



MONTEREY PARK
FOCUSED GENERAL
PLAN UPDATE DRAFT
ENVIRONMENTAL
IMPACT REPORT

State Clearinghouse Number:
2001-01-1074
June 2019



City of Monterey Park
Focused General Plan Update

Draft Environmental Impact Report

SCH 2001011074

June 6, 2019

City of Monterey Park

This document is designed for double-sided printing to conserve natural resources

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1 – Introduction

This Draft Environmental Impact Report (Draft EIR) has been prepared by the City of Monterey Park, in accordance with the California Environmental Quality Act (CEQA)¹ and associated CEQA Guidelines,² to describe the potential environmental consequences associated with implementation of the Monterey Park Focused General Plan Update (“Project”). This Draft EIR is intended to serve as an informational document for use by public agency decision makers and the public in their consideration of the Project.

1.1 – PROPOSED PROJECT

The City of Monterey Park proposes a focused update to the General Plan consisting solely of revisions to the Land Use Element, last comprehensively updated in 2001. The purpose of updating the Land Use Element is to ensure land use policies allow the City to attract investment and development consistent with its vision, and to facilitate economic growth and creation of new housing opportunities. The proposed amendment to the Land Use Element is a community-driven process designed to reflect local values and needs.

Per Chapter 21.42 (Voter Approval of Changes) of the Monterey Park Municipal Code, voter approval is required for amendments to the Land Use Element that revise permitted “use of land” other than provisions contained in the current Land Use Element. This code provision has been in place since the 1980s.

1.2 – EIR PURPOSE AND INTENDED USE

Under CEQA, the City of Monterey Park (City) is the designated Lead Agency for the Project. CEQA Guidelines Section 15367 defines the "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project. As the Lead Agency, the City intends this Draft EIR to serve as the CEQA-required environmental documentation for consideration of the project by City decision-makers, the public, any other responsible agencies and trustee agencies. This Draft EIR is intended to serve as a public information and disclosure document identifying those environmental impacts associated with the project that are expected to be significant, and describing mitigation measures and alternatives that could minimize or avoid significant impacts. In accordance with CEQA Guidelines Section 15146 (Degree of Specificity), such impacts and mitigation measures are discussed in this Draft EIR to the level of detail necessary to allow reasoned decisions about the project.

¹ The California Environmental Quality Act (CEQA) is codified in section 21000, et seq., of the California Public Resources Code.

² The CEQA Guidelines are set forth in sections 15000 through 15387 of the California Code of Regulations, Title 14, Chapter 3.

1.3 – PROGRAM EIR APPROACH AND ASSUMPTIONS

1.3.1 – PROGRAM EIR

This document is a Program EIR. The preparation, content, and processing of this EIR are covered primarily by CEQA Guidelines Section 15168. A Program EIR is one that may be prepared on a series of actions that can be characterized as one large project, and that are related: (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar effects that can be mitigated in similar ways.

The Focused General Plan Update satisfies each of these criteria. The Focused General Plan Update will shape land use and development within the City of Monterey Park, resulting in a geographic relationship. The Focused General Plan Update includes maps, goals, policies, and actions that are logical parts of a chain of contemplated actions governing future land uses and allowed development. The goals, policies, and actions either directly establish, or will govern future plans that will establish, rules, regulations, plans, or other general criteria governing implementation of the Focused General Plan Update. The Focused General Plan Update will be carried out under the authority and approval of the City of Monterey Park. Many of the specific projects and actions carried out pursuant to implementation of the Focused General Plan Update may have similar environmental impacts which could be mitigated in similar ways.

1.3.2 – IMPACT ASSESSMENT ASSUMPTIONS

The purpose of this Program EIR is to evaluate the foreseeable environmental consequences anticipated from development allowed by the Focused General Plan Update, and to identify mitigation measures and alternatives that could minimize or eliminate potentially significant adverse environmental impacts. The growth projection assumptions used as the basis for the impact analyses in this Program EIR are derived from intensification and redevelopment, primarily of “Focus Areas” described in updated Land Use Element that is the focus of the update.

The impact analyses in this EIR are based on the conservative assumption that the Focused General Plan Update estimated growth projections will be fully attained by the 2040 horizon year of this Program EIR. Each impact analysis chapter in this EIR (aesthetics; cultural and historic resources; land use and planning; etc.) includes a description of related existing conditions and regulatory setting, followed by identification of General Plan Update related impacts and mitigation measures.

1.4 – EIR SCOPING/NOTICE OF PREPARATION

A Notice of Preparation (NOP) was submitted to the State Clearinghouse and appropriate agencies to identify any issues of concern prior to preparation of this Draft EIR. The NOP included a comment period from April 16 to May 16, 2019. A scoping session was held on May 7, 2019 at the City Hall Council Chambers in Monterey Park. A summary of the comments received in response to the NOP, or received at the scoping meeting, are presented in Table 1-1. Written comments received in response to the NOP are included in Appendix A.

**Table 1-1
NOP Comments**

Commenter	Summary
California Department of Conservation, Division of Oil, Gas, and Geothermal Resources	Summary of Division records with regards to oil and gas wells within the City
Southern California Association of Governments	Describes 2016 RTP/SCS Goals, strategies, and demographic and growth forecasts
South Coast Air Quality Management District	Recommendations regarding modeling; South Coast AQMD documents; significance thresholds; mitigation measures; alternatives; permits; and data sources
Native American Heritage Commission	Consultation list of tribes
Department of Transportation	Use of VMT analysis to comply with SB 743; multimodal transportation
Scoping Meeting Commenters	<ul style="list-style-type: none"> ▪ Traffic impacts from new development. Examine future conditions both without adoption of the proposed land use plan and build-out of the plan. ▪ Factor the presence of Lyft and Uber into the traffic analysis. ▪ Report traffic impacts in terms of Vehicle Miles Traveled (VMT). ▪ Noise issues where new residential development will interface with office and industrial uses. ▪ Parking impacts ▪ Impacts of new development on water infrastructure and water resources

The Draft EIR focuses on the areas of concern resulting from an assessment of potential environmental impacts, discussion with City staff, and review of comments received from public agencies and the general public. The Draft EIR is comprehensive in that it covers all 20 of the CEQA Appendix G checklist topical areas, listed below.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.5 – EIR ORGANIZATION AND CONTENT

Each of the environmental evaluations presented in Sections 4.1 through 4.20 include the following subsections:

- *Environmental Setting*, which describes pertinent existing conditions with regard to the environmental topic;
- *Regulatory Setting*, which describes federal, State and local laws, regulations and policies applicable to the environmental topic; and
- *Impacts and Mitigation Measures*, which identifies: (1) the criteria under which an impact will be judged to be significant in this EIR, (2) the project impacts, (3) whether each identified impact is “significant” or “less than significant,” (4) mitigation measures for each identified “significant” impact, and (5) whether each impact would be “significant” or “less than significant” after implementation of the mitigation measures.

In addition, this Draft EIR includes: a chapter describing and comparing various possible alternatives to the proposed project (Chapter 5); a chapter summarizing the Draft EIR information in terms of various CEQA-required assessment conclusions (Chapter 6), including "unavoidable significant impacts," and "irreversible environmental changes," : and a chapter identifying preparers of the Draft EIR, references used, and the persons and organizations contacted (Chapter 7). Also included in Chapter 2 is an executive summary of the Draft EIR.

1.6 PUBLIC REVIEW OF THE DRAFT EIR

Pursuant to Section 15085 of the CEQA Guidelines, a NOC and Notice of Availability (NOA) was filed with the State Office of Planning and Research (OPR), State Clearinghouse on Thursday, June 6, 2019, and the Draft EIR circulated for public and agency review for a period of 45 days. Printed copies of the Draft EIR were posted at the City of Monterey Park. Electronic copies of the Draft EIR were sent to responsible agencies, local agencies, and concerned agencies and individuals, as requested.

Written comments from all agencies and individuals are invited regarding the information contained in the Draft EIR. Such comments should explain any perceived deficiencies in the assessment of impacts and identify the information that is purportedly lacking in the Draft EIR. All written comments on the Draft EIR are to be submitted to:

Samantha Tewart, Senior Planner
City of Monterey Park Community and
Economic Development Department
320 W. Newmark Avenue
Monterey Park, California 91754
Planning@montereypark.ca.gov

Following the close of the 45-day public review period all written comments on the Draft EIR and the responses to the comments shall be incorporated into a Final EIR and provided to all commenters prior to consideration and certification of the Final EIR document by the City of Monterey Park.

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The CEQA Guidelines direct that this determination be based on scientific and factual data. Definitions of key terminology is listed in Table 1-2.

**Table 1-2
Definitions of Key EIR Terminology**

Significant Impact	<p>"Significant effect on the environment" (significant impact) means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. <i>"An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."</i> (CEQA Guidelines, Section 15382)</p>
Cumulative Impacts	<p>"Cumulative impacts" are defined as <i>"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."</i> (CEQA Guidelines, Section 15355)</p>
Significant Unavoidable Impact	<p>"Significant unavoidable impact" is defined as a significant adverse environmental impact for which either no mitigation or only partial mitigation is feasible. If the project is to be approved without imposing an alternative design, the Lead Agency must include in the record of the project approval a written statement of the specific reasons to support its action, i.e., a "statement of overriding considerations." (CEQA Guidelines, Sections 15126.2[c] and 15093[b])</p>
Significance Criteria	<p>The criteria used in this EIR to determine whether an impact is or is not "significant" are based on (a) CEQA-defined "mandatory findings of significance" - i.e., where any of the specific conditions occur under which the Legislature and the Secretary of Resources have determined constitute a potentially significant effect on the environment, which are listed in CEQA Guidelines section 15065; (b) specific criteria that a Resources Agency has determined are "normally" considered to constitute a "significant effect on the environment"; (c) the relationship of the project effect to the adopted policies, ordinances, and standards of the Lead Agency and of responsible agencies; and/or (d) commonly accepted practice and the professional judgment of the EIR authors and Lead Agency staff.</p>
Mitigation Measure	<p>For each significant impact, the EIR must identify a specific "mitigation" measure or set of measures capable of <i>"(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the action; or (e) compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements."</i> (CEQA Guidelines, Section 15370)</p>

2 – Executive Summary

This EIR chapter provides a summary of the City of Monterey Park Focused General Plan Update (“Focused General Plan Update” or “Project”), a list of associated environmental issues to be resolved, a summary of significant impacts and mitigation measures associated with the Project, and a summary of feasible alternatives to the Project, including identification of the environmentally superior alternative.

2.1 – FOCUSED GENERAL PLAN UPDATE

The City of Monterey Park (City) proposes a focused update to the General Plan consisting solely of revisions to the Land Use Element, last comprehensively updated in 2001. The purpose of updating the Land Use Element is to ensure land use policies that allow the City to attract investment and development consistent with its vision, and to facilitate economic growth and creation of new housing opportunities. The proposed Land Use Element amendment is a community-driven process designed to reflect local values and needs.

The City-stated objectives of the General Plan Land Use Element Update are listed below.

1. Encourage economic investment and revitalization within the City’s Focus Areas.
2. Create new housing opportunities for a full range of housing types and to increase housing affordability.
3. Encourage infill development within underutilized areas of the City.
4. Accommodate job-generating land uses in order to increase employment in the City.
5. Accommodate commercial/retail uses in order to expand the City’s tax base.

A more detailed description of the Project can be found in Chapter 3, Project Description. This Draft EIR also examines alternatives to the Focused General Plan Update, which are summarized below and described in detail in Chapter 5, Alternatives.

The City of Monterey Park is the Lead Agency for environmental review of the Project. This Draft EIR will be used by City staff and the public in their review of the Project.

2.1 – ENVIRONMENTAL ISSUES

As required by the CEQA Guidelines, this EIR addresses areas of potential environmental impact or controversy known to the Lead Agency (the City), including those issues and concerns identified by the City in its Notice of Preparation (NOP) of this EIR (dated April 12, 2019) and by other agencies, organizations, and individuals in response to the NOP. A summary of the comments received in response to the NOP is shown in Table 1-1, NOP Comments, included in Chapter 1, Introduction. The Draft EIR focuses on the areas of concern resulting from an assessment of potential environmental impacts, discussion with City staff, and review of comments received from public agencies and the general public. The Draft EIR covers all 20 of the CEQA Appendix G checklist topics, listed below.

2 – Summary

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

2.3 – SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

For each of the environmental topics listed above, any "*significant*" Project or cumulative impact and associated mitigation measure(s) identified in this EIR are summarized in Table 2-1, Summary of Potentially Significant Impacts and Recommended Mitigation Measures, which follows at the end of this chapter. The summary chart has been organized to correspond with the more detailed impact and mitigation discussions in chapters 4.1 through 4.20 of this EIR. The chart is arranged in four columns: (1) identified impacts, (2) potential significance without mitigation, (3) mitigation measure(s), and (4) the level of impact significance after implementation of the mitigation measure(s). Because the table does not list impacts that are less than significant with no mitigation required, the Impact/Mitigation Measure numbering may be out of sequence.

2.4 – SUMMARY OF ALTERNATIVES

To provide a basis for further understanding of the environmental effects of a proposed project and possible approaches to reducing its identified significant impacts, the CEQA Guidelines (Section 15126.6) require an EIR to also "*...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project,*

and evaluate the comparative merits of the alternatives.” Chapter 5, Alternatives, identifies and evaluates the following three alternatives to the Project:

- **Alternative 1: No Project/Existing 2001 General Plan.** The No Project/Existing 2001 General Plan Alternative (No Project Alternative) assumes that development would occur within the Planning Area, but only development anticipated under the 2001 General Plan. Development assumptions for this alternative are shown in Table 5-1 in Chapter 5, Alternatives. The 2001 General Plan is 20 years old; the baseline data used for the original analysis is unavailable. For this alternative, it is assumed that only new residential development could occur; no new office, commercial, industrial, or hotel development would occur. Additionally, no new policies, goals, or development standards associated with the Focused General Plan Update would be implemented; the standards, goals, and policies associated with the 2001 General Plan would be applicable.
- **Alternative 2: Market Demand.** Alternative 2 is a “market-adjusted” development scenario that evaluates the portion of Focused General Plan Update capacity that would likely be built by 2040, based on current and foreseeable market trends. The Market Demand Alternative reflects a reduced amount of residential and hotel development. This alternative would have a similar amount of total office/commercial space as the Project. This alternative assumes that policies, goals, or development standards associated with the Focused General Plan Update would apply to this alternative. Development assumptions for this alternative are shown in Table 5-1 in chapter 5.
- **Alternative 3: Reduced Density/Intensity.** The Reduced Density/Intensity Alternative assumes that the development associated with the Project would be reduced by one third (33 percent), as shown in Table 5-1 in Chapter 5. While the amount of development would be reduced, this alternative assumes that policies, goals, and development standards associated with the Focused General Plan Update would be applicable to development under this alternative.

2.5 – ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines (Section 15126.2[e][2]) stipulate, *“If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”* Other than the No Project Alternative, Alternative 3: Reduced Density/Intensity would result in the least adverse environmental impacts, and would therefore be the “environmentally superior alternative.” This conclusion is based on the comparative impact conclusions in Table 5-2 and the analysis included in Chapter 5, Alternatives. However, this alternative would not fully meet the objectives at the same level as the Project.

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**TABLE 2.1
SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS AND RECOMMENDED MITIGATION MEASURES**

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
AIR QUALITY			
<p>Impact AQ-1 – Would the Project conflict with or obstruct implementation of the applicable air quality plan?</p> <p>Since the growth that could occur under the Project’s 2040 conditions would be inconsistent with the 2016 RTP/SCS growth forecasts, the Project could increase the frequency and/or severity of air quality violations in the Basin or otherwise impede attainment of air quality standards. This is considered a potentially significant impact.</p>	<p align="center">S (Significant)</p>	<p>Mitigation Measure AQ-2A: The City shall require development projects to:</p> <ol style="list-style-type: none"> 1) Submit evidence, such as emissions estimates, coating use estimates, and manufacturers specifications for VOC content, or other evidence, that indicates VOC emissions during architectural coating activities would not exceed South Coast Air Quality Management District (SCAQMD) CEQA significance thresholds. 2) Prepare a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines. The project applicant/developer shall include in any construction contracts and/or subcontracts a requirement that project contractors adhere to the requirements of the CRP. The CRP shall include a requirement that all interior and exterior residential and non-residential architectural coatings used in Project construction meet the SCAQMD “super compliant” coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP shall also specify the use of high-volume, low-pressure spray guns during coating applications to reduce coating waste. <p>Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall apply to new residential (or residential mixed use) development projects:</p>	<p align="center">SU (Significant Unavoidable)</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p> <ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code.</p> <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p> <ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who will track the effectiveness of the TDM program over time. • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
<p>Impact AQ-2 – 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?</p>	<p>S</p>	<p>Mitigation Measure AQ-2A: The City shall require development projects to:</p> <ol style="list-style-type: none"> 1) Submit evidence, such as emissions estimates, coating use estimates, and manufacturers specifications for VOC content, or other evidence, that indicates VOC emissions during architectural 	<p>SU</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>As shown in Table 4-3.8, construction emissions associated with a potential level of annual development that is consistent the Project’s 2040 growth projections could result in ROG emissions during architectural coating activities that exceed SCAQMD-recommended CEQA significance thresholds. This is considered a potentially significant impact. All other potential Project construction emissions would be below SCAQMD-recommended CEQA significance thresholds.</p> <p>As shown in Table 4.3-12, the modeled, maximum daily operational emissions associated with potential 2040 growth under the Project would result in NOx emissions that exceed SCAQMD-recommended CEQA significance thresholds. This is considered a potentially significant impact. All other potential Project operational emissions would be below SCAQMD-recommended CEQA significance thresholds.</p>		<p>coating activities would not exceed South Coast Air Quality Management District (SCAQMD) CEQA significance thresholds.</p> <p>2) Prepare a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines. The project applicant/developer shall include in any construction contracts and/or subcontracts a requirement that Project contractors adhere to the requirements of the CRP. The CRP shall include a requirement that all interior and exterior residential and non-residential architectural coatings used in Project construction meet the SCAQMD “super compliant” coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP shall also specify the use of high-volume, low-pressure spray guns during coating applications to reduce coating waste.</p> <p>Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall apply to new residential (or residential mixed use) development projects:</p> <ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p> <ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code. <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who will track the effectiveness of the TDM program over time. • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
<p>Would the project cause substantial adverse cumulative impacts with respect to air quality?</p> <p>The Project’s 2040 growth projections, and associated construction and operational emissions, are not consistent with SCAQMD planning assumptions and exceed SCAQMD-recommended emissions thresholds. This is considered a potentially significant impact.</p>	S	<p>Mitigation Measure AQ-2A: The City shall require development projects to:</p> <ol style="list-style-type: none"> 1) Submit evidence, such as emissions estimates, coating use estimates, and manufacturers specifications for VOC content, or other evidence, that indicates VOC emissions during architectural coating activities would not exceed South Coast Air Quality Management District (SCAQMD) CEQA significance thresholds. 2) Prepare a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines. The project applicant/developer shall include in any construction contracts and/or subcontracts a requirement that Project contractors adhere to the requirements of the CRP. The CRP shall include a requirement that all interior and exterior residential 	SU

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>and non-residential architectural coatings used in Project construction meet the SCAQMD “super compliant” coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP shall also specify the use of high-volume, low-pressure spray guns during coating applications to reduce coating waste.</p> <p>Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall apply to new residential (or residential mixed use) development projects:</p> <ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code. <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p> <ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>will track the effectiveness of the TDM program over time.</p> <ul style="list-style-type: none"> • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
BIOLOGICAL RESOURCES			
<p>Impact BIO-1 – 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 Wildlife or U.S. Fish and Wildlife Service?</p> <p>Project construction activities could encounter burrowing owls and nesting birds. This is considered a potentially significant impact.</p>	<p>S</p>	<p>Mitigation Measures BIO-1: Burrowing Owls</p> <p>Before project-related construction activities within the Planning Area, a qualified biologist must conduct focused protocol survey for burrowing owls within suitable habitat (e.g., grasslands associated with Garvey Reservoir, Oil landfill, and greenbelts) to determine if burrowing owl are present on or adjacent to a proposed project site. Surveys must be conducted consistent with the procedures in outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation. If burrowing owl(s) are observed, consultation with CDFW must occur to determine the next appropriate steps.</p> <p>Mitigation Measure BIO-2: Burrowing Owls</p> <p>If suitable burrowing owl habitat is present onsite, pre-construction take avoidance surveys will be conducted within 14 days of construction-related activities to determine presence/absence of this species. Pre-construction take avoidance surveys must be conducted consistent with the procedures in outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation. If burrowing owl(s) are observed during this survey, consultation with CDFW must occur to determine the next appropriate steps.</p>	<p>LTS (Less than Significant)</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Mitigation Measure BIO-3: Nesting Birds</p> <p>If vegetation removal is scheduled during the nesting season (typically February 1 to August 31), a focused survey for active nests must be conducted by a qualified biologist not more than five days before the beginning of project-related activities (e.g., excavation, grading, vegetation removal). Surveys must be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys must be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus <i>Buteo</i>, the survey area must encompass a 500-foot radius. Surveys must be conducted during weather conditions suited to maximize the observation of possible nests and concentrate on areas of suitable habitat.</p> <p>If a lapse in project-related work of five days or longer occurs, an additional nest survey is required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist must determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the project area must be monitored by a qualified biologist during active construction if work is occurring adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities will potentially adversely affect a nest, the biologist must immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).	
CULTURAL RESOURCES			
<p>Impact CUL-1 – Would the project cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5?</p> <p>Development under the Project could impact potential historic buildings and structures. This is considered a potentially significant impact.</p>	S	<p>The following mitigation measure is required to reduce impacts from development on potential historic (buildings and structures) resources to less than significant</p> <p>Mitigation Measure CUL-1: Historic and Archaeological Resources</p> <p>All buildings or structures that have been determined to be 45 years or older must be evaluated to determine whether they are “unique historic resource” before demolition or alteration.</p>	LTS
<p>Would the project cause substantial adverse cumulative impacts with respect to cultural resources?</p> <p>Development under the Project could make a cumulatively considerable contribution to cumulative impacts on cultural resources, including historic buildings and structures, archaeological resources, and human remains. This is considered a potentially significant impact.</p>	S	<p>In addition to adherence to General Plan Policies for the protection of cultural resources, and compliance with Section 5097 of the Public Resources Code, the following mitigation measure is required to reduce impacts from development on potential historic and cultural resources to less than significant</p> <p>Mitigation Measure CUL-1: Historic and Archaeological Resources</p> <p>All buildings or structures that have been determined to be 45 years or older must be evaluated to determine whether they are “unique historic resource” before demolition or alteration.</p>	LTS
GREENHOUSE GAS EMISSIONS			
<p>Impact GHG-1 – Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</p>	S	<p>Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall</p>	SU

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>As shown in Table 4.8-5, the Project's 2040 growth projection could result in GHG emissions that exceed the adjusted, SCAQMD derived plan-level efficiency metric. This is considered a potentially significant impact.</p>		<p>apply to new residential (or residential mixed use) development projects:</p> <ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p> <ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code. <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p> <ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who will track the effectiveness of the TDM program over time. • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
<p>Impact GHG-2 – Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of</p>	<p>S</p>	<p>Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements</p>	<p>SU</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>reducing the emissions of greenhouse gases?</p> <p>As shown in Table 4.8-5, Project growth could result in GHG emissions that exceed the 2017 Climate Change Scoping Plan’s recommended efficiency metrics. In addition, the Project has the potential to result in growth that is not planned for in the City’s CAP. This is considered a potentially significant impact.</p>		<p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall apply to new residential (or residential mixed use) development projects:</p> <ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p> <ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code. <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p> <ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who will track the effectiveness of the TDM program over time. • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
Would the project cause substantial adverse cumulative impacts with respect to greenhouse gas emissions?	S	Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements	SU

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>The Project's 2040 growth projection and associated GHG emissions could exceed the significance threshold applied in this EIR and pose a conflict with the 2017 Climate Change Scoping Plan and City's CAP. This is considered a potentially significant impact.</p>		<p>The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) shall apply to new residential (or residential mixed use) development projects:</p> <ul style="list-style-type: none"> • New one- and two-family dwellings and townhomes shall include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code. • New multifamily dwellings with 17 or more units shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code. • New multifamily dwelling units shall provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code. <p>Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements</p> <p>The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) shall apply to new non-residential (or mixed use) development projects:</p> <ul style="list-style-type: none"> • New non-residential development with more than 10 tenant-occupants shall provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code. • New non-residential development shall provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces shall be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code. 	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • New non-residential development shall provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces shall be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code. <p>Mitigation Measure AQ-2D: Non-Residential Travel Demand Management</p> <p>The following travel demand management (TDM) provisions shall apply to new non-residential development:</p> <ul style="list-style-type: none"> • New commercial and industrial projects greater than 25,000 square feet in size shall prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program shall have a designated coordinator who will track the effectiveness of the TDM program over time. • New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, shall implement an Employee Commute Reduction Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option). 	
NOISE			
Impact NOISE-1 – Would the project result in generation of a substantial temporary	S	Mitigation Measure NOISE-1: Construction Noise	LTS

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p> <p>Potential temporary construction-related noise increases of more than 10 dBA above ambient conditions during permissible construction hours would be a potentially significant impact.</p>		<p>To ensure that future development projects implement appropriate construction noise controls, the City shall require development projects that are subject to discretionary review and that are located near (i.e., within 200 feet) of noise-sensitive land uses (e.g., residential, school, or long term medical care facilities) to assess potential construction noise levels and minimize substantial adverse impacts by implementing feasible construction noise control measures that reduce construction noise levels at sensitive receptor locations. Such measures may include, but are not limited to: 1) construction management techniques (e.g., providing advance notice of construction activities to nearby noise-sensitive receptors, siting staging areas away from noise-sensitive land uses, phasing activities to take advantage of shielding/attenuation provided by topographic features or buildings, monitoring construction); 2) construction equipment controls (e.g., ensuring equipment has mufflers, use of electric hook-ups instead of generators); 3) use of temporary sound barriers (equipment enclosures, berms, walls, blankets, or other devices) when necessary; 4) preparation of a plan, procedures, or other mechanism to receive track, respond, and resolve construction noise complaints, including designation of an on-site appointee to handle such complaints, and report back to City staff; and 4) monitoring of actual construction noise levels to verify any need for noise controls.</p>	
<p>Impact NOISE-2 – Would the project result in generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p> <p>The increase in traffic noise levels along Atlantic Boulevard resulting in “clearly</p>	S	<p>Mitigation Measure NOISE-2: Long-Term Operational Noise</p> <p>The City shall periodically (at least every five years), conduct ambient noise monitoring or site-specific modeling to determine the 24-hour CNEL at the low density residential land uses along Atlantic Boulevard, between El Repetto Drive and Floral Drive. The purposes of the monitoring or modeling shall be to determine if CNEL values are approaching the clearly unacceptable noise</p>	SU

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>unacceptable” low density residential noise exposure levels is considered a potentially significant impact.</p> <p>The City’s existing General Plan policies and Municipal Code requirements would protect residents from excessive stationary noise sources and ensure new land uses meet the City’s Municipal Code noise standards. Therefore, potential growth under the Project would not expose people to a substantial permanent increase in noise levels from stationary and other non-transportation sources of noise. This impact would be less than significant.</p>		<p>level limit of 75 CNEL for low density residential land uses. When measured or modeled noise levels associated with traffic noise reach 75 CNEL, as measured at the project property line for the low density residential land uses closest to Atlantic Boulevard, the City shall evaluate the benefits, costs, and logistical feasibility (e.g., permits, right of way considerations, aesthetic considerations) of installing a noise barrier capable of reducing noise exposure levels to conditionally acceptable levels (at minimum). If such a barrier is found to be feasible and reasonable pursuant to Caltrans or Federal Highway Administration barrier acceptance criteria, the City shall proceed with constructing a barrier capable of achieving the barrier’s noise reduction goal.</p>	
<p>Would the project cause substantial adverse cumulative impacts with respect to noise or vibration?</p> <p>The long-term increases in traffic in the Planning Area would result in a cumulatively considerable increase in noise exposure to “clearly unacceptable” levels along Atlantic Avenue between El Repetto Drive and Floral Drive. This is considered a potentially significant impact.</p>	<p>S</p>	<p>Mitigation Measure NOISE-2: Long-Term Operational Noise</p> <p>The City shall periodically (at least every five years), conduct ambient noise monitoring or site-specific modeling to determine the 24-hour CNEL at the low density residential land uses along Atlantic Boulevard, between El Repetto Drive and Floral Drive. The purposes of the monitoring or modeling shall be to determine if CNEL values are approaching the clearly unacceptable noise level limit of 75 CNEL for low density residential land uses. When measured or modeled noise levels associated with traffic noise reach 75 CNEL, as measured at the project property line for the low density residential land uses closest to Atlantic Boulevard, the City shall evaluate the benefits, costs, and logistical feasibility (e.g., permits, right of way considerations, aesthetic considerations) of installing a noise barrier capable of reducing noise exposure levels to conditionally acceptable levels (at minimum). If such a barrier is found to be feasible and</p>	<p>SU</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		reasonable pursuant to Caltrans or Federal Highway Administration barrier acceptance criteria, the City shall proceed with constructing a barrier capable of achieving the barrier's noise reduction goal.	
HYDROLOGY AND WATER QUALITY			
<p>Impact HYDRO-2 – Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?</p> <p>The population anticipated under the Project is greater than the population assumed in the City of Monterey Park UWMP. As such, it is possible that there may be more demand for water than what was considered in the UWMP. This is considered a potentially significant impact.</p>	S	<p>Mitigation Measure UTS-1: Groundwater Supplies</p> <p>The City will cooperate with the local water service providers, including CalWater, during the development of the Urban Water Management Plans (UWMP) over the term of the Project. The City will coordinate with these providers to ensure that future assessments of water reliability consider population projections as allowed by the Project. Additionally, the City (also a water provider) will consider the population growth, as anticipated under the Project, when developing UWMPs over the term of the proposed General Plan. If it is determined that existing conservation measures are inadequate to meet future water needs, the City will develop additional conservation measures or expand other options such as increased use of recycled water in coordinate with local water service providers.</p>	LTS
TRANSPORTATION			
<p>Impact TRANS-1 – Would the project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</p> <p>As shown in Table 4.17-13, significant impacts would occur at 27 of the 30 study intersections during one or both of the analyzed peak periods. This is considered a potentially significant impact.</p>	S	<p>Intersection 1: Atlantic Boulevard and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Atlantic Boulevard and is at the northern city limit with the City of Alhambra. The signalized intersection has protected-permissive phasing at the southbound and eastbound approaches and permitted phasing for the northbound and westbound approaches.</p> <p>Level of Service (LOS) at this location can be improved by restriping the eastbound approach to provide a left-turn lane and a shared left-through-right lane. Similarly, the</p>	SU

