:45 PM	25	210	19	11	279	34	32	59	27	28	76	14	814
5:00 PM	25	213	25	8	271	38	22	71	20	41	66	7	807
5:15 PM	27	216	21	6	223	19	33	72	26	28	70	11	752
5:30 PM	25	211	11	4	214	28	34	70	23	19	65	7	711
5:45 PM	21	243	14	4	211	23	32	64	41	34	56	13	756
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	284	2551	224	83	3078	358	373	795	337	373	827	133	9416
APPROACH %'s :	9.28%	83.39%	7.32%	2.36%	87.47%	10.17%	24.78%	52.82%	22.39%	27.98%	62.04%	9.98%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	97	861	88	31	1092	137	112	272	103	127	288	38	3246
PEAK HR FACTOR :		0.958			0.972			0.828			0.960		0.994

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-030 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

AM

NS/EW Streets:	Veteran Ave			Veteran Ave			Santa Monica Blvd			Santa Monica Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	1	4	0	1	3	1	
7:00 AM	8	12	1	16	13	6	17	345	0	4	305	13	740
7:15 AM	20	31	5	17	19	11	24	368	2	5	320	13	835
7:30 AM	15	55	12	18	18	16	17	485	5	5	379	17	1042
7:45 AM	21	71	10	28	23	10	25	476	4	18	310	16	1012
8:00 AM	19	57	11	32	28	13	23	460	6	14	387	16	1066
8:15 AM	20	78	9	26	38	7	16	465	5	11	335	16	1026
8:30 AM	16	67	14	23	36	17	26	482	3	17	346	21	1068
8:45 AM	22	76	20	31	35	15	23	440	10	21	305	22	1020
9:00 AM	23	61	13	18	29	11	24	436	2	18	334	19	988
9:15 AM	13	62	12	15	26	14	22	442	6	11	355	16	994
9:30 AM	13	49	9	26	31	19	33	481	10	21	363	19	1074
9:45 AM	12	46	22	30	26	6	17	449	5	29	303	24	969

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	202	665	138	280	322	145	267	5329	58	174	4042	212	11834
APPROACH %'s :	20.10%	66.17%	13.73%	37.48%	43.11%	19.41%	4.72%	94.25%	1.03%	3.93%	91.28%	4.79%	

PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	77	278	54	112	137	52	88	1847	24	63	1373	75	4180
PEAK HR FACTOR :		0.867			0.929			0.958			0.906		0.978

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-030 **Day:** Tuesday

TOTALS

City: Los Angeles **Date:** 1/12/2016

PM

NS/EW Streets:	Veteran Ave			Veteran Ave			Santa Monica Blvd			Santa Monica Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	1	4	0	1	3	1	
3:00 PM	14	51	7	27	68	11	26	392	15	21	331	35	998
3:15 PM	14	48	14	31	92	15	24	357	9	34	375	32	1045
3:30 PM	15	43	10	36	78	12	20	384	16	16	366	34	1030
3:45 PM	16	57	12	43	98	11	25	333	14	24	356	27	1016
4:00 PM	9	52	13	36	99	11	28	416	10	17	371	35	1097
4:15 PM	12	64	11	26	110	12	27	323	13	26	364	30	1018
4:30 PM	18	53	12	37	93	12	23	386	11	16	371	40	1072
4:45 PM	5	67	9	29	115	14	29	351	6	20	338	36	1019
5:00 PM	16	60	10	33	102	15	31	366	10	18	385	31	1077
5:15 PM	18	76	15	38	129	11	36	364	10	25	389	24	1135
5:30 PM	13	57	13	25	106	19	20	388	9	21	346	29	1046
5:45 PM	10	81	8	32	118	15	33	392	12	23	336	38	1098
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	160	709	134	393	1208	158	322	4452	135	261	4328	391	12651
APPROACH %'s :	15.95%	70.69%	13.36%	22.34%	68.68%	8.98%	6.56%	90.69%	2.75%	5.24%	86.91%	7.85%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	57	274	46	128	455	60	120	1510	41	87	1456	122	4356
PEAK HR FACTOR :		0.865			0.903			0.956			0.950		0.959

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-031 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

AM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Santa Monica Blvd			Santa Monica Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	2	3	1	2	3	1	
7:00 AM	22	138	12	26	55	12	24	342	16	37	213	30	927
7:15 AM	35	176	17	25	61	14	18	350	17	31	325	33	1102
7:30 AM	38	238	21	42	136	12	30	425	18	49	325	25	1359
7:45 AM	25	231	26	53	141	8	18	461	19	80	342	35	1439
8:00 AM	35	250	14	48	101	12	21	452	19	62	327	38	1379
8:15 AM	26	208	19	47	100	15	29	457	23	56	368	38	1386
8:30 AM	26	232	16	58	146	16	27	428	14	46	308	26	1343
8:45 AM	25	191	16	54	129	20	27	463	30	68	329	68	1420
9:00 AM	28	214	24	61	128	16	33	409	43	52	302	47	1357
9:15 AM	32	187	19	51	125	23	35	467	35	54	308	53	1389
9:30 AM	32	159	29	48	113	27	46	440	20	59	282	44	1299
9:45 AM	31	154	29	45	105	15	31	422	32	59	307	47	1277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	355	2378	242	558	1340	190	339	5116	286	653	3736	484	15677
APPROACH %'s :	11.93%	79.93%	8.13%	26.72%	64.18%	9.10%	5.90%	89.11%	4.98%	13.40%	76.67%	9.93%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	124	927	80	190	478	47	98	1795	79	247	1362	136	5563
PEAK HR FACTOR :		0.946			0.885			0.969			0.944		0.966

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5007-031 | **Day:** Tuesday

TOTALS

City: Los Angeles | **Date:** 1/12/2016

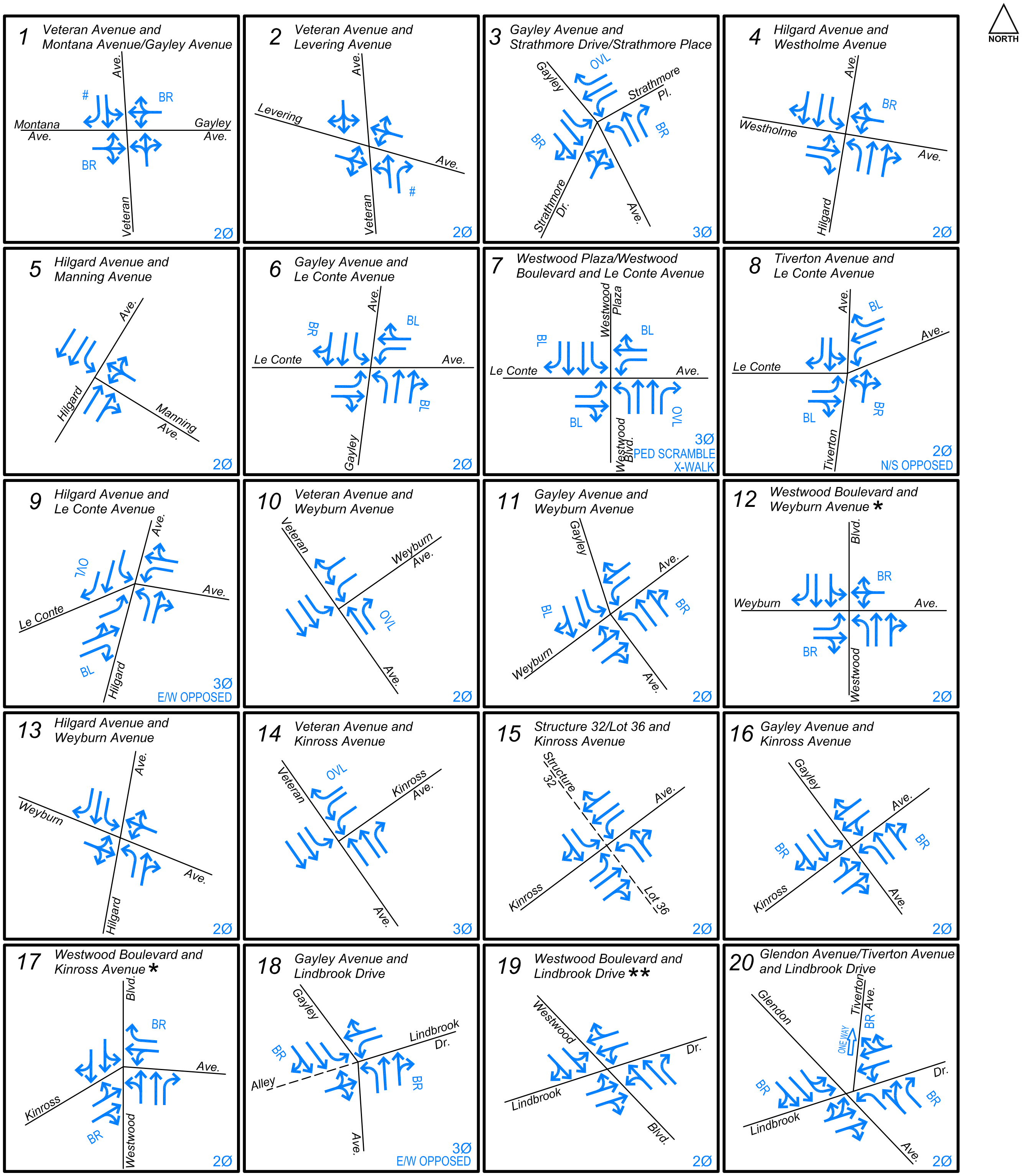
PM

NS/EW Streets:	Westwood Blvd			Westwood Blvd			Santa Monica Blvd			Santa Monica Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	2	3	1	2	3	1	
3:00 PM	35	158	28	55	251	37	40	371	44	66	314	58	1457
3:15 PM	18	161	17	56	259	19	45	348	46	63	319	38	1389
3:30 PM	30	166	27	56	254	28	39	340	32	65	337	68	1442
3:45 PM	41	163	26	57	281	30	41	357	29	55	286	46	1412
4:00 PM	43	157	31	57	262	27	42	367	43	80	329	65	1503
4:15 PM	38	188	31	65	295	22	46	351	44	62	329	60	1531
4:30 PM	35	188	20	65	271	26	20	344	45	70	337	70	1491
4:45 PM	40	205	34	61	296	28	38	310	38	66	329	49	1494
5:00 PM	35	172	36	54	268	33	28	355	50	89	320	54	1494
5:15 PM	36	189	38	46	269	34	35	350	44	82	347	52	1522
5:30 PM	46	170	35	54	248	25	24	338	52	72	378	68	1510
5:45 PM	35	224	32	50	280	34	29	375	38	82	347	59	1585
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	432	2141	355	676	3234	343	427	4206	505	852	3972	687	17830
APPROACH %'s :	14.75%	73.12%	12.12%	15.89%	76.04%	8.06%	8.31%	81.86%	9.83%	15.46%	72.07%	12.47%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	152	755	141	204	1065	126	116	1418	184	325	1392	233	6111
PEAK HR FACTOR :		0.900			0.958			0.972			0.941		0.964

CONTROL : Signalized

APPENDIX B

STUDY INTERSECTION
LANE CONFIGURATIONS AND SIGNAL CONTROLS



APPENDIX B

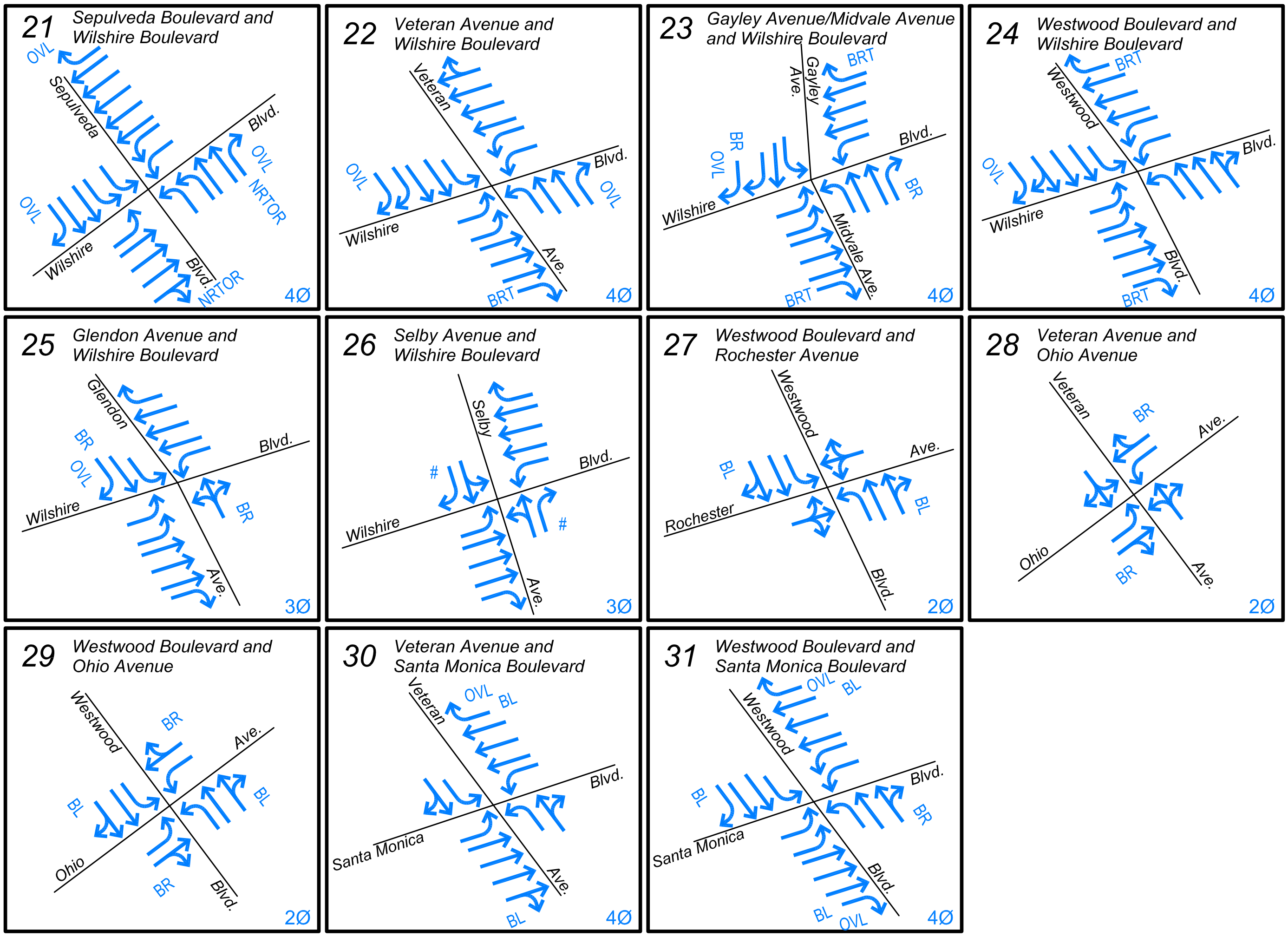
4/21/2016

FN: UCLAGeffenAcademy\LANE_CONFIGS

STUDY INTERSECTION LANE CONFIGURATIONS AND SIGNAL CONTROL

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
300 Corporate Pointe, Suite 470
Culver City, California 90230
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

NORTH



NOTE : ALL INTERSECTIONS OPERATING WITH ATSAC/ATCS

↰↑↱ : LANE CONFIGURATIONS

Ø : NUMBER OF CRITICAL SIGNAL PHASES

: DE FACTO RIGHT-TURN

BL : BIKE LANE

BR : BIKE ROUTE

BRT : BUS RAPID TRANSIT-WILSHIRE BRT SERVICE OPERATING DURING PEAK PERIODS BETWEEN 7:00 AM - 9:00 AM, 4:00 PM - 7:00 PM

NRTOR : NO RIGHT-TURN ON RED

OVL : OVERLAP PHASE

* : SOUTHBOUND LEFT-TURN MOVEMENT PROHIBITED FROM 4:00 PM - 7:00 PM

** : NORTHBOUND LEFT-TURN MOVEMENT PROHIBITED FROM 7:00 AM - 10:00 AM, 3:00 PM - 7:00 PM; SOUTHBOUND LEFT-TURN MOVEMENT PROHIBITED FROM 4:00 PM - 7:00 PM

APPENDIX B

4/21/2016

FN: UCLAGeffenAcademy\LANE_CONFIGS

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APPENDIX C

LEVEL OF SERVICE (LOS) ANALYSIS WORKSHEETS

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
1	East-West Street:	Montana Avenue/Gayley Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	24	0	24	0	24	24	0	25	0	25	0	25	0	25		25		0
	Left-Through		0							0				0					
	Through	217	0	266	6	223	272	17	243	0	302	6	249	0	308		249		0
	Through-Right		0							0				0					
	Right	25	0	0	0	25	0	8	34	0	0	0	34	0	0		34		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	171	0	171	-2	169	169	31	209	0	209	-2	207	0	207		207		0
	Left-Through		1							1				1					
	Through	305	0	476	9	314	483	20	337	0	546	9	346	0	553		346		0
	Through-Right		0							0				0					
	Right	72	1	72	0	72	72	0	75	1	75	0	75	1	75		75		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	161	0	161	0	161	161	6	174	0	174	0	174	0	174		174		0
	Left-Through		0							0				0					
	Through	490	0	704	0	490	704	8	518	0	747	0	518	0	747		518		0
	Through-Right		0							0				0					
	Right	53	0	0	0	53	0	0	55	0	0	0	55	0	0		55		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	8	0	8	0	8	8	3	11	0	11	0	11	0	11		11		0
	Left-Through		0							0				0					
	Through	143	0	194	0	143	194	2	151	0	218	0	151	0	218		151		0
	Through-Right		0							0				0					
	Right	43	0	0	0	43	0	11	56	0	0	0	56	0	0		56		0
	Left-Through-Right		1							1				1					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	500		*North-South:*	507			*North-South:*	571			*North-South:*	578			*North-South:*	0
			East-West:	712		*East-West:*	712			*East-West:*	758			*East-West:*	758			*East-West:*	0
			SUM:	1212		*SUM:*	1219			*SUM:*	1329			*SUM:*	1336			*SUM:*	0
VOLUME/CAPACITY (V/C) RATIO:				0.808			0.813				0.886				0.891				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.708			0.713				0.786				0.791				0.000
LEVEL OF SERVICE (LOS):				C			C				C				C				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.005	Δ*v/c* after mitigation:	-0.786
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
1	East-West Street:	Montana Avenue/Gayley Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		2		2		2		2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	0	79	0	79	79	0	82	0	82	0	82	0	82		82		0
	Left-Through		0							0				0					
	Through	537	0	652	5	542	657	24	583	0	708	5	588	0	713		588		0
	Through-Right		0							0				0					
	Right	36	0	0	0	36	0	6	43	0	0	0	43	0	0		43		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	67	0	67	0	67	67	21	91	0	91	0	91	0	91		91		0
	Left-Through		1							1				1					
	Through	248	0	315	3	251	318	13	271	0	362	3	274	0	365		274		0
	Through-Right		0							0				0					
	Right	116	1	116	0	116	116	0	121	1	121	0	121	1	121		121		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	54	0	54	0	54	54	-7	49	0	49	0	49	0	49		49		0
	Left-Through		0							0				0					
	Through	143	0	235	0	143	235	0	149	0	238	0	149	0	238		149		0
	Through-Right		0							0				0					
	Right	38	0	0	0	38	0	0	40	0	0	0	40	0	0		40		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	26	0	26	0	26	26	11	38	0	38	0	38	0	38		38		0
	Left-Through		0							0				0					
	Through	484	0	864	0	484	863	8	512	0	965	0	512	0	964		512		0
	Through-Right		0							0				0					
	Right	354	0	0	-1	353	0	47	415	0	0	-1	414	0	0		414		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	719	*North-South:*	724	*North-South:*	799	*North-South:*	804	*North-South:*	0
	East-West:	918	*East-West:*	917	*East-West:*	1014	*East-West:*	1013	*East-West:*	0
	SUM:	1637	*SUM:*	1641	*SUM:*	1813	*SUM:*	1817	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		1.091		1.094		1.209		1.211		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.991		0.994		1.109		1.111		0.000
LEVEL OF SERVICE (LOS):		E		E		F		F		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-1.109
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
2	East-West Street:	Levering Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	29	0	29	0	29	29	0	30	0	30	0	30	0	30		30		0
	Left-Through		1							1				1					
	Through	225	0	254	6	231	260	24	258	0	288	6	264	0	294		264		0
	Through-Right		0							0				0					
	Right	41	1	41	0	41	41	0	43	1	43	0	43	1	43		43		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	19	0	19	0	19	19	2	22	0	22	0	22	0	22		22		0
	Left-Through		0							0				0					
	Through	488	0	508	9	497	517	21	529	0	552	9	538	0	561		538		0
	Through-Right		0							0				0					
	Right	1	0	0	0	1	0	0	1	0	0	0	1	0	0		1		0
	Left-Through-Right		1							1				1					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	27	0	243	0	27	243	1	29	0	254	0	29	0	254		29		0
	Through-Right		0							0				0					
	Right	216	0	0	0	216	0	0	225	0	0	0	225	0	0		225		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	34	0	34	0	34	34	0	35	0	35	0	35	0	35		35		0
	Left-Through		0							0				0					
	Through	13	0	75	0	13	75	0	14	0	78	0	14	0	78		14		0
	Through-Right		0							0				0					
	Right	28	0	0	0	28	0	0	29	0	0	0	29	0	0		29		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — *North-South:*	537	546	582	591	0
East-West:	277	277	289	289	0
SUM:	814	823	871	880	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.543	0.549	0.581	0.587	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.443	0.449	0.481	0.487	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.006	Δ*v/c* after mitigation:	-0.481
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
2	East-West Street:	Levering Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	257	0	257	0	257	257	0	267	0	267	0	267	0	267		267		**0**
	Left-Through		1							1				1					
	Through	589	0	**846**	5	594	**851**	28	641	0	**908**	5	646	0	**913**		646		0
	Through-Right		0							0				0					
	Right	51	1	51	0	51	51	0	53	1	53	0	53	1	53		53		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	29	0	**29**	0	29	**29**	0	30	0	**30**	0	30	0	**30**		30		0
	Left-Through		0							0				0					
	Through	266	0	302	3	269	305	24	301	0	338	3	304	0	341		304		**0**
	Through-Right		0							0				0					
	Right	7	0	0	0	7	0	0	7	0	0	0	7	0	0		7		0
	Left-Through-Right		1							1				1					
	Left-Right																		
EASTBOUND	Left	4	0	**4**	0	4	**4**	0	4	0	**4**	0	4	0	**4**		4		0
	Left-Through		0							0				0					
	Through	26	0	98	0	26	98	0	27	0	102	0	27	0	102		27		**0**
	Through-Right		0							0				0					
	Right	68	0	0	0	68	0	0	71	0	0	0	71	0	0		71		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	52	0	52	0	52	52	0	54	0	54	0	54	0	54		54		**0**
	Left-Through		0							0				0					
	Through	85	0	**205**	0	85	**205**	2	90	0	**217**	0	90	0	**217**		90		0
	Through-Right		0							0				0					
	Right	68	0	0	0	68	0	2	73	0	0	0	73	0	0		73		0
	Left-Through-Right		1							1				1					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	*North-South:*	875	880	938	943	0
	East-West:	209	209	221	221	0
	SUM:	1084	1089	1159	1164	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.723	0.726	0.773	0.776	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.623	0.626	0.673	0.676	0.000
LEVEL OF SERVICE (LOS):		B	B	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.673
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
3	East-West Street:	Strathmore Drive/Strathmore Place	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	6	1	6	0	6	6	0	6	1	6	0	6	1	6		6		0
	Left-Through		0							0				0					
	Through	150	1	150	0	150	150	6	162	1	162	0	162	1	162		162		0
	Through-Right		0							0				0					
	Right	163	1	130	7	170	137	29	199	1	158	7	206	1	165		206		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	300	1	300	-2	298	298	23	335	1	335	-2	333	1	333		333		0
	Left-Through		0							0				0					
	Through	427	1	220	0	427	220	28	472	1	243	0	472	1	243		472		0
	Through-Right		1							1				1					
	Right	13	0	13	0	13	13	0	14	0	14	0	14	0	14		14		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	4	0	4	0	4	4	0	4	0	4	0	4	0	4		4		0
	Left-Through		0							0				0					
	Through	65	0	81	0	65	81	8	76	0	92	0	76	0	92		76		0
	Through-Right		0							0				0					
	Right	12	0	0	0	12	0	0	12	0	0	0	12	0	0		12		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	67	1	67	0	67	67	12	82	1	82	0	82	1	82		82		0
	Left-Through		0							0				0					
	Through	17	1	17	0	17	17	3	21	1	21	0	21	1	21		21		0
	Through-Right		0							0				0					
	Right	25	1	0	0	25	0	10	36	1	0	0	36	1	0		36		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	North-South:	450	448	497	498	0
	East-West:	148	148	174	174	0
	SUM:	598	596	671	672	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.420	0.418	0.471	0.472	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.320	0.318	0.371	0.372	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-0.371
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
3	East-West Street:	Strathmore Drive/Strathmore Place	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	37	1	37	0	37	37	0	39	1	39	0	39	1	39		39		0
	Left-Through		0							0				0					
	Through	576	1	576	0	576	576	33	632	1	632	0	632	1	632		632		0
	Through-Right		0							0				0					
	Right	127	1	38	0	127	36	23	155	1	42	0	155	1	40		155		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	67	1	67	0	67	67	19	89	1	89	0	89	1	89		89		0
	Left-Through		0							0				0					
	Through	202	1	109	0	202	109	6	216	1	117	0	216	1	117		216		0
	Through-Right		1							1				1					
	Right	16	0	16	0	16	16	0	17	0	17	0	17	0	17		17		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	8	0	8	0	8	8	0	8	0	8	0	8	0	8		8		0
	Left-Through		0							0				0					
	Through	82	0	121	0	82	121	6	91	0	131	0	91	0	131		91		0
	Through-Right		0							0				0					
	Right	31	0	0	0	31	0	0	32	0	0	0	32	0	0		32		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	179	1	179	4	183	183	40	226	1	226	4	230	1	230		230		0
	Left-Through		0							0				0					
	Through	113	1	113	0	113	113	11	129	1	129	0	129	1	129		129		0
	Through-Right		0							0				0					
	Right	243	1	176	-1	242	175	32	285	1	196	-1	284	1	195		284		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	643	*North-South:*	643	*North-South:*	721	*North-South:*	721	*North-South:*	0
	East-West:	300	*East-West:*	304	*East-West:*	357	*East-West:*	361	*East-West:*	0
	SUM:	943	*SUM:*	947	*SUM:*	1078	*SUM:*	1082	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.662		0.665		0.756		0.759		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.562		0.565		0.656		0.659		0.000
LEVEL OF SERVICE (LOS):		A		A		B		B		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.656
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
4	East-West Street:	Westholme Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		2		2		2		2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	177	1	177	0	177	177	0	184	1	184	0	184	1	184		184		0
	Left-Through		0							0				0					
	Through	384	1	204	3	387	206	4	404	1	215	3	407	1	216		407		0
	Through-Right		1							1				1					
	Right	24	0	24	0	24	24	0	25	0	25	0	25	0	25		25		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	17	1	17	0	17	17	0	18	1	18	0	18	1	18		18		0
	Left-Through		0							0				0					
	Through	528	1	337	3	531	339	25	574	1	363	3	577	1	365		577		0
	Through-Right		1							1				1					
	Right	146	0	146	0	146	146	0	152	0	152	0	152	0	152		152		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	24	0	24	0	24	24	0	25	0	25	0	25	0	25		25		0
	Left-Through		1							1				1					
	Through	23	0	47	0	23	47	0	24	0	49	0	24	0	49		24		0
	Through-Right		0							0				0					
	Right	61	1	0	0	61	0	0	63	1	0	0	63	1	0		63		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	33	0	33	0	33	33	0	34	0	34	0	34	0	34		34		0
	Left-Through		0							0				0					
	Through	148	0	257	0	148	257	0	154	0	267	0	154	0	267		154		0
	Through-Right		0							0				0					
	Right	76	0	0	0	76	0	0	79	0	0	0	79	0	0		79		0
	Left-Through-Right		1							1				1					
	Left-Right																		

CRITICAL VOLUMES		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
	North-South:	514	516	547	549	0
	East-West:	281	281	292	292	0
	SUM:	795	797	839	841	0
VOLUME/CAPACITY (V/C) RATIO:		0.530	0.531	0.559	0.561	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.430	0.431	0.459	0.461	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.459
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
4	East-West Street:	Westholme Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- SB-- / EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	103	1	103	0	103	103	0	107	1	107	0	107	1	107		107		0
	Left-Through		0							0				0					
	Through	497	1	271	2	499	272	27	544	1	295	2	546	1	296		546		0
	Through-Right		1							1				1					
	Right	44	0	44	0	44	44	0	46	0	46	0	46	0	46		46		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	59	1	59	0	59	59	0	61	1	61	0	61	1	61		61		0
	Left-Through		0							0				0					
	Through	598	1	326	2	600	327	9	631	1	343	2	633	1	344		633		0
	Through-Right		1							1				1					
	Right	53	0	53	0	53	53	0	55	0	55	0	55	0	55		55		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	209	0	209	0	209	209	0	217	0	217	0	217	0	217		217		0
	Left-Through		1							1				1					
	Through	212	0	421	0	212	421	0	221	0	438	0	221	0	438		221		0
	Through-Right		0							0				0					
	Right	177	1	126	0	177	126	0	184	1	131	0	184	1	131		184		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	37	0	37	0	37	37	0	39	0	39	0	39	0	39		39		0
	Left-Through		0							0				0					
	Through	62	0	149	0	62	149	0	65	0	156	0	65	0	156		65		0
	Through-Right		0							0				0					
	Right	50	0	0	0	50	0	0	52	0	0	0	52	0	0		52		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	429	430	450	451	0
East-West:	458	458	477	477	0
SUM:	887	888	927	928	0
VOLUME/CAPACITY (V/C) RATIO:	0.591	0.592	0.618	0.619	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.491	0.492	0.518	0.519	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.001	Δv/c after mitigation:	-0.518
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
5	East-West Street:	Manning Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		2		2		2		2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	636	1	322	3	639	324	4	666	1	337	3	669	1	339		669		0
	Through-Right		1							1				1					
	Right	8	0	8	0	8	8	0	8	0	8	0	8	0	8		8		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	27	1	27	0	27	27	0	28	1	28	0	28	1	28		28		0
	Left-Through		0							0				0					
	Through	610	2	305	3	613	307	25	660	2	330	3	663	2	332		663		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	8	0	8	0	8	8	0	8	0	8	0	8	0	8		8		0
	Left-Through		0							0				0					
	Through	0	0	116	0	0	116	0	0	0	120	0	0	0	120		0		0
	Through-Right		0							0				0					
	Right	108	0	0	0	108	0	0	112	0	0	0	112	0	0		112		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	North-South:	349	North-South:	351	North-South:	365	North-South:	367	North-South:	0
	East-West:	116	East-West:	116	East-West:	120	East-West:	120	East-West:	0
	SUM:	465	SUM:	467	SUM:	485	SUM:	487	SUM:	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.310		0.311		0.323		0.325		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.210		0.211		0.223		0.225		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.223
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
5	East-West Street:	Manning Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		**0**
	Left-Through		0							0				0					
	Through	689	1	**356**	2	691	**357**	27	744	1	**384**	2	746	1	**385**		746		0
	Through-Right		1							1				1					
	Right	23	0	23	0	23	23	0	24	0	24	0	24	0	24		24		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	201	1	**201**	0	201	**201**	0	209	1	**209**	0	209	1	**209**		209		0
	Left-Through		0							0				0					
	Through	852	2	426	2	854	427	9	896	2	448	2	898	2	449		898		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**		0		0
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	8	0	8	0	8	8	0	8	0	8	0	8	0	8		8		**0**
	Left-Through		0							0				0					
	Through	0	0	**77**	0	0	**77**	0	0	0	**80**	0	0	0	**80**		0		0
	Through-Right		0							0				0					
	Right	69	0	0	0	69	0	0	72	0	0	0	72	0	0		72		0
	Left-Through-Right		1							1				1					
	Left-Right																		

CRITICAL VOLUMES	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
North-South:	557	558	593	594	0
East-West:	77	77	80	80	0
SUM:	634	635	673	674	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.423	0.423	0.449	0.449	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.323	0.323	0.349	0.349	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.349
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
6	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition					Existing Plus Project					Future Condition W/O Project					Future Condition W/ Project					Future W/ Project W/ Mitigation				
No. of Phases					2					2					2					2					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--		SB--		
	EB--	0	WB--		0	EB--	0	WB--		0	EB--	0	WB--		0	EB--	0	WB--		0	EB--		WB--		
ATSAC-1 or ATSAC+ATCS-2?					2					2					2					2					
Override Capacity					0					0					0					0					