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>westbound approach will also need to be restriped to accommodate a left-turn lane, a shared through-right-turn lane, and an exclusive right-turn lane. Split left-turn phasing will be required for the east- and westbound approaches in order to accommodate these changes. These improvements will partially mitigate intersection operations during the peak periods, but the significant impacts will still remain.</p> <p>To fully mitigate the significant impact, the intersection would need to be widened along the east- and westbound approaches. However, widening the roadway at this intersection in any direction would be infeasible as it would require significant land acquisition of residential and commercial properties. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 2: Garfield Avenue and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Garfield Avenue and is at the northern city limit with the City of Alhambra. The signalized intersection provides protected left-turns at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. The significant impact could be mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 3: New Avenue and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at New</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Avenue and is at the eastern city limit with the City of Rosemead. The signalized intersection provides protected left-turns on the northbound and southbound approaches and permissive phasing for the eastbound and westbound approaches.</p> <p>LOS operations at this location can be improved by providing northbound permitted left-turn phasing and eastbound protected left-turn phasing. However, these measures are not sufficient to fully mitigate the significant impact at the intersection.</p> <p>The significant impact could be fully mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 4: Atlantic Boulevard and Emerson Avenue</p> <p>The signalized intersection provides protected-permitted phasing at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. Although the significant impact could be mitigated by providing additional lanes to Atlantic Boulevard and Emerson Avenue, neither roadway has the capacity to accommodate another traffic lane. Any additional lanes could only be accommodated through significant property acquisition and elimination of on-street parking. Thus, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 5: Garfield Avenue and Emerson Avenue</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The signalized intersection provides permitted phasing at all approaches. The immediate area around this location is primarily occupied by commercial uses. Intersection operations could be improved by providing southbound and westbound protected/permitted left-turn phasing; however, these measures would be insufficient to fully mitigate the significant impact.</p> <p>Additional intersection improvements could be made with an additional thru lane on both Emerson Avenue and Garfield Avenue, supplemented with additional left- and right-turn pockets. However, these measures would still be insufficient in mitigating the significant impact. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 6: Atlantic Boulevard and Garvey Avenue The signalized intersection provides protected left-turn phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing right-turn lane on the eastbound and westbound approaches to a thru-right-turn lane.</p> <p>Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 7: Garfield Avenue and Garvey Avenue</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue and an improvement along Garfield Avenue at the northbound approach (as part of a potential development project at the southeast corner of the intersection), a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. The northbound approach would also add an exclusive northbound right-turn lane, allowing two northbound thru lanes.</p> <p>Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 8: New Avenue and Garvey Avenue</p> <p>The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. Although this would be a physically feasible improvement and would mitigate the a.m. peak-period significant impact, it would not fully mitigate the significant impact during the p.m. peak period.</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 9: Corporate Center Drive and Ramona Boulevard The signalized intersection is located south of I-710 and I-10 interchange and provides protected left-turn phasing on the northbound and westbound approaches.</p> <p>The significant impact during the p.m. peak period can be eliminated by restriping the westbound approach to include a left-turn lane, a shared left-through lane, and a through lane; split phasing would be provided for the east- and westbound approaches. However, these measures will not eliminate the a.m. significant impact at this location.</p> <p>The significant impact could be eliminated by providing an additional east-west through lane. However, this would require widening Ramona Boulevard which would not be physically feasible due to freeway right-of-way north of the intersection, and which would require significant highway interchange reconfiguration. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 11: Corporate Center Drive and I-710 Northbound Off-Ramp The intersection is signal-controlled and provides protected split phasing at the eastbound and westbound approaches and permitted phasing at the southbound approach. The significant impact at this location during the</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>p.m. peak period would be fully mitigated by providing northbound right-turn overlap phasing. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 12: Fremont Avenue and Monterey Pass Road</p> <p>The Fremont Avenue and Monterey Pass Road intersection is signalized and has protected left-turn phasing for the southbound approach (Fremont Avenue SB) and permitted left-turn phasing for the eastbound approach (Monterey Pass Road northeast-bound).</p> <p>The current lane configuration for the southbound approach on Fremont Avenue consists of a left-turn lane and a channelized free right-turn lane; the eastbound approach (Monterey Pass Road northeast-bound) has a left-turn and two through lanes; while the westbound (Monterey Pass Road southwest-bound) approach includes a through lane and a channelized right-turn.</p> <p>The significant impacts at this intersection can be eliminated by increasing roadway capacity and restriping all three approaches. Additional roadway capacity can be achieved by removing or resizing existing medians and vegetation. With the additional space, the new southbound approach would have enough space to accommodate dual left-turns with protected phasing and a right-turn lane. The eastbound approach would have dual left-turn lanes with protected phasing and only one through lane; while the westbound approach would include a through lane and a shared through-right-turn lane. All of these measures would take place on public right-of-way. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 13: Garfield Avenue and Newmark Avenue</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The signalized intersection has protected phasing at the northbound and southbound approaches and permitted phasing on the eastbound and westbound approaches. Intersection LOS can be improved by providing southbound permitted left-turn phasing and eastbound protected/permitted left-turn phasing. However, these measures are not sufficient to eliminate the significant impacts.</p> <p>Full mitigation of the significant impact would require additional travel lanes along Newmark Avenue, which would require private property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 14: Atlantic Boulevard and Brightwood Street</p> <p>The signalized intersection contains permitted left-turn phasing on all approaches. The impact at the study intersection could be eliminated by restriping the northbound approach to provide a left-turn lane, two through lanes, and a shared through-right turn lane; the three through lanes would not be continuous and would change back to two northbound lanes north of Brightwood Street. In addition, the southbound approach would need to provide protected left-turn phasing and the eastbound approach protected/permitted phasing. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 15: I-710 NB On-Ramp/Ford Blvd and Floral Drive</p> <p>The signalized intersection is signal-controlled and provides permitted phasing at all approaches. LOS operations at this location can be improved by restriping the northbound approach to provide a shared left-through</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>lane and a right-turn lane. Similarly, the eastbound approach would need to be restriped to include a shared through-left turn and a shared through-right-turn lane. These measures would only mitigate the a.m. peak hour impact; the p.m. peak hour impact would remain.</p> <p>The p.m. significant impact could be mitigated by adding another through lane to Floral Drive. However, any improvements to Floral Drive would require removing on-street parking and widening the I-710 underpass to allow for an additional travel lane. Any improvements would also require coordination with Los Angeles County as south of Floral Drive is unincorporated East Los Angeles. As a result, there are no feasible mitigation measures for the p.m. impact at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 16 - Corporate Center Drive/McDonnell Avenue and Floral Drive</p> <p>The signalized intersection provides permitted left-turn phasing at the northbound and southbound approaches and protected left-turn phasing at the eastbound and westbound approaches.</p> <p>LOS operations can be improved by restriping the southbound approach to provide dual left-turn lanes and a shared thru-right-turn lane. These measures would improve intersection operations but not fully mitigate the significant impact.</p> <p>The a.m. peak hour significant impact could be fully mitigated with the removal of the northbound parking lane on McDonnell Avenue and replacing it with two lanes: one northbound through-left and one northbound through-right lane. However, McDonnell Avenue south of Floral Drive is outside the City of Monterey Park jurisdiction and would require coordination with Los Angeles County. Aside from</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>this improvement, there are no other feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 17 - Monterey Pass Road-Mednik Avenue and Floral Drive</p> <p>The signalized intersection provides permitted left-turn phasing at all approaches.</p> <p>LOS operations at this location can be improved by implementing protected/permitted left-turn phasing to the eastbound approach. However, this measure is not sufficient to mitigate significant impacts during both peak hours.</p> <p>The a.m. peak-hour significant impacts could be fully mitigated by adding an additional southbound left-turn lane; however, this would not be physically feasible as it would require property acquisition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 18 - Atlantic Boulevard and Floral Drive/Driveway</p> <p>The signalized intersection provides protected northbound and southbound left-turn phasing, and eastbound and westbound split phasing. The intersection approaches are fully developed. Widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 20 - Collegian Avenue and Avenida Cesar Chavez</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The signalized intersection provides permitted left-turn phasing at all approaches.</p> <p>Intersection operations can be improved by implementing protected/permitted left-turn signal phasing to the westbound approach. However, this measure would only mitigate the a.m. peak- hour impacts.</p> <p>This intersection is surrounded by areas that are fully built-out, and any improvements would require significant private property acquisitions. As such, there are no feasible mitigation measures for the p.m. impacts at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 21 - Atlantic Boulevard and Avenida Cesar Chavez</p> <p>The signalized intersection provides protected left-turn phasing in all directions. The intersection approaches are fully developed, and widening is not possible without significant property acquisition and building demolition. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 22 - Atlantic Boulevard and 1st Street/SR-60 West Bound Off-Ramp</p> <p>The signalized intersection provides permitted left-turns in all directions.</p> <p>The a.m. peak-hour impact could be fully mitigated by restriping the eastbound approach to provide dual left turns and an exclusive right-turn lane. The eastbound approach</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>is approximately 30 feet, so three approach lanes could be provided.</p> <p>The p.m. peak-hour impact could only be mitigated by providing additional north-south lanes along Atlantic Boulevard. This would require significant private property acquisitions and encroach onto the SR- 60 freeway right-of-way, making this an infeasible measure. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 23 - Atlantic Boulevard and SR-60 East Bound Off-Ramp</p> <p>The signalized intersection provides permitted phasing in all directions. The significant impact could be fully mitigated by adding a southbound through lane in currently underutilized pavement area. This will require restriping of the southbound approach and potentially a median reduction to accommodate the new through lane. This measure would also require coordination with Los Angeles County but would not require any new right-of-way. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 24 - Garfield Avenue and Riggin Street</p> <p>The signalized intersection provides permitted left-turn phasing in all directions. Intersection operations could be improved by restriping the southbound approach to include dual left-turn lanes with protected phasing, and incorporating protected/permitted phasing to the eastbound approach. The dual left-turn lanes would need to be accommodated by eliminating on-street parking on the south side of Riggin Street, east of Garfield Avenue. However, these changes would only fully mitigate a.m. peak-hour impacts and will not be sufficient to fully mitigate significant impacts during the p.m. peak hour. <i>This impact is considered significant and unavoidable.</i></p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Intersection 25 - Garfield Avenue and Pomona Boulevard</p> <p>The signalized intersection provides north- and southbound split left-turn phasing, and westbound permitted left-turn phasing.</p> <p>Significant impacts can be mitigated by restriping the north- and southbound approaches. The northbound approach would include dual left-turn lanes with protected phasing and a through lane; while the southbound approach would provide one through lane, one through-right-turn lane, and an exclusive right-turn lane. This improvement would require coordination with Caltrans and the City of Montebello. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 26 - Garfield Avenue and Via Campo</p> <p>This intersection is entirely outside the City of Monterey Park. It provides north- and southbound split left-turn phasing, and east- and westbound permitted left-turn phasing.</p> <p>The LOS at this intersection could be improved by restriping the southbound and eastbound approaches and adding protected left-turn phases to the north- and southbound approaches. The southbound approach will include a left-turn lane and two through lanes; while the eastbound will have a through-left-turn lane, two through lanes, and a right-turn lane.</p> <p>However, this measure is not sufficient to eliminate the p.m. peak-hour significant impact. In addition, the area is fully developed, and widening is not possible without significant property acquisition and building demolition.</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>There are no feasible mitigation measures at this intersection. Furthermore, the intersection is completely within City of Montebello jurisdiction, so coordination with the City would be required. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 27 - Wilcox Avenue and Pomona Boulevard</p> <p>The signalized intersection provides northbound protected left-turn phasing, and south- and westbound permitted left-turn phasing.</p> <p>Intersection operations could be improved by providing left-turn protected signal phasing; however, the p.m. peak-hour significant impact would not be fully mitigated. Significant impacts could be mitigated by adding an additional westbound right-turn lane and an additional southbound right-turn lane. However, widening is not possible without significant property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 28 - Markland Drive and Potrero Grande Drive/SR-60 West Bound Off-Ramp</p> <p>The signalized intersection provides north/south permitted left-turn phasing, and east/west protected left-turn phasing. The significant p.m. peak-period impact could be mitigated by restriping the eastbound approach to include: one left-turn lane, one through lane, one shared through-right-turn lane, and one exclusive right-turn lane. The approach currently has 40 feet, so there is enough roadway width to restripe the approach in this manner. This measure would require extensive coordination with</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Caltrans but would not require any new right-of-way. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 30 - Saturn Street/Market Place Drive and Potrero Grande Drive</p> <p>The signalized intersection provides eastbound and westbound protected left-turn phasing, and northbound and southbound permitted left-turn phasing.</p> <p>The significant p.m. peak-hour impact could be fully mitigated by restriping the northbound approach to provide: one left turn, one through lane, and one shared through-right-turn lane. <i>This impact would be less than significant after mitigation.</i></p>	
<p>Would the project cause substantial adverse cumulative impacts with respect to transportation?</p> <p>Traffic conditions under Future 2040 With General Plan Update Conditions would substantially impact 27 Of the 30 study intersections. This is considered a potentially significant impact.</p>	<p>S</p>	<p>Intersection 1: Atlantic Boulevard and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Atlantic Boulevard and is at the northern city limit with the City of Alhambra. The signalized intersection has protected-permissive phasing at the southbound and eastbound approaches and permitted phasing for the northbound and westbound approaches.</p> <p>Level of Service (LOS) at this location can be improved by restriping the eastbound approach to provide a left-turn lane and a shared left-through-right lane. Similarly, the westbound approach will also need to be restriped to accommodate a left-turn lane, a shared through-right-turn lane, and an exclusive right-turn lane. Split left-turn phasing will be required for the east- and westbound approaches in order to accommodate these changes. These improvements will partially mitigate intersection operations during the peak periods, but the significant impacts will still remain.</p>	<p>SU</p>

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>To fully mitigate the significant impact, the intersection would need to be widened along the east- and westbound approaches. However, widening the roadway at this intersection in any direction would be infeasible as it would require significant land acquisition of residential and commercial properties. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 2: Garfield Avenue and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Garfield Avenue and is at the northern city limit with the City of Alhambra. The signalized intersection provides protected left-turns at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. The significant impact could be mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 3: New Avenue and Hellman Avenue</p> <p>The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at New Avenue and is at the eastern city limit with the City of Rosemead. The signalized intersection provides protected left-turns on the northbound and southbound approaches and permissive phasing for the eastbound and westbound approaches.</p> <p>LOS operations at this location can be improved by providing northbound permitted left-turn phasing and eastbound protected left-turn phasing. However, these</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>measures are not sufficient to fully mitigate the significant impact at the intersection.</p> <p>The significant impact could be fully mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 4: Atlantic Boulevard and Emerson Avenue</p> <p>The signalized intersection provides protected-permitted phasing at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. Although the significant impact could be mitigated by providing additional lanes to Atlantic Boulevard and Emerson Avenue, neither roadway has the capacity to accommodate another traffic lane. Any additional lanes could only be accommodated through significant property acquisition and elimination of on-street parking. Thus, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 5: Garfield Avenue and Emerson Avenue</p> <p>The signalized intersection provides permitted phasing at all approaches. The immediate area around this location is primarily occupied by commercial uses. Intersection operations could be improved by providing southbound and westbound protected/permitted left-turn phasing; however, these measures would be insufficient to fully mitigate the significant impact.</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Additional intersection improvements could be made with an additional thru lane on both Emerson Avenue and Garfield Avenue, supplemented with additional left- and right-turn pockets. However, these measures would still be insufficient in mitigating the significant impact. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 6: Atlantic Boulevard and Garvey Avenue The signalized intersection provides protected left-turn phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing right-turn lane on the eastbound and westbound approaches to a thru-right-turn lane.</p> <p>Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 7: Garfield Avenue and Garvey Avenue The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue and an improvement along Garfield Avenue at the northbound approach (as part of a potential development project at the southeast corner of the intersection), a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. The northbound approach would also add an exclusive northbound right-turn lane, allowing two northbound thru lanes.</p> <p>Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 8: New Avenue and Garvey Avenue</p> <p>The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. Although this would be a physically feasible improvement and would mitigate the a.m. peak-period significant impact, it would not fully mitigate the significant impact during the p.m. peak period.</p> <p>An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Intersection 9: Corporate Center Drive and Ramona Boulevard The signalized intersection is located south of I-710 and I-10 interchange and provides protected left-turn phasing on the northbound and westbound approaches.</p> <p>The significant impact during the p.m. peak period can be eliminated by restriping the westbound approach to include a left-turn lane, a shared left-through lane, and a through lane; split phasing would be provided for the east- and westbound approaches. However, these measures will not eliminate the a.m. significant impact at this location.</p> <p>The significant impact could be eliminated by providing an additional east-west through lane. However, this would require widening Ramona Boulevard which would not be physically feasible due to freeway right-of-way north of the intersection, and which would require significant highway interchange reconfiguration. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 11: Corporate Center Drive and I-710 Northbound Off-Ramp</p> <p>The intersection is signal-controlled and provides protected split phasing at the eastbound and westbound approaches and permitted phasing at the southbound approach. The significant impact at this location during the p.m. peak period would be fully mitigated by providing northbound right-turn overlap phasing. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 12: Fremont Avenue and Monterey Pass Road</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The Fremont Avenue and Monterey Pass Road intersection is signalized and has protected left-turn phasing for the southbound approach (Fremont Avenue SB) and permitted left-turn phasing for the eastbound approach (Monterey Pass Road northeast-bound).</p> <p>The current lane configuration for the southbound approach on Fremont Avenue consists of a left-turn lane and a channelized free right-turn lane; the eastbound approach (Monterey Pass Road northeast-bound) has a left-turn and two through lanes; while the westbound (Monterey Pass Road southwest-bound) approach includes a through lane and a channelized right-turn.</p> <p>The significant impacts at this intersection can be eliminated by increasing roadway capacity and restriping all three approaches. Additional roadway capacity can be achieved by removing or resizing existing medians and vegetation. With the additional space, the new southbound approach would have enough space to accommodate dual left-turns with protected phasing and a right-turn lane. The eastbound approach would have dual left-turn lanes with protected phasing and only one through lane; while the westbound approach would include a through lane and a shared through-right-turn lane. All of these measures would take place on public right-of-way. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 13: Garfield Avenue and Newmark Avenue</p> <p>The signalized intersection has protected phasing at the northbound and southbound approaches and permitted phasing on the eastbound and westbound approaches. Intersection LOS can be improved by providing southbound permitted left-turn phasing and eastbound protected/permitted left-turn phasing. However, these</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>measures are not sufficient to eliminate the significant impacts.</p> <p>Full mitigation of the significant impact would require additional travel lanes along Newmark Avenue, which would require private property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 14: Atlantic Boulevard and Brightwood Street</p> <p>The signalized intersection contains permitted left-turn phasing on all approaches. The impact at the study intersection could be eliminated by restriping the northbound approach to provide a left-turn lane, two through lanes, and a shared through-right turn lane; the three through lanes would not be continuous and would change back to two northbound lanes north of Brightwood Street. In addition, the southbound approach would need to provide protected left-turn phasing and the eastbound approach protected/permitted phasing. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 15: I-710 NB On-Ramp/Ford Blvd and Floral Drive</p> <p>The signalized intersection is signal-controlled and provides permitted phasing at all approaches. LOS operations at this location can be improved by restriping the northbound approach to provide a shared left-through lane and a right-turn lane. Similarly, the eastbound approach would need to be restriped to include a shared through-left turn and a shared through-right-turn lane. These measures would only mitigate the a.m. peak hour impact; the p.m. peak hour impact would remain.</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The p.m. significant impact could be mitigated by adding another through lane to Floral Drive. However, any improvements to Floral Drive would require removing on-street parking and widening the I-710 underpass to allow for an additional travel lane. Any improvements would also require coordination with Los Angeles County as south of Floral Drive is unincorporated East Los Angeles. As a result, there are no feasible mitigation measures for the p.m. impact at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 16 - Corporate Center Drive/McDonnell Avenue and Floral Drive</p> <p>The signalized intersection provides permitted left-turn phasing at the northbound and southbound approaches and protected left-turn phasing at the eastbound and westbound approaches.</p> <p>LOS operations can be improved by restriping the southbound approach to provide dual left-turn lanes and a shared thru-right-turn lane. These measures would improve intersection operations but not fully mitigate the significant impact.</p> <p>The a.m. peak hour significant impact could be fully mitigated with the removal of the northbound parking lane on McDonnell Avenue and replacing it with two lanes: one northbound through-left and one northbound through-right lane. However, McDonnell Avenue south of Floral Drive is outside the City of Monterey Park jurisdiction and would require coordination with Los Angeles County. Aside from this improvement, there are no other feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Intersection 17 - Monterey Pass Road-Mednik Avenue and Floral Drive</p> <p>The signalized intersection provides permitted left-turn phasing at all approaches.</p> <p>LOS operations at this location can be improved by implementing protected/permitted left-turn phasing to the eastbound approach. However, this measure is not sufficient to mitigate significant impacts during both peak hours.</p> <p>The a.m. peak-hour significant impacts could be fully mitigated by adding an additional southbound left-turn lane; however, this would not be physically feasible as it would require property acquisition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 18 - Atlantic Boulevard and Floral Drive/Driveway</p> <p>The signalized intersection provides protected northbound and southbound left-turn phasing, and eastbound and westbound split phasing. The intersection approaches are fully developed. Widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 20 - Collegian Avenue and Avenida Cesar Chavez</p> <p>The signalized intersection provides permitted left-turn phasing at all approaches.</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Intersection operations can be improved by implementing protected/permitted left-turn signal phasing to the westbound approach. However, this measure would only mitigate the a.m. peak- hour impacts.</p> <p>This intersection is surrounded by areas that are fully built-out, and any improvements would require significant private property acquisitions. As such, there are no feasible mitigation measures for the p.m. impacts at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 21 - Atlantic Boulevard and Avenida Cesar Chavez</p> <p>The signalized intersection provides protected left-turn phasing in all directions. The intersection approaches are fully developed, and widening is not possible without significant property acquisition and building demolition. As such, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 22 - Atlantic Boulevard and 1st Street/SR-60 West Bound Off-Ramp</p> <p>The signalized intersection provides permitted left-turns in all directions.</p> <p>The a.m. peak-hour impact could be fully mitigated by restriping the eastbound approach to provide dual left turns and an exclusive right-turn lane. The eastbound approach is approximately 30 feet, so three approach lanes could be provided.</p> <p>The p.m. peak-hour impact could only be mitigated by providing additional north-south lanes along Atlantic Boulevard. This would require significant private property</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>acquisitions and encroach onto the SR- 60 freeway right-of-way, making this an infeasible measure. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 23 - Atlantic Boulevard and SR-60 East Bound Off-Ramp</p> <p>The signalized intersection provides permitted phasing in all directions. The significant impact could be fully mitigated by adding a southbound through lane in currently underutilized pavement area. This will require restriping of the southbound approach and potentially a median reduction to accommodate the new through lane. This measure would also require coordination with Los Angeles County but would not require any new right-of-way. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 24 - Garfield Avenue and Riggin Street</p> <p>The signalized intersection provides permitted left-turn phasing in all directions. Intersection operations could be improved by restriping the southbound approach to include dual left-turn lanes with protected phasing, and incorporating protected/permitted phasing to the eastbound approach. The dual left-turn lanes would need to be accommodated by eliminating on-street parking on the south side of Riggin Street, east of Garfield Avenue. However, these changes would only fully mitigate a.m. peak-hour impacts and will not be sufficient to fully mitigate significant impacts during the p.m. peak hour. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 25 - Garfield Avenue and Pomona Boulevard</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>The signalized intersection provides north- and southbound split left-turn phasing, and westbound permitted left-turn phasing.</p> <p>Significant impacts can be mitigated by restriping the north- and southbound approaches. The northbound approach would include dual left-turn lanes with protected phasing and a through lane; while the southbound approach would provide one through lane, one through-right-turn lane, and an exclusive right-turn lane. This improvement would require coordination with Caltrans and the City of Montebello. <i>This impact would be less than significant after mitigation.</i></p> <p>Intersection 26 - Garfield Avenue and Via Campo</p> <p>This intersection is entirely outside the City of Monterey Park. It provides north- and southbound split left-turn phasing, and east- and westbound permitted left-turn phasing.</p> <p>The LOS at this intersection could be improved by restriping the southbound and eastbound approaches and adding protected left-turn phases to the north- and southbound approaches. The southbound approach will include a left-turn lane and two through lanes; while the eastbound will have a through-left-turn lane, two through lanes, and a right-turn lane.</p> <p>However, this measure is not sufficient to eliminate the p.m. peak-hour significant impact. In addition, the area is fully developed, and widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection. Furthermore, the intersection is completely within City of Montebello jurisdiction, so coordination with</p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>the City would be required. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 27 - Wilcox Avenue and Pomona Boulevard</p> <p>The signalized intersection provides northbound protected left-turn phasing, and south- and westbound permitted left-turn phasing.</p> <p>Intersection operations could be improved by providing left-turn protected signal phasing; however, the p.m. peak-hour significant impact would not be fully mitigated. Significant impacts could be mitigated by adding an additional westbound right-turn lane and an additional southbound right-turn lane. However, widening is not possible without significant property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection. <i>This impact is considered significant and unavoidable.</i></p> <p>Intersection 28 - Markland Drive and Potrero Grande Drive/SR-60 West Bound Off-Ramp</p> <p>The signalized intersection provides north/south permitted left-turn phasing, and east/west protected left-turn phasing. The significant p.m. peak-period impact could be mitigated by restriping the eastbound approach to include: one left-turn lane, one through lane, one shared through-right-turn lane, and one exclusive right-turn lane. The approach currently has 40 feet, so there is enough roadway width to restripe the approach in this manner. This measure would require extensive coordination with Caltrans but would not require any new right-of-way. <i>This impact would be less than significant after mitigation.</i></p>	

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Intersection 30 - Saturn Street/Market Place Drive and Potrero Grande Drive</p> <p>The signalized intersection provides eastbound and westbound protected left-turn phasing, and northbound and southbound permitted left-turn phasing.</p> <p>The significant p.m. peak-hour impact could be fully mitigated by restriping the northbound approach to provide: one left turn, one through lane, and one shared through-right-turn lane. <i>This impact would be less than significant after mitigation.</i></p>	
UTILITIES AND SERVICE SYSTEMS			
<p>Impact UTS-2 – Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</p> <p>Sufficient long-term water supplies for the Project cannot be guaranteed at this time. This is considered a potentially significant impact.</p>	S	<p>Mitigation Measure UTS-1: Water Reliability Assessment</p> <p>The City shall collaborate with the local water service providers during the development of the Urban Water Management Plans over the term of the Project. The City shall work with these providers to ensure that future assessments of water reliability consider population projections as anticipated under the Project. If it is determined that existing conservation measures are not adequate to meet future water needs, the City shall work with the providers to develop additional conservation measures or expand other options such as increased use of recycled water.</p>	LTS

NOTES:

S = Significant

LTS = Less than Significant

SU = Significant Unavoidable Impact

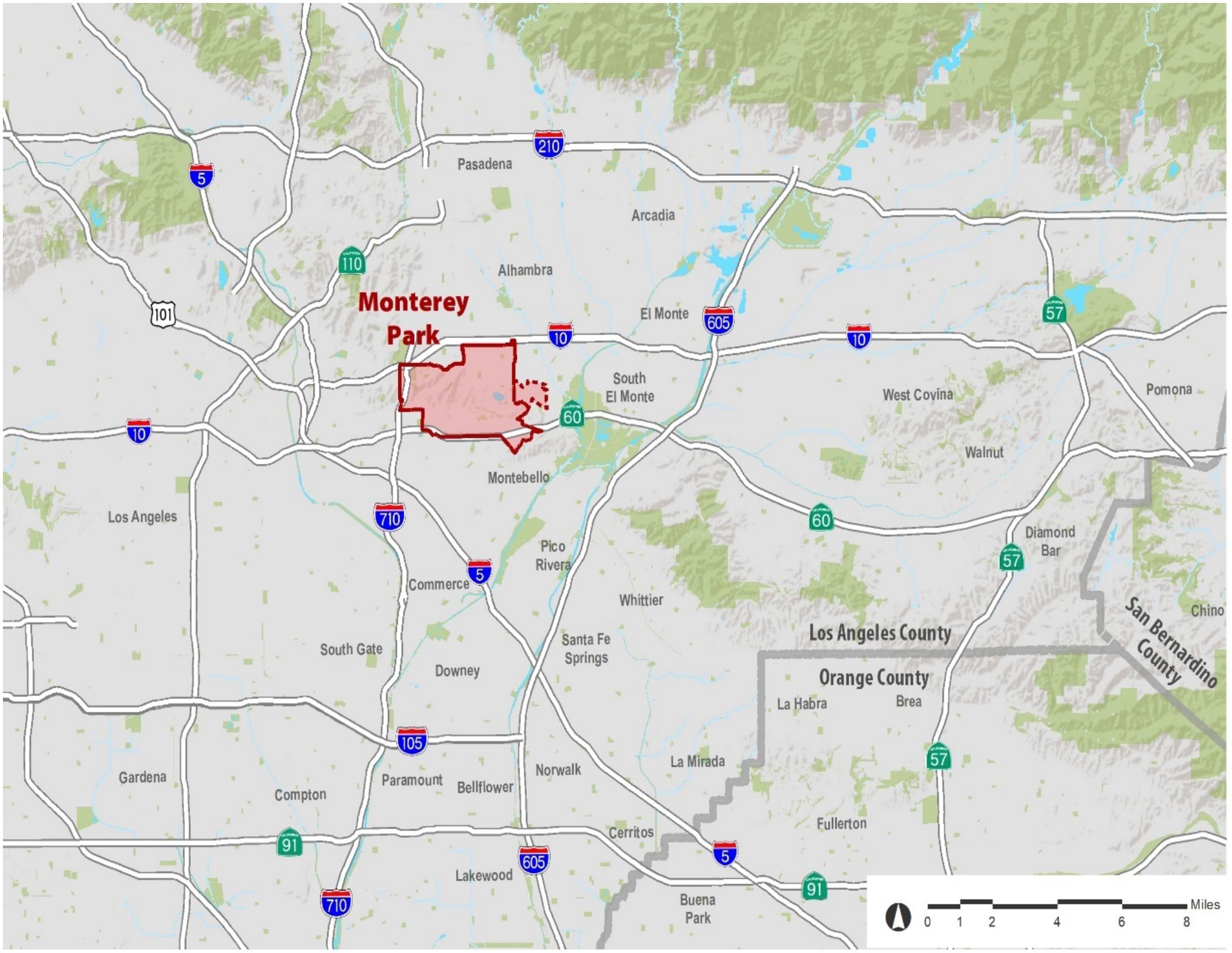
3 – Project Description

This EIR chapter describes the proposed City of Monterey Park Focused General Plan Update (“Focused General Plan Update” or “project”) evaluated in this Program EIR. This chapter describes: the general location of the City, environmental setting/existing conditions, project objectives, project characteristics, approvals associated with adoption of the General Plan Land Use Element Update, and intended use of this EIR.