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9		9		**0**
	Left-Through		0							0				0					
	Through	783	1	**460**	10	793	**467**	33	848	1	**498**	10	858	1	**505**		858		0
	Through-Right		1							1				1					
	Right	137	0	137	4	141	141	5	148	0	148	4	152	0	152		152		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	106	1	**106**	0	106	**106**	3	113	1	**113**	0	113	1	**113**		113		0
	Left-Through		0							0				0					
	Through	442	1	227	0	442	227	37	497	1	255	0	497	1	255		497		**0**
	Through-Right		1							1				1					
	Right	12	0	12	0	12	12	0	12	0	12	0	12	0	12		12		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	26	1	**26**	0	26	**26**	0	27	1	**27**	0	27	1	**27**		27		0
	Left-Through		0							0				0					
	Through	66	0	72	0	66	72	2	71	0	77	0	71	0	77		71		**0**
	Through-Right		1							1				1					
	Right	6	0	0	0	6	0	0	6	0	0	0	6	0	0		6		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	97	1	97	3	100	100	3	104	1	104	3	107	1	107		107		**0**
	Left-Through		0							0				0					
	Through	25	0	**167**	0	25	**167**	0	26	0	**176**	0	26	0	**176**		26		0
	Through-Right		1							1				1					
	Right	142	0	0	0	142	0	2	150	0	0	0	150	0	0		150		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	566	*North-South:*	573	*North-South:*	611	*North-South:*	618	*North-South:*	0
	East-West:	193	*East-West:*	193	*East-West:*	203	*East-West:*	203	*East-West:*	0
	SUM:	759	*SUM:*	766	*SUM:*	814	*SUM:*	821	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.506		0.511		0.543		0.547		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.406		0.411		0.443		0.447		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	-0.443
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
6	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			2			2			2			2			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	49	1	**49**	0	49	**49**	1	52	1	**52**	0	52	1	**52**		52		**0**
	Left-Through		0							0				0					
	Through	411	1	289	0	411	290	38	466	1	322	0	466	1	323		466		0
	Through-Right		1							1				1					
	Right	167	0	167	2	169	169	4	178	0	178	2	180	0	180		180		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	165	1	165	0	165	165	1	173	1	173	0	173	1	173		173		0
	Left-Through		0							0				0					
	Through	991	1	**516**	5	996	**518**	45	1076	1	**559**	5	1081	1	**562**		1081		**0**
	Through-Right		1							1				1					
	Right	40	0	40	0	40	40	0	42	0	42	0	42	0	42		42		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	21	1	**21**	0	21	**21**	0	22	1	**22**	0	22	1	**22**		22		0
	Left-Through		0							0				0					
	Through	99	0	116	0	99	116	1	104	0	122	0	104	0	122		104		**0**
	Through-Right		1							1				1					
	Right	17	0	0	0	17	0	0	18	0	0	0	18	0	0		18		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	218	1	218	2	220	220	1	228	1	228	2	230	1	230		230		**0**
	Left-Through		0							0				0					
	Through	198	0	**373**	0	198	**373**	3	209	0	**410**	0	209	0	**410**		209		0
	Through-Right		1							1				1					
	Right	175	0	0	0	175	0	19	201	0	0	0	201	0	0		201		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES	North-South:			565			567				611				614				0
	East-West:			394			394				432				432				0
	SUM:			959			961				1043				1046				0
VOLUME/CAPACITY *(V/C)* RATIO:				0.639			0.641				0.695				0.697				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.539			0.541				0.595				0.597				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.595
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Plaza/Westwood Boulevar	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
7	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation				
No. of Phases				0				0				0				0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	3	SB--	0	NB--	3	SB--	0	NB--	3	SB--	0	NB--	3	SB--	0	NB--		SB--		
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--		
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2					
Override Capacity				955				955				955				955					

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	53	1	53	0	53	53	3	58	1	58	0	58	1	58		58		**0**
	Left-Through		0							0				0					
	Through	647	2	**324**	-8	639	**320**	11	684	2	**342**	-8	676	2	**338**		676		0
	Through-Right		0							0				0					
	Right	165	1	94	0	165	94	0	172	1	97	0	172	1	97		172		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	46	1	**46**	0	46	**46**	0	48	1	**48**	0	48	1	**48**		48		0
	Left-Through		0							0				0					
	Through	199	2	100	0	199	100	4	211	2	106	0	211	2	106		211		**0**
	Through-Right		0							0				0					
	Right	66	1	20	0	66	20	0	69	1	21	0	69	1	21		69		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	93	1	**93**	0	93	**93**	0	97	1	**97**	0	97	1	**97**		97		0
	Left-Through		0							0				0					
	Through	194	0	234	4	198	238	1	203	0	244	4	207	0	248		207		**0**
	Through-Right		1							1				1					
	Right	40	0	0	0	40	0	-1	41	0	0	0	41	0	0		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	71	1	71	0	71	71	1	75	1	75	0	75	1	75		75		**0**
	Left-Through		0							0				0					
	Through	194	0	**311**	3	197	**314**	5	207	0	**329**	3	210	0	**332**		210		0
	Through-Right		1							1				1					
	Right	117	0	0	0	117	0	0	122	0	0	0	122	0	0		122		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			North-South:	370		North-South:	366			North-South:	390			North-South:	386			North-South:	0
			East-West:	404		East-West:	407			East-West:	426			East-West:	429			East-West:	0
			SUM:	774		SUM:	773			SUM:	816			SUM:	815			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:				0.810			0.809				0.854				0.853				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.710			0.709				0.754				0.753				0.000
LEVEL OF SERVICE (LOS):				C			C				C				C				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	-0.001	Δv/c after mitigation:	-0.754
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Plaza/Westwood Boulevar	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
7	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT			FUTURE CONDITION W/ PROJECT			FUTURE W/ PROJECT W/ MITIGATION		
No. of Phases			0			0			0			0			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB--	0	NB-- 3	SB--	0	NB-- 3	SB--	0	NB-- 3	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			955			955			955			955			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	65	1	**65**	0	65	**65**	14	82	1	**82**	0	82	1	**82**		82		**0**
	Left-Through		0							0				0					
	Through	274	2	137	0	274	137	11	296	2	148	0	296	2	148		296		0
	Through-Right		0							0				0					
	Right	168	1	19	0	168	19	1	176	1	21	0	176	1	21		176		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	74	1	74	0	74	74	0	77	1	77	0	77	1	77		77		0
	Left-Through		0							0				0					
	Through	469	2	**235**	-5	464	**232**	17	505	2	**253**	-5	500	2	**250**		500		**0**
	Through-Right		0							0				0					
	Right	142	1	121	0	142	121	1	149	1	126	0	149	1	126		149		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	43	1	**43**	0	43	**43**	1	46	1	**46**	0	46	1	**46**		46		0
	Left-Through		0							0				0					
	Through	250	0	328	2	252	330	9	269	0	363	2	271	0	365		271		**0**
	Through-Right		1							1				1					
	Right	78	0	0	0	78	0	13	94	0	0	0	94	0	0		94		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	149	1	149	0	149	149	0	155	1	155	0	155	1	155		155		**0**
	Left-Through		0							0				0					
	Through	403	0	**478**	2	405	**480**	3	422	0	**500**	2	424	0	**502**		424		0
	Through-Right		1							1				1					
	Right	75	0	0	0	75	0	0	78	0	0	0	78	0	0		78		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	300		*North-South:*	297			*North-South:*	335			*North-South:*	332			*North-South:*	0
			East-West:	521		*East-West:*	523			*East-West:*	546			*East-West:*	548			*East-West:*	0
			SUM:	821		*SUM:*	820			*SUM:*	881			*SUM:*	880			*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:				0.860			0.859				0.923				0.921				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.760			0.759				0.823				0.821				0.000
LEVEL OF SERVICE (LOS):				C			C				D				D				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.002	Δ*v/c* after mitigation:	-0.823
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Tiverton Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
8	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	1	1	1	1	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- 0 SB-- 0 / EB-- 0 WB-- 0	NB-- SB-- / EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	50	0	50	0	50	50	0	52	0	52	0	52	0	52		52		0
	Left-Through		0							0				0					
	Through	115	0	214	0	115	214	1	121	0	224	0	121	0	224		121		0
	Through-Right		0							0				0					
	Right	49	0	0	0	49	0	0	51	0	0	0	51	0	0		51		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	5	0	5	0	5	5	0	5	0	5	0	5	0	5		5		0
	Left-Through		1							1				1					
	Through	4	0	9	0	4	9	3	7	0	12	0	7	0	12		7		0
	Through-Right		0							0				0					
	Right	24	1	0	0	24	0	0	25	1	0	0	25	1	0		25		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	107	1	107	1	108	108	0	111	1	111	1	112	1	112		112		0
	Left-Through		0							0				0					
	Through	195	0	254	3	198	257	1	204	0	265	3	207	0	268		207		0
	Through-Right		1							1				1					
	Right	59	0	0	0	59	0	0	61	0	0	0	61	0	0		61		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	29	1	29	0	29	29	0	30	1	30	0	30	1	30		30		0
	Left-Through		0							0				0					
	Through	368	1	368	3	371	371	5	388	1	388	3	391	1	391		391		0
	Through-Right		0							0				0					
	Right	82	1	80	0	82	80	0	85	1	83	0	85	1	83		85		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	223	223	236	236	0
East-West:	475	479	499	503	0
SUM:	698	702	735	739	0
VOLUME/CAPACITY (V/C) RATIO:	0.465	0.468	0.490	0.493	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.365	0.368	0.390	0.393	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	-0.390
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Tiverton Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
8	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				2				2				2				2				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				1				1				1				1				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				0				0				0				0				

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	61	0	61	0	61	61	0	63	0	63	0	63	0	63		63		0
	Left-Through		0							0				0					
	Through	17	0	134	0	17	134	3	21	0	142	0	21	0	142		21		0
	Through-Right		0							0				0					
	Right	56	0	0	0	56	0	0	58	0	0	0	58	0	0		58		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	101	0	101	0	101	101	0	105	0	105	0	105	0	105		105		0
	Left-Through		1							1				1					
	Through	65	0	166	0	65	166	1	69	0	174	0	69	0	174		69		0
	Through-Right		0							0				0					
	Right	144	1	133	0	144	133	0	150	1	139	0	150	1	139		150		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	22	1	22	0	22	22	0	23	1	23	0	23	1	23		23		0
	Left-Through		0							0				0					
	Through	404	0	534	2	406	536	10	430	0	565	2	432	0	567		432		0
	Through-Right		1							1				1					
	Right	130	0	0	0	130	0	0	135	0	0	0	135	0	0		135		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	58	1	58	0	58	58	0	60	1	60	0	60	1	60		60		0
	Left-Through		0							0				0					
	Through	466	1	466	2	468	468	4	489	1	489	2	491	1	491		491		0
	Through-Right		0							0				0					
	Right	8	1	0	0	8	0	0	8	1	0	0	8	1	0		8		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
	North-South:	300	*North-South:*	300	*North-South:*	316	*North-South:*	316	*North-South:*	0
	East-West:	592	*East-West:*	594	*East-West:*	625	*East-West:*	627	*East-West:*	0
	SUM:	892	*SUM:*	894	*SUM:*	941	*SUM:*	943	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.595		0.596		0.627		0.629		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.495		0.496		0.527		0.529		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.527
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
9	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			3			3			3			3			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2			2			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	3	NB-- 0	SB--	3	NB-- 0	SB--	3	NB-- 0	SB--	3	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	38	1	38	0	38	38	0	40	1	40	0	40	1	40		40		0
	Left-Through		0							0				0					
	Through	424	0	441	0	424	441	3	444	0	462	0	444	0	462		444		0
	Through-Right		1							1				1					
	Right	17	0	0	0	17	0	0	18	0	0	0	18	0	0		18		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	16	1	16	0	16	16	0	17	1	17	0	17	1	17		17		0
	Left-Through		0							0				0					
	Through	312	1	312	0	312	312	20	345	1	345	0	345	1	345		345		0
	Through-Right		0							0				0					
	Right	295	1	170	3	298	172	5	312	1	182	3	315	1	183		315		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	203	1	125	3	206	126	1	212	1	130	3	215	1	132		215		0
	Left-Through		1							1				1					
	Through	46	0	125	0	46	126	0	48	0	130	0	48	0	132		48		0
	Through-Right		0							0				0					
	Right	25	1	6	0	25	6	0	26	1	6	0	26	1	6		26		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9		9		0
	Left-Through		0							0				0					
	Through	124	0	166	0	124	166	0	129	0	173	0	129	0	173		129		0
	Through-Right		1							1				1					
	Right	42	0	0	0	42	0	0	44	0	0	0	44	0	0		44		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	457		*North-South:*	457			*North-South:*	479			*North-South:*	479			*North-South:*	0
			East-West:	291		*East-West:*	292			*East-West:*	303			*East-West:*	305			*East-West:*	0
			SUM:	748		*SUM:*	749			*SUM:*	782			*SUM:*	784			*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:				0.525			0.526				0.549				0.550				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.425			0.426				0.449				0.450				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-0.449
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
9	East-West Street:	Le Conte Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	2	2	2	2	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	**51**	0	51	**51**	0	53	1	**53**	0	53	1	**53**		53		**0**
	Left-Through		0							0				0					
	Through	344	0	367	0	344	367	18	376	0	400	0	376	0	400		376		0
	Through-Right		1							1				1					
	Right	23	0	0	0	23	0	0	24	0	0	0	24	0	0		24		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	45	1	45	0	45	45	0	47	1	47	0	47	1	47		47		0
	Left-Through		0							0				0					
	Through	496	1	**496**	0	496	**496**	5	521	1	**521**	0	521	1	**521**		521		**0**
	Through-Right		0							0				0					
	Right	338	1	89	2	340	90	4	356	1	92	2	358	1	93		358		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	339	1	**249**	2	341	**250**	9	362	1	**264**	2	364	1	**265**		364		0
	Left-Through		1							1				1					
	Through	158	0	249	0	158	250	1	165	0	264	0	165	0	265		165		**0**
	Through-Right		0							0				0					
	Right	81	1	56	0	81	56	0	84	1	58	0	84	1	58		84		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	17	1	17	0	17	17	0	18	1	18	0	18	1	18		18		**0**
	Left-Through		0							0				0					
	Through	118	0	**159**	0	118	**159**	0	123	0	**166**	0	123	0	**166**		123		0
	Through-Right		1							1				1					
	Right	41	0	0	0	41	0	0	43	0	0	0	43	0	0		43		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES		Existing Condition	Existing Plus Project	Future W/O Project	Future W/ Project	Future W/ Project W/ Mitigation
	North-South:	547	547	574	574	0
	East-West:	408	409	430	431	0
	SUM:	955	956	1004	1005	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.670	0.671	0.705	0.705	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.570	0.571	0.605	0.605	0.000
LEVEL OF SERVICE (LOS):		A	A	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.605
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
10	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		2		2		2		2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--	0	NB-- 3 SB--	0	NB-- 3 SB--	0	NB-- 3 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	311	1	311	6	317	317	31	355	1	355	6	361	1	361		361		0
	Through-Right		0							0				0					
	Right	216	1	149	0	216	149	15	240	1	168	0	240	1	168		240		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	94	1	94	0	94	94	2	100	1	100	0	100	1	100		100		0
	Left-Through		0							0				0					
	Through	707	2	354	9	716	358	22	758	2	379	9	767	2	384		767		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	97	1	67	0	97	67	3	104	1	72	0	104	1	72		104		0
	Left-Through		0							0				0					
	Through	0	0	67	0	0	67	0	0	0	72	0	0	0	72		0		0
	Through-Right		0							0				0					
	Right	37	0	0	0	37	0	1	40	0	0	0	40	0	0		40		0
	Left-Through-Right		1							1				1					
	Left-Right																		
CRITICAL VOLUMES	North-South:			405			411				455				461				0
	East-West:			67			67				72				72				0
	SUM:			472			478				527				533				0
VOLUME/CAPACITY (V/C) RATIO:				0.315			0.319				0.351				0.355				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.215			0.219				0.251				0.255				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	-0.251
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
10	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			2			2			2			2			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB--	0	NB-- 3	SB--	0	NB-- 3	SB--	0	NB-- 3	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		**0**
	Left-Through		0							0				0					
	Through	837	1	**837**	5	842	**842**	30	901	1	**901**	5	906	1	**906**		906		0
	Through-Right		0							0				0					
	Right	141	1	0	0	141	0	12	159	1	0	0	159	1	0		159		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	45	1	**45**	0	45	**45**	-1	46	1	**46**	0	46	1	**46**		46		0
	Left-Through		0							0				0					
	Through	413	2	207	3	416	208	36	466	2	233	3	469	2	235		469		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**		0		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	449	1	**302**	0	449	**302**	25	492	1	**329**	0	492	1	**329**		492		**0**
	Left-Through		0							0				0					
	Through	0	0	302	0	0	302	0	0	0	329	0	0	0	329		0		0
	Through-Right		0							0				0					
	Right	155	0	0	0	155	0	4	165	0	0	0	165	0	0		165		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	882	*North-South:*	887	*North-South:*	947	*North-South:*	952	*North-South:*	0
	East-West:	302	*East-West:*	302	*East-West:*	329	*East-West:*	329	*East-West:*	0
	SUM:	1184	*SUM:*	1189	*SUM:*	1276	*SUM:*	1281	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.789		0.793		0.851		0.854		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.689		0.693		0.751		0.754		0.000
LEVEL OF SERVICE (LOS):		B		B		C		C		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.751
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
11	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	35	1	35	0	35	35	1	37	1	37	0	37	1	37		37		**0**
	Left-Through		0							0				0					
	Through	735	1	**399**	14	749	**406**	26	791	1	**432**	14	805	1	**439**		805		0
	Through-Right		1							1				1					
	Right	63	0	63	0	63	63	6	72	0	72	0	72	0	72		72		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	25	1	**25**	0	25	**25**	0	26	1	**26**	0	26	1	**26**		26		0
	Left-Through		0							0				0					
	Through	501	1	311	3	504	312	35	556	1	343	3	559	1	344		559		**0**
	Through-Right		1							1				1					
	Right	120	0	120	0	120	120	4	129	0	129	0	129	0	129		129		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	212	0	**212**	0	212	**212**	13	234	0	**234**	0	234	0	**234**		234		0
	Left-Through		1							1				1					
	Through	105	0	149	0	105	149	3	112	0	160	0	112	0	160		112		**0**
	Through-Right		1							1				1					
	Right	44	0	0	0	44	0	2	48	0	0	0	48	0	0		48		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	31	1	31	0	31	31	2	34	1	34	0	34	1	34		34		**0**
	Left-Through		0							0				0					
	Through	54	0	**109**	0	54	**109**	-1	55	0	**112**	0	55	0	**112**		55		0
	Through-Right		1							1				1					
	Right	55	0	0	0	55	0	0	57	0	0	0	57	0	0		57		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	424	*North-South:*	431	*North-South:*	458	*North-South:*	465	*North-South:*	0
	East-West:	321	*East-West:*	321	*East-West:*	346	*East-West:*	346	*East-West:*	0
	SUM:	745	*SUM:*	752	*SUM:*	804	*SUM:*	811	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.497		0.501		0.536		0.541		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.397		0.401		0.436		0.441		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.005	Δ*v/c* after mitigation:	-0.436
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
11	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	63	1	**63**	0	63	**63**	4	70	1	**70**	0	70	1	**70**		70		**0**
	Left-Through		0							0				0					
	Through	535	1	341	2	537	342	33	590	1	375	2	592	1	376		592		0
	Through-Right		1							1				1					
	Right	146	0	146	0	146	146	8	160	0	160	0	160	0	160		160		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	95	1	95	0	95	95	0	99	1	99	0	99	1	99		99		0
	Left-Through		0							0				0					
	Through	909	1	**644**	7	916	**647**	32	978	1	**693**	7	985	1	**697**		985		**0**
	Through-Right		1							1				1					
	Right	378	0	378	0	378	378	15	408	0	408	0	408	0	408		408		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	94	0	**94**	0	94	**94**	10	108	0	**108**	0	108	0	**108**		108		0
	Left-Through		1							1				1					
	Through	99	0	137	0	99	137	2	105	0	144	0	105	0	144		105		**0**
	Through-Right		1							1				1					
	Right	38	0	0	0	38	0	-1	39	0	0	0	39	0	0		39		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	108	1	108	0	108	108	9	121	1	121	0	121	1	121		121		**0**
	Left-Through		0							0				0					
	Through	178	0	**318**	0	178	**318**	10	195	0	**341**	0	195	0	**341**		195		0
	Through-Right		1							1				1					
	Right	140	0	0	0	140	0	0	146	0	0	0	146	0	0		146		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	*North-South:*	707	710	763	767	0
	East-West:	412	412	449	449	0
	SUM:	1119	1122	1212	1216	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.746	0.748	0.808	0.811	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.646	0.648	0.708	0.711	0.000
LEVEL OF SERVICE (LOS):		B	B	C	C	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.708
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
12	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				0				0				0				0				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				1125				#####				1125				1125				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	78	1	78	0	78	78	5	86	1	86	0	86	1	86		86		**0**
	Left-Through		0							0				0					
	Through	730	1	**392**	-8	722	**388**	14	774	1	**415**	-8	766	1	**411**		766		0
	Through-Right		1							1				1					
	Right	54	0	54	0	54	54	0	56	0	56	0	56	0	56		56		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	12	0	**12**	0	12	**12**	0	12	0	**12**	0	12	0	**12**		12		0
	Left-Through		1							1				1					
	Through	341	1	195	0	341	195	5	360	1	204	0	360	1	204		360		**0**
	Through-Right		0							0				0					
	Right	24	1	8	0	24	8	0	25	1	8	0	25	1	8		25		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	33	1	33	0	33	33	0	34	1	34	0	34	1	34		34		0
	Left-Through		0							0				0					
	Through	97	0	**135**	0	97	**135**	1	102	0	**141**	0	102	0	**141**		102		**0**
	Through-Right		1							1				1					
	Right	38	0	0	0	38	0	-1	39	0	0	0	39	0	0		39		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	60	0	**60**	0	60	**60**	1	63	0	**63**	0	63	0	**63**		63		**0**
	Left-Through		0							0				0					
	Through	67	0	159	0	67	159	4	74	0	170	0	74	0	170		74		0
	Through-Right		0							0				0					
	Right	32	0	0	0	32	0	0	33	0	0	0	33	0	0		33		0
	Left-Through-Right		1							1				1					
	Left-Right																		
	CRITICAL VOLUMES		North-South:	404		North-South:	400			North-South:	427			North-South:	423			North-South:	0
			East-West:	195		East-West:	195			East-West:	204			East-West:	204			East-West:	0
			SUM:	599		SUM:	595			SUM:	631			SUM:	627			SUM:	0
	VOLUME/CAPACITY (V/C) RATIO:			0.532			0.529				0.561				0.557				0.000
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.432			0.429				0.461				0.457				0.000
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.004	Δ*v/c* after mitigation:	-0.461
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
12	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1125	#####	1125	1125	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	101	1	101	0	101	101	3	108	1	108	0	108	1	108		108		0
	Left-Through		0							0				0					
	Through	405	1	240	0	405	240	25	446	1	262	0	446	1	262		446		0
	Through-Right		1							1				1					
	Right	74	0	74	0	74	74	1	78	0	78	0	78	0	78		78		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		1							1				1					
	Through	635	1	318	-5	630	315	16	677	1	339	-5	672	1	336		672		0
	Through-Right		0							0				0					
	Right	43	1	15	0	43	15	1	46	1	17	0	46	1	17		46		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	56	1	56	0	56	56	1	59	1	59	0	59	1	59		59		0
	Left-Through		0							0				0					
	Through	155	0	253	0	155	253	5	166	0	274	0	166	0	274		166		0
	Through-Right		1							1				1					
	Right	98	0	0	0	98	0	6	108	0	0	0	108	0	0		108		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	103	0	103	0	103	103	0	107	0	107	0	107	0	107		107		0
	Left-Through		0							0				0					
	Through	246	0	410	0	246	410	1	257	0	427	0	257	0	427		257		0
	Through-Right		0							0				0					
	Right	61	0	0	0	61	0	0	63	0	0	0	63	0	0		63		0
	Left-Through-Right		1							1				1					
	Left-Right																		

CRITICAL VOLUMES		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
	North-South:	419	416	447	444	0
	East-West:	466	466	486	486	0
	SUM:	885	882	933	930	0
VOLUME/CAPACITY (V/C) RATIO:		0.787	0.784	0.829	0.827	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.687	0.684	0.729	0.727	0.000
LEVEL OF SERVICE (LOS):		B	B	C	C	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.002	Δ*v/c* after mitigation:	-0.729
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
13	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	37	1	37	0	37	37	0	39	1	39	0	39	1	39		39		**0**
	Left-Through		0							0				0					
	Through	420	0	**429**	0	420	**429**	3	440	0	**449**	0	440	0	**449**		440		0
	Through-Right		1							1				1					
	Right	9	0	0	0	9	0	0	9	0	0	0	9	0	0		9		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	24	1	**24**	0	24	**24**	0	25	1	**25**	0	25	1	**25**		25		0
	Left-Through		0							0				0					
	Through	299	1	299	0	299	299	19	330	1	330	0	330	1	330		330		**0**
	Through-Right		0							0				0					
	Right	38	1	38	0	38	38	1	41	1	41	0	41	1	41		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	63	0	63	0	63	63	0	66	0	66	0	66	0	66		66		0
	Left-Through		0							0				0					
	Through	41	0	**167**	0	41	**167**	0	43	0	**175**	0	43	0	**175**		43		**0**
	Through-Right		0							0				0					
	Right	63	0	0	0	63	0	0	66	0	0	0	66	0	0		66		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	11	0	**11**	0	11	**11**	0	11	0	**11**	0	11	0	**11**		11		**0**
	Left-Through		0							0				0					
	Through	33	0	81	0	33	81	0	34	0	84	0	34	0	84		34		0
	Through-Right		0							0				0					
	Right	37	0	0	0	37	0	0	39	0	0	0	39	0	0		39		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES North-South:	453	453	474	474	0
East-West:	178	178	186	186	0
SUM:	631	631	660	660	0
VOLUME/CAPACITY (V/C) RATIO:	0.421	0.421	0.440	0.440	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.321	0.321	0.340	0.340	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.340
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hilgard Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
13	East-West Street:	Weyburn Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing				Existing Plus Project				Future w/o Project				Future w/ Project				Mitigation			
No. of Phases				2				2				2				2				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				0				0				0				0				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	47	1	47	0	47	47	0	49	1	49	0	49	1	49		49		0
	Left-Through		0							0				0					
	Through	298	0	318	0	298	318	18	328	0	349	0	328	0	349		328		0
	Through-Right		1							1				1					
	Right	20	0	0	0	20	0	0	21	0	0	0	21	0	0		21		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	47	1	47	0	47	47	0	49	1	49	0	49	1	49		49		0
	Left-Through		0							0				0					
	Through	505	1	505	0	505	505	5	531	1	531	0	531	1	531		531		0
	Through-Right		0							0				0					
	Right	67	1	67	0	67	67	0	70	1	70	0	70	1	70		70		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	94	0	94	0	94	94	1	99	0	99	0	99	0	99		99		0
	Left-Through		0							0				0					
	Through	120	0	351	0	120	351	0	125	0	367	0	125	0	367		125		0
	Through-Right		0							0				0					
	Right	137	0	0	0	137	0	0	143	0	0	0	143	0	0		143		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	11	0	11	0	11	11	0	11	0	11	0	11	0	11		11		0
	Left-Through		0							0				0					
	Through	72	0	123	0	72	123	0	75	0	128	0	75	0	128		75		0
	Through-Right		0							0				0					
	Right	40	0	0	0	40	0	0	42	0	0	0	42	0	0		42		0
	Left-Through-Right		1							1				1					
	Left-Right																		

	Existing		Existing Plus Project		Future w/o Project		Future w/ Project		Mitigation	
CRITICAL VOLUMES	*North-South:*	552	*North-South:*	552	*North-South:*	580	*North-South:*	580	*North-South:*	0
	East-West:	362	*East-West:*	362	*East-West:*	378	*East-West:*	378	*East-West:*	0
	SUM:	914	*SUM:*	914	*SUM:*	958	*SUM:*	958	*SUM:*	0
VOLUME/CAPACITY (*V/C*) RATIO:		0.609		0.609		0.639		0.639		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.509		0.509		0.539		0.539		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.539
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
14	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB-- 0 EB-- 0 WB-- 3	NB-- 3 SB-- 0 EB-- 0 WB-- 3	NB-- 3 SB-- 0 EB-- 0 WB-- 3	NB-- 3 SB-- 0 EB-- 0 WB-- 3	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	564	2	282	0	564	282	42	629	2	315	0	629	2	315		629		0
	Through-Right		0							0				0					
	Right	470	1	**396**	104	574	**490**	182	671	1	**564**	104	775	1	**658**		775		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	154	1	**154**	10	164	**164**	17	177	1	**177**	10	187	1	**187**		187		0
	Left-Through		0							0				0					
	Through	548	2	274	-1	547	274	9	579	2	290	-1	578	2	289		578		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**		0		**0**
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	135	2	**74**	18	153	**84**	54	194	2	**107**	18	212	2	**117**		212		**0**
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Through-Right		0							0				0					
	Right	33	1	0	6	39	0	3	37	1	0	6	43	1	0		43		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	550		*North-South:*	654			*North-South:*	741			*North-South:*	845			*North-South:*	0
			East-West:	74		*East-West:*	84			*East-West:*	107			*East-West:*	117			*East-West:*	0
			SUM:	624		*SUM:*	738			*SUM:*	848			*SUM:*	962			*SUM:*	0
VOLUME/CAPACITY (*V/C*) RATIO:				0.438			0.518				0.595				0.675				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.338			0.418				0.495				0.575				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.080	Δ*v/c* after mitigation:	-0.495
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
14	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB-- 0	NB-- 3 SB-- 0	NB-- 3 SB-- 0	NB-- 3 SB-- 0	NB-- SB--
	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	766	2	383	0	766	383	25	822	2	411	0	822	2	411		822		0
	Through-Right		0							0				0					
	Right	243	1	0	7	250	0	81	334	1	0	7	341	1	0		341		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	47	1	47	3	50	50	5	54	1	54	3	57	1	57		57		0
	Left-Through		0							0				0					
	Through	837	2	419	0	837	419	55	926	2	463	0	926	2	463		926		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Through-Right		0							0				0					
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	589	2	324	59	648	356	235	848	2	466	59	907	2	499		907		0
	Left-Through		0							0				0					
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Through-Right		0							0				0					
	Right	212	1	165	6	218	168	17	238	1	184	6	244	1	187		244		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
North-South:	430	433	465	468	0
East-West:	324	356	466	499	0
SUM:	754	789	931	967	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.529	0.554	0.653	0.679	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.429	0.454	0.553	0.579	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.026	Δ*v/c* after mitigation:	-0.553
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Structure 32/Lot 36	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
15	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				2				2				2				2				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				0				0				0				0				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	7	1	7	23	30	30	43	50	1	50	23	73	1	73		73		0
	Left-Through		0							0				0					
	Through	1	0	7	0	1	7	0	1	0	53	0	1	0	53		1		0
	Through-Right		1							1				1					
	Right	6	0	0	0	6	0	46	52	0	0	0	52	0	0		52		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9		9		0
	Left-Through		0							0				0					
	Through	1	0	12	0	1	12	0	1	0	12	0	1	0	12		1		0
	Through-Right		1							1				1					
	Right	11	0	0	0	11	0	0	11	0	0	0	11	0	0		11		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	196	1	196	0	196	196	0	204	1	204	0	204	1	204		204		0
	Left-Through		0							0				0					
	Through	270	1	210	107	377	267	26	307	1	307	107	414	1	375		414		0
	Through-Right		1							1				1					
	Right	150	0	150	7	157	157	173	329	0	304	7	336	0	336		336		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	34	1	34	2	36	36	185	220	1	220	2	222	1	222		222		0
	Left-Through		0							0				0					
	Through	145	1	91	0	145	91	14	165	1	102	0	165	1	102		165		0
	Through-Right		1							1				1					
	Right	37	0	37	0	37	37	0	39	0	39	0	39	0	39		39		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			North-South:	19		North-South:	42			North-South:	62			North-South:	85			North-South:	0
			East-West:	287		East-West:	303			East-West:	527			East-West:	597			East-West:	0
			SUM:	306		SUM:	345			SUM:	589			SUM:	682			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:				0.204			0.230				0.393				0.455				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.104			0.130				0.293				0.355				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.062	Δ*v/c* after mitigation:	-0.293
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Structure 32/Lot 36	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
15	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition					Existing Plus Project					Future Condition W/O Project					Future Condition W/ Project					Future W/ Project W/ Mitigation				
No. of Phases					2					2					2					2					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--		SB--		
	EB--	0	WB--		0	EB--	0	WB--		0	EB--	0	WB--		0	EB--	0	WB--		0	EB--		WB--		
ATSAC-1 or ATSAC+ATCS-2?					2					2					2					2					
Override Capacity					0					0					0					0					