3.1 – PROJECT LOCATION

The City of Monterey Park is located seven miles east of downtown Los Angeles in the San Gabriel Valley. The City is bordered by the City of Alhambra to the north, City of Rosemead and the unincorporated community of South San Gabriel to the east, City of Montebello to the south, and the unincorporated community of East Los Angeles to the west (see Exhibit 3-1: Regional Location). Several freeways and highways offer regional access to the City, including the Pomona Freeway (SR-60) on the south, the San Bernardino Freeway (1-10) to the north, and the Long Beach Freeway (I-710) to the west. Regional arterial roads traversing the City include Garvey Avenue, Atlantic Boulevard, and Garfield Avenue.

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Monterey Park



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3.2 – ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The City of Monterey Park encompasses approximately eight square miles, nearly all of which are developed with urban land uses. Monterey Park’s Sphere of Influence consists of the unincorporated community of South San Gabriel located adjacent to the City’s eastern boundary south of Graves Avenue between New Avenue and San Gabriel Boulevard. The entire area encompasses 4,270 net acres with approximately 3,980 net acres within the corporate city limits and an additional 289 net acres within the Sphere of Influence (not including right-of-way). State law defines a Sphere of Influence as the probable physical boundary and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) (Cal. Gov’t. Code §56076). All properties within the corporate City limits and the Sphere of Influence area is called the Planning Area (see Exhibit 3-2: Planning Area).

The 2019 estimated population of the City of Monterey Park is 64,240 residents, with 4,648 residents within the Sphere of Influence.¹ An estimated 31,532 employees work within the City and 1,517 employees work within the Sphere of Influence.

Monterey Park has a variety of land uses. Commercial and light industrial land uses total 173 acres (5 percent) and 143 acres (3 percent), respectively. Office use makes up 195 acres or (5 percent). Park and open space uses comprise up 300 acres (8 percent). Public facilities and institutional uses make up 13 percent. Vacant land makes up three- percent of the Planning Area. Table 3-1 shows the existing land use and acreage within the Planning Area. Exhibit 3-3 shows the existing land uses within the Planning Area.

¹ The 2019 population and housing estimates for the Planning Area are derived from a variety of informational sources including: the California Department of Finance, Demographic Research Unit, Population and Housing Estimates, January 2018; Urban Footprint and CoreLogic 2019 parcel attribute data; and MIG, 2019. It should be noted that, to provide a conservative analysis, an occupancy rate was not applied to the existing and future population estimates. The California Department of Finance estimates a 4.4 percent vacancy rate (95.6 occupancy rate) for 2018.

**Table 3-1
Land Use Distribution by Acres (2019)**

Land Use Category	City		Sphere of Influence		Planning Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Single-Unit	1,876	47.1%	202	69.7%	2,078	48.7%
Multi-Unit	561	14.1%	31	10.8%	592	13.9%
Mobile Home Parks	1	0.0%	-	0.0%	1	0.0%
Residential Care Facilities	4	0.1%	3	1.2%	7	0.2%
Mixed-Use	7	0.2%	-	0.0%	7	0.2%
General Commercial	172	4.3%	2	0.6%	174	4.1%
Offices	194	4.9%	1	0.4%	195	4.6%
Hotel/Motels	8	0.2%	1	0.2%	9	0.2%
Light Industrial	143	3.6%	-	0.0%	143	3.3%
Parking Lots and Structures	16	0.4%	-	0.0%	16	0.4%
Hospitals and Medical	7	0.2%	-	0.0%	7	0.2%
Public Facilities	313	7.9%	1	0.4%	314	7.4%
Utilities	64	1.6%	10	3.4%	74	1.7%
Schools	74	1.9%	-	0.0%	74	1.7%
East Los Angeles College (ELAC)	77	1.9%	-	0.0%	77	1.8%
Nursery	14	0.4%	14	4.8%	28	0.7%
Closed Landfill (Open Space)	148	3.7%	-	0.0%	148	3.5%
Golf Course	47	1.2%	-	0.0%	47	1.1%
Parks and Recreation	105	2.6%	-	0.0%	105	2.5%
Religious Institutions	24	0.6%	0	0.1%	24	0.6%
Vacant Lands	125	3.1%	24	8.4%	149	3.5%
Total	3,980	100.0%	289	100.0%	4,269	100.0%
Source: MIG, 2019.						

Residential Uses. Making up the largest land use category (63 percent of the Planning Area), residential uses are found throughout Monterey Park. Of all residential uses, single-unit residential uses make up the bulk of the residential category (78 percent). Higher density residential use is concentrated between Graves Avenue and Monterey Park’s northern boundary, Hellman Avenue. High density residential (30 or more units per acre) exists along Garfield Avenue south of Newmark Avenue, north of East Los Angeles College along Floral Drive, and north of Garvey Avenue.

Commercial, Office, and Industrial Uses. Commercial areas comprise four percent of all land uses. Commercial uses are located in Downtown Monterey Park, along Garvey Avenue, Atlantic Boulevard, Garfield Avenue, Monterey Pass Road, Corporate Center Drive, Oil/Edison, and Saturn Park. Office uses (including business, medical, and other) make five percent of land area. Industrial uses are only in the incorporated area and make up three percent of total land area.

Floor-area ratio (FAR) describes the relationship between the total amount of usable floor area that a building has or is permitted to have, and the total area of the lot on which the building stands. The ratio is determined by dividing a building's gross floor area by the gross area of the lot upon which it is built. A higher ratio is more likely to indicate a dense or urban condition.

Monterey Park has a low FAR overall with the majority of parcels falling in the 0.00 to 0.50 range. No parcels have a FAR higher than 2.00. The few parcels with a FAR ranging between 0.51 and 2.00 are classified as commercial, office, and mixed use and are scattered along Garvey Avenue, Garfield Avenue, and Atlantic Boulevard.

Park and Open Space. Parks and open space make up about seven percent of the acreage in the Planning Area. Parks and open space include the Monterey Park Golf Course, Highlands Park, Pine Tree Park, Sequoia Park, Sunnyslope Park, Cascade Park, Barnes Park, Bella Vista Park, Sierra Vista Park, MWD Conservation Park, Edison Trails Park, George E. Elder Park, Garvey Ranch Park, La Loma Park, Demonstration Garden, Service Club House, Langley Senior Center and the closed landfill.

Public Facilities and Institutional. Public and quasi-public uses include schools (public and private); public assembly uses such as religious institutions; hospitals; government offices; and utilities. The total land area devoted to public facilities and institutional uses is 570 net acres or 13 percent of the Planning Area. Public and private schools occupy 74 net acres of the Planning Area (less than two percent). East Los Angeles College, located along Avenida Cesar Chavez, encompasses 77 net acres and is the only college in the Planning Area.

Vacant and Other Land Uses. Vacant land exists within Monterey Park; only 149 net acres or four percent of the land is vacant. Other land uses such as parking lots, hotel and motels, nursery, and mixed-use properties occupy just over 60 net acres.

3.3 – BACKGROUND

The City of Monterey Park proposes a focused update to the General Plan consisting solely of revisions to the Land Use Element, last comprehensively updated in 2001. The purpose of updating the Land Use Element is to ensure land use policies allow the City to attract investment and development consistent with its vision, and to facilitate economic growth and creation of new housing opportunities.

Ensuring the Monterey Park 2040 General Plan Update reflects the diverse priorities and needs of the community, the General Plan program uses a variety of community engagement strategies to gather input. The community participation program includes:

General Plan Advisory Committee (GPAC)

The GPAC has eleven community members and five alternate members; all appointed by the City Council. The GPAC convened four times and focused on the following:

- March 11, 2019 – General Plan purpose, Asset/Challenges/Opportunities/Vision discussion
- April 1, 2019 – Stakeholder Interview results, Conditions Influencing Monterey Park Planning (market, physical constraints, land use patterns, circulation), Areas of Stability and Change discussion and mapping exercise

3 – Project Description

- April 15, 2019 – Focus Areas (“areas of change”), Focus Areas’ possible land use alternatives, Cherry Blossom Festival planning
- May 6, 2019 – Community engagement input summaries (Community Survey and Cherry Blossom Festival), land use alternatives adjustments based on community input, and endorsement of preferred land use alternatives.

Stakeholder Interviews

A series of stakeholder interviews were conducted between March 6, 2019 and March 20, 2019. The interviews’ purpose was twofold: inform community members about the Monterey Park 2040 General Plan Update, and gather input regarding Monterey Park’s strengths, challenges, and opportunities. Invitations to participate were extended to 26 local organizations/community groups and City Council members.

Monterey Park 2040 Website and Social Media

The website, www.montereypark2040.org, focuses on the General Plan update. It provides information about the General Plan update process and schedule, involvement opportunities, latest news, community engagement summaries, and draft plans and other technical documents prepared for the General Plan update and its environmental review process. The website can be viewed in English, Simplified Chinese, and Spanish. The website provides an opportunity for people to sign up for additional information, which is provided through email.

In addition to the website, the General Plan program has a Facebook account, a twitter account (MPGP2040), and two hashtags (#MontereyPark2040 and #MPGP2040). Upcoming events, “going on now” messages, and other communications are “e-blasted” through the accounts.

Community Survey/Intercepts

A written 11-question community survey was conducted from March 20, 2019 through May 31, 2019. The survey (available in English, Simplified Chinese, and Spanish) asks: what characteristics and elements make Monterey Park special, what characteristics and elements would the community like to see more of, what type of housing should be provided, how do people get around (mobility modes) now and how would they like to get around in the future, how Monterey Park should change, and what should the future Monterey Park look like. The survey was available on the Monterey Park 2040 website, and in the Monterey Park Bruggemeyer Library, Langley Senior Center, and Monterey Park City Hall. In addition, General Plan team members conducted and distributed surveys at six locations: Langley Senior Center, Bruggemeyer Library, ELAC, Monterey Park Farmers’ Market, Monterey Park’s LA Fitness, and the Cherry Blossom Festival. Approximately 260 surveys were completed/submitted.

Cherry Blossom Festival

During the April 27 and April 28, 2019 Cherry Blossom Festival event, approximately 600 participants were asked to provide their opinions regarding the Focus Areas’ land use alternatives. The Monterey Park 2040 booth featured multiple interactive boards displaying each Focus Area’s preferred land use alternative. The land use alternatives’ description provided a verbal summary and a series of photographs representing possible building types/heights/density that could be constructed. Participants applied “dots” to vote/express their opinion of the alternative. Display boards were translated into Simplified Chinese and Spanish.

Preferred Land Use Public Meeting and Environmental Scoping Meeting

On May 6, 2019 a public meeting was convened in the Monterey Park City Hall Council Chambers to present the General Plan’s technical findings (existing land use analysis and market analysis), community engagement activities and findings, and the proposed preferred Focus Areas’ land use alternative. Community members’ questions and comments were noted. In addition, an Environmental Scoping Meeting was conducted. Community members’ comments focused on traffic, water infrastructure and supply, noise, and parking.

3.4- PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires the EIR to describe the basic objectives and underlying purpose of the project. The City-stated objectives of the General Plan Land Use Element Update are listed below.

1. Encourage economic investment and revitalization within the City’s Focus Areas.
2. Create new housing opportunities for a full range of housing types and to increase housing affordability.
3. Encourage infill development within underutilized areas of the City.
4. Accommodate job-generating land uses in order to increase employment in the City.
5. Accommodate commercial/retail uses in order to expand the City’s tax base.

3.5 – PROJECT CHARACTERISTICS

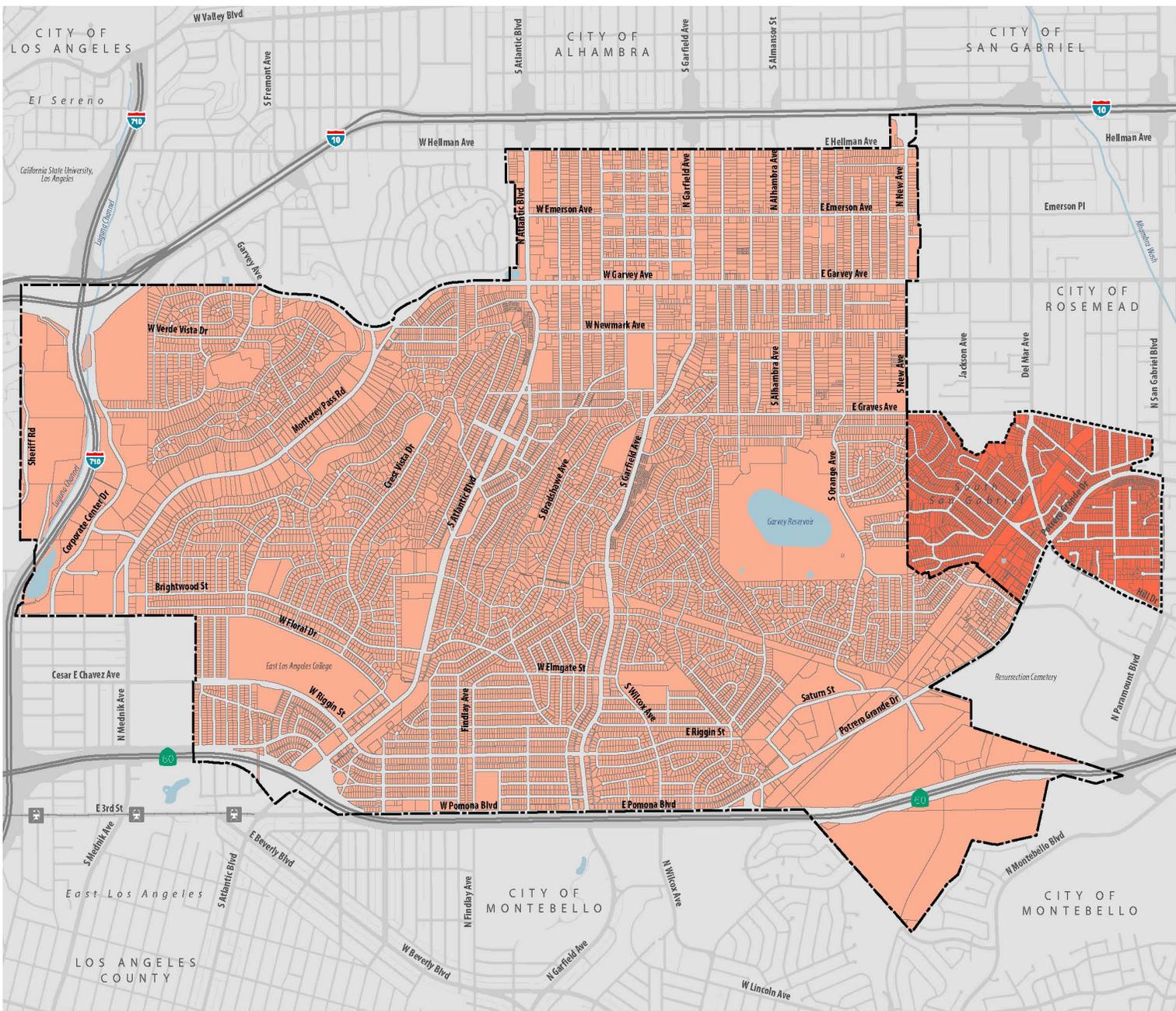
This section provides a description of the 2040 growth projections analyzed in this Draft EIR, and a general description of Focus Areas and the Updated Land Use Map.

Updated Land Use Map and Land Use Designations

The Land Use Element identifies the planned land use designations for the entire City, city-wide land use and urban design goals and policies, and Focus Area land use and urban design goals and policies. The land use designations generally relate to the designations shown in the 2001 General Plan (see Exhibit 3-4); however, some land use categories have been refined. Table 3-2 identifies a brief description for each land use designation and acres.

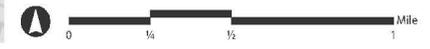
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**Exhibit 3-2
Planning Area**



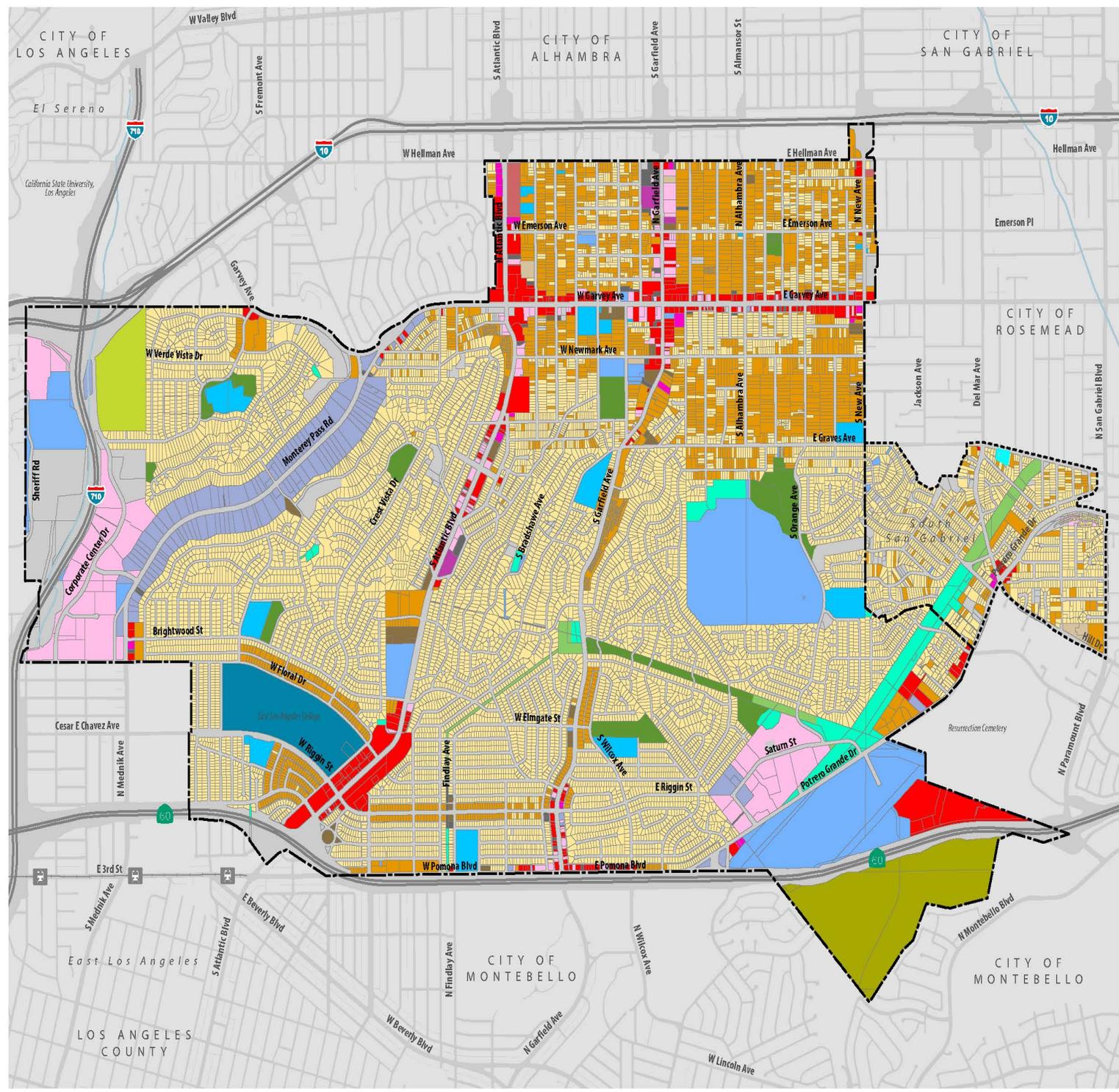
- Planning Area**
- City of Monterey Park (Incorporated)
 - Sphere of Influence (Unincorporated)
- Base Map Features**
- Monterey Park Boundary
 - Sphere of Influence Boundary
 - Metro Gold Line and Stations
 - Water Courses
 - Waterbodies

March 2019
Sources: Los Angeles County Assessor, 2019.



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Exhibit 3-3 Existing Land Use (2019)



Existing Land Use (2019)

- Single-Family
- Mobile Home Park
- Multi-Family
- Residential Care Facility
- General Commercial
- Office
- Mixed Use
- Hotel/Motel
- Hospital
- Government and Public Facility
- Water Facilities and Utility Corridors
- Public Schools
- Community College
- Nursery
- Golf Course
- Park
- Former Landfill
- Religious Institution
- Parking
- Vacant

Base Map Features

- Monterey Park Boundary
- Sphere of Influence Boundary
- Metro Gold Line and Stations
- Water Courses
- Waterbodies

March 2019
Sources: Los Angeles County Assessor, 2019; Urban Footprint (Core Logix), 2019.



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**Table 3-2
General Plan Land Use Designations**

Land Use Designations	City		Sphere of Influence		Planning Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Residential Designations						
Low Density: One residential unit per lot, with private open space.	1,690	42.5%	244	84.2%	1,934	45.3%
Medium Density: Attached or detached residential units, with private and common open space.	287	7.2%	2	0.8%	289	6.8%
High Density: Attached or detached residential units, with private and common open space.	418	10.5%	15	5.3%	433	10.1%
Commercial and Business Designations						
Commercial: Broad range of retail and service commercial uses, hospitality, entertainment, medical, and professional offices.	166	4.2%	4	1.3%	169	4.0%
Corporate Center: Professional offices, hospitality, entertainment, and medical.	128	3.2%	-	-	128	3.0%
Innovation/Technology: Research and development, light manufacturing, service commercial, professional offices, entertainment, and breweries/wineries/distilleries.	238	6.0%	-	-	238	5.6%

3 – Project Description

Land Use Designations	City		Sphere of Influence		Planning Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Mixed-Use Designation						
Mixed Use: Broad range of retail and service commercial uses, hospitality, entertainment, medical, professional offices, and residential uses.	149	3.7%	-	-	149	3.5%
Public Facilities and Open Space Designations						
Public Facilities: Public buildings, childcare centers for City-supported programs, community gardens, public utility facilities, utility easements, reservoirs and wells, public schools, and similar uses of a public-serving nature.	441	11.1%	24	8.5%	466	10.9%
Open Space: Parks and City-owned recreational facilities, community gardens, golf courses, and resource conservation areas.	463	11.6%	-	-	463	10.9%
Overlay						
Housing Overlay: In addition to uses permitted in the underlying land use designation, attached residential uses.	18	N/A	-	N/A	-	N/A
Total	3,980	100.0%	289	100.0%	4,269	100.0%

Focus Areas

The Focus Areas identify the areas of change where the majority of development growth is anticipated through the 2040 planning horizon year. Areas that are not in the Focus Areas will not see significant growth. See Exhibit 3-5 for the locations of the Focus Areas. Table 3-3 identifies the changes in floor-area ratio and building height between the current General Plan adopted in 2001 and the 2040 General Plan Update.

Corporate Center

The Corporate Center Focus Area is located along Corporate Center Drive parallel to the I-710 Freeway. Existing land uses consists of four-to six-story office buildings. The proposed land use plan focuses on adding additional office opportunities and hospitality uses, including hotels and restaurants up to 125 feet in height (10 stories). The northern portion of this focus area limits buildings height up to 60 feet (four stories).

Corporate Place

The Corporate Place Focus Area is along Corporate Place, just west of Monterey Pass Road and north of Floral Drive. Existing land uses consist of low-scale office and light industrial uses. The proposed land use plan focuses on accommodating additional intensity of creative office uses and industrial uses up to 50 feet in building height (four stories).

Monterey Pass

The Monterey Pass Focus Area is located along Monterey Pass Road. Existing land uses consist of light industrial and small warehouse uses. The proposed land use plan focuses on transitioning existing uses to research and development, light manufacturing and service commercial, and professional office uses up to 35 feet in building height (two stories).

Downtown Core

The Downtown Core includes properties around the intersection of Garvey and Garfield Avenues. Existing land uses generally consist of commercial uses, a seven-story hotel, and vacant land. The proposed land use plan focuses on adding a broad range of retail and service commercial uses, hospitality, entertainment, medical, professional offices, and residential uses up to 75 feet in building height (four stories).

Downtown Perimeter

The Downtown Perimeter Focus Area parallels the Downtown Core Focus Area in terms of proposed land uses but limits the building heights to a maximum of 50 feet (four stories).

Garvey Corridor

The Garvey Corridor is located along Garvey Avenue, between Atlantic Boulevard and New Avenue. Existing land uses consist of local commercial and office businesses, restaurants, and some automotive repair shops. The proposed land uses include a mixture of commercial and residential uses but limits the building heights to 50 feet (four stories). It also requires active storefronts along the first floor of Garvey Avenue.

North Atlantic

The North Atlantic Focus Area is located along Atlantic Boulevard between Hellman Avenue and Newmark Avenue. Existing land uses include commercial uses; shopping centers; restaurants; two hotels under construction; and the Atlantic Times Square mixed-use development, consisting of commercial, entertainment, and residential uses. The proposed land use plan focuses on adding additional mixed-use development at 75 feet in building height (six stories) between Hellman and Garvey Avenue. Building heights are restricted to 50 feet (four stories) south of Garvey Avenue.

South Atlantic

The South Atlantic Focus Area is located on the westside of Atlantic Boulevard, between 1st Street and Brightwood Street, adjacent to East Los Angeles College. Existing land uses consist of commercial shopping centers, retail uses, and fast-food restaurants. The proposed land use plan recommends adding a Housing Overlay allowing attached residential uses at 60 dwelling units per acre with a 50-foot building height limit (four stories). The Overlay will continue to allow the commercial uses to remain.

**Table 3-3
General Plan FAR and Height Changes**

Focus Area	2001 General Plan			2040 (Draft) General Pan		
	Floor-area Ratio	Not to Exceed Height		Floor-area Ratio	Not to Exceed Height	
		Feet	Stories		Feet	Stories
Corporate Center	2.00	100	8	4.00	125	10
				2.00 (north end)	60 (north end)	4 (north end)
Corporate Place	0.60 (commercial only)	40	3	1.00 (added industrial and office)	50	4
Monterey Pass	0.65	Zoning controls		0.65	35	2
Downtown Core	1.00	75	7	2.50	75	7
Downtown Perimeter	0.65	55	4	1.50	50	4
Garvey Corridor	0.50, 0.75 (housing)	Zoning controls		1.50	50	4

Focus Area	2001 General Plan			2040 (Draft) General Pan		
	Floor-area Ratio	Not to Exceed Height		Floor-area Ratio	Not to Exceed Height	
		Feet	Stories		Feet	Stories
North Atlantic	2.00	75	7	2.00	75	7
					50 (south of Garvey Ave.)	4 (south of Garvey Ave.)
South Atlantic	0.65 No housing	40	4	0.65 (commercial)	40 (commercial)	2 (commercial)
				Housing Overlay at 60 DU/AC	50 (Housing Overlay)	4 (housing Overlay)

Notes: FAR = Floor-area ratio; DU/AC: Dwelling unit per acre

Growth Projections (2040)

Table 3-4 summarizes the growth anticipated through the 2040 planning horizon year. This scenario assumes that existing low-density residential neighborhoods would experience limited redevelopment activity given the built-out nature of Monterey Park and the fact that the amended Land Use Element would not change density limits in residential zones; accessory dwelling units would account for the limited level of growth. Most development activity would occur in the Focus Areas shown in Exhibit 3-5 and described below. This development would consist of redevelopment of existing commercial and industrial properties with mixed-use developments (where permitted) and transition of aging properties to more intense uses permitted by land use policy. Exhibit 3-6 shows the Draft Land Use Plan. Exhibit 3-7 shows the Regulating Plan, which identifies the maximum allowed building height and floor-area ratios (intensity and massing of buildings) within the Focus Areas. The Regulating Plan also identifies where active street fronts (e.g., pedestrian-friendly building orientation and transparent store fronts) are required within the mixed-use areas and where buildings need to transition down in height to be more compatible with adjoining low-density residential neighborhoods.

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**Table 3-4
Growth Projections, 2019 - 2040**

Type		City			Sphere of Influence			Planning Area		
		Existing (2019)	Proposed (2040)	Difference	Existing (2019)	Proposed (2040)	Difference	Existing (2019)	Proposed (2040)	Difference
Total Population²		64,240	75,442	+11,202	4,648	5,139	+491	68,888	80,581	+11,693
Dwelling Units	Single-Family Units	12,219	12,039	-180	1,269	1,429	+160	13,488	13,468	-20
	Multi-Family Units	8,746	12,582	+3,836	248	248	0	8,994	12,830	+3,836
	Total	20,965	24,621	+3,656	1,517	1,677	+160	22,482	26,298	+3,816
Total Employees		31,532	34,206	+2,674	58	113	+55	31,590	34,320	+2,730
Building Square Feet	Commercial	5,705,938	6,315,919	+609,981	35,554	45,505	+9,951	5,741,492	6,361,424	+619,932
	Office	5,249,764	6,136,066	+886,302	2,400	0	-2,400	5,252,164	6,136,066	+883,902
	Industrial	2,025,800	1,786,058	-239,742	---	--	--	2,025,800	1,786,058	-239,742
	Hospital	1,188,400	1,188,400	0	---	--	--	1,188,400	1,188,400	0
	Total	14,169,902	15,426,443	+1,256,541	37,954	45,505	+7,551	14,207,856	15,471,948	+1,264,092
Hotel/Motel Rooms	Hotel	520	1,182	+662	--	--	--	520	1,182	+662
	Motel	207	152	-55	--	--	--	207	152	-55
	Total	727	1,334	+607	--	--	--	727	1,334	+607

Source: Monterey Park and MIG, 2019.

² Please note that a rate of 3.06 persons per dwelling unit was used to estimate population increase associated with new dwelling units. The 3.06 person per dwelling unit rate is based on California Department of Finance, Demographic Research Unit, Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2018, with 2010 Benchmark, (2018).

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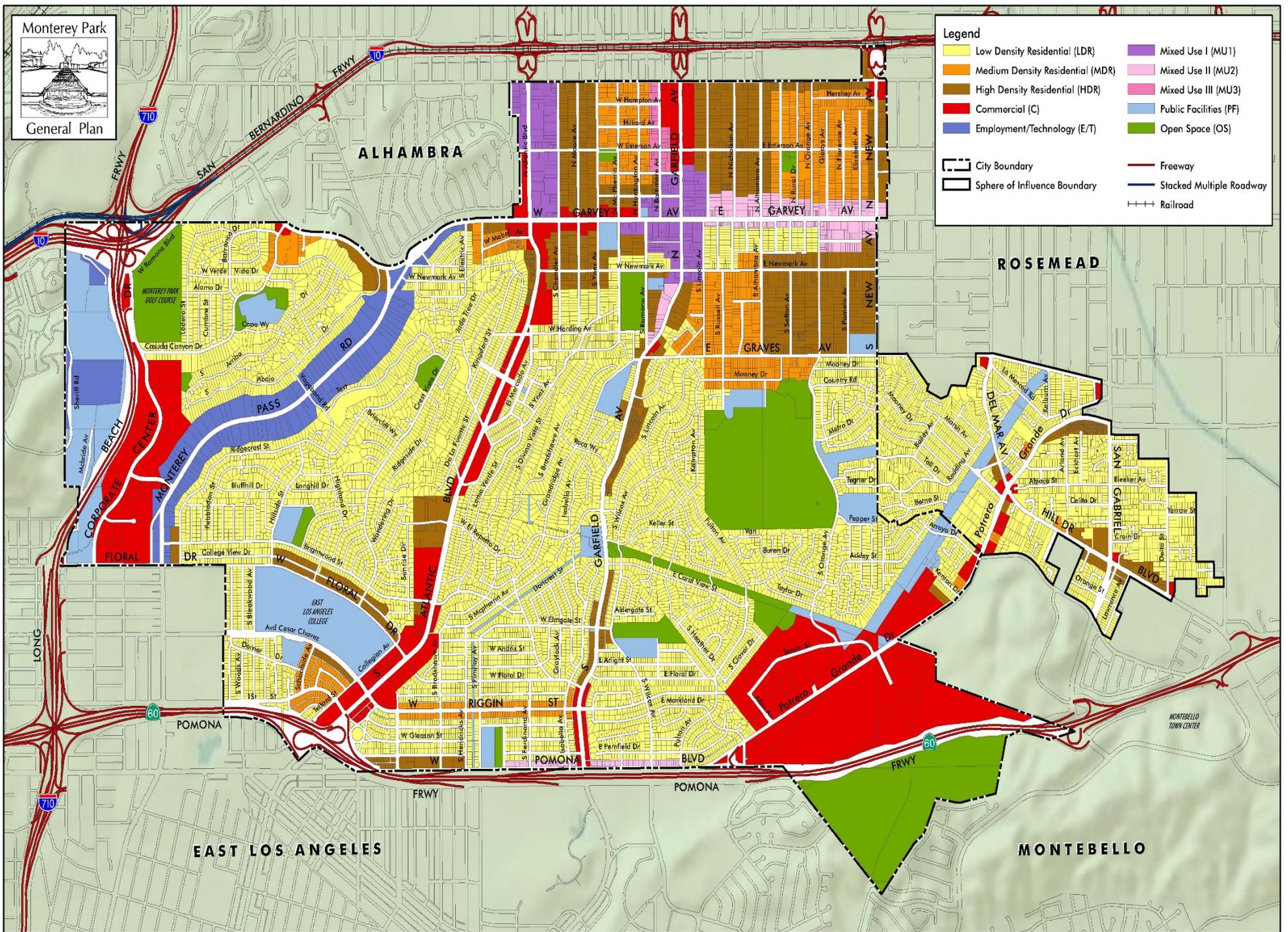
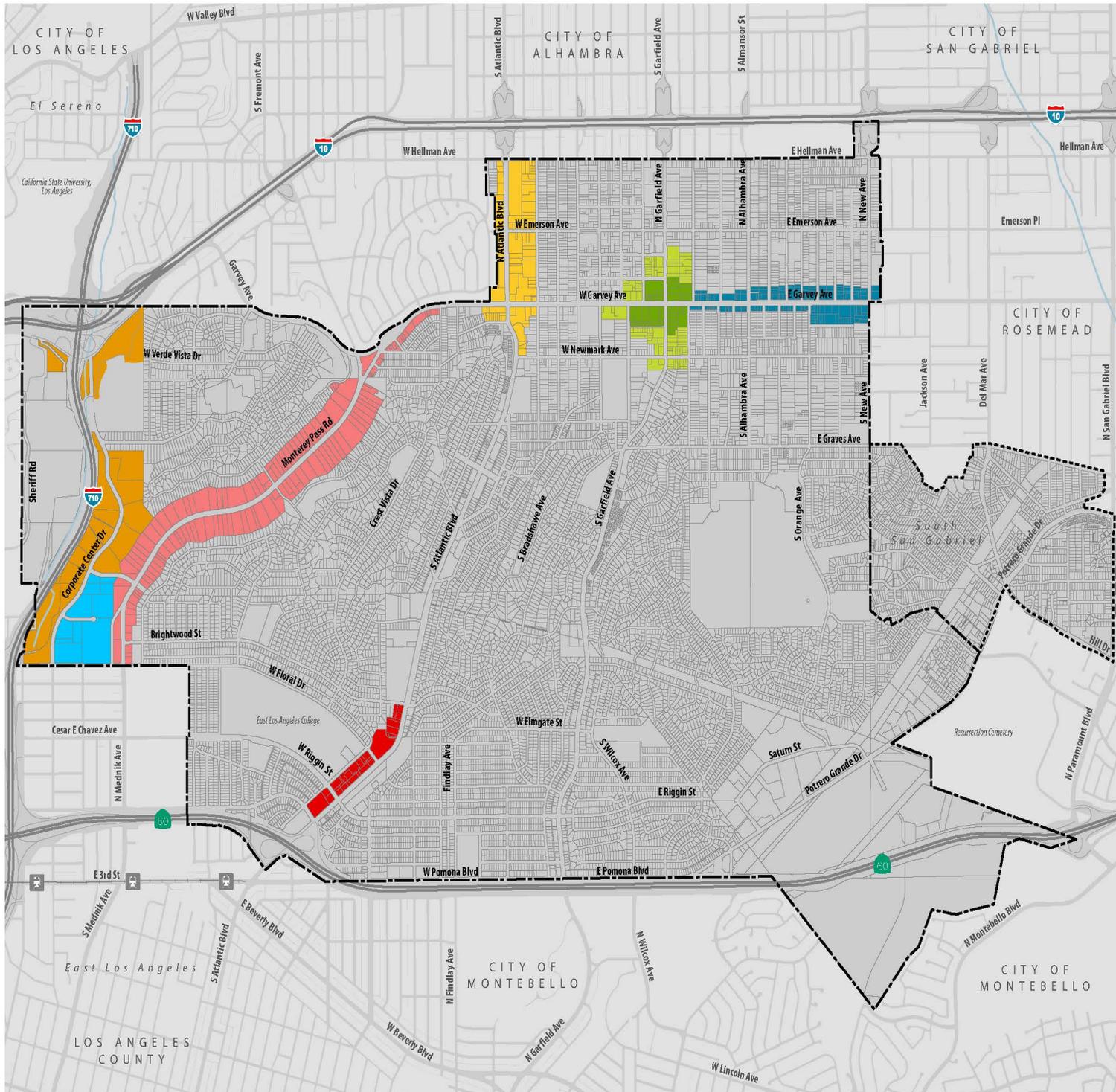


Exhibit 3-4
Existing General Plan Land Use

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Exhibit 3-5 Focus Areas



Focus Areas

- Corporate Place
- Monterey Pass
- CorporateCenter
- DowntownCore
- Downtown Perimeter
- Garvey Corridor
- North Atlantic
- South Atlantic

Base Map Features

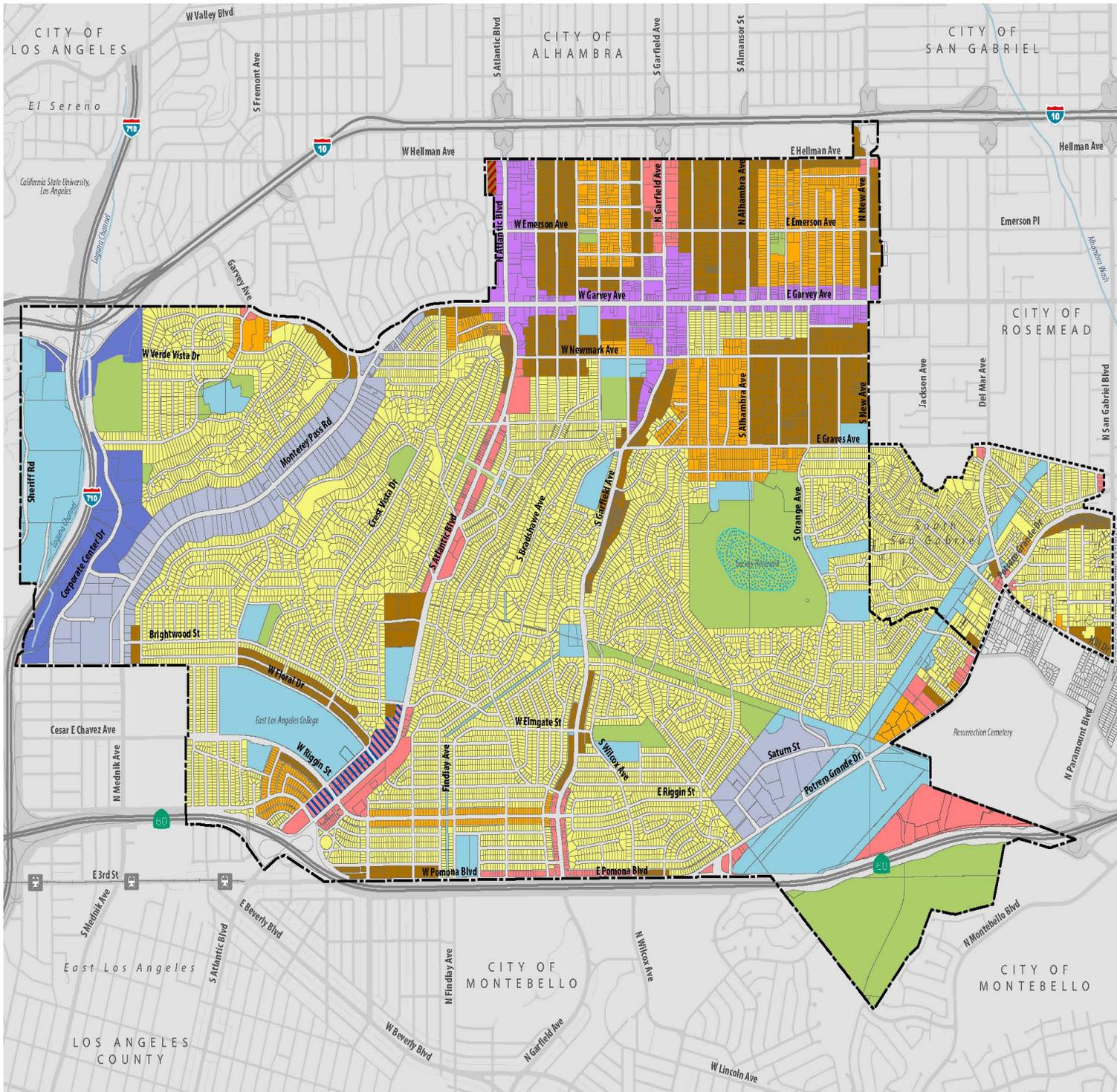
- Monterey Park Boundary
- Sphere of Influence Boundary
- Metro Gold Line and Stations
- Water Courses
- Waterbodies

March 2019
Sources: City of Monterey Park, Los Angeles County, 2019.



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**Exhibit 3-6
Draft Land Use Plan**



Land Use Designations

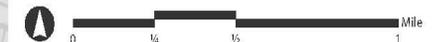
-  Low Density Residential (0-8 DU/AC)
-  Medium Density Residential (8.1-16 DU/AC)
-  High Density Residential (16.1-30 DU/AC)
-  Commercial (0.50-1.50 FAR)
-  Mixed Use (1.50-2.50 FAR)
-  Corporate Center (2.00-4.00 FAR)
-  Employment/Technology (0.65-1.50 FAR)
-  Public Facilities and Utilities
-  Open Space and Recreation
-  Housing Overlay I (60 DU/AC; 50 Feet Height)
-  Housing Overlay II (30 DU/AC; 45 Feet Height)

Base Map Features

-  Monterey Park Boundary
-  Sphere of Influence Boundary
-  Metro Gold Line and Stations
-  Watercourses and Channels
-  Garvey Reservoir

Note: Also see Regulating Plan

May 8, 2019
Sources: City of Monterey Park and MIG, 2019.



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3.6 – JURISDICTIONAL APPROVALS

Implementation of the proposed project would require the following discretionary actions via the City Council and voter approval:

Monterey Park City Council

- Certification of the Final EIR
- Adoption of a Mitigation Monitoring and Reporting Program
- Referral to voters of updated Land Use Element and Title 21 amendments

Voter Approval

- Approval of Land Use Element
- Approval of Title 21 amendments

3.7 – INTENDED USE OF THE EIR

This Program EIR is an informational document designed to inform the City of Monterey Park Planning Commission, City Council, and the public of the environmental consequences associated with implementation of the proposed General Plan Update. The City is the Lead Agency for environmental review of the project under CEQA.

This EIR has been prepared to serve as the CEQA-required environmental documentation for use by the City in its consideration of the project, including all of the associated project approvals described in Section 3.5 above. In compliance with CEQA Guidelines Section 15125(a)(1), this EIR includes a description of the physical environmental conditions as they exist at the time the Notice of Preparation (NOP) was published (April 12, 2019), unless otherwise noted.

This CEQA document is also intended to be used as the baseline (or “first-tier”) CEQA document for subsequent public and private development and improvement actions in the Plan area that are consistent with the General Plan Update. The City would examine these subsequent future activities in the context of the information contained in this program EIR to determine whether and what additional, more focused environmental review would be required.

As the Lead Agency, the City also intends this EIR to serve as the CEQA-required environmental documentation for consideration by other Responsible Agencies and Trustee Agencies that may have limited discretionary authority over future site-specific development proposals facilitated by and consistent with the Focused General Plan Update. Following certification of this Program EIR and adoption of the General Plan by the lead agency (City of Monterey Park), other agencies may use this Program EIR in the approval of subsequent implementation activities. These agencies may include but are not limited to those listed below.

Local Agencies

- County of Los Angeles
- City of Alhambra

3 – Project Description

- City of Rosemead
- City of Montebello
- Los Angeles County Local Agency Formation Commission (LAFCO)

State and Regional Agencies

- California Department of Fish and Wildlife
- California Department of Conservation
- California Department of Housing and Community Development (HCD)
- California Department of Transportation (Caltrans)
- Los Angeles Regional Water Quality Control Board
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District

Federal Agencies

- U.S. Fish and Wildlife Services
- U.S. Army Corps of Engineers

3.8 – REFERENCES

California Department of Finance, Demographic Research Unit, Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2018, with 2010 Benchmark, (2018).

4.1 – Aesthetics

This EIR chapter describes the existing aesthetic characteristics within the Planning Area and evaluates potential aesthetic impacts associated with implementation of the Monterey Park Focused General Plan Update.

4.1.1 – ENVIRONMENTAL SETTING

Neighborhood Characteristics

This section describes the visual character of the Planning Area. It begins with a description of residential neighborhoods within the Planning Area, and then includes a description of other areas, such as the Focus Areas. The locations of the Focus Areas are shown in Exhibit 3-3 in Chapter 3, Project Description.

Single-Family Residential Neighborhoods. Making up the largest land use category (63 percent of the Planning Area), residential uses are found throughout Monterey Park. Of all residential uses, single-family residential uses make up the majority of the residential category (78 percent). As shown in the Exhibit 3-3, included in Chapter 3, Project Description, the majority of single-family residential neighborhoods are located east of Monterey Pass Road, north of Pomona Boulevard, west of the eastern city boundary, and south of West Newmark Avenue.

As described in the City of Monterey Park Housing Element, the majority of the residential housing within the city was constructed between 1940 and 1980. Since these homes were built during a 40 year period, there are a range of architectural styles, with both single- and two-story structures throughout the City. These homes are generally set back from the street and include off-street parking.

Downtown Monterey Park. The Downtown is centered on the Garvey Avenue/Garfield Street intersection. Existing land uses generally consist of commercial uses, a seven-story hotel, and vacant land. The majority of building heights within this area range from one to two stories. The Downtown also includes many parcels with buildings set back from the street and large surface parking lots, which lends to a more suburban character. A landscaped median on Garvey Avenue provides green space within this area.

Garvey Corridor. The Garvey Corridor extends from the Downtown. Existing land uses consist of local commercial and office businesses, restaurants, and some automotive repair shops. Buildings along the Garvey Corridor are generally single story, although two- and three-story buildings are present. Lots are generally smaller, with buildings located along the street frontage, with surface parking. Architectural details of buildings along this corridor are varied.

North Atlantic. The North Atlantic Focus Area is along Atlantic Boulevard, between Hellman Avenue and Newmark Avenue. Existing land uses include commercial uses, shopping centers, restaurants, two hotels under construction, and the Atlantic Times Square mixed use development, consisting of commercial, entertainment, and residential uses. The building types within this Focus Area are mixed and include multi-story mixed-use buildings and single-story auto-oriented commercial development with parking lots located between the building and the street.

4.1 - Aesthetics

South Atlantic. The South Atlantic Focus Area is on the westside of Atlantic Boulevard, between 1st Street and Brightwood Street, adjacent to East Los Angeles College. Existing land uses consist of commercial shopping centers, retail uses, and fast-food restaurants. Buildings within this area are auto-oriented single-story buildings located on large lots with ample surface parking.

Corporate Center/Corporate Place. These Focus Areas are in the western portion of the City, along Interstate 710 and Corporate Center Drive. These areas include office parks that include both larger buildings (4 to 6 stories) along with low-scale office and light industrial buildings. These areas include surface parking lots and ornamental landscaping.

Monterey Pass. The Monterey Pass Focus Area is located along Monterey Pass Road, and existing land uses consist of light industrial and small warehouse uses. Monterey Pass Road is at the base of a small valley, with hillsides parallel to both sides of the street. Development within this area is single story along both sides of the street. On- and off-street parking, with overhead utility lines, are also present.

Saturn Park. Saturn Park is a business park in the southeastern area of the city. It includes office and light industrial uses in large scale one- to four-story buildings. The business park includes large parking lots and ornamental landscaping. Many of the facilities are gated.

East Los Angeles College. East Los Angeles College is in the southwest corner of the City. The campus has a variety of educational buildings, as well as recreational facilities, including a stadium and baseball field. Higher density multi-family buildings are located within the neighborhood surrounding the campus.

Oll Northern Parcel. The Oll northern parcel includes an Edison Electrical substation on the western portion of the site and large-format retail buildings with surrounding parking lots on the eastern portion of the site.

Oll Southern Parcel. The Oll southern parcel is maintained as an open space area.

City Gateways

The existing General Plan (2001) Urban Design Plan, included in the Land Use Element, identifies gateways within the City. Gateways mark the major entrances into the city. As noted in the Urban Design Plan, gateways should have distinctive design features such as signs, graphics, landscaping, and accent lighting that clearly communicate the community's commitment to high-quality design and development. The Urban Design Plan notes that gateway treatments should be pursued at major entrances to the city, including North Atlantic Boulevard, North Garfield Avenue, New Avenue, South Atlantic Boulevard, and South Garfield Avenue.

City Arterials

As described in the Urban Design Plan, key arterial corridors form the visual frame of the City, with major streets as the way most residents and visitors experience the community. The Urban Design Plan identifies ways to enhance these corridors, including installation of street trees; undergrounding of utilities; installation of street furniture and enhanced paving, graphics, and signage; and distinctive nighttime illumination. Streets identified as high priority for upgrading

include Atlantic Boulevard, Garfield Avenue, Garvey Avenue, New Avenue, Monterey Pass Road, and Potrero Grande Drive.

Scenic Highways

The California Department of Transportation (Caltrans) maintains the California Scenic Highway Program and identifies segments of California highways and adjacent corridors as containing outstanding natural beauty. There are no designated scenic highways are located within or adjacent to the Planning Area (California Department of Transportation, 2019).

Light and Glare

Existing sources of nighttime light within Monterey Park include street and freeway lights, parking lot lighting, building lighting, signage, vehicle headlights, interior lighting visible through windows, and other sources of light that would be found within a developed urban environment. Sources of glare include reflection of sunlight and artificial light off windows, buildings and other surfaces.

4.1.2 – REGULATORY FRAMEWORK

State

California Scenic Highway Program

The purpose of the California Scenic Highway Program is to protect and enhance California's natural beauty and to protect the social and economic values provided by the state's scenic resources. A highway may be designated “scenic” based on the natural landscape visible to travelers, the scenic quality of the landscape, and the extent to which development intrudes on the views from the highway. The California Scenic Highway Program includes both officially designated scenic highways and highways that are eligible for designation.

Local

Urban Design Plan

The Urban Design Plan, included in the 2001 General Plan Land Use Element, is intended to be a tool to achieve a sense of community and identity for residential areas and commercial districts within Monterey Park. The Urban Design Plan provides guidance for decision makers and staff, and also identifies treatments for City Gateways and Arterial Corridors.

Specific Plans

A Specific Plan implements a General Plan; it sets development standards but does so for a specific parcel, or series of parcels, for which a Specific Plan has been written. An adopted Specific Plan constitutes the zoning for the Specific Plan area. Monterey Park's six Specific Plans are:

- Potrero Grande Specific Plan.
- 500 East Markland Drive Specific Plan
- South Garfield Village Specific Plan

4.1 - Aesthetics

- Mid-Atlantic Specific Plan
- Garvey/Garfield Specific
- North Atlantic Specific Plan

Monterey Park Municipal Code – Zoning Regulations

Zoning regulations within the MPMC to implement the Land Use Element of the General Plan, provide specific development standards such as building heights, setbacks, lot size, and other related standards. Monterey Park's Title 21 (Zoning) identifies specific uses allowed within each zoning district and provides specific development requirements/standards.

4.1.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to aesthetics if it would:

- a) Have a substantial adverse effect on a scenic vista;
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?; or
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential aesthetic impacts that could result from the implementation of the Project and recommends mitigation measures as needed to reduce significant impacts.

Scenic Vistas

Impact AES-1 – Would the project have a substantial adverse effect on a scenic vista?

Analysis of Impacts

Scenic view available within the Planning Area are location-dependent and can vary from views of adjacent development to views of surrounding cities and mountains in the distance. The 2001 General Plan Land Use Element does not identify any specific scenic vistas within the City. It does identify important City Gateways and City Arterials and includes measures for how to augment the visual character of these features.

Implementation of the Project could result in an increase in development within Focus Areas of Monterey Park; these areas currently include urban development. New development associated with the Project could result in taller and more dense development than currently exists at

certain locations; however, this new development would be consistent with the urban character of the city.

Additionally, the Focused General Plan Update includes several goals and policies specifically addressing visual character of the Planning Area. These include:

- Policy 1.5 Compatibility. Encourage infill development to be compatible with the surrounding neighborhood and offer community amenities that are accessible to the public.
- Policy 1.6 Quality Urban Design. Enhance the City's neighborhoods, centers, and corridors through high-quality urban design.
- Policy 3.1 Quality Neighborhoods. Maintain the quality and character of residential neighborhoods.
- Policy 3.7 Safe and Sanitary. Pursue code enforcement efforts that simultaneously work to enhance the visual quality of residential neighborhoods and to ensure safe, decent, and sanitary housing for all residents.
- Policy 4.2 Sustainable Practices. Balance development with the preservation of environmental systems and the natural beauty of the area through sustainable practices in site planning, landscaping, construction, maintenance, and operations.
- Policy 7.4 Sensitive Design. Require that new additions, renovations, and infill development be sensitive to neighborhood context and building form and scale (for example, second stories, detached garages, setbacks, enhanced front entrances).
- Policy 7.7 Compatibility. Strengthen neighborhood identity with new development that is architecturally compatible with surrounding structures.
- Policy 8.1 Streetscapes. Provide and maintain high-quality public streetscapes in all neighborhoods.
- Policy 8.5 New Development. Require new development to provide engaging, well-landscaped outdoor spaces that invite and support outdoor activities.
- Policy 8.6 Parking. Minimize the street presence and visibility of parking facilities from public streets and neighboring properties.
- Policy 12.1 Compatibility. Require that new, infill, and rehabilitation projects in commercial districts be compatible with existing contexts in terms of site design, scale, building design, materials, and architectural approaches.
- Policy 2.2 Comprehensive Design. Provide for comprehensive design review of new commercial development.
- Policy 28.2 Reduce Visual Impact. Reduce visual impact of aboveground and overhead utilities, including electric lines, by working with local providers to maximize opportunities to place utilities underground.

Implementation of the Focused General Plan Update could increase development within the City; however, this development would be located within areas that currently include urban development. Additionally, the Project includes several policies regarding compatibility and sensitive design, which would be implemented through the City's zoning regulations. The Project would result in a less than significant impact on scenic vistas.

4.1 - Aesthetics

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Scenic Resources/Scenic Highways

Impact AES-2 – Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Analysis of Impacts

No designated scenic highways occur within or adjacent to the Planning Area (California Department of Transportation, 2019).

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Existing Visual Character

Impact AES-3 – In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Analysis of Impacts

Scenic views available within the Planning Area are location-dependent and can vary from views of adjacent development to views of surrounding cities and mountains in the distance. The 2001 General Plan Land Use Element does not identify any specific scenic vistas within the City.

The Project would include revisions to the existing land use plan and development standards within the city. These development standards would encourage new development to be located within the Focus Areas. In addition to updated development standards, the Project includes several policies related to scenic quality and aesthetics associated with new development:

- Policy 1.5 Compatibility. Encourage infill development to be compatible with the surrounding neighborhood and offer community amenities the are accessible to the public.

- Policy 1.6 Quality Urban Design. Enhance the City’s neighborhoods, centers, and corridors through high-quality urban design.
- Policy 3.1 Quality Neighborhoods. Maintain the quality and character of residential neighborhoods.
- Policy 3.7 Safe and Sanitary. Pursue code enforcement efforts that simultaneously work to enhance the visual quality of residential neighborhoods and to ensure safe, decent, and sanitary housing for all residents.
- Policy 4.2 Sustainable Practices. Balance development with the preservation of environmental systems and the natural beauty of the area through sustainable practices in site planning, landscaping, construction, maintenance, and operations.
- Policy 7.2 Identity. Foster a sense of community and facilitate engagement by encouraging residents to take pride in their neighborhoods and form neighborhood groups that address issues affecting the area where they live.
- Policy 7.4 Sensitive Design. Require that new additions, renovations, and infill development be sensitive to neighborhood context and building form and scale (for example, second stories, detached garages, setbacks, enhanced front entrances).
- Policy 7.5 Transition. Require high-density or mixed-use developments to transition sensitively to adjacent lower-density residential uses.
- Policy 7.7 Compatibility. Strengthen neighborhood identity with new development that is architecturally compatible with surrounding structures.

Consistent with California law, Monterey Park’s zoning regulations will need to be updated to reflect the Focused General Plan Update. These revisions will ensure that the development within the City reflects revised development standards and will be consistent with the development pattern identified within the Focused General Plan Update. The implementation of the Project would not cause a significant environmental impact due to conflict with applicable zoning and other regulations governing scenic quality.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Light and Glare

Impact AES-4 – Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Analysis of Impacts

Implementation of the Project could result in new development, which could include new sources of light and glare within the Planning Area. New sources of light and glare would be similar in character and nature to the existing light and glare present in the Planning Area’s urban environment. Any development associated with implementation of the Project would be

4.1 - Aesthetics

subject to the City's zoning regulations, which would evaluate site-specific lighting and glare. Implementation of the Project would not result in a significant impact related to a new source of substantial light or glare, which would adversely affect day or nighttime views in the Planning Area.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to aesthetics?

Analysis of Impacts

Implementation of the Project could result in development within Focus Areas of the City; this new development could result in changes to the visual environment. However, these changes would be located within urban areas and would be generally similar, visually, to the existing urban development with the City. Additionally, the Focused General Plan Update includes several goals and polices related to the design and quality of new development. Implementation of the Project could result in new sources of light and glare within the Planning Area; these new sources would be similar to existing sources found in an urban environment, and any development associated with implementation of the Project would be subject to the City's design review process, which would evaluate site-specific lighting and glare. Implementation of the Project would not cause a substantial adverse cumulative impact with respect to aesthetics.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

4.1.5 References

California Department of Transportation. *California Scenic Highway Mapping System* (http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ accessed May 21, 2019).
City of Monterey Park, 2001. *City of Monterey Park General Plan*, adopted July 18.

4.2 – Agriculture and Forestry Resources

This chapter describes the existing agriculture and forestry uses within the City of Monterey Park and evaluates potential impacts allowed by the implementation of the Monterey Park Focused General Plan Update.

4.2.1 – ENVIRONMENTAL SETTING

The majority of the Planning Area includes urban uses and development. There is no active cultivation of land or farming production facilities within the Planning Area. There are no timberland areas within the Planning Area.

4.2.2 – REGULATORY FRAMEWORK

State

California Farmland Mapping and Monitoring Program. The California Department of Conservation's Division of Land Resource Protection established the State Farmland Mapping and Monitoring Program (FMMP) in 1982. The FMMP conducts comprehensive mapping of State farmland. The intent of the FMMP is to provide decision-makers with information regarding State agricultural resources, including data on existing farmland, and farmland development trends.

4.2.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to agricultural and forestry resources if it would:

- a) 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 California Resources Agency, to non-agricultural use;
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- c) 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) Result in the loss of forest land or conversion of forest land to non-forest use; or
- e) 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.

4.2.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to agriculture resources, timberland, and forest lands.

Convert Farmland

Impact AG-1 – 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 California Resources Agency, to non-agricultural use?

Analysis of Impacts

The Planning Area is a developed urban area. The Farmland Mapping and Monitoring Program (FMMP) does not identify prime farmland, unique farmland, or farmland of statewide importance within the City of Monterey Park Planning Area (California Department of Conservation, 2017).

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Williamson Act Conflict

Impact AG-2 – Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Analysis of Impacts

The California Department of Conservation mapping indicates that no Williamson Act contracts are active for any area within the Planning Area (California Department of Conservation, 2016). The existing zoning map does not contain any agricultural zones or any zone that principally allows agricultural uses. The Project does not propose any changes to uses allowed or development standards within the Planning Area related to agricultural uses. There would be no conflict with existing zoning for agricultural use or a Williamson Act contract.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Conflict with Existing Zoning

Impact AG-3 – 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))?

Analysis of Impacts

Public Resources Code Section 12220(g) defines forest land as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” Monterey Park is an urban developed city and no area within the Planning Area is currently being managed or used for forest land as identified in Public Resources Code Section 12220(g).

Public Resources Code Section 4526 defines timberland as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.” There is no land within Planning Area of Monterey Park that meets this definition.

Government Code Section 51104(g) defines timberland zoned Timberland Production as “an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.” No area within the Monterey Park Planning Area has been zoned timberland.