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	128	1	128	65	193	193	200	333	1	333	65	398	1	398		398		0
	Left-Through		0							0				0					
	Through	1	0	56	0	1	58	0	1	0	271	0	1	0	273		1		0
	Through-Right		1							1				1					
	Right	55	0	0	2	57	0	213	270	0	0	2	272	0	0		272		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	51	1	51	0	51	51	0	53	1	53	0	53	1	53		53		0
	Left-Through		0							0				0					
	Through	2	0	151	0	2	151	0	2	0	157	0	2	0	157		2		0
	Through-Right		1							1				1					
	Right	149	0	0	0	149	0	0	155	0	0	0	155	0	0		155		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	65	1	65	0	65	65	0	68	1	68	0	68	1	68		68		0
	Left-Through		0							0				0					
	Through	201	1	112	15	216	117	1	210	1	159	15	225	1	164		225		0
	Through-Right		1							1				1					
	Right	22	0	22	-5	17	17	85	108	0	108	-5	103	0	103		103		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	41	1	41	0	41	41	92	135	1	135	0	135	1	135		135		0
	Left-Through		0							0				0					
	Through	516	1	263	0	516	263	52	589	1	300	0	589	1	300		589		0
	Through-Right		1							1				1					
	Right	10	0	10	0	10	10	0	10	0	10	0	10	0	10		10		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	279		*North-South:*	344			*North-South:*	490			*North-South:*	555			*North-South:*	0
			East-West:	328		*East-West:*	328			*East-West:*	368			*East-West:*	368			*East-West:*	0
			SUM:	607		*SUM:*	672			*SUM:*	858			*SUM:*	923			*SUM:*	0
VOLUME/CAPACITY (V/C) RATIO:				0.405			0.448				0.572				0.615				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.305			0.348				0.472				0.515				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.043	Δ*v/c* after mitigation:	-0.472
Significant impacted?	NO	Fully mitigated?	N/A

LADOT
Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
16	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

MOVEMENT		EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	62	1	62	20	82	**82**	171	236	1	**236**	20	256	1	**256**		256		**0**
	Left-Through		0							0				0					
	Through	644	1	**339**	-31	613	323	28	698	1	366	-31	667	1	351		667		0
	Through-Right		1							1				1					
	Right	33	0	33	0	33	33	0	34	0	34	0	34	0	34		34		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	25	1	**25**	0	25	25	0	26	1	26	0	26	1	26		26		0
	Left-Through		0							0				0					
	Through	428	1	268	-1	427	**270**	26	471	1	**298**	-1	470	1	**299**		470		**0**
	Through-Right		1							1				1					
	Right	108	0	108	4	112	112	12	124	0	124	4	128	0	128		128		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	111	0	**111**	44	155	**155**	5	121	0	**121**	44	165	0	**165**		165		0
	Left-Through		1							1				1					
	Through	109	0	133	19	128	183	15	128	0	175	19	147	0	224		147		**0**
	Through-Right		1							1				1					
	Right	46	0	133	36	82	183	52	100	0	175	36	136	0	224		136		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	25	0	25	0	25	25	-1	25	0	25	0	25	0	25		25		**0**
	Left-Through		1							1				1					
	Through	107	0	**98**	0	107	**98**	16	127	0	**109**	0	127	0	**109**		127		0
	Through-Right		1							1				1					
	Right	63	0	98	0	63	98	0	66	0	109	0	66	0	109		66		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES		Existing		Existing Plus Project		Future W/O Project		Future W/ Project		Future W/ Project W/ Mitigation
	North-South:	364	*North-South:*	352	*North-South:*	534	*North-South:*	555	*North-South:*	0
	East-West:	209	*East-West:*	253	*East-West:*	230	*East-West:*	274	*East-West:*	0
	SUM:	573	*SUM:*	605	*SUM:*	764	*SUM:*	829	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.382		0.403		0.509		0.553		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.282		0.303		0.409		0.453		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.044	Δ*v/c* after mitigation:	-0.409
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
16	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	94	1	94	19	113	113	115	213	1	213	19	232	1	232		232		0
	Left-Through		0							0				0					
	Through	457	1	247	0	457	247	32	508	1	273	0	508	1	273		508		0
	Through-Right		1							1				1					
	Right	36	0	36	0	36	36	0	37	0	37	0	37	0	37		37		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	66	1	66	0	66	66	0	69	1	69	0	69	1	69		69		0
	Left-Through		0							0				0					
	Through	741	1	453	-16	725	457	33	804	1	492	-16	788	1	496		788		0
	Through-Right		1							1				1					
	Right	165	0	165	23	188	188	8	180	0	180	23	203	0	203		203		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	85	0	85	2	87	87	15	103	0	103	2	105	0	105		105		0
	Left-Through		1							1				1					
	Through	179	0	202	0	179	209	18	204	0	324	0	204	0	331		204		0
	Through-Right		1							1				1					
	Right	54	0	202	11	65	209	181	237	0	324	11	248	0	331		248		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	70	0	70	0	70	70	9	82	0	82	0	82	0	82		82		0
	Left-Through		1							1				1					
	Through	227	0	219	10	237	224	21	257	0	284	10	267	0	289		267		0
	Through-Right		1							1				1					
	Right	141	0	219	0	141	224	0	147	0	284	0	147	0	289		147		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	547	570	705	728	0
East-West:	304	311	406	413	0
SUM:	851	881	1111	1141	0
VOLUME/CAPACITY (V/C) RATIO:	0.567	0.587	0.741	0.761	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.467	0.487	0.641	0.661	0.000
LEVEL OF SERVICE (LOS):	A	A	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.020	Δv/c after mitigation:	-0.641
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
17	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				0				0				0				0				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				1125				#####				1125				1125				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	62	0	62	0	62	62	15	80	0	80	0	80	0	80		80		0
	Left-Through		1							1				1					
	Through	840	1	482	-27	813	469	19	893	1	527	-27	866	1	513		866		0
	Through-Right		0							0				0					
	Right	57	1	57	0	57	57	0	59	1	59	0	59	1	59		59		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	5	0	5	0	5	5	0	5	0	5	0	5	0	5		5		0
	Left-Through		1							1				1					
	Through	308	0	179	0	308	179	3	324	0	188	0	324	0	188		324		0
	Through-Right		1							1				1					
	Right	29	0	179	0	29	179	1	31	0	188	0	31	0	188		31		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	63	0	63	19	82	82	0	66	0	66	19	85	0	85		85		0
	Left-Through		1							1				1					
	Through	83	0	91	0	83	100	11	97	0	101	0	97	0	111		97		0
	Through-Right		1							1				1					
	Right	35	0	91	0	35	100	3	39	0	101	0	39	0	111		39		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	11	0	11	0	11	11	0	11	0	11	0	11	0	11		11		0
	Left-Through		1							1				1					
	Through	60	0	71	0	60	71	0	62	0	73	0	62	0	73		62		0
	Through-Right		0							0				0					
	Right	43	1	43	0	43	43	0	45	1	45	0	45	1	45		45		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			North-South:	487		North-South:	474			North-South:	532			North-South:	518			North-South:	0
			East-West:	134		East-West:	153			East-West:	139			East-West:	158			East-West:	0
			SUM:	621		SUM:	627			SUM:	671			SUM:	676			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:				0.552			0.557				0.596				0.601				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.452			0.457				0.496				0.501				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.005	Δ*v/c* after mitigation:	-0.496
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
17	East-West Street:	Kinross Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1125	#####	1125	1125	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	71	0	**71**	0	71	**71**	16	90	0	**90**	0	90	0	**90**		90		**0**
	Left-Through		1							1				1					
	Through	480	1	382	0	480	382	26	525	1	443	0	525	1	443		525		0
	Through-Right		0							0				0					
	Right	71	1	71	0	71	71	0	74	1	74	0	74	1	74		74		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		1							1				1					
	Through	742	0	**406**	-14	728	**404**	31	803	0	**441**	-14	789	0	**439**		789		**0**
	Through-Right		1							1				1					
	Right	70	0	406	10	80	404	5	78	0	441	10	88	0	439		88		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	50	0	**50**	0	50	**50**	1	53	0	**53**	0	53	0	**53**		53		0
	Left-Through		1							1				1					
	Through	147	0	138	0	147	138	2	155	0	153	0	155	0	153		155		**0**
	Through-Right		1							1				1					
	Right	79	0	138	0	79	138	15	97	0	153	0	97	0	153		97		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	36	0	36	0	36	36	0	37	0	37	0	37	0	37		37		**0**
	Left-Through		1							1				1					
	Through	154	0	**190**	0	154	**190**	0	160	0	**197**	0	160	0	**197**		160		0
	Through-Right		0							0				0					
	Right	55	1	55	0	55	55	0	57	1	57	0	57	1	57		57		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	*North-South:*	477	475	531	529	0
	East-West:	240	240	250	250	0
	SUM:	717	715	781	779	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.637	0.636	0.694	0.692	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.537	0.536	0.594	0.592	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.002	Δ*v/c* after mitigation:	-0.594
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
18	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		3		3		3		3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	23	1	23	0	23	23	24	48	1	48	0	48	1	48		48		0
	Left-Through		0							0				0					
	Through	651	1	376	-10	641	371	181	858	1	482	-10	848	1	477		848		0
	Through-Right		1							1				1					
	Right	101	0	101	0	101	101	0	105	0	105	0	105	0	105		105		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	47	1	47	0	47	47	20	69	1	69	0	69	1	69		69		0
	Left-Through		0							0				0					
	Through	439	1	222	35	474	240	51	508	1	265	35	543	1	282		543		0
	Through-Right		1							1				1					
	Right	5	0	5	0	5	5	16	21	0	21	0	21	0	21		21		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	0	0	0	0	0	0	12	12	0	12	0	12	0	12		12		0
	Left-Through		0							0				0					
	Through	1	0	2	0	1	2	7	8	0	38	0	8	0	38		8		0
	Through-Right		0							0				0					
	Right	1	0	0	0	1	0	17	18	0	0	0	18	0	0		18		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	130	1	130	0	130	130	0	135	1	135	0	135	1	135		135		0
	Left-Through		0							0				0					
	Through	18	0	75	0	18	75	10	29	0	92	0	29	0	92		29		0
	Through-Right		1							1				1					
	Right	57	0	0	0	57	0	4	63	0	0	0	63	0	0		63		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			North-South:	423		North-South:	418			North-South:	551			North-South:	546			North-South:	0
			East-West:	132		East-West:	132			East-West:	173			East-West:	173			East-West:	0
			SUM:	555		SUM:	550			SUM:	724			SUM:	719			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:				0.389			0.386				0.508				0.505				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.289			0.286				0.408				0.405				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.003	Δ*v/c* after mitigation:	-0.408
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
18	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			3			3			3			3			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2			2			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	9	1	**9**	0	9	**9**	0	9	1	**9**	0	9	1	**9**		9		**0**
	Left-Through		0							0				0					
	Through	462	1	305	18	480	314	111	592	1	373	18	610	1	382		610		0
	Through-Right		1							1				1					
	Right	148	0	148	0	148	148	0	154	0	154	0	154	0	154		154		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	68	1	68	0	68	68	12	83	1	83	0	83	1	83		83		0
	Left-Through		0							0				0					
	Through	813	1	**409**	-5	808	**407**	231	1077	1	**541**	-5	1072	1	**539**		1072		**0**
	Through-Right		1							1				1					
	Right	5	0	5	0	5	5	0	5	0	5	0	5	0	5		5		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	4	0	4	0	4	4	40	44	0	44	0	44	0	44		44		0
	Left-Through		0							0				0					
	Through	7	0	**36**	0	7	**36**	25	32	0	**162**	0	32	0	**162**		32		**0**
	Through-Right		0							0				0					
	Right	25	0	0	0	25	0	60	86	0	0	0	86	0	0		86		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	298	1	**298**	0	298	**298**	0	310	1	**310**	0	310	1	**310**		310		**0**
	Left-Through		0							0				0					
	Through	12	0	167	0	12	167	-6	6	0	174	0	6	0	174		6		0
	Through-Right		1							1				1					
	Right	155	0	0	0	155	0	7	168	0	0	0	168	0	0		168		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	418	*North-South:*	416	*North-South:*	550	*North-South:*	548	*North-South:*	0
	East-West:	334	*East-West:*	334	*East-West:*	472	*East-West:*	472	*East-West:*	0
	SUM:	752	*SUM:*	750	*SUM:*	1022	*SUM:*	1020	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.528		0.526		0.717		0.716		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.428		0.426		0.617		0.616		0.000
LEVEL OF SERVICE (LOS):		A		A		B		B		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.001	Δ*v/c* after mitigation:	-0.617
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
19	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				0				0				0				0				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				1125				#####				1125				1125				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	10	10	0	10	0	10	0	10		10		**0**
	Left-Through		1							1				1					
	Through	831	1	**416**	-27	804	**402**	34	899	1	**460**	-27	872	1	**446**		872		0
	Through-Right		0							0				0					
	Right	163	1	163	0	163	163	2	172	1	172	0	172	1	172		172		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	8	0	**8**	0	8	**8**	0	8	0	**8**	0	8	0	**8**		8		0
	Left-Through		1							1				1					
	Through	369	0	215	0	369	215	6	390	0	234	0	390	0	234		390		**0**
	Through-Right		1							1				1					
	Right	28	0	215	0	28	215	0	29	0	234	0	29	0	234		29		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	31	0	31	0	31	31	0	32	0	32	0	32	0	32		32		0
	Left-Through		1							1				1					
	Through	123	0	**107**	0	123	**107**	18	146	0	**125**	0	146	0	**125**		146		**0**
	Through-Right		1							1				1					
	Right	60	0	107	0	60	107	9	71	0	125	0	71	0	125		71		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	116	0	**116**	0	116	**116**	0	121	0	**121**	0	121	0	**121**		121		**0**
	Left-Through		1							1				1					
	Through	177	0	166	0	177	166	4	188	0	175	0	188	0	175		188		0
	Through-Right		1							1				1					
	Right	39	0	166	0	39	166	0	41	0	175	0	41	0	175		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			*North-South:*	424		*North-South:*	410			*North-South:*	468			*North-South:*	454			*North-South:*	0
			East-West:	223		*East-West:*	223			*East-West:*	246			*East-West:*	246			*East-West:*	0
			SUM:	647		*SUM:*	633			*SUM:*	714			*SUM:*	700			*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:				0.575			0.563				0.635				0.622				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.475			0.463				0.535				0.522				0.000
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.013	Δ*v/c* after mitigation:	-0.535
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
19	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1125	#####	1125	1125	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**		0		**0**
	Left-Through		1							1				1					
	Through	551	1	276	0	551	276	44	617	1	309	0	617	1	309		617		0
	Through-Right		0							0				0					
	Right	130	1	130	0	130	130	14	149	1	149	0	149	1	149		149		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0		0
	Left-Through		1							1				1					
	Through	776	0	**415**	-14	762	**408**	46	854	0	**455**	-14	840	0	**448**		840		**0**
	Through-Right		1							1				1					
	Right	54	0	415	0	54	408	0	56	0	455	0	56	0	448		56		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	13	0	**13**	0	13	**13**	0	14	0	**14**	0	14	0	**14**		14		0
	Left-Through		1							1				1					
	Through	124	0	114	0	124	114	11	140	0	138	0	140	0	138		140		**0**
	Through-Right		1							1				1					
	Right	77	0	114	0	77	114	27	107	0	138	0	107	0	138		107		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	132	0	132	0	132	132	0	137	0	137	0	137	0	137		137		**0**
	Left-Through		1							1				1					
	Through	370	0	**271**	0	370	**271**	2	387	0	**283**	0	387	0	**283**		387		0
	Through-Right		1							1				1					
	Right	39	0	271	0	39	271	0	41	0	283	0	41	0	283		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
	North-South:	415	408	455	448	0
	East-West:	284	284	297	297	0
	SUM:	699	692	752	745	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.621	0.615	0.668	0.662	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.521	0.515	0.568	0.562	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.006	Δ*v/c* after mitigation:	-0.568
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Glendon Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
20	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			2			2			2			2			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	Existing Condition: Volume	No. of Lanes	Lane Volume	Existing Plus Project: Project Traffic	Total Volume	Lane Volume	Future Condition W/O Project: Added Volume	Total Volume	No. of Lanes	Lane Volume	Future Condition W/ Project: Added Volume	Total Volume	No. of Lanes	Lane Volume	Future W/ Project W/ Mitigation: Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	40	1	40	0	40	40	0	42	1	42	0	42	1	42		42		0
	Left-Through		0							0				0					
	Through	343	1	343	0	343	343	1	358	1	358	0	358	1	358		358		0
	Through-Right		0							0				0					
	Right	263	1	263	0	263	263	0	274	1	274	0	274	1	274		274		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	34	1	34	0	34	34	0	35	1	35	0	35	1	35		35		0
	Left-Through		0							0				0					
	Through	77	1	45	0	77	45	11	91	1	52	0	91	1	52		91		0
	Through-Right		1							1				1					
	Right	12	0	12	0	12	12	0	12	0	12	0	12	0	12		12		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	71	0	71	0	71	71	0	74	0	74	0	74	0	74		74		0
	Left-Through		1							1				1					
	Through	203	0	274	0	203	274	4	215	0	289	0	215	0	289		215		0
	Through-Right		0							0				0					
	Right	24	1	4	0	24	4	16	41	1	20	0	41	1	20		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	166	0	166	0	166	166	16	189	0	189	0	189	0	189		189		0
	Left-Through		1							1				1					
	Through	247	0	253	0	247	253	4	261	0	273	0	261	0	273		261		0
	Through-Right		1							1				1					
	Right	92	0	253	0	92	253	0	96	0	273	0	96	0	273		96		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	North-South:	377	377	393	393	0
	East-West:	440	440	478	478	0
	SUM:	817	817	871	871	0
VOLUME/CAPACITY (V/C) RATIO:		0.545	0.545	0.581	0.581	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.445	0.445	0.481	0.481	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.000	Δv/c after mitigation:	-0.481
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet

(Circular 212 Method)

I/S #:	North-South Street:	Glendon Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
20	East-West Street:	Lindbrook Drive	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	75	1	75	0	75	75	0	78	1	78	0	78	1	78		78		0
	Left-Through		0							0				0					
	Through	256	1	256	0	256	256	0	266	1	266	0	266	1	266		266		0
	Through-Right		0							0				0					
	Right	157	1	157	0	157	157	0	163	1	163	0	163	1	163		163		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	116	1	116	0	116	116	0	121	1	121	0	121	1	121		121		0
	Left-Through		0							0				0					
	Through	262	1	170	0	262	170	4	277	1	179	0	277	1	179		277		0
	Through-Right		1							1				1					
	Right	78	0	78	0	78	78	0	81	0	81	0	81	0	81		81		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	51	0	51	0	51	51	0	53	0	53	0	53	0	53		53		0
	Left-Through		1							1				1					
	Through	174	0	225	0	174	225	22	203	0	256	0	203	0	256		203		0
	Through-Right		0							0				0					
	Right	43	1	6	0	43	6	3	48	1	9	0	48	1	9		48		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	253	0	253	0	253	253	3	266	0	266	0	266	0	266		266		0
	Left-Through		1							1				1					
	Through	458	0	414	0	458	414	2	479	0	433	0	479	0	433		479		0
	Through-Right		1							1				1					
	Right	116	0	414	0	116	414	0	121	0	433	0	121	0	433		121		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — *North-South:*	372	372	387	387	0
East-West:	478	478	522	522	0
SUM:	850	850	909	909	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.567	0.567	0.606	0.606	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.467	0.467	0.506	0.506	0.000
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.506
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Sepulveda Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
21	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		0		0		0		0		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 / EB-- 0	SB-- 3 / WB-- 3	NB-- 3 / EB-- 0	SB-- 3 / WB-- 3	NB-- 3 / EB-- 0	SB-- 3 / WB-- 3	NB-- 3 / EB-- 0	SB-- 3 / WB-- 3	NB-- / EB--	SB-- / WB--
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		1031		#####		1031		1031		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	233	2	**128**	0	233	**128**	-5	237	2	**130**	0	237	2	**130**		237		**0**
	Left-Through		0							0				0					
	Through	299	2	150	0	299	150	-19	292	2	146	0	292	2	146		292		0
	Through-Right		0							0				0					
	Right	319	1	246	2	321	247	20	352	1	273	2	354	1	274		354		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	308	2	169	0	308	169	37	358	2	197	0	358	2	197		358		0
	Left-Through		0							0				0					
	Through	771	2	386	0	771	386	38	840	2	420	0	840	2	420		840		**0**
	Through-Right		0							0				0					
	Right	592	1	**481**	0	592	**481**	18	634	1	**509**	0	634	1	**509**		634		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	111	1	111	0	111	111	9	125	1	125	0	125	1	125		125		0
	Left-Through		0							0				0					
	Through	1983	3	**554**	11	1994	**557**	421	2485	3	**686**	11	2496	3	**689**		2496		**0**
	Through-Right		1							1				1					
	Right	232	0	232	0	232	232	17	258	0	258	0	258	0	258		258		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	133	2	**73**	2	135	**74**	6	144	2	**79**	2	146	2	**80**		146		**0**
	Left-Through		0							0				0					
	Through	2526	5	505	9	2535	507	130	2759	5	552	9	2768	5	554		2768		0
	Through-Right		0							0				0					
	Right	126	1	0	0	126	0	-37	94	1	0	0	94	1	0		94		0
	Left-Through-Right		0							0				0					
	Left-Right																		
	CRITICAL VOLUMES		*North-South:*	609		*North-South:*	609			*North-South:*	639			*North-South:*	639			*North-South:*	0
			East-West:	627		*East-West:*	631			*East-West:*	765			*East-West:*	769			*East-West:*	0
			SUM:	1236		*SUM:*	1240			*SUM:*	1404			*SUM:*	1408			*SUM:*	0
	VOLUME/CAPACITY *(V/C)* RATIO:			1.199			1.203				1.362				1.366				0.000
	V/C LESS ATSAC/ATCS ADJUSTMENT:			1.099			1.103				1.262				1.266				0.000
	LEVEL OF SERVICE (LOS):			F			F				F				F				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	-1.262
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Sepulveda Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
21	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB-- 3 EB-- 0 WB-- 3	NB-- 3 SB-- 3 EB-- 0 WB-- 3	NB-- 3 SB-- 3 EB-- 0 WB-- 3	NB-- 3 SB-- 3 EB-- 0 WB-- 3	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1031	#####	1031	1031	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	327	2	180	0	327	180	12	352	2	194	0	352	2	194		352		**0**
	Left-Through		0							0				0					
	Through	818	2	**409**	0	818	**409**	28	879	2	**440**	0	879	2	**440**		879		0
	Through-Right		0							0				0					
	Right	345	1	111	1	346	111	7	366	1	109	1	367	1	109		367		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	143	2	**79**	0	143	**79**	1	150	2	**83**	0	150	2	**83**		150		0
	Left-Through		0							0				0					
	Through	552	2	276	0	552	276	15	589	2	295	0	589	2	295		589		**0**
	Through-Right		0							0				0					
	Right	214	1	0	0	214	0	6	229	1	0	0	229	1	0		229		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	309	1	309	0	309	309	11	333	1	**333**	0	333	1	**333**		333		0
	Left-Through		0							0				0					
	Through	2103	3	**585**	5	2108	**586**	131	2319	3	633	5	2324	3	634		2324		**0**
	Through-Right		1							1				1					
	Right	236	0	236	0	236	236	-34	212	0	212	0	212	0	212		212		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	425	2	**234**	2	427	**235**	25	467	2	257	2	469	2	258		469		**0**
	Left-Through		0							0				0					
	Through	2160	5	432	12	2172	434	604	2852	5	**570**	12	2864	5	**573**		2864		0
	Through-Right		0							0				0					
	Right	197	1	118	0	197	118	41	246	1	163	0	246	1	163		246		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES	North-South:			488			488				523				523				0
	East-West:			819			821				903				906				0
	SUM:			1307			1309				1426				1429				0
VOLUME/CAPACITY (V/C) RATIO:				1.268			1.270				1.383				1.386				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				1.168			1.170				1.283				1.286				0.000
LEVEL OF SERVICE (LOS):				F			F				F				F				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-1.283
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

LADOT Moving LA Forward

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
22	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				0				0				0				0				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	3	SB--	3	NB--	3	SB--	3	NB--	3	SB--	3	NB--	3	SB--	3	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				1031				#####				1031				1031				

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	246	1	246	0	246	246	0	256	1	256	0	256	1	256		256		**0**
	Left-Through		0							0				0					
	Through	458	2	**229**	12	470	**235**	25	502	2	**251**	12	514	2	**257**		514		0
	Through-Right		0							0				0					
	Right	98	1	63	-8	90	55	18	120	1	80	-8	112	1	72		112		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	135	1	**135**	0	135	**135**	4	144	1	**144**	0	144	1	**144**		144		0
	Left-Through		0							0				0					
	Through	211	2	106	2	213	107	10	230	2	115	2	232	2	116		232		**0**
	Through-Right		0							0				0					
	Right	370	2	0	14	384	0	49	434	2	0	14	448	2	0		448		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	495	2	272	92	587	323	185	700	2	385	92	792	2	436		792		0
	Left-Through		0							0				0					
	Through	3615	3	**1205**	-69	3546	**1182**	336	4098	3	**1366**	-69	4029	3	**1343**		4029		**0**
	Through-Right		0							0				0					
	Right	186	1	63	0	186	63	0	194	1	66	0	194	1	66		194		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	64	2	**35**	0	64	**35**	6	73	2	**40**	0	73	2	**40**		73		**0**
	Left-Through		0							0				0					
	Through	2209	3	562	-1	2208	562	78	2377	3	608	-1	2376	3	608		2376		0
	Through-Right		1							1				1					
	Right	39	0	39	0	39	39	15	56	0	56	0	56	0	56		56		0
	Left-Through-Right		0							0				0					
	Left-Right																		
CRITICAL VOLUMES			North-South:	364		North-South:	370			North-South:	395			North-South:	401			North-South:	0
			East-West:	1240		East-West:	1217			East-West:	1406			East-West:	1383			East-West:	0
			SUM:	1604		SUM:	1587			SUM:	1801			SUM:	1784			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:				1.556			1.539				1.747				1.730				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:				1.456			1.439				1.647				1.630				0.000
LEVEL OF SERVICE (LOS):				F			F				F				F				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.017	Δ*v/c* after mitigation:	-1.647
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
22	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB-- 3 / EB-- 0 WB-- 0	NB-- 3 SB-- 3 / EB-- 0 WB-- 0	NB-- 3 SB-- 3 / EB-- 0 WB-- 0	NB-- 3 SB-- 3 / EB-- 0 WB-- 0	NB-- SB-- / EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1031	#####	1031	1031	

Movement		Existing Condition: Volume	No. of Lanes	Lane Volume	Existing Plus Project: Project Traffic	Total Volume	Lane Volume	Future Condition W/O Project: Added Volume	Total Volume	No. of Lanes	Lane Volume	Future Condition W/ Project: Added Volume	Total Volume	No. of Lanes	Lane Volume	Future W/ Project W/ Mitigation: Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	256	1	**256**	0	256	**256**	0	266	1	**266**	0	266	1	**266**		266		**0**
	Left-Through		0							0				0					
	Through	379	2	190	1	380	190	15	409	2	205	1	410	2	205		410		0
	Through-Right		0							0				0					
	Right	107	1	79	1	108	82	3	114	1	73	1	115	1	76		115		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	111	1	111	0	111	111	18	134	1	134	0	134	1	134		134		0
	Left-Through		0							0				0					
	Through	316	2	158	7	323	162	37	366	2	183	7	373	2	187		373		**0**
	Through-Right		0							0				0					
	Right	887	2	**269**	53	940	**295**	236	1159	2	**364**	53	1212	2	**390**		1212		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	398	2	219	6	404	222	83	497	2	**273**	6	503	2	**277**		503		0
	Left-Through		0							0				0					
	Through	2288	3	**763**	5	2293	**764**	114	2495	3	832	5	2500	3	833		2500		**0**
	Through-Right		0							0				0					
	Right	150	1	22	0	150	22	0	156	1	23	0	156	1	23		156		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	51	2	**28**	-4	47	**26**	21	74	2	41	-4	70	2	39		70		**0**
	Left-Through		0							0				0					
	Through	1990	3	513	-32	1958	505	380	2451	3	**630**	-32	2419	3	**622**		2419		0
	Through-Right		1							1				1					
	Right	61	0	61	0	61	61	7	70	0	70	0	70	0	70		70		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES: *North-South:*	525	551	630	656	0
East-West:	791	790	903	899	0
SUM:	1316	1341	1533	1555	0
VOLUME/CAPACITY *(V/C)* RATIO:	1.276	1.301	1.487	1.508	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	1.176	1.201	1.387	1.408	0.000
LEVEL OF SERVICE (LOS):	F	F	F	F	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.021 — Δ*v/c* after mitigation: -1.387

Significant impacted? YES — Fully mitigated? YES

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue/Midvale Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
23	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1169	#####	1169	1169	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	83	1	**83**	0	83	83	0	86	1	86	0	86	1	86		86		**0**
	Left-Through		0							0				0					
	Through	235	2	118	0	235	**118**	0	245	2	**123**	0	245	2	**123**		245		0
	Through-Right		0							0				0					
	Right	43	1	24	0	43	24	0	45	1	25	0	45	1	25		45		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	78	1	78	35	113	**113**	12	93	1	**93**	35	128	1	**128**		128		0
	Left-Through		0							0				0					
	Through	113	1	**113**	0	113	113	0	118	1	118	0	118	1	118		118		**0**
	Through-Right		0							0				0					
	Right	320	2	0	0	320	0	56	389	2	0	0	389	2	0		389		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	492	2	271	-31	461	254	177	689	2	**379**	-31	658	2	**362**		658		0
	Left-Through		0							0				0					
	Through	2705	3	**902**	-47	2658	**886**	183	2998	3	999	-47	2951	3	984		2951		**0**
	Through-Right		0							0				0					
	Right	173	1	132	0	173	132	0	180	1	137	0	180	1	137		180		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	38	1	**38**	0	38	**38**	0	40	1	40	0	40	1	40		40		**0**
	Left-Through		0							0				0					
	Through	1914	3	638	-1	1913	638	43	2035	3	**678**	-1	2034	3	**678**		2034		0
	Through-Right		0							0				0					
	Right	123	1	84	20	143	87	30	158	1	112	20	178	1	114		178		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	196	*North-South:*	231	*North-South:*	216	*North-South:*	251	*North-South:*	0
	East-West:	940	*East-West:*	924	*East-West:*	1057	*East-West:*	1040	*East-West:*	0
	SUM:	1136	*SUM:*	1155	*SUM:*	1273	*SUM:*	1291	*SUM:*	0
VOLUME/CAPACITY (*V/C*) RATIO:		0.972		0.988		1.089		1.104		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.872		0.888		0.989		1.004		0.000
LEVEL OF SERVICE (LOS):		D		D		E		F		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.015	Δ*v/c* after mitigation:	-0.989
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gayley Avenue/Midvale Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
23	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1169	#####	1169	1169	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	119	1	119	0	119	119	0	124	1	124	0	124	1	124		124		0
	Left-Through		0							0				0					
	Through	161	2	81	0	161	81	0	168	2	84	0	168	2	84		168		0
	Through-Right		0							0				0					
	Right	39	1	34	0	39	34	0	41	1	36	0	41	1	36		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	131	1	131	11	142	142	48	184	1	184	11	195	1	195		195		0
	Left-Through		0							0				0					
	Through	213	1	213	0	213	213	1	223	1	223	0	223	1	223		223		0
	Through-Right		0							0				0					
	Right	531	2	139	-16	515	130	241	794	2	233	-16	778	2	224		778		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	279	2	153	0	279	153	81	371	2	204	0	371	2	204		371		0
	Left-Through		0							0				0					
	Through	2063	3	688	5	2068	689	53	2200	3	733	5	2205	3	735		2205		0
	Through-Right		0							0				0					
	Right	69	1	10	0	69	10	0	72	1	10	0	72	1	10		72		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	11	1	11	0	11	11	0	11	1	11	0	11	1	11		11		0
	Left-Through		0							0				0					
	Through	1446	3	482	-20	1426	475	167	1672	3	557	-20	1652	3	551		1652		0
	Through-Right		0							0				0					
	Right	86	1	21	18	104	33	12	101	1	9	18	119	1	22		119		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	332	332	357	348	0
East-West:	699	700	761	755	0
SUM:	1031	1032	1118	1103	0
VOLUME/CAPACITY (V/C) RATIO:	0.882	0.883	0.956	0.944	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.782	0.783	0.856	0.844	0.000
LEVEL OF SERVICE (LOS):	C	C	D	D	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	-0.012	Δ*v/c* after mitigation:	-0.856
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
24	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3? NB--	0	0	0	0	
SB--	3	3	3	3	
EB--	0	0	0	0	
WB--	0	0	0	0	
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1031	#####	1031	1031	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	123	1	123	6	129	129	10	138	1	138	6	144	1	144		144		**0**
	Left-Through		0							0				0					
	Through	610	2	**233**	-2	608	**233**	56	691	2	**262**	-2	689	2	**261**		689		0
	Through-Right		1							1				1					
	Right	90	0	90	0	90	90	0	94	0	94	0	94	0	94		94		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	69	1	**69**	0	69	**69**	6	78	1	**78**	0	78	1	**78**		78		0
	Left-Through		0							0				0					
	Through	322	2	113	0	322	113	6	341	2	120	0	341	2	120		341		**0**
	Through-Right		1							1				1					
	Right	129	1	0	0	129	0	3	137	1	0	0	137	1	0		137		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	309	2	170	-22	287	158	111	433	2	238	-22	411	2	226		411		0
	Left-Through		0							0				0					
	Through	2277	3	**759**	6	2283	**761**	80	2449	3	**816**	6	2455	3	**818**		2455		**0**
	Through-Right		0							0				0					
	Right	175	1	114	3	178	114	5	187	1	118	3	190	1	118		190		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	121	2	**67**	0	121	**67**	4	130	2	**72**	0	130	2	**72**		130		**0**
	Left-Through		0							0				0					
	Through	1708	3	569	14	1722	574	60	1837	3	612	14	1851	3	617		1851		0
	Through-Right		0							0				0					
	Right	62	1	28	-5	57	23	58	123	1	84	-5	118	1	79		118		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES *North-South:*	302	302	340	339	0
East-West:	826	828	888	890	0
SUM:	1128	1130	1228	1229	0
VOLUME/CAPACITY *(V/C)* RATIO:	1.094	1.096	1.191	1.192	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.994	0.996	1.091	1.092	0.000
LEVEL OF SERVICE (LOS):	E	E	F	F	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-1.091
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
24	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1031	#####	1031	1031	