The City of Monterey Park does not include any area that would be defined as forest land or timberland, and the existing zoning map does not include these designations.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Loss of Forest Land

Impact AG-4 – Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Analysis of Impacts

Public Resources Code Section 12220(g) defines forest land as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” Monterey Park is an urban developed city and no area within Planning Area is currently being managed or used for forest land.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is required.

Other Changes

Impact AG-5 – 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?

Analysis of Impacts

There are no forest lands or agricultural lands within the Planning Area.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to Agriculture and Forestry Resources?

Analysis of Impacts

As described in the section above, the FMMP does not identify prime farmland, unique farmland, or farmland of statewide importance within the City of Monterey Park Planning Area. Additionally, there are no identified agricultural or forestry resources within the Planning Area. Implementation of the Project would not cause a substantial adverse cumulative impact with respect to agricultural and forestry resources.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

4.2.5 REFERENCES

California Department of Conservation, Division of Land Resource Protection, 2017. *Los Angeles Important Farmland 2016* (<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf> accessed April 26, 2019)

California Department of Conservation, 2016. *Los Angeles County Williamson Act FY 2015/2016*. (ftp://ftp.consrv.ca.gov/pub/dlrp/wa/LA_15_16_WA.pdf accessed April 26, 2019)

4.3 – Air Quality

This EIR chapter describes the existing air quality setting of the Monterey Park Focused General Plan Update Planning Area, identifies associated regulatory requirements, evaluates the Project's potential air quality impacts, and identifies mitigation measures to reduce the Project's potentially significant air quality impacts. The methodologies and assumptions used in the preparation of this chapter follow the CEQA Guidelines developed by the South Coast Air Quality Management District (SCAQMD, 2017a). Information on existing air quality conditions, federal and State ambient air quality standards, and pollutants of concern was obtained from the U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and SCAQMD. This EIR air quality analysis has been closely coordinated with the energy and greenhouse gas analyses contained in Chapters 4.6 and 4.8 of this EIR. Please refer to Appendix B for detailed air quality and greenhouse gas emissions estimates (MIG, 2019).

4.3.1 – ENVIRONMENTAL SETTING

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

South Coast Air Basin

The U.S. EPA and CARB are the federal and State agencies charged with maintaining air quality in the nation and California, respectively. The U.S. EPA delegates much of its authority over air quality to CARB. CARB has geographically divided California into 15 air basins for the purposes of managing air quality on a regional basis. An air basin is a CARB-designated management unit with similar meteorological and geographic conditions.

The Planning Area is the City of Monterey Park and its Sphere of Influence, in the South Coast Air Basin (Basin), which includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. The Basin encompasses approximately 6,745 square miles of coastal plains, and is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

Air quality in the Basin is managed by the SCAQMD. Pursuant to the California Clean Air Act, SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and State air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, State, and local agencies to reduce pollutant emissions through adoption and implementation of rules and regulations. Please refer to Section 4.3.2 for a description of the regulatory setting of the Planning Area as it relates to air quality.

Basin Climate and Meteorology

The climate of the Los Angeles region is classified as Mediterranean, but weather conditions within the Basin are dependent on local topography and proximity to the Pacific Ocean. The climate is dominated by the Pacific high-pressure system that results in generally mild, dry summers and mild, wet winters. This temperate climate is occasionally interrupted by extremely

4.3 – Air Quality

hot temperatures during the summer, Santa Ana winds during the fall, and storms from the Pacific Northwest during the winter. In addition to the Basin's topography and geographic location, El Niño and La Niña patterns also have large effects on weather and rainfall received between November and March.

The Pacific high-pressure system drives the prevailing winds in the Basin. The winds tend to blow onshore in the daytime and offshore at night. In the summer, an inversion layer is created over the coastal areas and increases ozone levels. A temperature inversion is created when a layer of cool air is overlain by a layer of warmer air; this can occur over coastal areas when cool, dense air that originates over the ocean is blown onto land and flows underneath the warmer, drier air that is present over land. In the winter, areas throughout the Basin often experience a shallow inversion layer that prevents the dispersion of surface level air pollutants, resulting in higher concentrations of criteria air pollutants such as carbon monoxide (CO) and oxides of nitrogen (NO_x).

In the fall months, the Basin is often impacted by Santa Ana winds. These winds are the result of a high-pressure system over the Nevada-Utah region that overcomes the westerly wind pattern and forces hot, dry winds from the east to the Pacific Ocean. These winds are powerful and incessant. A strong Santa Ana wind can easily exacerbate fire conditions, resulting in worsening air quality throughout the Basin, as smoke and ash are pushed into the region.

An El Niño is a warming of the surface waters of the eastern Pacific Ocean. It is a climate pattern that occurs across the tropical Pacific Ocean that is usually associated with drastic weather occurrences, including enhanced rainfall in Southern California. La Niña is a term for cooler than normal sea surface temperatures across the eastern Pacific Ocean. The Los Angeles region receives less than normal rainfall during La Niña years.

Located in the western Gabriel Valley region of Los Angeles County, the City of Monterey Park consists of approximately eight square miles. It is situated adjacent to the cities/communities of Arcadia, Alhambra, Rosemead, City Terrace, Montebello, and South San Gabriel. The region experiences a Mediterranean climate characterized by hot, dry summers and cool, mild winters, with precipitation occurring in the winter months. The Planning Area is within the Climatic Transition Zone from the moister coastal region to the more arid inland regions of Southern California.

Regulated Air Pollutants

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: ozone (O₃); particulate matter (PM), which consists of “inhalable coarse” PM (particles with an aerodynamic diameter between 2.5 and 10 microns in diameter, or PM₁₀) and “fine” PM (particles with an aerodynamic diameter smaller than 2.5 microns, or PM_{2.5}); carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. The U.S. EPA refers to these six common pollutants as “criteria” pollutants because the agency regulates the pollutants on the basis of human health and/or environmentally based criteria and because they are known to cause adverse human health effects and/or adverse effects on the environment (U.S. EPA 2019a and 2019b).

CARB has also established California Ambient Air Quality Standards (CAAQS) for the six common air pollutants regulated by the federal Clean Air Act (the CAAQS are more stringent than the NAAQS), plus the following additional air pollutants due to their known adverse effects

on human health or the environment (CARB 2019a): hydrogen sulfide (H₂S), sulfates (SO_x), vinyl chloride, and visibility reducing particles.

A description of the air pollutants associated with the Planning Area and its vicinity is provided below. Air pollutants not commonly associated with the existing or proposed sources in the vicinity of the Planning Area, such as hydrogen sulfide and visibility reducing particles, are not described below.

- **Ground-level Ozone**, or smog, is not emitted directly into the atmosphere. It is created from chemical reactions between NO_x and volatile organic compounds (VOCs), also called reactive organic gases (ROGs), in the presence of sunlight (U.S. EPA 2017). Thus, ozone formation is typically highest on hot sunny days in urban areas with NO_x and ROG pollution. Ozone irritates the nose, throat, and air pathways and can cause or aggravate shortness of breath, coughing, asthma attacks, and lung diseases such as emphysema and bronchitis.
 - **ROGs** is a CARB term defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and includes several low-reactive organic compounds which have been exempted by the U.S. EPA (CARB 2004).
 - **VOCs** is a U.S. EPA term defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. The term exempts organic compounds of carbon which have been determined to have negligible photochemical reactivity such as: methane, ethane, and methylene chloride (CARB 2004).
- **Particulate Matter**, also known as particle pollution, is a mixture of extremely small solid and liquid particles made up of a variety of components such as organic chemicals, metals, and soil and dust particles (U.S. EPA 2016a).
 - **PM₁₀**, also known as inhalable coarse, respirable, or suspended PM, consists of particles less than or equal to 10 micrometers in diameter (approximately 1/7th the thickness of a human hair). These particles can be inhaled deep into the lungs and possibly enter the blood stream, causing health effects that include, but are not limited to, increased respiratory symptoms (e.g., irritation, coughing), decreased lung capacity, aggravated asthma, irregular heartbeats, heart attacks, and premature death in people with heart or lung disease (U.S. EPA 2016a).
 - **PM_{2.5}**, also known as fine PM, consists of particles less than or equal to 2.5 micrometers in diameter (approximately 1/30th the thickness of a human hair). These particles pose an increased risk because they can penetrate the deepest parts of the lung, leading to and exacerbating heart and lung health effects (U.S. EPA 2016a).
- **Carbon Monoxide (CO)** is an odorless, colorless gas that is formed by the incomplete combustion of fuels. Motor vehicles are the single largest source of carbon monoxide in the Basin. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can aggravate cardiovascular disease and cause headaches, dizziness, unconsciousness, and even death (U.S. EPA 2016b).
- **Nitrogen Dioxide (NO₂)** is a by-product of combustion. NO₂ is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO₂ are collectively referred to as NO_x and are major contributors to ozone formation.

NO₂ also contributes to the formation of particulate matter. NO₂ can cause breathing difficulties at high concentrations (U.S. EPA 2016c).

- **Sulfur Dioxide (SO₂)** is one of a group of highly reactive gases known as SO_x. Fossil fuel combustion in power plants and industrial facilities are the largest emitters of SO₂. Short-term effects of SO₂ exposure can include adverse respiratory effects such as asthma symptoms. SO₂ and other SO_x can react to form PM (U.S. EPA 2016d).
- **Sulfates (SO₄²⁻)** are the fully oxidized ionic form of sulfur. SO₄²⁻ are primarily produced from fuel combustion. Sulfur compounds in the fuel are oxidized to SO₂ during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Sulfate exposure can increase risks of respiratory disease (CARB 2009).
- **Lead** is a metal found naturally in the environment as well as in manufactured products. Mobile sources used to be the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. EPA established national regulations to gradually reduce the lead content in gasoline, and in 1996, lead was banned from gasoline. As a result of these efforts, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically. Lead can adversely affect multiple organ systems of the body and people of every age group. Lead poisoning in young children can cause brain damage, behavioral problems, and liver or kidney damage. Lead poisoning to adults can cause reproductive problems, muscle and joint pain, nerve disorders, and kidney disease (CARB 2016a).

Common criteria air pollutants, such as ozone precursors, SO₂, and PM, are emitted by a large number of sources and have effects on a regional basis (i.e., throughout the Basin). Other pollutants, such as hazardous air pollutants (HAPs; described in more detail below under “Toxic Air Contaminants”), toxic air contaminants (TACs; described in more detail below), and fugitive dust, are generally not as prevalent and/or emitted by fewer and more specific sources. As such, these pollutants have much greater effects on local air quality conditions and local receptors.

Ambient Air Quality Standards and Basin Attainment Status

In general, the NAAQS and CAAQS define “clean” air and are established at levels designed to protect the health of the most sensitive groups in our communities by defining the maximum amount of a pollutant (averaged over a specified period of time) that can be present in outdoor air without any harmful effects on people or the environment. Air pollutant levels are typically described in terms of concentration, which refers to the amount of pollutant material per volumetric unit of air. Concentrations are typically measured in parts per million (ppm) or micrograms per cubic meter (µg/m³).

The U.S. EPA, CARB, and regional air agencies assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories.

- **Attainment.** A region is “in attainment” if monitoring shows ambient concentrations of a specific pollutant are less than or equal to the NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a “maintenance area” for 10 years to ensure that the air quality improvements are sustained.

- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and State laws require nonattainment areas to develop strategies, implementation plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Table 4.3-1(Ambient Air Quality Standards and Basin Attainment Status) lists the NAAQS and CAAQS and summarizes the Basin’s attainment status.

**Table 4.3-1
Ambient Air Quality Standards and Basin Attainment Status**

Pollutant	Averaging Time ^(B)	California Standards ^(A)		National Standards ^(A)	
		Standard ^(C)	Attainment Status ^(D)	Standard ^(C)	Attainment Status ^(D)
Ozone	1-Hour (1979)	--	--	240 µg/m ³	Nonattainment
	1-Hour (Current)	180 µg/m ³	Nonattainment	--	--
	8-Hour (1997)	--	--	160 µg/m ³	Nonattainment
	8-Hour (2008)	--	--	147 µg/m ³	Nonattainment
PM ₁₀	8-Hour (Current)	137 µg/m ³	Nonattainment	137 µg/m ³	Nonattainment
	24-Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment
	Annual Average	20 µg/m ³	Nonattainment	--	--
PM _{2.5}	24-Hour	--	--	35 µg/m ³	Nonattainment
	Annual Average (1997)	--	--	15 µg/m ³	Attainment
	Annual Average (Current)	12 µg/m ³	Nonattainment	12 µg/m ³	Nonattainment
Carbon Monoxide	1-Hour	23,000 µg/m ³	Attainment	40,000 µg/m ³	Attainment
	8-Hour	10,000 µg/m ³	Attainment	10,000 µg/m ³	Attainment
Nitrogen Dioxide	1-Hour	339 µg/m ³	Attainment	188 µg/m ³	Unclassifiable/Attainment
	Annual Average	57 µg/m ³	Attainment	100 µg/m ³	Attainment
Sulfur Dioxide	1-Hour	655 µg/m ³	Attainment	196 µg/m ³	Attainment
	24-Hour	105 µg/m ³	--	367 µg/m ³	Unclassifiable/Attainment
	Annual Average	--	--	79 µg/m ³	Unclassifiable/Attainment
Lead	3-Months Rolling	--	--	0.15 µg/m ³	Nonattainment (Partial)
Hydrogen Sulfide	1-Hour	42 µg/m ³	Attainment	--	
Sulfates	24-Hour	25 µg/m ³	Attainment	--	
Vinyl Chloride	24-Hour	26 µg/m ³	Attainment	--	

Source: SCAQMD 2018, modified by MIG.

(A) This table summarizes the CAAQS and NAAQS and the Basin’s attainments status. This table does not prevent comprehensive information regarding the CAAQS and NAAQS. Each CAAQS and NAAQS has its own averaging time, standard unit of measurement, measurement method, and statistical test for determining if a specific standard has been exceeded. Standards are not presented for visibility reducing particles, which are

<p>not concentration-based. The Basin is unclassified for visibility reducing particles.</p> <p>(B) Ambient air standards have changed over time. This table presents information on the standards previously used by the U.S. EPA for which the Basin does not meet attainment.</p> <p>(C) All standards are shown in terms of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) rounded to the nearest whole number for comparison purposes (with the exception of lead, which has a standard less than $1 \mu\text{g}/\text{m}^3$). The actual CAAQS and NAAQS standards specify units for each pollutant measurement.</p> <p>(D) A= Attainment, N= Nonattainment, U=Unclassifiable.</p>

Toxic Air Contaminants (TACs)

In addition to criteria air pollutants, the U.S. EPA and CARB have classified certain pollutants as HAPs or TACs, respectively. The U.S. EPA has identified 187 HAPs, including such substances as benzene and formaldehyde; CARB also considers particulate emissions from diesel-fueled engines and other substances to be TACs. Since CARB's list of TACs references and includes U.S. EPA's list of HAPs, this EIR uses the term TAC when referring to HAPs and TACs.

TACs can cause severe health effects at very low concentrations (non-cancer effects), and many are suspected or confirmed carcinogens (i.e., can cause cancer) (U.S. EPA 2019a, CARB 2019b). People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects such as (but not limited to) reduce immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and/or other health problems (U.S. EPA 2019a, CARB 2019b). A description of the TACs associated with the proposed project and its vicinity is provided below.

- **Gasoline-Powered Mobile Sources.** According to the SCAQMD's *Multiple Air Toxics Exposure Study in the South Coast Air Basin* (SCAQMD 2015), or MATES IV, gasoline-powered vehicles emit TACs, such as benzene, which can have adverse health risks. Gasoline-powered sources emit TACs in much smaller amounts than diesel-powered vehicles. The MATES IV study identifies that diesel emissions account for between 68% to 80% of the total air toxics and cancer risk in the Basin.
- **Diesel Particulate Matter (DPM).** Diesel engines emit both gaseous and solid material; the solid material is known as DPM. Almost all DPM is less than $1 \mu\text{m}$ in diameter, and thus is a subset of $\text{PM}_{2.5}$. DPM is typically composed of carbon particles and numerous organic compounds. Diesel exhaust also contains gaseous pollutants, including VOCs and NO_x . The primary sources of diesel emissions are ships, trains, trucks, rail yards and heavily traveled roadways. These sources are often located near highly populated areas, resulting in greater DPM related health consequences in urban areas. The majority of DPM is small enough to be inhaled into the lungs and what particles are not exhaled can be deposited on the lung surface and in the deepest regions of the lungs where the lung is most susceptible to injury. In 1998, CARB identified DPM as a toxic air contaminant based on evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM also contributes to the same non-cancer health effects as $\text{PM}_{2.5}$ exposure (CARB 2016c).

Local Air Quality Conditions

The SCAQMD monitors air quality within the Basin. Existing levels of ambient air quality and historical trends within the planning area are best documented by measurements taken by the SCAQMD. The station closest to Monterey Park is identified as the West San Gabriel Valley Station (Station #088) by SCAQMD (CARB refers to this station as Pasadena). The station is located approximately four miles to the north of Monterey Park and monitors CO , O_3 , NO_2 , and

PM_{2.5}. This monitoring station represents the best approximation of the air quality conditions within the Planning Area. The station nearest to Monterey Park that monitors PM₁₀ is identified as the East San Gabriel Valley 1 Station (Station #060) by SCAQMD (CARB refers to this station as Azusa).

Table 4.3-2 summarizes the published monitoring data from West San Gabriel Valley and East San Gabriel Valley 1 (PM₁₀ only) monitoring stations from 2015 to 2017, the three most recent years for which verified, published data is available from the SCAQMD (2018 data was not yet available as of the time of writing of this EIR). Table 4.3-2 shows that air quality standards at this location have been exceeded for PM_{2.5}, PM₁₀, and O₃. The number of days exceeding both federal and State O₃ standards substantially increased in 2017 as compared to the two previous years. Local air conditions for the past three years have not exceeded federal PM₁₀ standards; however, conditions did exceed the State standard for the past three years, during six days in 2017 and twelve days in 2015 and 2016. Local air conditions exceeded the PM_{2.5} federal standard one day in 2015 and zero days in 2016 and 2017.

**Table 4.3-2
Local Air Quality Conditions (2015 – 2017)**

Pollutant	Ambient Air Standard	Year ^(A)		
		2015	2016	2017
Ozone (O₃)				
Maximum 1-hour Concentration (ppm)		0.111	0.126	0.139
Maximum 8-hr Concentration (ppm)		0.084	0.090	0.1
Number of Days Exceeding State 1-hr Standard	>180 µg/m ³	12	12	18
Number of Days Exceeding State 8-hr Standard	>137 µg/m ³	18	19	36
Days Exceeding Federal 1-hr Standard	>0.124 ppm	0	1	2
Days Exceeding Federal 8-hr Standard	>0.070 ppm	18	18	36
Carbon Monoxide (CO)				
Maximum 1-hr Concentration (ppm)		2.6	1.5	2.2
Maximum 8-hr Concentration (ppm)		1.6	1.0	1.7
Days Exceeding State 1-hr Standard	>23,000 µg/m ³	--	--	--
Days Exceeding Federal/State 8-hr Standard	>10,000 µg/m ³	--	--	--
Days Exceeding Federal 1-hr Standard	>40,000 µg/m ³	--	--	--
Nitrogen Dioxide (NO₂)				
Maximum 1-hr Concentration (ppb)		74.9	71.9	72.3
Annual Arithmetic Mean Concentration (ppb)		15.3	15.4	15.3
Days Exceeding State 1-hr Standard	>180 µg/m ³	--	--	--
Coarse Particulate Matter (PM₁₀)				
Maximum 24-hr Concentration (µg/m ³)		101	74	83
Annual Arithmetic Mean (µg/m ³)		37.1	33.7	31.4
Samples Exceeding State 24-hr Standard	>50 µg/m ³	12	12	6
Samples Exceeding Federal 24-hr Standard	>150 µg/m ³	0	0	0

Pollutant	Ambient Air Standard	Year ^(A)		
		2015	2016	2017
<i>Fine Particulate Matter (PM_{2.5})</i>				
Maximum 24-hr Concentration (µg/m ³)		48.5	29.21	22.8
Annual Arithmetic Mean (µg/m ³)		9.57	9.59	9.68
Samples Exceeding Federal 24-hr Standard	>35 µg/m ³	1	0	0
Source: SCAQMD 2019a, 2019b, 2019c (A) "--" indicates data are not available.				

Existing Emissions Levels in the Planning Area

The City's General Plan Resources Element identifies vehicle emissions from cars and trucks using city streets and the surrounding freeways as the primary source of the city's pollutant emissions. Monterey Park is generally bordered by, or contains portions of, I-10 to the north, SR 60 to the south, and I-710 to the west. These are all considered high-volume roadways (carrying more than 100,000 average daily vehicle trips) and as such are a major source of criteria air pollutants and TACs in the Planning Area. In addition to high-volume roadways, Monterey Park also has existing industrial sources, such as the Southern California Edison (SCE) Mesa Substation, which was approved to be expanded and upgraded in 2017, and the former Operating Industries, Inc., landfill. Both the substation and landfill is located in the southeast portion of the city. The landfill is located on a 190-acre site that operated from 1948 to 1984. The City's General Plan Solid and Hazardous Waste Element notes that the City, along with the EPA, has developed a long-term remediation plan for the site. Cleanup and maintenance of remedial systems are expected to continue until at least 2040, including maintenance of landfill cover, leachate, and landfill gas control systems.

The existing residential and non-residential land uses in the Planning Area generate emissions from the following sources:

- **Small "area" sources.** Existing land uses generate emissions from small area sources, including landscaping equipment and the use of consumer products such as paints, cleaners, and fertilizers that result in the evaporation of chemicals to the atmosphere during product use.
- **Energy use and consumption.** Existing land uses generate emissions from the combustion of natural gas in building water and space heating equipment, as well as industrial processes.
- **Mobile sources.** Existing land uses generate emissions from vehicles travelling to and from the Planning Area.

Existing land uses in the Planning Area are summarized in Table 3-1 of the Project Description (see Chapter 3). Existing emissions were estimated using the California Emissions Estimator Model, or CalEEMod, Version 2016.3.2. The existing emissions were estimated using default data assumptions contained within CalEEMod, with the following project-specific modifications:

- **Land Use Development:** The default acreage and square footage for each existing, modeled land use within the Planning Area was adjusted to reflect existing development conditions¹.
- **Energy Use and Consumption:** The residential default electrical energy intensity and natural gas energy intensity values were adjusted upwards by a factor of 1.13 and a factor of 1.27, respectively, to reflect lower energy efficiency requirements of the 2013 energy code (CAPCOA 2017). Similarly, the non-residential default electrical energy intensity, light energy intensity, and natural gas energy intensity values were adjusted upwards by a factor of 1.05, 1.02, and 1.01, respectively. This is appropriate as most buildings in the Planning Area were constructed prior to the adoption of both the 2013 (modeled energy efficiency) and 2016 (default assumption) Title 24 building energy efficiency standards.
- **Mobile Sources:** The default, weekday trip generation rates for existing land use types, with the exception of elementary schools, were replaced with trip generation rates contained in the Transportation Impact Study (TIS) prepared for the Focused General Plan Update (KOA 2019). According to the TIS and default elementary school trip rates, the existing land uses generate approximately 527,550 total daily vehicle trips per weekday. As estimated using CalEEMod, the existing land uses in the Planning Area generate approximately 1,411,576,106 annual vehicle miles travelled, or VMT (see Appendix B). Of this, approximately 650,487,300 VMT (46%) are attributable to residential land uses. Non-residential land uses account for approximately 761,088,806 VMT (54% of total VMT), with retail/shopping center land uses accounting for nearly 468,263,202 (62%) of the non-residential VMT.

The emissions generated by current land uses in the Planning Area are shown in Table 4.3-3 (Existing Land Use Emissions). The emissions are shown for two scenarios:

- **Year 2019 (current conditions)**, which are based on Year 2019 vehicle fleet characteristics (e.g., vehicle type, age, emission rates), and represent the emissions levels that exist at the time the Notice of Preparation was released for this EIR.
- **Year 2040 (future conditions)**, which are based on Year 2040 vehicle fleet characteristics and represent the projected emission that existing land uses would generate in the future (assuming no increase in population or change in land uses). This scenario provides an estimate of how emissions would change in the Planning Area as a result of regulations that would reduce motor vehicle emissions in the future, and allows for distinguishing the potential change in emissions that could occur from the change in land uses that would occur under Year 2040 growth projections, as opposed to a change in emissions that would occur from regulatory requirements that would be in place whether or not the Project is implemented.

¹ Only land uses that were identified for change were modeled.

**Table 4.3-3
Existing Land Use Emissions Estimates**

Emissions Source	Maximum Daily Pollutant Emissions (Pounds per Day) ^(A)							
	ROG	NO _x	CO	SO ₂	PM ₁₀		PM _{2.5}	
					Dust	Exhaust	Dust	Exhaust
Year 2019 (Current Conditions)								
Area Sources	7,020.9	488.1	13,303.1	29.3	--	1,727.6	--	1,727.6
Energy	36.2	319.6	203.9	2.0	--	25.0	--	25.0
Mobile Sources	1,268.0	5,815.4	16,057.7	48.0	3,628.3	54.5	956.6	1,007.9
<i>Year 2019 Total^(B)</i>	<i>8,325.1</i>	<i>6,623.0</i>	<i>29,564.7</i>	<i>79.2</i>	<i>3,573.8</i>	<i>1,807.2</i>	<i>956.6</i>	<i>2,760.5</i>
Year 2040 (Future Conditions)								
Area Sources	7,020.7	487.8	13,285.7	29.3	--	1,727.7	--	1,727.7
Energy	20.3	176.3	93.9	1.1	--	14.0	--	14.0
Mobile Sources	517.4	3367.8	6,470.1	36.2	3,799.1	15.1	1,016.5	14.0
<i>Year 2040 Total^(B)</i>	<i>7,755.4</i>	<i>4,031.9</i>	<i>19,849.7</i>	<i>66.6</i>	<i>3,799.1</i>	<i>1,756.8</i>	<i>1,016.5</i>	<i>1,755.7</i>
Source: MIG 2019, see Appendix B.								
(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted in this document. Maximum daily ROG, CO, SO _x emissions occur during the summer. Maximum daily NO _x , PM ₁₀ , and PM _{2.5} emissions occur during the winter.								
(B) Totals may not equal due to rounding.								

As shown in Table 4.3-3, mobile source emissions will decrease between Year 2019 and Year 2040 conditions. This decrease in emissions is due to improvements in exhaust emission control systems in newer vehicles, along with fewer older vehicles in use. In contrast, PM₁₀ and PM_{2.5} dust emissions will increase because these emissions are associated with, for example, paved road dust and tire and break wear. Also, 2040 trip rates were adjusted up by a growth factor of 1.06 (provided by the Traffic Impact Study (TIS)) to account for expected population growth within the Planning Area (regardless of whether or not the Project is implemented).

Sensitive Receptors

Some people are more affected by air pollution than others. Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. Both CARB and the SCAQMD consider residences, schools, parks and playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes to be sensitive air quality land uses and receptors (SCAQMD 2017a; CARB 2005).

In general, the sensitive air quality receptors in the Planning Area include, but are not limited to:

- Existing low-density, medium-density, and high-density residential receptors in the Planning Area;
- Existing elementary and intermediate schools, East Los Angeles College, and education or institutional facilities;
- Existing public facilities, such as the Boys and Girls Club and Edmund D. Edelman Children's Courthouse;

- Existing parks, including, but not limited to, Barnes Park, Bella Vista Park, and Highlands Park.

Existing Air Pollution-Related Health Risks

Sensitive air quality receptors are usually most affected by local sources of air pollution. The Planning Area borders or is near the I-10, I-710, and SR-60. Additionally, the Metrolink San Bernardino Line runs within the I-10 corridor. The Planning Area also includes several small stationary sources of emissions. These sources are described below.

Under the State's Air Toxics Hot Spots Information and Assessment Act (AB 2588; see Section 4.3.2), the SCAQMD is required to prepare an annual report of activities related to facilities that emit TACs. According to the SCAQMD's July 2017 Annual Report on AB 2588, Air Toxics Hot Spots Program, there were no facilities in the Planning Area that were subject to AB 2588 activities (SCAQMD 2018a). Publically available data from CARB indicates there are four facilities within the Planning Area that report emissions pursuant to AB 2588 (CARB 2016d):

- Aero Powder Coating Inc. at 708-710 Monterey Pass Road emits criteria air pollutants and TACs, including, but not limited to, ammonia emissions, at levels that did not exceed SCAQMD prioritization thresholds and, therefore, an AB 2588 risk assessment has not been prepared for this facility.
- Architectural Woodworking Co. at 582 S Monterey Pass Road emits total organic gases, ROG, and ammonia emissions at levels that did not exceed SCAQMD prioritization thresholds and, therefore, an AB 2588 risk assessment has not been prepared for this facility.
- East Los Angeles College at 1301 Avenida Cesar Chavez emits criteria air pollutants and TACs, including, but not limited to, ammonia emissions, at levels that did not exceed SCAQMD prioritization thresholds and, therefore, an AB 2588 risk assessment has not been prepared for this facility.
- West-bag Inc. at 1161 Monterey Pass Road emits criteria air pollutants and TACs, including, but not limited to, ammonia emissions, at levels that did not exceed SCAQMD prioritization thresholds and, therefore, an AB 2588 risk assessment has not been prepared for this facility.

According to the SCAQMD's MATES IV Carcinogenic Risk Map, the City of Monterey Park generally has an estimated cancer risk of above 1,200 (SCAQMD 2018d).² This cancer risk estimate is orders of magnitude higher than the SCAQMD's significance threshold of 10 cases in one million for cancer risk. These estimates, however, are based upon regional modeling efforts that largely do not account for site-specific emission rates and dispersion characteristics that typically result in refined and substantially lower health risk estimates.

CalEnviroScreen is another mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. The tool uses environmental, health, and socioeconomic information to

² According to the SCAQMD (2018b), cancer risk refers to the probability of contracting cancer associated with exposure to a substance. It is expressed as the chance per million population of a cancer case occurring. A risk of 1,005 per million means that in a population of one million individuals (exposed over a 70 year lifetime), 1,005 additional cancer cases would be expected.

produce scores for every census tract in California. The scores are then mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. According to the OEHHA CalEnviroScreen 3.0 Map, the Planning Area is in census tracts 6037482001, 6037530400, 6037482702, 6037482002, 6037482101, 6037481902, 6037481800, and 6037481713, and has pollution indicator percentiles ranging from 25% to 70% based on the CalEnviroScreen indicators (e.g., exposure, environmental effects, population characteristics, socioeconomic factors) (OEHHA 2018). These numbers also indicate relatively average health risks in the Planning Area, as compared to other areas of California.

4.3.2 – REGULATORY FRAMEWORK

Federal

Federal Clean Air Act

The Federal Clean Air Act (42 United States Code, §§ 7401, *et seq.*; CAA), as amended, provides the overarching basis for both Federal and State air pollution prevention, control, and regulation. The CAA establishes the U.S. EPA's responsibilities for protecting and improving the nation's air quality. The U.S. EPA oversees Federal programs for setting air quality standards and designating attainment status, permitting new and modified stationary sources of pollutants, controlling emissions of hazardous air pollutants, and reducing emissions from motor vehicles and other mobile sources. In 1971, to achieve the purposes of Section 109 of the CAA, the U.S. EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and public welfare from air pollutants in the atmosphere.

The U.S. EPA requires each State to prepare and submit a State Implementation Plan (SIP) that consists of background information, rules, technical documentation, and agreements that an individual State will use to attain compliance with the NAAQS within federally imposed deadlines. State and local agencies implement the plans and rules associated with the SIP, but the rules are also federally enforceable.

State

California Clean Air Act (Health and Safety Code, § 40910, *et seq.*)

In addition to being subject to federal requirements, air quality in the State is also governed by more stringent regulations under the California Clean Air Act (CCAA), which was enacted in 1988 to develop plans and strategies for attaining the CAAQS.

Both the CAA and CCAA are administered by CARB. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level.

In-Use Off-Road Diesel Equipment Program

CARB's In-Use Off-Road Diesel Equipment regulation is intended to reduce emissions of NO_x and PM from off-road diesel vehicles, including construction equipment, operating within California. The regulation imposes limits on idling; requires reporting equipment and engine

information and labeling all vehicles reported; restricts adding older vehicles to fleets; and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing exhaust retrofits for PM. The requirements and compliance dates of the off-road regulation vary by fleet size, and large fleets (fleets with more than 5,000 horsepower) must meet average targets or comply with Best Available Control Technology (BACT) requirements beginning in 2014. CARB has off-road anti-idling regulations affecting self-propelled diesel-fueled vehicles of 25 horsepower and up. The off-road anti-idling regulations limit idling on applicable equipment to no more than five minutes, unless exempted due to safety, operation, or maintenance requirements.

On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation

CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) regulation (also known as the Truck and Bus Regulation) is intended to reduce emission of NO_x, PM, and other criteria pollutants generated from existing on-road diesel vehicles operating in California. The regulation applies to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds that are privately or federally owned, and for privately and publicly owned school buses. Heavier trucks and buses with a GVWR greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Fleets complying with the heavier trucks and buses schedule must install the best available PM filter on 1996 model year and newer engines and replace the vehicle eight years later. Trucks with 1995 model year and older engines had to be replaced starting in 2015. Replacements with a 2010 model year or newer engine meet the final requirements, but owners can also replace the equipment with used trucks that have a future compliance date (as specified in regulation). By 2023, all trucks and buses must have at least 2010 model year engines with few exceptions.

CARB Stationary Diesel Engines – Emission Regulations

In 1998, CARB identified DPM as a TAC. To reduce public exposure to DPM, in 2000, the Board approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Risk Reduction Plan) (CARB 2000). Integral to this plan is the implementation of control measures to reduce DPM such as the control measures for stationary diesel-fueled engines. As such, diesel generators must comply with regulations under CARB's amendments to *Airborne Toxic Control Measure for Stationary Compression Ignition Engines* and be permitted by SCAQMD.

CARB Air Quality and Land Use Handbook

In 1998, CARB identified particulate matter from diesel-fueled engines as a TAC. CARB's Air Quality and Land Use Handbook is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process (CARB 2005). The CARB Handbook recommends that planning agencies consider proximity to air pollution sources when considering new locations for "sensitive" land uses, such as residences, medical facilities, daycare centers, schools, and playgrounds. Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the Handbook relative to the Planning Area include taking steps to consider or avoid siting new, sensitive land uses:

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- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day;
- Within 300 feet of gasoline fueling stations; or
- Within 300 feet of dry cleaning operations (dry cleaning with TACs is being phased out and will be prohibited in 2023). The SCAQMD (Regulation 14, Rule 21) has established emission controls for the use of perchloroethylene, the most common dry-cleaning solvent.

CARB prepared a technical supplement to the Handbook, a *Technical Advisory on Strategies to Reduce Air Pollution Exposure Near High Volume Roadways* (CARB 2017), that provides recommendations for strategies to minimize exposure of the public to air pollutants due to proximity to high volume roadways, such as reducing traffic emissions and removing pollution from the air.

Air Toxics “Hot Spots” Program

Toxic Air Contaminant Identification and Control Act (AB 1807) created California’s program to reduce exposure to air toxics. The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks (Health and Safety Code §§ 44300, *et seq.*). CARB must collect data on toxic emissions from stationary sources (facilities) throughout the State and ascertain potential health risks that these emissions pose to members of community for developing cancer or for resulting in non-cancer health effects. California’s Children’s Environmental Health Protection Act of 1999 (Health and Safety Code § 39606), also requires explicit consideration of infants and children in assessing risks from air toxics.

Substances regulated under California’s Air Toxics Hot Spots Program are defined in statute and include a list of substances developed by the following sources:

- International Agency for Research on Cancer (IARC);
- U.S. Environmental Protection Agency (U.S. EPA);
- U.S. National Toxicology Program (NTP);
- CARB Toxic Air Contaminant Identification Program List;
- Hazard Evaluation System and Information Service (HESIS) (State of California);
- Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) list of carcinogens and reproductive toxicants (State of California); and
- Any additional substance recognized by the State Board as presenting a chronic or acute threat to public health when present in the ambient air.

On May 6, 2005, the SCAQMD adopted a *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* containing numerous recommendations focused on land use planning, such as locating sensitive receptors away from substantial sources of TACs and CO hot spots (e.g., high-traffic freeways and roads, distribution centers, refineries). When locating receptors near large generators of TAC emissions, the SCAQMD recommends conducting CO hot spot analyses and analyzing health risk for these new developments.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a Joint Powers Authority under California law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. SCAG encompasses the counties of Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial.

SCAG is designated as a Metropolitan Planning Organization (MPO) and as a Regional Transportation Planning Agency. SCAG, as a designated MPO, is required to prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Information contained in Chapter 5 (The Road to Greater Mobility and Sustainable Growth) of the 2016 RTP/SCS forms the basis for the land use and transportation components of the Air Quality Management Plan (AQMP) and are utilized in the preparation of air quality forecasts and consistency analysis included in the AQMP.

SCAQMD Air Quality Management Plan (AQMP)

The SCAQMD is required to prepare an overall plan for air quality improvement, known as an AQMP. The purpose of an AQMP is to bring an air basin into compliance with federal and State air quality standards. The SCAQMD 2016 AQMP was adopted in 2017. That 2016 AQMP provides guidance for how the SCAQMD, in coordination with federal, State, regional, and local governments will bring the Basin back into attainment for the following NAAQS: 2008 8-hour ozone; 2012 annual PM_{2.5}; 2006 24-hour PM_{2.5}; 1997 8-hour ozone; and 1997 1-hour ozone.

To achieve the reductions necessary to bring ambient air quality back into attainment, the SCAQMD identifies seven primary objectives for the AQMP, which include:

1. Eliminating reliance on unknown future technology measures to demonstrate future attainment of air quality standards;
2. Calculating and accounting for co-benefits associated with measures identified in other, approved planning efforts (e.g., SCAG RTP/SCS);
3. Developing a strategy with fair-share emission reductions at the federal, State, and local levels;
4. Investing in strategies and technologies that meet multiple objectives regarding air quality, climate change, air toxic exposure, energy, and transportation—especially in disadvantaged communities;
5. Seeking, identifying, and securing significant sources of funding for incentives to implement early deployment and commercialization of zero and near-zero technologies, particularly in the mobile source sector;

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6. Enhancing the socioeconomic analysis and selecting the most efficient and cost-effective path to achieve multi-pollutant and -deadline targets; and
7. Prioritizing non-regulatory, innovative approaches that can contribute to the economic vitality of the regional while maximizing emission reductions.

The emission forecasts and demonstrations presented in the 2016 AMQP rely heavily on information contained in other planning and strategy documents. For example, the 2016 AQMP's long-term emissions inventory is based on the growth and land uses projections contained in the SCAG's 2016 RTP/SCS. Additionally, the conclusions relating to ozone compliance are based on implementation of measures presented in CARB's Mobile Source Strategy and SIP strategy. The Mobile Source Strategy outlines a suite of measures targeted at on-road light- and heavy-duty vehicles, off-road equipment, and federal and international sources. A subset of the statewide strategy is a mobile source strategy for the South Coast SIP. Because the SCAQMD has limited authority in regulating mobile source emissions, coordination and cooperation between SCAQMD, CARB, and the U.S. EPA is imperative to meeting the NOx reductions required to meet ozone standards. Although not incorporated specifically from another planning document strategy, the 2016 AQMP also provides numerous control measures for stationary sources.

SCAQMD Rules and Regulations

The SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of business, processes, operations, and products to implement the AQMP and the various federal and State air quality requirements. In general, rules that would be applicable to Project development include:

- **Rule 401 (Visible Emissions)** prohibits discharge into the atmosphere from any single source of emission for any contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade than that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- **Rule 402 (Nuisance)** prohibits discharges of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 (Fugitive Dust)** prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent capacity in the air). Rule 403 requires the implementation of Best Available Control Measures and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres.
- **Rule 445 (Wood Burning Devices)** prohibits installation of woodburning devices such as fireplaces and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Planning Area will be natural gas fueled fireplaces.

- **Rule 481 (Spray Coating Operations)** imposes equipment and operational restrictions during construction for all spray painting and spray coating operations.
- **Rule 1108 (Cutback Asphalt)** prohibits the sale or use of any cutback asphalt containing more than 0.5 percent by volume organic compounds which evaporate at 260°C (500°F) or lower.
- **Rule 1113 (Architectural Coatings)** establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.
- **Rule 1143 (Consumer Paint Thinners and Multi-Purpose Solvents)** prohibits the supply, sale, manufacture, blending, packaging, or repackaging of any consumer paint thinner or multi-purpose solvent for use in the District unless consumer paint thinners or other multi-purpose solvents comply with applicable VOC content limits.
- **Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities)** specifies work practice requirements to limit asbestos emissions from building demolitions and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos containing materials handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos containing waste materials.
- **Rule 2202 (On-Road Motor Vehicle Mitigation Options)** provides employers with options to reduce mobile source emissions generated from employee commutes. The rule applies to any employer who employs 250 or more employees on a full- or part-time basis at a worksite for a consecutive six-month period.

City of Monterey Park General Plan

The City's existing General Plan Resources Element includes the following goal and policies related to air quality:

- Goal Five: Improve air quality for future generations of Monterey Park residents.
 - Policy 5.1 - Continue to improve traffic flow through and within the city.
 - Policy 5.2 - Review zoning regulations annually to identify whether revisions are required to accommodate and encourage the use of alternative-fuel vehicles (for example, electric cars).
 - Policy 5.3 - Encourage employer rideshare and transit incentives programs by local businesses.
 - Policy 5.4 - Enhance pedestrian and bicycle circulation within Monterey Park.
 - Policy 5.5 - Support the development of higher density housing in close proximity to commercial service centers.
 - Policy 5.6 - Synchronize traffic signals to reduce the number of stops and starts by automobiles.
 - Policy 5.7 - Promote energy conservation and recycling by the public and private sectors.

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- Policy 5.8 - Integrate air quality planning with land use and transportation planning

4.3.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to air quality if it would:

- a) Conflict with or obstruct implementation of applicable air quality plan;
- b) 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;
- c) Expose sensitive receptors to substantial pollutant concentrations (i.e., carbon monoxide hot spots or TACs); or
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Regional Significance Thresholds

The significance thresholds in the SCAQMD's *CEQA Air Quality Handbook* were used for evaluating the impacts associated with the implementation of the Project. The SCAQMD has established mass daily thresholds for regional pollutant emissions, as shown in Table 4.3-4.

**Table 4.3-4
SCAQMD Regional Emission Significance Thresholds**

Air Contaminant	Construction (Maximum Pounds Per Day)	Operation (Maximum Pounds Per Day)
NO _x	100	55
VOC	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550
Lead	3	3

Source: SCAQMD 2019d

Localized Significance Thresholds

In addition to establishing thresholds of significance for emissions of criteria air pollutants on a regional level, the SCAQMD has also developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards (i.e., would result in less than significant adverse localized air quality impacts). The LST methodology takes into account a number of factors, including: (1) existing ambient air quality in each Source Receptor Area (SRA); (2) how many acres the project would disturb in a day; and (3) how far project construction and operational activities would take place from the nearest sensitive receptor. Unlike the regional emission significance thresholds presented in Table 4.3-

4, LSTs have only been developed for NO_x, CO, PM₁₀, and PM_{2.5}. The construction and operational LSTs for one-acre, two-acre, and five-acre sites in SRA 11 (South San Gabriel Valley), the SRA in which the City of Monterey Park is located, are shown in Table 4.3-5 below.

**Table 4.3-5
SCAQMD Localized Significance Thresholds for Source Receptor Area 11**

Pollutant Monitored	Maximum Allowable Emissions (Pounds per Day) as a Function of Receptor Distance (in Feet) from Site Boundary				
	82 Feet	164 Feet	328 Feet	656 Feet	1,640 Feet
ONE-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO _x)	83	84	96	123	193
Carbon Monoxide (CO)	673	760	1,113	2,110	6,884
Particulate Matter (PM ₁₀)	5	13	29	60	153
Particulate Matter (PM _{2.5})	4	5	9	20	83
Operational Thresholds					
Nitrogen Oxides (NO _x)	83	84	96	123	193
Carbon Monoxide (CO)	673	760	1,113	2,110	6,884
Particulate Matter (PM ₁₀)	1	4	7	15	37
Particulate Matter (PM _{2.5})	1	2	3	5	20
TWO-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO _x)	121	118	126	147	206
Carbon Monoxide (CO)	1,031	1,143	1,554	2,660	7,530
Particulate Matter (PM ₁₀)	7	22	37	68	162
Particulate Matter (PM _{2.5})	5	8	12	24	89
Operational Thresholds					
Nitrogen Oxides (NO _x)	121	118	126	147	206
Carbon Monoxide (CO)	1,031	1,143	1,554	2,660	7,530
Particulate Matter (PM ₁₀)	2	6	9	17	39
Particulate Matter (PM _{2.5})	2	2	3	6	22
FIVE-ACRE SITE					
Construction Thresholds					
Nitrogen Oxides (NO _x)	183	176	184	202	245
Carbon Monoxide (CO)	1,814	1,984	2,549	4,024	9,342
Particulate Matter (PM ₁₀)	14	43	59	91	186
Particulate Matter (PM _{2.5})	9	12	19	34	104
Operational Thresholds					
Nitrogen Oxides (NO _x)	183	176	184	202	245
Carbon Monoxide (CO)	1,814	1,984	2,549	4,024	9,342
Particulate Matter (PM ₁₀)	4	11	15	22	45
Particulate Matter (PM _{2.5})	2	3	5	9	25
Source: SCAQMD 2008, modified by MIG					
Note: The localized thresholds for NO _x in this table account for the conversion of NO to NO ₂ . The emission thresholds are based on NO ₂ levels, as this is the compound associated with adverse health effects.					

Carbon Monoxide “Hot Spot” Thresholds

Historically, to determine whether a project poses the potential for a CO hotspot, the quantitative CO screening procedures provided in the *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) were used (UCD ITS 1997). The Protocol determines a project may worsen air quality if the project increases the percentage of vehicles in cold start modes by two percent or more; significantly increases traffic volumes by five percent or more; or worsens traffic flow, defined for signalized intersections as increasing average delay at intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F. With new vehicles and improvements in fuels resulting in fewer emissions, the retirement of older polluting vehicles, and new controls and programs, CO concentrations have declined dramatically in California. As a result of emissions controls on new vehicles, the number of vehicles that can idle and the length of time that vehicles can idle before emissions would trigger a CO impact has increased, so the use of LOS as an indicator is no longer applicable for determining CO impacts.

The Bay Area Air Quality Management District (BAAQMD) developed a screening-level analysis for CO hotspots in 2010, which finds that projects that are consistent with the applicable congestion management program, and that do not cause traffic volumes at affected intersections to increase to more than 44,000 vehicles per hour, would not result in a CO hotspot that could exceed State or federal air quality standards (BAAQMD 2017 pg. 3-4). CO modeling was conducted for the SCAQMD’s 2003 AQMP at four busy intersections during morning and evening peak hour periods as well. The busiest intersection studied in this analysis, Wilshire Boulevard and Veteran Avenue, had 8,062 vehicles per hour during morning peak hours, 7,719 vehicles per hour during evening peak hours, and approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour CO concentration for this intersection was 4.6 ppm, which is less than a fourth of the 1-hour CAAQS CO standard (20 ppm) (SCAQMD 2003a). The BAAQMD screening threshold is generally consistent with the results of the CO modeling conducted for the SCAQMD’s 2003 AQMP.

Therefore, for purposes of this EIR, the Project would pose the potential for a CO hotspot if it would exceed the BAAQMD’s screening traffic level for peak hour intersection traffic volumes (44,000 vehicles per hour) (thereby having the potential to result in CO concentrations that exceed 1-hour State [20 ppm], 1-hour federal [35 ppm], and/or State and federal 8-hour [9 ppm] ambient air quality standards for CO).

Toxic Air Contaminant Thresholds

The SCAQMD recommends preparation of a Health Risk Assessment (HRA) for large commercial or industrial projects to determine the specific health risks posed by long-term emissions of TACs from a project. Following OEHHA and SCAQMD guidance, health risks from TAC emissions are estimated based on “Individual Cancer Risk,” which is the likelihood that a person exposed to TACs over 70-year lifetime will get cancer or suffer some other “non-cancer” effect (measured by what is called as a “hazard index”). Numerous weighting factors (e.g., age sensitivity factors, breathing rates) are applied during health risk calculations to account for those members of the public who may be more sensitive to pollution than others (e.g., sensitive receptors). A project is considered to have a significant impact if it results in any of the following:

- A maximum incremental cancer risk greater than or equal to 10 in one million;

- A population-wide cancer burden greater than 0.5 (in areas where cancer risk is greater than or equal to 1 in one million); or
- A chronic or acute hazard index greater than or equal to 1.0.

The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ruled CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." The opinion also holds that when a project has "potentially significant exacerbating effects on existing environmental hazards," those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project. The Supreme Court provided the example of a project that threatens to disperse existing buried environmental contaminants that would otherwise remain undisturbed. The Court concluded that it is proper under CEQA to undertake an analysis of the dispersal of existing contaminants because such an analysis would be focused on how the project "would worsen existing conditions." The court also found that the limited number of express CEQA provisions that require analysis of the impacts of the existing environment on a project – such as impacts associated with school siting and airports – should be viewed as specific statutory exceptions to the general rule that such impacts are not properly within CEQA's scope.

Consistent with this court ruling, the impact discussion presented below focuses on the Project's effect on air quality and existing health risks, rather than the effect of existing air quality and its potential risks on the Project's residents. The analysis evaluates whether the Project could create or exacerbate adverse public health risk conditions at sensitive receptor locations, as identified in the SCAQMD's CEQA significance criteria.

4.3.4 – IMPACTS AND MITIGATION MEASURES

This section describes (1) potential impacts related to conflicts with an applicable air quality plan, (2) violations of air quality standards, (3) cumulatively considerable net increases of criteria pollutants, (4) exposure of sensitive receptors to substantial pollutant concentrations, and (5) objectionable odors which could result from the implementation of the Project. The section then recommends mitigation measures as needed to reduce significant impacts.

Conflicts with Local Air Quality Plans

Impact AQ-1 – Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Analysis of Impacts

As described in Section 4.3.1, the Project is within the South Coast Air Basin, which is under the jurisdiction of the SCAQMD. Pursuant to the methodology provided in Chapter 12 of the SCAQMD *CEQA Air Quality Handbook*, consistency with the AQMP is affirmed if the Project:

- 1) Is consistent with the growth assumptions in the AQMP; and
- 2) Does not increase the frequency or severity of an air quality standards violation or cause a new one.

Consistency Criterion 1 refers to the growth forecasts and associated assumptions included in the 2016 AQMP. The 2016 AQMP was designed to achieve attainment for all criteria air

pollutants within the Basin while still accommodating growth in the region. Projects that are consistent with the AQMP growth assumptions would not interfere with attainment of air quality standards, because this growth is included in the projections used to formulate the AQMP. Therefore, if the growth allowed by the Project is consistent with the regional population, housing, and employment forecasts identified by SCAG in the RTP/SCS, Project implementation would be consistent with the AQMP, even if emissions could potentially exceed the SCAQMD’s recommended daily emissions thresholds.

The Project includes land use designations that allow development of up to a total of 26,298 dwelling units accommodating a population of up to 80,581 total residents. This represents a potential increase of 3,816 dwelling units, a potential increase in population of up to 11,693 residents, and an increase in potential employment of up to 2,730 employees over existing conditions within the Planning Area (see Chapter 4.17, Population and Housing). The 2016 RTP/SCS population and employment projections for the City of Monterey Park, as well as the increase in population and employment that would occur with the implementation of the Project, are shown in Table 4.3-6.

**Table 4.3-6
RTP/SCS and Focused General Plan Update Net Growth Assumptions**

Scenario	Net New Population	Net New Employment
<i>Monterey Park Focused GPU</i>	<i>11,693</i>	<i>2,730</i>
RTP/SCS Growth 2012 - 2040	3,700	4,000
Within Growth Assumptions?	No	Yes

Source: SCAG 2016, City of Monterey Park 2019.

As shown in Table 4.3-6, the anticipated potential growth allowed by the implementation of the Focused General Plan Update would exceed SCAG’s growth projection and, therefore, be inconsistent with the 2016 AQMP.

Consistency Criterion 2 refers to the CAAQS and NAAQS. As described in Section 4.3.1, the South Coast Air Basin is designated nonattainment for national and state O₃ standards, national and State PM_{2.5} standards, and national PM₁₀ standards. The analyses of potential emissions under Impact AQ-2 indicates that Project development could result in emissions of ROG, an ozone precursor pollutant, during potential construction activities that exceed SCAQMD thresholds of significance; however, Mitigation Measure AQ-2 would require the use of “super compliant” architectural coatings (see definition below) that would reduce construction ROG emissions to a less than significant level. Although the mass amount of emissions attributable to a single project (i.e., pounds per day) does not necessarily contribute to air pollution levels measured throughout the South Coast Air Basin and in or near the Monterey Park, the SCAQMD, in developing its CEQA significance thresholds, considered the emission levels at which a project’s individual emissions would be cumulatively considerable (SCAQMD 2003b; page D-3). The SCAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant. As discussed under Impact AQ-2 below, Project development construction emissions would not exceed the SCAQMD’s regional or local significance thresholds with mitigation and, therefore, would not have the potential to cause or contribute to new or more frequent exceedances of national and State ozone standards; however, NO_x emissions under the 2040 growth projection could exceed the SCAQMD’s regional significance thresholds and,

therefore, have the potential to cause or contribute to new or more frequent exceedances of national and State ozone standards.

Level of Significance Before Mitigation

Since the growth that could occur under the Project's 2040 conditions would be inconsistent with the 2016 RTP/SCS growth forecasts, the Project could increase the frequency and/or severity of air quality violations in the Basin or otherwise impede attainment of air quality standards. This is considered a **potentially significant impact**.

Mitigation Measures

See Mitigation Measure AQ-2A, AQ-2B, AQ-2C, and AQ-2D under Impact AQ-2, below.

Level of Significance After Mitigation

The growth that could occur under the Project by 2040 would be inconsistent with the 2016 RTP/SCS growth forecast and could increase the frequency and/or severity of air quality violations in the Basin or otherwise impede attainment of ozone air quality standards, even with the inclusion of mitigation measures designed to reduce project emissions. There are no additional feasible measures that would reduce this impact. Therefore, this impact would be **significant and unavoidable**.

Net Increases of Non-attainment Criteria Pollutants

Impact AQ-2 – 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?

Analysis of Impacts

Project implementation would generate short-term construction and long-term operational emissions of regulated air pollutants (i.e., criteria air pollutants and TACs). These emissions would be released to the ambient air and disperse according to the topographic and meteorological influences that prevail near the Planning Area and in the greater South Coast Air Basin (see Section 4.3.1).

Although future projects occurring within the Planning Area would be guided by the goals and policies outlined in the Focused General Plan Update, the City's adoption of the Project would not authorize nor permit any individual projects to move forward at this time. Nonetheless, the City has prepared an air quality analysis that focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Project. The SCAQMD has not adopted plan-level significance thresholds. The SCAQMD and/or CARB monitor levels of criteria air pollutant concentrations in ambient air to evaluate attainment of CAAQS and NAAQS; the significance of the net change in criteria air pollutant emissions that the implementation of the Project could emit during construction and operation is evaluated below by comparing the potential levels of emissions from these activities against the SCAQMD's regional and localized significance thresholds (see Table 4.3-4 and Table 4.3-5). As explained under Impact AQ-1, the SCAQMD, in developing its CEQA significance thresholds, considered the emission levels at which a project's individual emissions would be cumulatively considerable (SCAQMD 2003b; page D-3). The SCAQMD considers projects that result in emissions that exceed its CEQA

significance thresholds to result in individual impacts that are cumulatively considerable and significant.

Neither the SCAQMD nor CARB conduct regular and routine monitoring of TACs because most TACs do not have an established ambient air quality standard against which ambient air concentrations can be compared³; however, TAC emissions could result in local effects if substantial concentrations were to occur at sensitive receptor locations as a result of the proposed project. The proposed project's TAC emissions are discussed under Impact AQ-3 below.

Construction Emissions

Regional Construction Emissions. The Project would not directly result in construction of any development or infrastructure; however, future development supported by the Focused General Plan Update would result in short-term construction-related criteria pollutant emissions that have the potential to adversely affect air quality. Short-term criteria pollutant emissions would occur during demolition, site preparation, grading, building construction, paving, and architectural coating activities associated with specific new development projects. Emissions would occur from use of equipment, worker, vendor and hauling trips, and disturbance of on-site soils (fugitive dust). ROG and NO_x emissions are primarily associated with gas and diesel equipment exhaust and the application of architectural coatings. Fugitive dust emissions (PM₁₀ and PM_{2.5}) are primarily associated with site preparation and vary as a function of such parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and VMT by construction vehicles on- and off-site. Typical construction equipment associated with development and redevelopment projects includes dozers, graders, excavators, loaders, and trucks. The types and quantity of equipment, as well as duration of construction activities, would be dependent on project-specific conditions. Larger projects would require more equipment over a longer timeframe than would smaller projects; however, specific information is not available for future projects at this time because Project development is expected to occur over approximately 20 years, and the location, type, and timing of construction would be based on market demand.

To determine if anticipated typical construction activities could result in a significant air quality impact, construction emissions were modeled using CalEEMod V. 2016.3.2. CalEEMod utilizes construction survey data to estimate construction phase lengths and equipment needs based on the area of an individual project site. Due to the uncertainty of timing and methods of construction activities that would occur under the Project, the construction emissions analysis assumed that a maximum of 10% of the Project's planned growth could be under construction in any given year, as shown in Table 4.3-7⁴.

³ Ambient air quality standards have been adopted for lead and vinyl chloride, both of which are TACs; however, these pollutants are monitored at far fewer locations than criteria air pollutants like ozone precursors and PM. In addition, the SCAQMD does periodically conduct monitoring and modeling of TAC emissions sources; however, these efforts are usually source-specific.

⁴ This is considered a conservative assumption because it represents a doubling of the overall average activity that could occur over a 21-year growth period (2020-2040).

**Table 4.3-7
Project Growth (2040), Average Year, and Worst-Case Year Construction Activity**

CalEEMod Land Use Input		General Plan Development ^(A)		
Type	Subtype	Net Growth (2040) ^(B)	Average Year Development ^(C)	Worst-Case Year Development ^(D)
Commercial	General Office Building	883,902 SF	44,195 sf	88,390 sf
Educational	Elementary School	1,298 Students	64 Students	128 Students
Educational	Junior College (2 years)	3,697 Students	185 Students	370 Students
Residential	Multi-Family Housing	3,836 Dwelling Units	192 Dwelling Units	384 Dwelling Units
Recreational	Hotel/Motel	607 Rooms	30.35 Rooms	60.7 Rooms
Retail	Reginal Shopping Center	619,932 SF	30,997 SF	61,993 SF

(A) Development values are approximate.
 (B) The growth values in this table do not represent the total development square footage that would exist in the Plan's horizon year (2040). Rather, these values are estimates of the total netnew square footage and dwelling units that would be constructed by 2040. The values do not include remodeling of existing buildings, which would not result in significant construction emissions.
 (C) Values reflect 2040 growth development divided by 21 years.
 (D) Values reflect twice the average year development intensity, or approximately 10% of total Project growth.

Potential construction emissions were modeled using CalEEMod, Version 2016.3.2 (see Appendix B). The modeling assumes default construction phase and duration information based on the land use inputs shown in Table 4.3-7. Construction was assumed to start in 2020; the type and amount of equipment used during construction was generated using CalEEMod default assumptions. Due to the changeover in construction fleets as old equipment is replaced with newer, cleaner equipment, it is anticipated that maximum daily emissions would decrease as development occurs beyond 2020. The modeled potential annual construction emissions are presented in Table 4.3-8. It is mandatory for all construction projects in the South Coast Air Basin to comply with SCAQMD Rule 403 (Fugitive Dust). Therefore, the emissions presented in Table 4.3-8 include the mandatory application of dust control measures commensurate with SCAQMD Rule 403.

**Table 4.3-8
Project Construction Emissions Estimates**

Season	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀ ^(A)	PM _{2.5} ^(B)
Summer	140.8	56.6	38.2	0.1	10.4	6.7
Winter	140.8	56.6	38.2	0.1	10.4	6.7
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	Yes	No	No	No	No	No

Source: MIG, 2019 (see Appendix B) and SCAQMD 2019d.
 (A) PM₁₀ emissions estimates include both exhaust and dust emissions. Fugitive dust emissions include application of control measures as required by SCAQMD Rule 403, including watering exposed areas three times (3x) daily and cleaning paved roads.
 (B) PM_{2.5} emissions estimates include both exhaust and dust emissions. Fugitive dust emissions include application of fugitive dust control measures as required by SCAQMD Rule 403, including watering exposed areas three times (3x) daily and cleaning paved roads.

The SCAQMD does not have a recommended plan-level (as compared with project-level) threshold of significance for short-term construction related emissions of ROG, NO_x, PM₁₀ and PM_{2.5}. But, as shown in Table 4.3-8, the worst-case maximum daily construction emissions associated with Project implementation could have the potential for ROG (an ozone precursor) emissions to exceed SCAQMD regional thresholds. The modeled ROG emissions exceed regional thresholds due to the architectural coating phase associated with the modeled construction activities, which would account for more than 99% of estimated ROG emissions.