	MOVEMENT	Existing Condition Volume	Existing Condition No. of Lanes	Existing Condition Lane Volume	Existing Plus Project Project Traffic	Existing Plus Project Total Volume	Existing Plus Project Lane Volume	Future W/O Project Added Volume	Future W/O Project Total Volume	Future W/O Project No. of Lanes	Future W/O Project Lane Volume	Future W/ Project Added Volume	Future W/ Project Total Volume	Future W/ Project No. of Lanes	Future W/ Project Lane Volume	Future W/ Project W/ Mitigation Added Volume	Future W/ Project W/ Mitigation Total Volume	Future W/ Project W/ Mitigation No. of Lanes	Future W/ Project W/ Mitigation Lane Volume
NORTHBOUND	Left	181	1	**181**	2	183	**183**	5	193	1	**193**	2	195	1	**195**		195		**0**
	Left-Through		0							0				0					
	Through	467	2	206	0	467	206	14	500	2	220	0	500	2	220		500		0
	Through-Right		1							1				1					
	Right	152	0	152	0	152	152	1	159	0	159	0	159	0	159		159		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	123	1	123	-3	120	120	25	153	1	153	-3	150	1	150		150		0
	Left-Through		0							0				0					
	Through	581	2	**203**	-1	580	**200**	37	642	2	**223**	-1	641	2	**220**		641		**0**
	Through-Right		1							1				1					
	Right	229	1	0	-11	218	0	11	249	1	0	-11	238	1	0		238		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	213	2	117	7	220	121	25	247	2	136	7	254	2	140		254		0
	Left-Through		0							0				0					
	Through	1861	3	**620**	7	1868	**623**	61	1998	3	**666**	7	2005	3	**668**		2005		**0**
	Through-Right		0							0				0					
	Right	200	1	110	3	203	112	16	224	1	128	3	227	1	130		227		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	74	2	**41**	0	74	**41**	22	99	2	**54**	0	99	2	**54**		99		**0**
	Left-Through		0							0				0					
	Through	1072	3	357	8	1080	360	164	1280	3	427	8	1288	3	429		1288		0
	Through-Right		0							0				0					
	Right	40	1	0	1	41	0	11	53	1	0	1	54	1	0		54		0
	Left-Through-Right		0							0				0					
	Left-Right																		

CRITICAL VOLUMES	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
North-South:	384	383	416	415	0
East-West:	661	664	720	722	0
SUM:	1045	1047	1136	1137	0
VOLUME/CAPACITY *(V/C)* RATIO:	1.014	1.016	1.102	1.103	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.914	0.916	1.002	1.003	0.000
LEVEL OF SERVICE (LOS):	E	E	F	F	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-1.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Glendon Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
25	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	0	0	0	0	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	1069	#####	1069	1069	

MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND Left	10	0	10	0	10	10	0	10	0	10	0	10	0	10		10		**0**
Left-Through		0							0				0					
Through	154	0	**184**	0	154	**184**	0	160	0	**191**	0	160	0	**191**		160		0
Through-Right		0							0				0					
Right	20	0	0	0	20	0	0	21	0	0	0	21	0	0		21		0
Left-Through-Right		1							1				1					
Left-Right																		
SOUTHBOUND Left	53	1	**53**	0	53	**53**	6	61	1	**61**	0	61	1	**61**		61		0
Left-Through		0							0				0					
Through	86	1	86	0	86	86	2	91	1	91	0	91	1	91		91		**0**
Through-Right		0							0				0					
Right	79	1	0	2	81	0	17	99	1	0	2	101	1	0		101		0
Left-Through-Right		0							0				0					
Left-Right																		
EASTBOUND Left	296	2	**163**	0	296	**163**	0	308	2	**169**	0	308	2	**169**		308		0
Left-Through		0							0				0					
Through	1968	3	656	6	1974	658	87	2135	3	712	6	2141	3	714		2141		**0**
Through-Right		0							0				0					
Right	160	1	160	0	160	160	0	166	1	166	0	166	1	166		166		0
Left-Through-Right		0							0				0					
Left-Right																		
WESTBOUND Left	61	1	61	0	61	61	0	63	1	63	0	63	1	63		63		**0**
Left-Through		0							0				0					
Through	1824	3	**608**	8	1832	**611**	106	2004	3	**668**	8	2012	3	**671**		2012		0
Through-Right		0							0				0					
Right	186	1	160	0	186	160	1	195	1	165	0	195	1	165		195		0
Left-Through-Right		0							0				0					
Left-Right																		

CRITICAL VOLUMES		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
	North-South:	237	237	252	252	0
	East-West:	771	774	837	840	0
	SUM:	1008	1011	1089	1092	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.943	0.946	1.019	1.022	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.843	0.846	0.919	0.922	0.000
LEVEL OF SERVICE (LOS):		D	D	E	E	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.919
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Glendon Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
25	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition				Existing Plus Project				Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
No. of Phases				0				0				0				0				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	3	NB--	0	SB--	3	NB--	0	SB--	3	NB--	0	SB--	3	NB--		SB--	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--		WB--	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				
Override Capacity				1069				#####				1069				1069				

	Movement	Existing Condition			Existing Plus Project			Future Condition W/O Project				Future Condition W/ Project				Future W/ Project W/ Mitigation			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	64	0	64	0	64	64	0	67	0	67	0	67	0	67		67		0
	Left-Through		0							0				0					
	Through	171	0	342	0	171	342	0	178	0	356	0	178	0	356		178		0
	Through-Right		0							0				0					
	Right	107	0	0	0	107	0	0	111	0	0	0	111	0	0		111		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	184	1	184	0	184	184	43	234	1	234	0	234	1	234		234		0
	Left-Through		0							0				0					
	Through	280	1	280	0	280	280	12	303	1	303	0	303	1	303		303		0
	Through-Right		0							0				0					
	Right	116	1	41	4	120	45	113	234	1	156	4	238	1	160		238		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	136	2	75	0	136	75	0	142	2	78	0	142	2	78		142		0
	Left-Through		0							0				0					
	Through	1904	3	635	5	1909	636	87	2068	3	689	5	2073	3	691		2073		0
	Through-Right		0							0				0					
	Right	59	1	59	0	59	59	0	61	1	61	0	61	1	61		61		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	100	1	100	0	100	100	0	104	1	104	0	104	1	104		104		0
	Left-Through		0							0				0					
	Through	816	3	272	4	820	273	83	932	3	311	4	936	3	312		936		0
	Through-Right		0							0				0					
	Right	199	1	107	0	199	107	0	207	1	90	0	207	1	90		207		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	North-South:	526	North-South:	526	North-South:	590	North-South:	590	North-South:	0
	East-West:	735	East-West:	736	East-West:	793	East-West:	795	East-West:	0
	SUM:	1261	SUM:	1262	SUM:	1383	SUM:	1385	SUM:	0
VOLUME/CAPACITY (V/C) RATIO:		1.180		1.181		1.294		1.296		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.080		1.081		1.194		1.196		0.000
LEVEL OF SERVICE (LOS):		F		F		F		F		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-1.194
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Selby Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
26	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	54	0	54	0	54	54	1	57	0	57	0	57	0	57		57		**0**
	Left-Through		1							1				1					
	Through	101	0	**155**	0	101	**155**	0	105	0	**162**	0	105	0	**162**		105		0
	Through-Right		0							0				0					
	Right	90	1	59	0	90	59	0	94	1	62	0	94	1	62		94		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	81	0	**81**	0	81	**81**	0	84	0	**84**	0	84	0	**84**		84		0
	Left-Through		1							1				1					
	Through	48	0	129	0	48	129	0	50	0	134	0	50	0	134		50		**0**
	Through-Right		0							0				0					
	Right	35	1	28	0	35	28	0	36	1	29	0	36	1	29		36		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	14	1	14	0	14	14	0	15	1	15	0	15	1	15		15		0
	Left-Through		0							0				0					
	Through	1969	3	**656**	7	1976	**659**	93	2142	3	**714**	7	2149	3	**716**		2149		**0**
	Through-Right		0							0				0					
	Right	31	1	31	0	31	31	0	32	1	32	0	32	1	32		32		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	62	1	**62**	0	62	**62**	0	65	1	**65**	0	65	1	**65**		65		**0**
	Left-Through		0							0				0					
	Through	1987	3	662	8	1995	665	106	2174	3	725	8	2182	3	727		2182		0
	Through-Right		0							0				0					
	Right	99	1	99	0	99	99	0	103	1	103	0	103	1	103		103		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — *North-South:*	236	236	246	246	0
East-West:	718	721	779	781	0
SUM:	954	957	1025	1027	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.669	0.672	0.719	0.721	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.569	0.572	0.619	0.621	0.000
LEVEL OF SERVICE (LOS):	A	A	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.619
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Selby Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
26	East-West Street:	Wilshire Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		3		3		3		3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	**20**	0	20	**20**	2	23	0	**23**	0	23	0	**23**		23		**0**
	Left-Through		1							1				1					
	Through	106	0	126	0	106	126	0	110	0	133	0	110	0	133		110		0
	Through-Right		0							0				0					
	Right	100	1	47	0	100	47	0	104	1	49	0	104	1	49		104		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	195	0	195	0	195	195	0	203	0	203	0	203	0	203		203		0
	Left-Through		1							1				1					
	Through	163	0	**358**	0	163	**358**	0	170	0	**373**	0	170	0	**373**		170		**0**
	Through-Right		0							0				0					
	Right	19	1	0	0	19	0	0	20	1	0	0	20	1	0		20		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	40	1	40	0	40	40	0	42	1	42	0	42	1	42		42		0
	Left-Through		0							0				0					
	Through	2107	3	**702**	5	2112	**704**	130	2323	3	**774**	5	2328	3	**776**		2328		**0**
	Through-Right		0							0				0					
	Right	73	1	73	0	73	73	0	76	1	76	0	76	1	76		76		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	107	1	**107**	0	107	**107**	0	111	1	**111**	0	111	1	**111**		111		**0**
	Left-Through		0							0				0					
	Through	1192	3	397	4	1196	399	81	1321	3	440	4	1325	3	442		1325		0
	Through-Right		0							0				0					
	Right	159	1	159	0	159	159	0	165	1	165	0	165	1	165		165		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	378	*North-South:*	378	*North-South:*	396	*North-South:*	396	*North-South:*	0
	East-West:	809	*East-West:*	811	*East-West:*	885	*East-West:*	887	*East-West:*	0
	SUM:	1187	*SUM:*	1189	*SUM:*	1281	*SUM:*	1283	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.833		0.834		0.899		0.900		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.733		0.734		0.799		0.800		0.000
LEVEL OF SERVICE (LOS):		C		C		C		D		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-0.799
Significant impacted?	NO	Fully mitigated?	N/A

LADOT
Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
27	East-West Street:	Rochester Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	46	1	46	0	46	46	0	48	1	48	0	48	1	48		48		0
	Left-Through		0							0				0					
	Through	1091	1	565	4	1095	567	67	1202	1	622	4	1206	1	624		1206		0
	Through-Right		1							1				1					
	Right	39	0	39	0	39	39	0	41	0	41	0	41	0	41		41		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	21	1	21	0	21	21	0	22	1	22	0	22	1	22		22		0
	Left-Through		0							0				0					
	Through	529	1	274	3	532	275	17	567	1	293	3	570	1	295		570		0
	Through-Right		1							1				1					
	Right	18	0	18	0	18	18	0	19	0	19	0	19	0	19		19		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	28	0	28	0	28	28	0	29	0	29	0	29	0	29		29		0
	Left-Through		0							0				0					
	Through	26	0	91	0	26	91	0	27	0	95	0	27	0	95		27		0
	Through-Right		0							0				0					
	Right	37	0	0	0	37	0	0	39	0	0	0	39	0	0		39		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	27	0	27	0	27	27	0	28	0	28	0	28	0	28		28		0
	Left-Through		0							0				0					
	Through	33	0	77	0	33	77	0	34	0	80	0	34	0	80		34		0
	Through-Right		0							0				0					
	Right	17	0	0	0	17	0	0	18	0	0	0	18	0	0		18		0
	Left-Through-Right		1							1				1					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	North-South:	586	588	644	646	0
	East-West:	118	118	123	123	0
	SUM:	704	706	767	769	0
VOLUME/CAPACITY (V/C) RATIO:		0.469	0.471	0.511	0.513	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.369	0.371	0.411	0.413	0.000
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.411
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
27	East-West Street:	Rochester Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition			Existing Plus Project			Future Condition W/O Project			Future Condition W/ Project			Future W/ Project W/ Mitigation		
No. of Phases			2			2			2			2			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	SB--	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	WB--	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			
Override Capacity			0			0			0			0			

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	49	1	49	0	49	49	0	51	1	51	0	51	1	51		51		0
	Left-Through		0							0				0					
	Through	851	1	454	2	853	455	24	910	1	484	2	912	1	485		912		0
	Through-Right		1							1				1					
	Right	56	0	56	0	56	56	0	58	0	58	0	58	0	58		58		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	29	1	29	0	29	29	0	30	1	30	0	30	1	30		30		0
	Left-Through		0							0				0					
	Through	1079	1	559	2	1081	560	87	1210	1	625	2	1212	1	626		1212		0
	Through-Right		1							1				1					
	Right	38	0	38	0	38	38	0	40	0	40	0	40	0	40		40		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	17	0	17	0	17	17	0	18	0	18	0	18	0	18		18		0
	Left-Through		0							0				0					
	Through	27	0	120	0	27	120	0	28	0	125	0	28	0	125		28		0
	Through-Right		0							0				0					
	Right	76	0	0	0	76	0	0	79	0	0	0	79	0	0		79		0
	Left-Through-Right		1							1				1					
	Left-Right																		
WESTBOUND	Left	42	0	42	0	42	42	0	44	0	44	0	44	0	44		44		0
	Left-Through		0							0				0					
	Through	83	0	158	0	83	158	0	86	0	164	0	86	0	164		86		0
	Through-Right		0							0				0					
	Right	33	0	0	0	33	0	0	34	0	0	0	34	0	0		34		0
	Left-Through-Right		1							1				1					
	Left-Right																		

CRITICAL VOLUMES		Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation
	North-South:	608	*North-South:*	609	*North-South:*	676	*North-South:*	677	*North-South:*	0
	East-West:	175	*East-West:*	175	*East-West:*	182	*East-West:*	182	*East-West:*	0
	SUM:	783	*SUM:*	784	*SUM:*	858	*SUM:*	859	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.522		0.523		0.572		0.573		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.422		0.423		0.472		0.473		0.000
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	∆*v/c* after mitigation:	-0.472
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
28	East-West Street:	Ohio Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	31	0	31	0	31	31	0	32	0	32	0	32	0	32		32		**0**
	Left-Through		0							0				0					
	Through	309	0	**390**	2	311	**392**	31	353	0	**437**	2	355	0	**439**		355		0
	Through-Right		0							0				0					
	Right	50	0	0	0	50	0	0	52	0	0	0	52	0	0		52		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	23	0	**23**	0	23	**23**	0	24	0	**24**	0	24	0	**24**		24		0
	Left-Through		0							0				0					
	Through	207	0	357	1	208	359	11	226	0	387	1	227	0	389		227		**0**
	Through-Right		0							0				0					
	Right	127	0	0	1	128	0	5	137	0	0	1	138	0	0		138		0
	Left-Through-Right		1							1				1					
	Left-Right																		
EASTBOUND	Left	218	1	**218**	1	219	**219**	11	238	1	238	1	239	1	239		239		0
	Left-Through		0							0				0					
	Through	716	0	748	0	716	748	32	777	0	**810**	0	777	0	**810**		777		**0**
	Through-Right		1							1				1					
	Right	32	0	0	0	32	0	0	33	0	0	0	33	0	0		33		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	23	1	23	0	23	23	0	24	1	**24**	0	24	1	**24**		24		**0**
	Left-Through		0							0				0					
	Through	504	0	**554**	0	504	**554**	6	530	0	582	0	530	0	582		530		0
	Through-Right		1							1				1					
	Right	50	0	0	0	50	0	0	52	0	0	0	52	0	0		52		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES *North-South:*	413	415	461	463	0
East-West:	772	773	834	834	0
SUM:	1185	1188	1295	1297	0
VOLUME/CAPACITY *(V/C)* RATIO:	0.790	0.792	0.863	0.865	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.690	0.692	0.763	0.765	0.000
LEVEL OF SERVICE (LOS):	B	B	C	C	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.763
Significant impacted?	NO	Fully mitigated?	N/A