To reduce potential ROG emissions generated during coating application activities to levels below SCAQMD thresholds, the City would require development projects to implement Mitigation Measure AQ-2, which requires the use of SCAQMD Rule 1113 “super compliant” coatings with a lower VOC content than the CalEEMod default assumption, as well as the application of coatings with efficient spray equipment. The standard VOC content assumption for residential and non-residential coatings is 50 and 100 grams per liter, respectively. Thus, the use of coatings with a VOC content of less than 10 grams per liter of coating would substantially reduce ROG emissions during coating application activities, as shown in Table 4.3-9.

**Table 4.3-9
Mitigated Project Construction Emissions Estimates**

Season	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀ ^(A)	PM _{2.5} ^(B)
Summer	25.2	56.6	38.2	0.1	10.4	6.7
Winter	25.3	56.6	38.2	0.1	10.4	6.7
SCAQMD CEQA Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: MIG, 2019 (see Appendix B) and SCAQMD 2019d.

(A) PM₁₀ emissions estimates include both exhaust and dust emissions. Fugitive dust emissions include application of control measures as required by SCAQMD Rule 403, including watering exposed areas three times (3x) daily.

(B) PM_{2.5} emissions estimates include both exhaust and dust emissions. Fugitive dust emissions include application of fugitive dust control measures as required by SCAQMD Rule 403, including watering exposed areas (3x) daily.

Localized Construction Emissions. The Project’s maximum daily construction emissions (for the 10% development scenario shown in Table 4.3-8) are compared against the SCAQMD’s-recommended LSTs in Table 4.3-10 (Construction Emissions Localized Significance Thresholds Analysis). Consistent with the SCAQMD’s LST methodology, the emissions included in the construction LST analysis are on-site emissions only, and the LST thresholds against which potential on-site emissions are compared against are based on the project size, in acres, as determined using the specific equipment list generated by CalEEMod and the equipment activity estimates contained in the SCAQMD’s *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* (SCAQMD 2016b).⁵ The LST thresholds are for SRA 11 (South San Gabriel Valley), the SRA in which the Project is located, and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

⁵ According to the SCAQMD’s *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, the maximum number of acres disturbed on the peak day of use per crawler tractor, grader, and rubber tired dozer is 0.5 acres per 8 hour day, while the maximum number of acres disturbed on the peak day of use per scraper is 1 acre per 8 hour day.

Based on the use of two excavators, two dozers, one grader, two crawler tractors, and two scrapers during the grading construction phase, potential on-site construction emissions were estimated against the SCAQMD's thresholds for a 5-acre project size. The emissions presented in Table 4.3-10 include the mandatory application of dust control measures commensurate with SCAQMD Rule 403, as described above under the regional construction emissions discussion.

**Table 4.3-10
Construction Emissions Localized Significance Thresholds Analysis**

Construction Phase ^(B)	Maximum On-Site Pollutant Emissions (lbs/day) ^(A)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition	33.2	21.8	2.3	1.6
Site Preparation	42.4	21.5	9.2	5.9
Grading	50.2	32.0	5.6	3.4
Building Construction	19.2	16.8	1.1	1.1
Paving	14.1	14.7	0.8	0.7
Architectural Coating	1.7	1.8	0.1	0.1
SCAQMD LST Threshold ^(C)	183	1,814	14	9
Threshold Exceeded?	No	No	No	No

Source: MIG, 2019 (see Appendix B) and SCAQMD 2009, 2016b.

(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted in this report.

(B) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.

(C) LST threshold is based on 5-acre project size and 25-meter receptor distance. Pursuant to the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008, page 3-3), the threshold for a 25-meter receptor distance was evaluated.

As shown in Table 4.3-10, the maximum daily on-site emissions generated during project construction would not exceed the SCAQMD's recommended LST thresholds. Thus, this impact would be less than significant.

Operational Emissions

Regional Operational Emissions. The Planning Area is currently occupied primarily by various residential and non-residential uses. If adopted, the Project would accommodate new residential and non-residential land uses, some of which would involve redevelopment of existing development. Overall, Project implementation would increase residential dwelling units and non-residential square footage in the City under year 2040 growth conditions. The net change in land uses associated with Project growth is shown in 4.3-11.

**Table 4.3-11
Project Growth and Net Land Use Change**

CalEEMod Land Use Inputs		General Plan Area Development Levels ^(A)		
Type	Subtype	Existing (2019)	Projected Growth (2040)	Net Change
Residential	Single Family Housing	13,488 DU	13,468 DU	-20 DU
Residential	Multi-Family Housing	8,994 DU	12,830 DU	+3,836 DU
Retail	Regional Shopping Center	5,741,492 SF	6,361,424 SF	+619,932 SF
Commercial	General Office Building	5,252,164 SF	6,136,066 SF	+883,902 SF
Industrial	General Light Industrial	2,025,800 SF	1,786,058 SF	-239,742 SF
Recreational	Hotel/Motel	727 Rooms	1,334 Rooms	+607 Rooms
Educational	Junior College (2 years)	36,970 Students	40,667 Students	+3,697 Students
Educational	Elementary School	6,246 Students	7,544 Students	+1,298 Students

Source: MIG 2019 (see Appendix B).
(A) DU (dwelling units); SF (square feet)

Growth under the Project could result in long-term regional emissions of criteria air pollutants and ozone precursors associated with the operation of area sources, energy sources, and mobile sources. Area source emissions, which are widely distributed and made of many small emissions sources (e.g., landscaping equipment, consumer products, painting operations,), were modeled according to the size and type of land uses proposed. Energy sources, which include natural gas combustion for heating and other purposes, were also modeled based on the size and type of land uses included in the Project's 2040 growth forecast. Mobile-source emissions were modeled based on the daily vehicle trips that would result from the Project. The net change in emissions of regulated air pollutants that could occur under Focused General Plan update implementation was modeled using CalEEMod, V. 2016.3.2. The net change in operational emissions for the Project was modeled based on the Project's 2040 growth projections, using default data assumptions provided by CalEEMod, with the following project-specific modifications:

- **Land Use Development:** The default acreage and square footage for proposed development intensities within the Planning Area was adjusted to reflect proposed development conditions (considering allowable floor-to-area ratio, acreage in the Planning Area, etc.).
- **Area Sources:** Woodstoves and hearths were excluded from new development pursuant to SCAQMD Rule 445.
- **Energy Use and Consumption:** The residential default electrical energy intensity values were adjusted downwards by a factor of 0.5 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018). Similarly, the non-residential default light energy intensity value was adjusted downwards by a factor of 0.7 to reflect increased lighting efficiency in the 2019 energy code.
- **Mobile Sources:** The default weekday trip generation rates for existing land use types were replaced with trip generation rates contained in the TIS prepared for the Focused General Plan Update (KOA 2019) with the exception of elementary school land use trip rates. According to the TIS and default elementary school trip rates, the proposed land uses generate approximately 569,515 total daily vehicle trips per weekday. As estimated

using CalEEMod, Planning Area land uses would, in 2040, generate approximately 1,531,570,752 annual VMT (see Appendix B). Of this, approximately 736,948,534 VMT (48%) would be attributable to residential land uses. Non-residential land uses would account for approximately 794,622,218 VMT (52%), with retail/shopping center land uses accounting for nearly 485,979,322 VMT (62% of the total non-residential VMT).

The net change in long-term operational emissions that would be generated by Project growth are shown in Table 4.3-12. As explained in Section 4.3.1, under the “Existing Emissions Levels in the Planning Area” discussion, the net change in emissions evaluated in this EIR is based on the difference between the existing land uses under future year 2040 conditions and the Project land uses under 2040 growth conditions.

**Table 4.3-12
2040 Project Growth Forecast Operational Emissions Estimates**

Emission Scenario	Maximum Daily Emissions (Pounds Per Day) ^(A)					
	ROG	NO _x	CO	SO ₂	PM ₁₀ ^(B)	PM _{2.5} ^(B)
Project Growth Forecast Operational Emissions in Year 2040						
Area Sources	6,974.5	540.0	13,228.5	28.7	1,674.7	1,674.7
Energy Sources	23.3	202.3	109.3	1.3	16.1	16.1
Mobile Sources	524.0	3,409.2	6,560.7	36.8	3,869.5	1,045.4
<i>Total Emissions^(C)</i>	<i>7,521.7</i>	<i>4,151.6</i>	<i>19,898.5</i>	<i>66.8</i>	<i>5,560.3</i>	<i>2,736.2</i>
Existing Land Uses Year 2040 Condition^(D)						
Area Sources	7,020.7	487.8	13,285.7	29.3	1,727.7	1,727.7
Energy	20.3	176.3	93.9	1.1	14.0	14.0
Mobile Sources	517.4	3,367.8	6,470.1	36.2	3,814.2	1,030.5
<i>Total Emissions^(C)</i>	<i>7,758.4</i>	<i>4,031.9</i>	<i>19,849.7</i>	<i>66.6</i>	<i>5,555.9</i>	<i>2,772.2</i>
Net Change in Emissions Levels						
Area Sources	-46.2	52.2	-57.2	-0.6	-53.0	-53.0
Energy	3.0	26.0	15.4	0.2	2.1	2.1
Mobile Sources	6.6	41.4	90.6	0.6	55.3	14.9
<i>Total Emissions^(B)</i>	<i>-233.6</i>	<i>119.6</i>	<i>48.8</i>	<i>0.2</i>	<i>4.4</i>	<i>-36.0</i>
SCAQMD CEQA Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	Yes	No	No	No	No
Source: MIG 2019 (see Appendix B), SCAQMD 2019d						
(A) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. Maximum daily ROG, CO, SO _x emissions occur during the summer. Maximum daily NO _x emissions occur during the winter. In general, due to rounding, there is no difference between summer and winter PM ₁₀ and PM _{2.5} emissions levels for the purposes of this table.						
(B) PM ₁₀ and PM _{2.5} values include both fugitive dust and exhaust values.						
(C) See Table 4-3.3 for 2040 future baseline conditions emissions.						
(D) Totals may not equal due to rounding.						

As shown in Table 4.3-12, the modeled, maximum daily operational emissions associated with potential 2040 growth under the Project do not exceed the SCAQMD’s recommended regional

pollutant thresholds for any pollutants, except NO_x. The increase in NO_x, as well as other mobile source emissions, is attributable to the increase in VMT that would occur with implementation of the Project. As described in Section 4.3.1, the South Coast Air Basin is designated nonattainment for national and State ozone standards, and NO_x is an ozone precursor pollutant. Therefore, the potential increase in NO_x emissions that could occur with Project growth is considered a potentially significant impact.

As shown in Table 4.3-12, area sources (e.g., gas fireplaces and consumer products associated with increased residential development) and mobile sources account for nearly 78% of the NO_x emissions estimated to occur with growth under the Focused General Plan Update. The TIS prepared for the project indicates that land use trip generation rates were reduced to reflect transit credits for areas of the city adjacent to high-quality transit lines, such as Metro Rapid lines or transit centers. These credits results in an approximate 5.3% reduction in trips generated under the Project's 2040 growth projection.

Additional reductions in area mobile source emissions would be required to bring NO_x emissions allowed by the Project growth in 2040 to levels below SCAQMD-recommended thresholds. To reduce mobile source emissions associated with Project growth, the City would implement Mitigation Measures AQ-2B, AQ-2C, and AQ-2D below. Mitigation Measures AQ-2B, AQ-2C, and AQ-2D would reduce residential and non-residential vehicle trip emissions by promoting electric vehicle infrastructure, bicycle parking, and non-residential TDM programs.

Localized Operational Emissions. The Project's maximum daily operational emissions are compared against the SCAQMD's-recommended LSTs in Table 4.3-13. Consistent with the SCAQMD's LST methodology, the emissions included in the operational LST analysis are on-site emissions only, and the LST thresholds against which these on-site emissions are compared are based on the average project size in acres. The LST thresholds are for SRA 11 (South San Gabriel Valley), the SRA in which the Project is located, and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD.

**Table 4.3-13
Operational Emissions Localized Significance Thresholds Analysis**

Emissions Source ^(B)	Maximum On-Site Pollutant Emissions (lbs/day) ^(A)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Total Area Emissions	540.0	13,228.5	1,674.7	1,674.7
Total Energy Emissions	202.3	109.3	16.1	16.1
Total On-site Mobile Emissions ^(C)	170.5	328.0	193.5	136.8
Total On-site Emissions in Planning Area	912.8	13,665.8	1,884.3	1,827.6
Average Emissions per Acre ^(D)	0.2	2.8	0.4	0.4
SCAQMD LST Threshold ^(E)	83	673	1	1
Threshold Exceeded?	No	No	No	No
Source: MIG 2019 (see Appendix B) and SCAQMD 2009, 2016b.				
(A) See Table 4.3-11.				
(B) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the				

purposes of this table.

(C) Total on-site emissions are equal to 5% of the total mobile emissions estimated in Table 4.3-11.

(D) The Planning Area is approximately 4,270 acres in size.

(E) LST threshold is based on 1.0-acre project size and 25-meter receptor distance. See Table 4.3-5.

As shown in Table 4.3-13, the total emissions from all on-site operational activities within any one-acre individual project site would be below the SCAQMD's recommended LST threshold for all pollutants. The radius of a one-acre circle is approximately 25 meters. Therefore, the emissions occurring within a one-acre project site would not subject a sensitive receptor within 25 meters to criteria air pollutant emissions exceeding the LSTs. The use of one-acre LSTs at a distance of 25 meters is considered a conservative approach, since they are the lowest LST values applicable within the Planning Area (see Table 4.3-5). This impact would be less than significant.

Level of Significance Before Mitigation

As shown in Table 4-3.8, construction emissions associated with a potential level of annual development that is consistent the Project's 2040 growth projections could result in ROG emissions during architectural coating activities that exceed SCAQMD-recommended CEQA significance thresholds. This is considered a **potentially significant impact**. All other potential Project construction emissions would be below SCAQMD-recommended CEQA significance thresholds.

As shown in Table 4.3-12, the modeled, maximum daily operational emissions associated with potential 2040 growth under the Project would result in NOx emissions that exceed SCAQMD-recommended CEQA significance thresholds. This is considered a **potentially significant impact**. All other potential Project operational emissions would be below SCAQMD-recommended CEQA significance thresholds.

Mitigation Measures

Mitigation Measure AQ-2A The City will require development projects to:

- 1) Submit evidence, such as emissions estimates, coating use estimates, and manufacturers specifications for VOC content, or other evidence, demonstrating VOC emissions during architectural coating activities would not exceed South Coast Air Quality Management District (SCAQMD) CEQA significance thresholds.
- 2) Prepare a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines. The project applicant/developer must include in any construction contracts and/or subcontracts a requirement that Project contractors adhere to the requirements of the CRP. The CRP must include a requirement that all interior and exterior residential and non-residential architectural coatings used in Project construction meet the SCAQMD "super compliant" coating VOC content standard of less than 10 grams of VOC per liter of coating. The CRP must also specify the use of high-volume, low-pressure spray guns during coating applications to reduce coating waste.

Mitigation Measure AQ-2B: Residential Electric Vehicle and Bicycle Parking Requirements

The following Residential and Non-Residential Voluntary Measures from the CalGreen Code (Appendix A4) applies to new residential (or residential mixed use) development projects :

- New one- and two-family dwellings and townhomes must include electric vehicle infrastructure consistent with Section A4.106.8.1 of the CalGreen Code.
- New multifamily dwellings with 17 or more units must provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to Section A4.106.8.2 of the CalGreen Code.
- New multifamily dwelling units must provide bicycle parking pursuant to Section A4.106.9.2 of the CalGreen Code.

Mitigation Measure AQ-2C: Non-Residential Electric Vehicle and Bicycle Parking Requirements

The following Non-Residential Voluntary Measures from the CalGreen Code (Appendix A5) apply to new non-residential (or mixed use) development projects:

- New non-residential development with more than 10 tenant-occupants must provide changing/shower facilities for tenant-occupants in accordance with Table A5.106.4.3 of the CalGreen Code.
- New non-residential development must provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles pursuant to the Tier 1 requirements of Table A5.106.5.1.1 of the CalGreen Code. Such parking spaces must be marked pursuant to Section A5.106.5.1.3 of the CalGreen Code.
- New non-residential development must provide electric vehicle charging spaces capable of supporting electric vehicle supply equipment pursuant to the Tier 1 requirements of Section A5.106.5.3.1 of the CalGreen Code. Such spaces must be marked pursuant to Section A5.106.5.3.3 of the CalGreen Code.

Mitigation Measure AQ-2D: Non-Residential Travel Demand Management

The following travel demand management (TDM) provisions apply to new non-residential development:

- New commercial and industrial projects greater than 25,000 square feet in size must prepare and implement a TDM program that achieve a 10% reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual, or other reputable source as determined by the city.. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. The TDM program must have a designated coordinator who will track the effectiveness of the TDM program over time.
- New commercial and industrial projects that employ 250 or more employees at a work site, on a full or part-time basis, must implement an Employee Commute Reduction

Program pursuant to South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Option).

Level of Significance After Mitigation

As shown in Table 4.3-9, implementation of Mitigation Measure AQ-2 would reduce ROG emissions during architectural coating activities and reduce Impact AQ-2 to a less than significant level.

Mitigation Measures AQ-2B, AQ-2C, and AQ-2D would reduce exhaust emissions of NO_x and other pollutants from vehicles; however, since specific development projects are unknown, and some of the measures are voluntary, the emissions reductions that would be achieved by Mitigation Measures AQ-2B, AQ-2C, and AQ-2D are not certain and cannot be guaranteed by the City at this time. Therefore, long-term Project growth emissions under Impact AIR-2 could result in NO_x emissions that exceed SCAQMD thresholds. This impact would be **significant and unavoidable** even with incorporation of all feasible mitigation measures.

Exposure of Sensitive Receptors to Pollutants

Impact AQ-3 – Would the project expose sensitive receptors to substantial pollutant concentrations?

Analysis of Impacts

Growth projected to occur under the Project could expose existing and new sensitive receptors to substantial concentrations of criteria air pollutants and TAC emissions that pose adverse health effects; however, as described in more detail below, these emissions would be less than significant with standard environmental review practices.

CO Hotspots

Based on the TIS prepared for the Project (see Appendix B), the maximum number of vehicles moving through any study analysis zone under the Project's 2040 growth conditions would be 7,011 vehicles through the intersection of Garfield Avenue and Hellman Avenue (during PM peak hour). This level of traffic is substantially below the screening threshold of 44,000 vehicles per hour for a CO hotspot analysis (See Section 4.3.3). Therefore, the Project would not cause or significantly contribute to CO concentrations that exceed State or federal ambient air quality standards for CO. This impact would be less than significant, and no mitigation is required.

Construction Emissions

As discussed under Impact AQ-2, Project growth could generate emissions, including emissions of DPM (a TAC), during construction activities that would occur intermittently over the approximately 20-year growth period associated with the Project. As shown in Table 4.3-9, emissions of construction-related criteria air pollutants would not exceed SCAQMD LSTs during any phases of construction. The LSTs reflect the emissions level at which an individual project's criteria air pollutant emissions have the potential to exceed applicable State and federal air quality standards, based on meteorological conditions observed in the Project's designated SRA. In addition to criteria air pollutant emissions, construction activities occurring within the Planning Area would generate DPM. Health risks associated with receptor exposure to DPM would be less than significant, since (1) the use of off-road heavy-duty diesel equipment would be temporary and would combine with the highly dispersive properties of DPM; (2) additional

reductions in exhaust emissions will occur in the future; and (3) construction-related activities would be short-term, incremental through time, and would occur at scattered locations throughout the Planning Area such that an individual receptor location would not be exposed to DPM exposure for a prolonged period of time. Since the Project would not exceed applicable construction LSTs or expose receptors to substantial DPM concentrations, this impact would be less than significant, and no mitigation is required.

Exacerbation of Existing Sources of Pollutants

Project growth could add new residential development in the Planning Area and could place new, sensitive receptors in proximity to existing sources of emissions such as the I-10 (and Metrolink rail corridor), I-710, SR-60, and local stationary sources of emissions.

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015), projects are not required to analyze how existing conditions might impact a project's future users or residents. As such, this analysis does not focus on potential, future receptor exposure to existing emissions from existing sources of pollutants in and near the city. Rather, it focuses on the incremental increase in pollutant concentrations and associated impacts (including adverse health impacts) that could occur if existing operations were to change as a result of Project growth.

Under the 2040 growth projection, the Project could increase the number of residents in the Planning Area from approximately 68,900 people to approximately 80,600 people, an increase of approximately 11,700 people (17% increase). The Project could also result in a net increase of approximately 1,264,000 square feet of non-residential building square footage (primarily office and retail) and 607 hotel rooms. Although this growth would occur throughout the Planning Area, it would occur primarily in areas focused for redevelopment, such as the Corporate Center Drive corridor, the Atlantic Avenue corridor, Garvey Avenue, and other areas capable of supporting mixed use and higher density development. The growth envisioned under the Project could generate long-term emissions, primarily associated with area and mobile sources that would combust natural gas or gasoline. As shown in Table 4.3-13, emissions of operations-related criteria air pollutants would be below SCAQMD localized significance thresholds and would not result in, nor substantially exacerbate, substantial pollutant concentrations at sensitive receptor locations.

Additional Information on Existing Sources of Pollutants

The Project could result in new sensitive receptors being exposed to significant sources of TAC emissions. The *CARB Air Quality and Land Use Handbook* recommends avoiding the siting of new sensitive land uses (e.g., residences, schools) within:

- Within 300 feet of large gasoline fueling stations (with a throughput of more than 3.6 million gallons of gasoline per year);
- Within 300 feet of dry cleaning operations;
- Within 500 feet of freeways, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day; and
- Within 1,000 feet of a major rail service or maintenance yard.

The County of Los Angeles Department of Public Health, in its *Air Quality Recommendations for Local Jurisdictions*, also recommends a buffer of at least 500 feet between freeways and sensitive land uses.

A review for gas stations and dry cleaning facilities within the City indicates there may be 13 dry cleaning facility and approximately 7 gas station facilities located within the Planning Area. The dry cleaners are generally located throughout the city; the gas stations are generally located along Garvey Avenue and in the southern portion of the city. There are existing, residential receptors near these facilities, in some cases within 300 feet. I-10, I-710, and SR60 are also major roadways with an ADT of more than 100,000 near the city; however, the Project does not propose siting new sensitive receptors within 500 feet of these roadways.

Although the potential exists for the Project to result in new sensitive residential receptors near existing sources of emissions, the Project would not exacerbate pollutant concentrations or health risks associated with emissions sources and, therefore, would not materially change the existing environmental risks present in the Planning Area. This impact would be less than significant, and no mitigation required.

Objectionable Odors

Impact AQ-4 – Would the project result in other emissions such as those leading to odors adversely affecting a substantial number of people?

Analysis of Impacts

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals and paper). The Project does not support such sources, and there are no such active sources in or near the Planning Area (the Operating Industries, Inc. landfill is closed).

Under the 2040 growth projection, the Project could increase the amount of residential and non-residential development in the Planning Area, including multi-family development that could be located close to retail, restaurant, and other commercial land uses that may generate localized sources of odors that may or may not be objectionable to nearby residential land uses.

The Project does by itself permit or authorize any new, major sources of potential odors (e.g., wastewater treatment plant), and odor impacts would be less than significant with standard environmental review practices.

Existing General Plan Policy 5.8 establishes the intent of the City to integrate air quality and land use planning to protect sensitive receptors from harmful air quality effects, including objectionable odors. Pursuant to existing CEQA requirements, project-specific odors would be analyzed as development proposals are submitted to the City. Future development projects would be subject to SCAQMD rules and the City's General Plan policies and would be required to assess project-specific odors and, if necessary, implement mitigation measures to reduce potential nuisance odors.

Level of Significance Before Mitigation

The potential impacts associated with objectionable odors under the Focused General Plan Update would be **less than significant**.

Mitigation Measures

None required.

Level of Significance After Mitigation

Not applicable.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to Air Quality?

Analysis of Impacts

As described in Section 4.3.1, the South Coast Air Basin is designated nonattainment for national and State O₃ standards, national and State PM_{2.5} standards, and national PM₁₀ standards. The SCAQMD, in developing its CEQA significance thresholds, considered the emission levels at which a project's individual emissions would be cumulatively considerable (SCAQMD 2003b; page D-3). The SCAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant.

The analyses of emissions associated with potential Project growth in 2040 under Impact AQ-1 and Impact AQ-2 indicates the Project could result in population growth that exceeds SCAQMD planning assumptions in the AQMP. Emissions of ROG and NO_x (ozone precursor pollutants) during construction and long-term growth activities would also exceed SCAQMD thresholds of significance. Mitigation Measure AQ-2A would require the use of super compliant architectural coatings that would reduce construction ROG emissions to a less than significant level. Mitigation Measures AQ-2B, AQ-2C, and AQ-2D would reduce exhaust emissions of NO_x and other pollutants from vehicles; however, since future, specific development projects are unknown, and some of the measures are voluntary, these emissions reductions are not certain and cannot be guaranteed by the City at this time. Therefore, the Project could result in projected growth and associated long-term NO_x emissions that exceed the SCAQMD-recommended CEQA thresholds of significance.

Level of Significance Before Mitigation

The Project's 2040 growth projections, and associated construction and operational emissions, are not consistent with SCAQMD planning assumptions and exceed SCAQMD-recommended emissions thresholds. This is considered a **potentially significant impact**.

Mitigation Measures

See Mitigation Measures, AQ-2A, AQ-2B, AQ-2C, and AQ-2D.

Level of Significance After Mitigation

The growth that could occur under the Project would be inconsistent with the 2016 RTP/SCS growth forecast and result in NO_x emissions that could increase the frequency and/or severity of air quality violations in the Basin or otherwise impede attainment of air quality standards. Therefore, this impact would be **significant and unavoidable**.

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4.4 – Biological Resources

This EIR chapter describes the existing biological resources in the City of Monterey Park General Plan Area (Planning Area). The chapter includes the regulatory framework necessary to evaluate potential environmental impacts associated with the allowed land uses permitted in the City of Monterey Park Focused General Plan Update (Project), describes potential impacts that could result from the Project; discusses environmental regulations, goals, and policies that would avoid or reduce those potential impacts; and mitigation measures, where applicable, to ensure that impacts as a result of Project implementation will be less than significant.

4.4.1 – ENVIRONMENTAL SETTING

This chapter provides an overall description of the existing biological resources within the Planning Area in order to inform analysis of potential environmental impacts to biological resources associated with the Project. As set forth in CEQA Guidelines Section 15125(a), the following Environmental Setting discussion describes the environmental conditions in the Planning Area as they relate to Biological Resources. It constitutes the baseline conditions by which the City would evaluate biological resource impacts according to CEQA thresholds of significance. Special emphasis is placed on environmental resources that are rare or unique to the Planning Area and that may be affected by the Project.

Information contained in this section is based on a review of available background information pertaining to the biological resources within the Planning Area. The following provides a description of the physical characteristics, vegetation communities and associated wildlife habitats, wildlife movement corridors, sensitive natural communities, special status species, and jurisdictional wetlands and other waters present or potentially present on the site. A discussion of the regulations that serve to protect these sensitive resources is provided in section 4.4.2 (Regulatory Framework).

Physical Features

The Planning Area is located on the Los Angeles and El Monte U.S. Geological Survey (USGS) 7.5-minute quadrangle maps. The Planning Area is characterized by hills in the central and western portion and relatively flat areas to the north and south. Elevations within the Planning Area range from 250 feet above mean sea level (amsl) along Highway 60 to 580 feet at the Garvey Reservoir. The region experiences a Mediterranean climate characterized by hot dry summers, and cool, mild winters, with precipitation occurring in the winter months. The area is within the climatic transition zone from the moister coastal region to the more arid inland regions of southern California.

Vegetation Communities

A majority of the Planning Area supports industrial, commercial, and residential development. As such, the majority of the vegetation within the city is composed of landscaped/ornamental vegetation and non-native weedy plant species. However, fragments of undeveloped land exist on steep, isolated hillsides and rights-of-way. The Garvey Reservoir, the Operations Industries, Inc. (OII) landfill, greenbelts, and areas west of Interstate 710 support the largest contiguous areas of open space within City limits. Vegetation types in the Planning Area were broken into

4.4 – Biological Resources

four general vegetation community types: non-native grassland, chaparral, mixed riparian scrub, and ornamental vegetation. These communities are described in more detail below.

Ornamental

Ornamental vegetation communities are cultivated for landscaping in areas that were previously graded or developed. Ornamental landscaping consists of areas supporting introduced or non-native trees, shrubs, flowers, and turf. This habitat occurs in green belts, parks, along sidewalks and roadways, and developed areas throughout the Planning Area. Typical ornamental tree species include, but are not limited to, eucalyptus (*Eucalyptus* spp.), Peruvian pepper trees (*Shinus molle*), various palm trees (e.g., *Washingtonia* spp., *Syagrus romanzoffiana*, and *Phoenix* spp.), pine trees (*Pinus* spp.), ginkgo (*Ginkgo biloba*), acacia (*Acacia* spp.), fig (*Ficus* spp.), London plane (*Platanus × acerifolia*), ash (*Fraxinus* spp.), magnolia (*Magnolia grandiflora*), and black locust (*Robinia pseudoacacia*). Ornamental species intergrade on the edges of chaparral and non-native grassland communities throughout the Planning Area.

Chaparral

Chaparral habitat is distributed throughout steep, undeveloped hillslopes within the Planning Area. Chaparral stands are typically dominated by toyon (*Heteromeles arbutifolia*), but other native, subdominant species include coast live oak (*Quercus agrifolia*) and blue elderberry (*Sambucus nigra* ssp. *caerulea*). This community typically maintains an understory of disturbed non-native grassland vegetation communities. Chaparral areas also commonly intergrade with ornamental plant communities associated with neighboring urban areas, resulting in a mixture of species from each community.

Non-Native Grassland

Non-native grassland communities dominate around Garvey Reservoir, Oil landfill, greenbelts, and open space areas west of Interstate 710. In residential areas, non-native grasslands intermix with chaparral communities on undeveloped hillsides in central portions of the Planning Area. Common grasses include ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), soft chess brome (*Bromus hordeaceus*), Mediterranean barley (*Hordeum murinum*), and wild oats (*Avena fatua*). Other dominant and co-dominant non-native species in these communities include black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), tree of heaven (*Ailanthus altissima*), milk thistle (*Silybum marianum*), prickly lettuce (*Lactuca serriola*), smooth cat's ear (*Hypochaeris glabra*), Italian thistle (*Carduus pycnocephalus*), red-stem filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), and tocalote (*Centaurea melitensis*). Native species may form a small percentage of the herbaceous cover, including such species as California poppy (*Eschschozia californica*) and lupine (*Lupinus* spp.).