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #: 28	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by: Crain & Associates	Date: 4/21/2016
	East-West Street:	Ohio Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:	Project: UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	24	0	24	0	24	24	0	25	0	25	0	25	0	25		25		0
	Left-Through		0							0				0					
	Through	388	0	445	1	389	446	12	416	0	475	1	417	0	476		417		0
	Through-Right		0							0				0					
	Right	33	0	0	0	33	0	0	34	0	0	0	34	0	0		34		0
	Left-Through-Right		1							1				1					
	Left-Right																		
SOUTHBOUND	Left	22	0	22	0	22	22	0	23	0	23	0	23	0	23		23		0
	Left-Through		0							0				0					
	Through	378	0	569	2	380	572	42	435	0	649	2	437	0	652		437		0
	Through-Right		0							0				0					
	Right	169	0	0	1	170	0	15	191	0	0	1	192	0	0		192		0
	Left-Through-Right		1							1				1					
	Left-Right																		
EASTBOUND	Left	155	1	155	1	156	156	6	167	1	167	1	168	1	168		168		0
	Left-Through		0							0				0					
	Through	463	0	524	0	463	524	12	494	0	557	0	494	0	557		494		0
	Through-Right		1							1				1					
	Right	61	0	0	0	61	0	0	63	0	0	0	63	0	0		63		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	108	1	108	0	108	108	0	112	1	112	0	112	1	112		112		0
	Left-Through		0							0				0					
	Through	442	0	476	0	442	476	29	489	0	524	0	489	0	524		489		0
	Through-Right		1							1				1					
	Right	34	0	0	0	34	0	0	35	0	0	0	35	0	0		35		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	593	596	674	677	0
East-West:	632	632	691	692	0
SUM:	1225	1228	1365	1369	0
VOLUME/CAPACITY (V/C) RATIO:	0.817	0.819	0.910	0.913	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.717	0.719	0.810	0.813	0.000
LEVEL OF SERVICE (LOS):	C	C	D	D	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	-0.810
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet

(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
29	East-West Street:	Ohio Avenue	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	2	2	2	2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	80	1	80	0	80	80	-2	81	1	81	0	81	1	81		81		0
	Left-Through		0							0				0					
	Through	955	1	499	4	959	501	58	1052	1	548	4	1056	1	550		1056		0
	Through-Right		1							1				1					
	Right	42	0	42	0	42	42	0	44	0	44	0	44	0	44		44		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	24	1	24	0	24	24	0	25	1	25	0	25	1	25		25		0
	Left-Through		0							0				0					
	Through	492	1	284	3	495	285	14	526	1	304	3	529	1	305		529		0
	Through-Right		1							1				1					
	Right	75	0	75	0	75	75	3	81	0	81	0	81	0	81		81		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	208	1	208	0	208	208	10	226	1	226	0	226	1	226		226		0
	Left-Through		0							0				0					
	Through	330	0	465	0	330	465	9	352	0	505	0	352	0	505		352		0
	Through-Right		1							1				1					
	Right	135	0	0	0	135	0	13	153	0	0	0	153	0	0		153		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	72	1	72	0	72	72	0	75	1	75	0	75	1	75		75		0
	Left-Through		0							0				0					
	Through	318	0	340	0	318	340	5	336	0	359	0	336	0	359		336		0
	Through-Right		1							1				1					
	Right	22	0	0	0	22	0	0	23	0	0	0	23	0	0		23		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	North-South:	523	525	573	575	0
	East-West:	548	548	585	585	0
	SUM:	1071	1073	1158	1160	0
VOLUME/CAPACITY (V/C) RATIO:		0.714	0.715	0.772	0.773	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.614	0.615	0.672	0.673	0.000
LEVEL OF SERVICE (LOS):		B	B	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-0.672
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
29	East-West Street:	Ohio Avenue	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
No. of Phases		2		2		2		2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- 0 SB--	0	NB-- SB--	
	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- 0 WB--	0	EB-- WB--	
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		
Override Capacity		0		0		0		0		

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	97	1	**97**	0	97	**97**	8	109	1	**109**	0	109	1	**109**		109		**0**
	Left-Through		0							0				0					
	Through	861	1	475	2	863	476	19	915	1	504	2	917	1	505		917		0
	Through-Right		1							1				1					
	Right	88	0	88	0	88	88	0	92	0	92	0	92	0	92		92		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	31	1	31	0	31	31	0	32	1	32	0	32	1	32		32		0
	Left-Through		0							0				0					
	Through	1092	1	**615**	2	1094	**616**	75	1211	1	**683**	2	1213	1	**684**		1213		**0**
	Through-Right		1							1				1					
	Right	137	0	137	0	137	137	11	154	0	154	0	154	0	154		154		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	112	1	112	0	112	112	5	122	1	122	0	122	1	122		122		0
	Left-Through		0							0				0					
	Through	272	0	**375**	0	272	**375**	9	292	0	**397**	0	292	0	**397**		292		**0**
	Through-Right		1							1				1					
	Right	103	0	0	0	103	0	-2	105	0	0	0	105	0	0		105		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	127	1	**127**	0	127	**127**	0	132	1	**132**	0	132	1	**132**		132		**0**
	Left-Through		0							0				0					
	Through	288	0	326	0	288	326	10	310	0	350	0	310	0	350		310		0
	Through-Right		1							1				1					
	Right	38	0	0	0	38	0	0	40	0	0	0	40	0	0		40		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition		Existing Plus Project		Future Condition W/O Project		Future Condition W/ Project		Future W/ Project W/ Mitigation	
CRITICAL VOLUMES	*North-South:*	712	*North-South:*	713	*North-South:*	792	*North-South:*	793	*North-South:*	0
	East-West:	502	*East-West:*	502	*East-West:*	529	*East-West:*	529	*East-West:*	0
	SUM:	1214	*SUM:*	1215	*SUM:*	1321	*SUM:*	1322	*SUM:*	0
VOLUME/CAPACITY *(V/C)* RATIO:		0.809		0.810		0.881		0.881		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.709		0.710		0.781		0.781		0.000
LEVEL OF SERVICE (LOS):		C		C		C		C		A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	-0.781
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
30	East-West Street:	Santa Monica Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition					Existing Plus Project					Future Condition W/O Project					Future Condition W/ Project					Future W/ Project W/ Mitigation				
No. of Phases					4					4					4					4					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--	0	SB--		0	NB--		SB--		
	EB--	0	WB--		3	EB--	0	WB--		3	EB--	0	WB--		3	EB--	0	WB--		3	EB--		WB--		
ATSAC-1 or ATSAC+ATCS-2?					2					2					2					2					
Override Capacity					0					0					0					0					

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	77	1	77	0	77	77	0	80	1	80	0	80	1	80		80		0
	Left-Through		0							0				0					
	Through	278	0	332	1	279	333	17	306	0	362	1	307	0	363		307		0
	Through-Right		1							1				1					
	Right	54	0	0	0	54	0	0	56	0	0	0	56	0	0		56		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	112	1	112	0	112	112	0	117	1	117	0	117	1	117		117		0
	Left-Through		0							0				0					
	Through	137	0	189	1	138	191	8	151	0	208	1	152	0	210		152		0
	Through-Right		1							1				1					
	Right	52	0	0	1	53	0	3	57	0	0	1	58	0	0		58		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	88	1	88	1	89	89	15	107	1	107	1	108	1	108		108		0
	Left-Through		0							0				0					
	Through	1847	3	468	0	1847	468	64	1986	3	503	0	1986	3	503		1986		0
	Through-Right		1							1				1					
	Right	24	0	24	0	24	24	0	25	0	25	0	25	0	25		25		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	63	1	63	0	63	63	0	66	1	66	0	66	1	66		66		0
	Left-Through		0							0				0					
	Through	1373	3	458	0	1373	458	24	1453	3	484	0	1453	3	484		1453		0
	Through-Right		0							0				0					
	Right	75	1	0	0	75	0	0	78	1	0	0	78	1	0		78		0
	Left-Through-Right		0							0				0					
	Left-Right																		

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	North-South:	444	445	479	480	0
	East-West:	546	547	591	592	0
	SUM:	990	992	1070	1072	0
VOLUME/CAPACITY (V/C) RATIO:		0.720	0.721	0.778	0.780	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.620	0.621	0.678	0.680	0.000
LEVEL OF SERVICE (LOS):		B	B	B	B	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.678
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Veteran Avenue	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
30	East-West Street:	Santa Monica Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	4	4	4	4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- SB--
	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- 0 WB-- 3	EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	57	1	57	0	57	57	0	59	1	59	0	59	1	59		59		0
	Left-Through		0							0				0					
	Through	274	0	320	0	274	320	8	293	0	342	0	293	0	342		293		0
	Through-Right		1							1				1					
	Right	46	0	0	0	46	0	1	49	0	0	0	49	0	0		49		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	128	1	128	0	128	128	1	134	1	134	0	134	1	134		134		0
	Left-Through		0							0				0					
	Through	455	0	515	1	456	517	22	495	0	576	1	496	0	578		496		0
	Through-Right		1							1				1					
	Right	60	0	0	1	61	0	19	81	0	0	1	82	0	0		82		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	120	1	120	1	121	121	4	129	1	129	1	130	1	130		130		0
	Left-Through		0							0				0					
	Through	1510	3	388	0	1510	388	42	1613	3	414	0	1613	3	414		1613		0
	Through-Right		1							1				1					
	Right	41	0	41	0	41	41	0	43	0	43	0	43	0	43		43		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	87	1	87	0	87	87	1	92	1	92	0	92	1	92		92		0
	Left-Through		0							0				0					
	Through	1456	3	485	0	1456	485	70	1585	3	528	0	1585	3	528		1585		0
	Through-Right		0							0				0					
	Right	122	1	0	0	122	0	1	128	1	0	0	128	1	0		128		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	572	574	635	637	0
East-West:	605	606	657	658	0
SUM:	1177	1180	1292	1295	0
VOLUME/CAPACITY (V/C) RATIO:	0.856	0.858	0.940	0.942	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.756	0.758	0.840	0.842	0.000
LEVEL OF SERVICE (LOS):	C	C	D	D	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	-0.840
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
31	East-West Street:	Santa Monica Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	4	4	4	4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 3 WB-- 3	NB-- 0 SB-- 0 EB-- 3 WB-- 3	NB-- 0 SB-- 0 EB-- 3 WB-- 3	NB-- 0 SB-- 0 EB-- 3 WB-- 3	NB-- SB-- EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION Volume	No. of Lanes	Lane Volume	EXISTING PLUS PROJECT Project Traffic	Total Volume	Lane Volume	FUTURE CONDITION W/O PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	124	1	124	0	124	124	8	137	1	137
	Left-Through		0							0	
	Through	927	1	**504**	4	931	**506**	32	997	1	**542**
	Through-Right		1							1	
	Right	80	0	80	0	80	80	3	86	0	86
	Left-Through-Right		0							0	
	Left-Right										
SOUTHBOUND	Left	190	1	**190**	0	190	**190**	4	202	1	**202**
	Left-Through		0							0	
	Through	478	2	239	3	481	241	22	519	2	260
	Through-Right		0							0	
	Right	47	1	20	0	47	20	1	50	1	21
	Left-Through-Right		0							0	
	Left-Right										
EASTBOUND	Left	98	2	54	0	98	54	5	107	2	59
	Left-Through		0							0	
	Through	1795	3	**598**	0	1795	**598**	54	1922	3	**641**
	Through-Right		0							0	
	Right	79	1	0	0	79	0	5	87	1	0
	Left-Through-Right		0							0	
	Left-Right										
WESTBOUND	Left	247	2	**136**	0	247	**136**	1	258	2	**142**
	Left-Through		0							0	
	Through	1362	3	454	0	1362	454	15	1432	3	477
	Through-Right		0							0	
	Right	136	1	0	0	136	0	18	160	1	0
	Left-Through-Right		0							0	
	Left-Right										
CRITICAL VOLUMES			North-South:	694		North-South:	696			North-South:	744
			East-West:	734		East-West:	734			East-West:	783
			SUM:	1428		SUM:	1430			SUM:	1527
VOLUME/CAPACITY (V/C) RATIO:				1.039			1.040				1.111
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.939			0.940				1.011
LEVEL OF SERVICE (LOS):				E			E				F

	MOVEMENT	FUTURE CONDITION W/ PROJECT Added Volume	Total Volume	No. of Lanes	Lane Volume	FUTURE W/ PROJECT W/ MITIGATION Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	137	1	137		137		**0**
	Left-Through			0					
	Through	4	1001	1	**544**		1001		0
	Through-Right			1					
	Right	0	86	0	86		86		0
	Left-Through-Right			0					
	Left-Right								
SOUTHBOUND	Left	0	202	1	**202**		202		0
	Left-Through			0					
	Through	3	522	2	261		522		**0**
	Through-Right			0					
	Right	0	50	1	21		50		0
	Left-Through-Right			0					
	Left-Right								
EASTBOUND	Left	0	107	2	59		107		0
	Left-Through			0					
	Through	0	1922	3	**641**		1922		**0**
	Through-Right			0					
	Right	0	87	1	0		87		0
	Left-Through-Right			0					
	Left-Right								
WESTBOUND	Left	0	258	2	**142**		258		**0**
	Left-Through			0					
	Through	0	1432	3	477		1432		0
	Through-Right			0					
	Right	0	160	1	0		160		0
	Left-Through-Right			0					
	Left-Right								
CRITICAL VOLUMES				North-South:	746			North-South:	0
				East-West:	783			East-West:	0
				SUM:	1529			SUM:	0
VOLUME/CAPACITY (V/C) RATIO:					1.112				0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:					1.012				0.000
LEVEL OF SERVICE (LOS):					F				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-1.011
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Westwood Boulevard	Year of Count:	2016	Ambient Growth: (%):	1	Conducted by:	Crain & Associates	Date:	4/21/2016
31	East-West Street:	Santa Monica Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:		Project:	UCLA Geffen Project

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	4	4	4	4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 / EB-- 3 WB-- 3	NB-- 0 SB-- 0 / EB-- 3 WB-- 3	NB-- 0 SB-- 0 / EB-- 3 WB-- 3	NB-- 0 SB-- 0 / EB-- 3 WB-- 3	NB-- SB-- / EB-- WB--
ATSAC-1 or ATSAC+ATCS-2?	2	2	2	2	
Override Capacity	0	0	0	0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	152	1	152	0	152	152	12	170	1	170	0	170	1	170		170		0
	Left-Through		0							0				0					
	Through	755	1	448	2	757	449	22	808	1	480	2	810	1	481		810		0
	Through-Right		1							1				1					
	Right	141	0	141	0	141	141	5	152	0	152	0	152	0	152		152		0
	Left-Through-Right		0							0				0					
	Left-Right																		
SOUTHBOUND	Left	204	1	204	0	204	204	21	233	1	233	0	233	1	233		233		0
	Left-Through		0							0				0					
	Through	1065	2	533	2	1067	534	45	1153	2	577	2	1155	2	578		1155		0
	Through-Right		0							0				0					
	Right	126	1	94	0	126	94	6	137	1	103	0	137	1	103		137		0
	Left-Through-Right		0							0				0					
	Left-Right																		
EASTBOUND	Left	116	2	64	0	116	64	3	124	2	68	0	124	2	68		124		0
	Left-Through		0							0				0					
	Through	1418	3	473	0	1418	473	27	1503	3	501	0	1503	3	501		1503		0
	Through-Right		0							0				0					
	Right	184	1	32	0	184	32	13	204	1	34	0	204	1	34		204		0
	Left-Through-Right		0							0				0					
	Left-Right																		
WESTBOUND	Left	325	2	179	0	325	179	7	345	2	190	0	345	2	190		345		0
	Left-Through		0							0				0					
	Through	1392	3	464	0	1392	464	53	1502	3	501	0	1502	3	501		1502		0
	Through-Right		0							0				0					
	Right	233	1	29	0	233	29	2	244	1	11	0	244	1	11		244		0
	Left-Through-Right		0							0				0					
	Left-Right																		

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES — North-South:	685	686	747	748	0
East-West:	652	652	691	691	0
SUM:	1337	1338	1438	1439	0
VOLUME/CAPACITY (V/C) RATIO:	0.972	0.973	1.046	1.047	0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.872	0.873	0.946	0.947	0.000
LEVEL OF SERVICE (LOS):	D	D	E	E	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	-0.946
Significant impacted?	NO	Fully mitigated?	N/A