Mixed Riparian Scrub

Mixed riparian scrub vegetation communities are located within the Laguna Channel detention basin, located east of the intersection of Corporate Center Drive and Corporate Place. Non-native species such as arundo (*Arundo donax*) dominates in these limited areas but cattails (*Typha* sp.) and other riparian species are occasional. Ornamental trees are also prevalent within this detention basin.

Common Wildlife

Wildlife within the Planning Area is largely limited to species that are adapted to high levels of disturbance associated with the urban environment. Common urban-tolerant birds include red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), Anna’s hummingbird (*Calypte anna*), European starling (*Sturnus vulgaris*), yellow-rumped warbler (*Setophaga coronata*), and mourning dove (*Zenaida macroura*). Common mammals expected to occur in the urban setting include, but are not limited to, western gray squirrel (*Sciurus griseus*), raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*) (CDFW 2016).

Federal and State Protected Waters and Wetlands

Based on the topography of the Planning Area, groundwater and surface waters flow generally north to south, discharging offsite into the Los Angeles River or Rio Hondo. Rio Hondo is confluent to Los Angeles River approximately seven miles south of the Planning Area, which ultimately drains to the Pacific Ocean. Most drainages within the Planning Area flow through underground storm drains and concrete lined channels.

The only named water feature within the Planning Area is the Laguna Channel, which flows north to south along the western perimeter of Interstate 710 (USGS 2019). According to the U.S. Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI), the Laguna Channel drainage basin supports freshwater forested/shrub, riverine, freshwater pond, and freshwater emergent wetlands (USFWS 2019a). Seasonal wetlands not mapped by NWI may also be present in localized areas within the Planning Area in the form of depressions, seeps, and swales. These features are typically dry during the summer, and support wetland-adapted plants, such as annual broad-leaf plants, rushes, and sedges. All wetland and water features have the potential to be regulated as Waters of the US by USACE and Waters of the State by Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Wildlife (CDFW).

Sensitive Plant Communities

The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) identifies native plant communities that are rare and unique to California. While they have no legal, protective status, impacts to these plant communities may be considered “significant” under CEQA. No sensitive plant communities are present within the Planning Area (CDFW 2018, CDFW 2019a).

Special Status Plant Species

Based on a review of available databases and literature, it was determined that one special status plant species, southern California black walnut (*Juglans californica*), has potential to occur in the Planning Area (CDFW 2019a, CDFW 2019b, CNPS 2019). Southern California black walnut, California Rare Plant Rank (CRPR) 4.2, generally occurs in chaparral, cismontane woodland, coastal scrub and riparian woodlands. Within the Planning Area, open space areas associated with chaparral habitats (i.e. undeveloped hillslopes) and within the Laguna Channel detention basin represent suitable habitat for this species. Other species known from habitats that do not occur in the Planning Area (e.g., coastal sage scrub, California annual grasslands, pinyon and juniper woodlands, coastal dunes, vernal pools, etc.) were not included on the list of potentially present special status plant species and were excluded from further consideration.

Special Status Wildlife Species

Based upon a review of the CNDDDB and the USFWS Quadrangle Species Lists (CDFW 2019a, USFWS 2019b; Los Angeles and El Monte quadrangles), it was determined that one special status wildlife species, burrowing owl (*Athene cunicularia*), has potential to occur in the Planning Area. The CNDDDB reports the nearest burrowing owl observation as approximately 4 miles southeast of the Planning Area (CDFW 2019a). Burrowing owls, a California species of special concern, prefer open habitats such as grasslands and agricultural areas where suitable burrows are present. Burrowing owls typically utilize California ground squirrel burrows, but will also use other mammal burrows, as well as debris piles and man-made culverts. Although burrowing owls do not typically forage in areas within tall vegetation, non-native grassland areas that have been mowed or disked (e.g., Garvey Reservoir, the Oll landfill, and greenbelt areas) provide suitable habitat for burrowing owls.

Migratory birds are protected under the Federal Migratory Bird Treaty Act (MBTA), which prohibits killing any migratory bird or disturbing or destroying an active nest of a migratory bird; this list contains hundreds of birds, including many of which are considered common or even nuisance or non-native species. Nesting birds are also protected under California Fish and Game Code¹ (CFGC) 3503, 3503.5, and 3512, which prohibits the take of active bird nests. Vegetation communities within the Planning Area support suitable nesting habitat for common and special status bird species with baseline protections under MBTA and CFGC.

4.4.2 – REGULATORY FRAMEWORK

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the General Plan CEQA review process.

Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (7 U.S.C. § 136, 16 U.S.C. § 1531, *et seq.*), as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the USFWS and the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service), (3) prohibitions against “taking” (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental “take.” The FESA also discusses recovery plans and the designation of critical habitat for listed species. Critical habitat is defined in Section 3(5)(A) of the FESA as “(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior (Secretary) that such areas are essential for the conservation of the species.” Both the USFWS and the NOAA Fisheries Service share the responsibility for administration of the FESA. During the CEQA review

¹ Subject to being changed to “Fish and Wildlife Code” per SB 757 (Allen, 2019).

process, each agency is given the opportunity to comment on the potential of the proposed Project to affect plants and animals listed, proposed for listing, or candidate for listing.

The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. § 703, *et seq.*), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term “take” is defined as meaning, “to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires.” With a few exceptions, most birds are considered migratory under the MBTA. Disturbance or impacts that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

Clean Water Act Sections 404 and 401

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (e.g., dams and levees), infrastructure developments (e.g., highways, rail lines, and airports) and mining projects. Section 404 of the CWA requires a federal permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the CWA (33 U.S.C. § 1341) requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a water quality certification from the state in which the discharge originates. The discharge is required to comply with the applicable water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (State Water Board) and its nine Regional Water Quality Control Boards (Water Boards).

State

California Endangered Species Act

The State of California enacted similar laws to the FESA, the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of “threatened” and “endangered” species. It converted all “rare” animals into the CESA as threatened species but did not do so for rare plants. Thus, these laws provide the legal

framework for protection of California-listed rare, threatened, and endangered plant and animal species. The CDFW implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the CNDDDB, a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed Project to affect listed plants and animals.

Fully Protected Species and Species of Special Concern

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at § 5515, amphibian and reptiles at § 5050, birds at § 3511, and mammals at § 4700) dealing with “fully protected” species states that these species “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” (Fish & Game Code §§ 3511, 4700, 5050, and 55153) although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. The designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrow (*Passer domesticus*) and European Starling (*Sturnus vulgaris*). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW.

Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Act (Water Code §§ 13000, *et seq.*) as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The State Water Board protects all waters in its regulatory scope but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the Clean Water Act (33 U.S.C. §§1251, *et seq.*; CWA). Waters of the State are regulated by the Water Boards under the State Water Quality Certification Program, which regulates discharges of dredged and

fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a United States Army Corps of Engineers (USACE) permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to Waters of the State, the Water Boards have the option to regulate such activities under its state authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

California Fish and Game Code Sections 1600-1616

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code (CFGC). Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement. The term “stream,” which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life.” This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). Riparian vegetation is defined as the area that surrounds a channel or lake and supports (or can support) vegetation that is dependent on surface or subsurface water.

California Department Fish and Wildlife Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW or the USFWS. The California Natural Diversity Database (CNDDDB) identifies a number of natural communities as rare, which are given the highest inventory priority (CDFW 2019a). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (14 CCR Appendix G).

Other Sensitive Species

California Native Plant Society

Plant species that may not be listed as endangered, threatened, candidate, or proposed species under FESA or CESA, but are still considered rare, are generally assigned a rarity code by the California Native Plant Society (CNPS). The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on the geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. This inventory assigns a California Rare Plant Rank (CRPR) to target species, based on the following categories:

- 1A Presumed extinct in California;

4.4 – Biological Resources

- 1B Rare, threatened, or endangered in California and elsewhere;
- 2 Rare, threatened, or endangered in California, but more common elsewhere;
- 3 Plants for which more information is needed – A review list; and
- 4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

- .1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
- .2 Fairly endangered in California (20-80% occurrences threatened).
- .3 Not very endangered in California (<20% of occurrences threatened, or no current threats known).

Plants that are CRPR 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). Under CEQA, impacts analyses are mandatory for all CRPR 1 and 2 species as they meet the definition of threatened or endangered under the Native Plant Protection Act (NPPA) and Sections 2062 and 2067 of the California Fish and Game Code.

CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

CDFW California Natural Diversity Database

CDFW maintains the CNDDDB, which is a program that inventories the status and locations of rare plants and animals in California. Each rare species or plant community is assigned an “element ranking” in the CNDDDB that quantifies and qualifies the rarity of each species/community within its global and state range. The CNDDDB gives five categories of rarity for each species’ global and state range; these are summarized in Table 4.4-1. All federal and state listed species are assigned a ranking; however, even non-listed species (such as Species of Concern, Special Animals, or plants ranked by CNPS) are assigned an element ranking by CDFW for the CNDDDB. Impacts to species assigned an element ranking in the CNDDDB are considered under CEQA.

**Table 4.4-1
CNDDDB Element Ranking Code Definitions**

Rank	Definition
Global Ranking*	
G1	Extremely endangered: less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres
G2	Endangered: 6-20 EO's OR 1,000-3,000 individuals OR 2,000-10,000 acres
G3	Restricted range, rare: 21-80 EO's OR 3,000-10,000 individuals OR 10,000-50,000 acres
G4	Apparently secure; some factors exist to cause some concern such as narrow habitat or continued threats
G5	Demonstrably secure; commonly found throughout its historic range

Rank	Definition
State Ranking	
S1-S5	Same as for Global Ranking, except that the rank is a reflection of the element throughout its state range.
*Subspecies receive a T-rank attached to the G-rank. A T-rank reflects the global situation of just that subspecies and not for the entire species; however, the rank values have the same definition.	

4.4.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the General Plan Update would have a significant impact related to biological resources if it would:

- a) 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 Wildlife or U.S. Fish and Wildlife Service;
- b) 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 Wildlife or U.S. Fish and Wildlife Service;
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.4.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to biological resources that could result from the implementation of the project and recommends mitigation measures as needed to reduce significant impacts.

Special Status Species Protections

Impact BIO-1 – 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 Wildlife or U.S. Fish and Wildlife Service?

Analysis of Impacts

Special Status Plants

Based on a review of available databases and literature it was determined that one special status plant species, southern California black walnut (*Juglans californica*), has potential to occur in the

Planning Area (CDFW 2019a, CDFW 2019b, CNPS 2019). Within the Planning Area, open space areas containing chaparral habitats (e.g., undeveloped hillslopes) and areas within the Laguna Channel detention basin represent suitable habitat for this species. If present, southern California black walnut is likely to occur as individual plants and not as part of a forest, copse, or other grouping. Any project-related impacts to individual southern California black walnut trees would be less than significant.

Special Status Wildlife

Based on a review of available databases and literature it was determined that one special status plant species, burrowing owl (*Athene cunicularia*), has low potential to occur in the Planning Area (CDFW 2019a, CDFW 2019c). Burrowing owl, a California species of special concern, prefer open habitats such as grasslands and agricultural areas where suitable burrows are present. Burrowing owls typically use California ground squirrel (*Otospermophilus beecheyi*) burrows, but will also use other mammal burrows, as well as debris piles and man-made culverts. Although burrowing owls do not forage in areas with tall vegetation, non-native grassland areas that have been mowed or disked (e.g., Garvey Reservoir, the OII landfill, and greenbelt areas) provide suitable habitat for burrowing owls. Implementation of Mitigation Measure BIO-1 and BIO-2 may be required to reduce potential impacts to burrowing owl to a less than significant level.

Native trees, ornamental trees, and various other substrates within the Planning Area have the potential to provide nesting habitat for bird species protected by the MBTA and the Fish and Game Code Sections 3503 and 3513. Destruction of or disturbance to an active nest is prohibited. Project-related activities including site mobilization, tree removal, other vegetation clearing, grubbing, grading, and noise and vibration from the operation of heavy equipment have the potential to result in significant direct (i.e., death or physical harm) and/or indirect (i.e., nest abandonment) impacts to nesting birds. Implementation of Mitigation Measure BIO-3 may be required to reduce impacts to nesting birds to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact

Mitigation Measures

BIO-1 Before project-related construction activities within the Planning Area, a qualified biologist must conduct focused protocol survey for burrowing owls within suitable habitat (e.g., grasslands associated with Garvey Reservoir, OII landfill, and greenbelts) to determine if burrowing owl are present on or adjacent to a proposed project site. Surveys must be conducted consistent with the procedures in outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation. If burrowing owl(s) are observed, consultation with CDFW must occur to determine the next appropriate steps.

BIO-2 If suitable burrowing owl habitat is present onsite, pre-construction take avoidance surveys will be conducted within 14 days of construction-related activities to determine presence/absence of this species. Pre-construction take avoidance surveys must be conducted consistent with the procedures in outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation. If burrowing owl(s) are observed during this survey, consultation with CDFW must occur to determine the next appropriate steps.

BIO-3 If vegetation removal is scheduled during the nesting season (typically February 1 to AUGUST 31), a focused survey for active nests must be conducted by a qualified biologist not more than five days before the beginning of project-related activities (e.g., excavation, grading, vegetation removal). Surveys must be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys must be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area must encompass a 500-foot radius. Surveys must be conducted during weather conditions suited to maximize the observation of possible nests and concentrate on areas of suitable habitat.

If a lapse in project-related work of five days or longer occurs, an additional nest survey is required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist must determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the project area must be monitored by a qualified biologist during active construction if work is occurring adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities will potentially adversely affect a nest, the biologist must immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).

Level of Significance After Mitigation

Less than significant with mitigation incorporated

Sensitive Natural Communities and Riparian Habitat

Impact BIO-2 – 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 Wildlife or U.S. Fish and Wildlife Service?

Analysis of Impacts

No sensitive natural vegetation communities documented in CNDDDB (CDFW 2019a) are present on the Planning Area. Riparian habitat associated with the Laguna Channel drainage basin is dominated by arundo (*Arundo donax*), but cattails (*Typha* spp.) and other riparian species are occasional in these disturbed areas. Impacts to these disturbed riparian habitats within the Planning Area would be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Wetland Conservation

Impact BIO-3 – Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Analysis of Impacts

The Laguna Channel and its drainage basin, located east of the intersection of Corporate Center Drive and Corporate Place, contains the Planning Area's potential state or federally protected wetlands. A significant impact would occur if a proposed project has a substantial adverse effect on any state and federally protected wetlands. The USACE and EPA regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act. Section 404 of the CWA requires a permit before dredged or fill material may be discharged into waters of the United States. Section 401 of the CWA requires an applicant for a federal permit to obtain a certification from the RWQCB. Additionally, Section 1602 of the Fish and Game Code requires the issuance of a Lake and Streambed Alteration Agreement (LSAA) to authorize work in jurisdictional streambeds. Although future development may affect these features, the Project will not impact these potentially jurisdictional features. Therefore, impacts to USACE, RWQCB, and CDFW jurisdictional features will be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required

Animal Migration and Conservation

Impact BIO-4 – Would the project 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?

Analysis of Impacts

The Planning Area and surrounding region represents a developed and urbanized area and is not located within an established wildlife movement corridor, movement pathway, or linkage between larger habitat areas for terrestrial or aquatic wildlife. Due to the disturbed, limited, and fragmented condition of habitats on site, which would preclude most species from using the site for breeding/nesting, the Planning Area also does not function as a wildlife nursery site that would contribute disproportionately to a population. Thus, wildlife species, migratory corridors and native wildlife nursery sites will not be impacted due to project implementation and no further mitigation is required.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Local Biological Resources Policies

Impact BIO-5 – Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Analysis of Impacts

The City of Monterey Park maintains tree and shrub preservation policies that protects against the removal of trees and shrubs on public property. “No person shall cut down, injure, girdle, destroy or remove any standing or growing trees or shrubbery, or any ornament or improvement in any public park or street of the city without first being issued a permit...” (Monterey Park Municipal Code Sections 9.63.030 and 9.63.060). The Project will adhere to all existing City regulations and no further mitigation is required. Therefore, any related impacts will be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Habitat Conservation Plans

Impact BIO-6 – Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Analysis of Impacts

The Planning Area is not located within an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. Therefore, no impact will occur.

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Biological Resources Cumulative Impacts

Impact BIO-7-- Cumulative Impacts- *Would the project cause substantial adverse cumulative impacts with respect to biological resources?*

The Planning Area is mostly developed and urbanized. The Project does not propose new development within the existing designated open spaces within the Planning Area. The Project does not propose removal of any native habitat, conversion of wetlands, or other water resource feature and or conflict with a Habitat Conservation Plan or Natural Community Conservation Plan. With respect to cumulative impacts, all biological impacts associated with implementation of the proposed General Plan would remain less than significant with implementation of Mitigation Measures BIO-1 and BIO-2, which will ensure that any potential impacts to burrowing owls would be less than significant. Mitigation Measure MM BIO-3 would ensure that potential impacts to nesting migratory birds would be less than significant. Therefore, no unavoidable, cumulative impacts to biological resources would result from the Project.

4.4.5 REFERENCES

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4.5 – Cultural Resources

This EIR chapter addresses historic resources, archeological resources, and potential for the discovery of human remains allowed by the implementation of the Monterey Park Focused General Plan Update EIR. The chapter will evaluate whether site-specific projects within the Planning Area will cause a substantial adverse change in a historic resource, archaeological resource, or disturb human remains.

4.5.1 – ENVIRONMENTAL SETTING

The City of Monterey Park has grown from its origin as part of the Mission San Gabriel de Archangel in the early 1800s to a demographically rich city with over 61,000 residents at the beginning of the twenty-first century. The end of World War II resulted in revived growth and explosive population gains during the 1940s and 1950s. Until this time, the population was concentrated in the northern and southern portions of Monterey Park, with the Garvey and Monterey Hills forming a natural barrier. With the renewed growth, many new subdivisions were developed, utilizing even the previously undeveloped central area to allow for maximum growth potential that transformed Monterey Park into a prosperous, highly-regarded, and well-balanced suburban community (City of Monterey Park General Plan 2013).

4.5.2 – REGULATORY FRAMEWORK

Cultural resources are indirectly protected under the provisions of the Federal Antiquities Act of 1906 (16 U.S.C §§ 431, *et seq.*) and related legislation, regulations, policies, and guidance documents. The following is a summary of the applicable (federal, state, and local) regulatory framework related to the protection of cultural resources in California.

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a proposed project on cultural resources. These laws and regulations establish a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act (NHPA) of 1966, as amended, CEQA, and Public Resources Code (PRC) 5024, are the primary federal and state laws governing and affecting preservation of cultural resources of national, state, regional, and local significance. Other relevant regulations and guidelines at the local level include the City's General Plan and Monterey Park Municipal Code. A description of the applicable laws, regulations, and guidelines are provided in the following paragraphs.

Federal

NATIONAL HISTORIC PRESERVATION ACT (NHPA) OF 1966

In summary, the NHPA establishes the nation's policy for historic preservation and sets in place a program for the preservation of historic properties by requiring federal agencies to consider effects to significant cultural resources (i.e. historic properties) before undertakings.

SECTION 106 OF THE FEDERAL GUIDELINES

Section 106 of the NHPA (16 U.S.C. §§ 470, *et seq.*) states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the National Registry of Historical Places (NRHP) and that the Advisory Council on Historic Preservation (ACHP) and State Historic Preservation Officer (SHPO) must be afforded an opportunity to comment, through a process outlined in the ACHP regulations at 36 Code of Federal Regulations (CFR) Part 800, on such undertakings.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP)

The NRHP was established by the NHPA of 1966 as “an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment.” The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, or association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: It is associated with the lives of persons who are significant in our past.
- Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must be at least 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 1990

The Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001, *et seq.*; NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural

items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to CEQA, a historical resource is a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). In addition, resources included in a local register of historic resources or identified as significant in a local survey conducted in accordance with state guidelines are also considered historic resources under CEQA, unless a preponderance of the facts demonstrates otherwise. According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historic resource as defined in Public Resources Code (PRC) Section 5024.1.

CEQA applies to archaeological resources when (1) the archaeological resource satisfies the definition of a historical resource or (2) the archaeological resource satisfies the definition of a “unique archaeological resource.” A unique archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

1. The archaeological resource contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
2. The archaeological resource has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. The archaeological resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate properties that are to be protected, to the extent prudent and feasible, from substantial adverse change” (Public Resources Code § 5024.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks (CHLs) are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historic resources surveys, or designated by local landmarks programs may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria¹:

- Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.

¹ *Public Resources Code § 5024.1(b).*

4.5 – Cultural Resources

- Criterion 2: It is associated with the lives of persons important in our past.
- Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. It is possible that a resource whose integrity does not satisfy NRHP criteria may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data. Resources that have achieved significance within the past 50 years also may be eligible for inclusion in the CRHR, provided that enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource.

CALIFORNIA HISTORICAL LANDMARKS

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource must also be approved for designation by the County Board of Supervisors or the City or Town Council in whose jurisdiction it is located, be recommended by the State Historical Resources Commission, or be officially designated by the Director of California State Parks.

To be eligible for designation as a Landmark, a resource must meet at least one of the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California)
- Associated with an individual or group having a profound influence on the history of California
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder

CALIFORNIA POINTS OF HISTORICAL INTEREST

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest (Points) designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historic resource may be designated as both a Landmark and a Point. If a Point is later granted status as a Landmark, the Point designation will be retired. In practice, the Point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance.

To be eligible for designation as a Point, a resource must meet at least one of the following criteria:

- The first, last, only, or most significant of its type within the local geographic region (city or county)
- Associated with an individual or group having a profound influence on the history of the local area
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder

NATIVE AMERICAN HERITAGE COMMISSION, PUBLIC RESOURCES CODE SECTIONS 5097.9–5097.991

Section 5097.91 of the Public Resources Code (PRC) established the Native American Heritage Commission (NAHC), whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.9 of the PRC, a state policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

CALIFORNIA NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 2001

Codified in the Health and Safety Code Sections 8010–8030, the California Native American Graves Protection Act (NAGPRA) is consistent with the federal NAGPRA. Intended to “provide a seamless and consistent state policy to ensure that all California Indian human remains, and cultural items be treated with dignity and respect,” the California NAGPRA also encourages and provides a mechanism for the return of remains and cultural items to lineal descendants. Health and Safety Code Section 8025 established a Repatriation Oversight Commission to oversee this process. The act also provides a process for non–federally recognized tribes to file claims with agencies and museums for repatriation of human remains and cultural items.

SENATE BILL 18

Senate Bill (SB) 18 (Government Code Section 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB18 requires public notice to be sent to tribes listed on the Native American Heritage Commission’s SB18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose

of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

ASSEMBLY BILL 52

Assemble Bill (AB) 52 specifies that a project that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. AB 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if the tribe requests in writing to the lead agency to be informed by the lead agency of proposed projects in that geographic area and the tribe requests CEQA consultation. AB 52 specifies examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The Bill makes the above provisions applicable to projects that have a notice of preparation or a notice of negative declaration filed or mitigated negative declaration on or after July 1, 2015. AB 52 amends Sections 5097.94 and adds Sections 21073, 21074, 2108.3.1., 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to the Public Resources Code (PRC), relating to Native Americans.

HEALTH AND SAFETY CODE SECTIONS 7050 AND 7052

Health and Safety Code Section 7050.5 declares that, in the event of the discovery of human remains outside a dedicated cemetery, all ground disturbances must cease, and the county coroner must be notified. Health and Safety Code Section 7052 generally makes it a felony penalty for mutilating, disinterring, or otherwise disturbing human remains.

PENAL CODE, SECTION 622.5

Penal Code Section 622.5 makes it a misdemeanor to injure or destroy objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

Local

CITY OF MONTEREY PARK GENERAL PLAN

The City of Monterey Park promulgated policies for the Historic Resources Section of the General Plan. These policies were created to identify and preserve the City's unique history and cultural resources for generations (City of Monterey General Park 2013).

- Policy 3.1 Continue to support the efforts of the Historical Society, Historical Heritage Commission, and the Arts and Cultural Commission.
- Policy 3.2 Raise public awareness about Monterey Park's history and cultural resources

4.5.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the General Plan Update would have a significant impact related to historic, cultural resources if it would:

- a) Cause a substantial adverse change in the significance of a historic resource as defined by CEQA Guidelines Section 15064.5;
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;
- c) Disturb any human remains, including those interred outside of dedicated cemeteries.

4.5.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to historic resources, archaeological resources, and human remains, which could result from the implementation of the Project and recommends mitigation measures as needed to reduce significant impacts.

Historic Resources

Impact CUL-1 – Would the project cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5?

Analysis of Impacts

The City identified Cascades Park and the Jardin del Encanto complex as the only two historic built environments listed on the California Register of Historic Resources. The City lists the Midwick View Estates as a City “Point of Interest (California Office of Historic Preservation: 2019).” The California Office of Historic Preservation indicates no California Landmarks are located within the City limits (California Office of Historic Preservation: 2019).” Additionally, no historic buildings or structures are listed on the National Register of Historic Places (National Park Service: 2019). The City has not conducted a citywide historic resources survey, so the number of potential historic buildings and structures are unknown (Los Angeles Conservancy: 2019).

Future development is subject to the goals and policies of the Monterey Park Focused General Plan Update EIR that could impact historic resources where new development supplants older development. Adverse modification of historic resources may also occur if appropriate restoration methods are not implemented, thereby permanently altering the historic character of the resource. Impacts associated with the destruction or alteration of historic resources can affect a City’s sense of place and lose important information relevant to City, the region, and/or State history.

The City currently does not have regulatory policies relating to the protection of historic resources and/or built environments during Project development, demolition, and/or alternation related activities. Therefore, a historic conservancy through mitigation is required to avoid or minimize impacts to historic built environments (residences, buildings, or structures). Therefore, Cultural Mitigation Measures will need to be incorporated and will be applicable in the event of the demolition and/or alteration of historic and significant structures, ensuring that new development is compatible with historic resources, and ensuring that restoration of historic structures preserve the character of the resource. [Significance Criteria 9.2.1 (a)]

Level of Significance Before Mitigation

Potentially significant.

Mitigation Measures

The following mitigation measure is required to reduce impacts from development on potential historic (buildings and structures) resources to less than significant

MM-CUL-1: All buildings or structures that have been determined to be 45 years or older must be evaluated to determine whether they are “unique historic resource” before demolition or alteration.

Level of Significance After Mitigation

Less than significant

Archaeological Resources

Impact CUL-2 – Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Analysis of Impacts

Ground-disturbing activities associated with development carried out as allowed by the Project could result in damage to or destruction of previously undiscovered archaeological and/or Native American cultural resources. Impacts would be less than significant with mitigation incorporated. The Planning Area has a long cultural history and is known to have been the home to Native American groups before settlement by Euro-Americans. Archaeological materials associated with past occupation within the City are known to exist and have the potential to provide important cultural and scientific information regarding the prehistory and history of the Planning Area and the region.

The Project provides the framework on how the City will implement and utilize long term planning goals and policies to ensure sustainable growth and economic development, redevelopment, road improvements, surface and subsurface parking facilities, as well as other types of capital improvements that could result in the disturbance of soils at depths not previously disturbed by existing or past development.

The potential for uncovering significant resources within the Planning Area during earthmoving construction activities is unknown. Nevertheless, ground-disturbing activities associated with the Planning Area where excavation depths exceed those previously attained, have the potential to damage or destroy prehistoric or historic archaeological resources that may be present below the ground surface. Consequently, damage to or destruction to newly discovered sub-surface cultural resources, could result in potential significant impacts. Failure to properly evaluate, assess, survey, and if necessary, monitor the Planning Area could result in significant impacts to newly discovered archaeological (prehistoric and historic) resources. However, adherence to existing regulations and General Plan policies, will ensure impacts to archaeological resources will be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation required.

Human Remains

Impact CUL-3 – Would the project disturb any human remains, including those interred outside of formal cemeteries?

Analysis of Impacts

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the Public Resources Code. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific regulations protecting human remains. Existing regulations prohibit interference with human remains, and protects them from disturbance, vandalism, or destruction, and established procedures to be implemented if Native American skeletal remains are discovered. Public Resources Code §5097.98 also addresses the disposition of Native American burials, protects such remains, and established the Native American Heritage Commission (NAHC) to resolve any related disputes.

Ground-disturbing activities associated with the Planning Area could result in damage to or destruction of currently unknown human remains. Impacts would be less than significant with mitigation incorporated. Human burials outside of formal cemeteries often occur in prehistoric archeological contexts. Although the majority of the Planning Area is built out, the potential still exists for these resources to be present. Excavations during construction activities within the Planning Area would have the potential to disturb these resources, including Native American burials. Compliance with Section 5097 of the Public Resources Code would reduce potential impacts to human remains and burial grounds to a less than significant level.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to cultural resources?

Level of Significance Before Mitigation

Potentially significant.

Mitigation Measures

4.5 – Cultural Resources

Application of Mitigation Measure MM-CUL-1, compliance with Section 5097 of the Public Resources Code, and the City's General Plan Policies: 3.1 and 3.2 would result in less than significant impacts with respect to historical resource, archaeological resources, and potential impacts on currently unknown human remains.

Level of Significance After Mitigation

Less than significant.

4.5.5 References

California Office of Historic Preservation.

2019 List of California Landmarks listed by County. Electronically available at:
http://ohp.parks.ca.gov/?page_id=21387.

California Public Resources Code

1993 Historic Resources: Chapter 1; Code § 5024.1(a) and Code § 5024.1(b).

Electronically available at:

http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC§ionNum=5024.1

City of Monterey Park

2013 City of Monterey Park: General Plan Update. Report on file at City of Monterey Park City Hall.

City of Monterey Park.

2013 Historical Museum. Electronically available at:
<https://www.montereypark.ca.gov/590/Historical-Museum>.

Los Angeles Conservancy.

2019 City of Monterey Park. Electronically available at:
<https://www.laconservancy.org/communities/monterey-park>

National Park Service.

2019 National Register of Historic Places. Monterey Park. Electronically available at:
<https://www.nps.gov/subjects/nationalregister/database-research.htm>.

4.6 – Energy

This EIR chapter addresses energy impacts associated with implementation of the Monterey Park Focused General Plan Update. Energy resources are closely tied to impacts discussed in the Air Quality and Greenhouse Gas (GHG) chapters of the EIR, Chapters 4.3 and 4.8, respectively. Many of the values presented in this chapter are derived from the emissions modeling conducted for the Project. Refer to Appendix B for detailed air quality and GHG emissions estimates and information on energy usage (MIG 2019).

4.6.1 – ENVIRONMENTAL SETTING

Energy is primarily categorized into three areas: electricity, natural gas, and fuels used for transportation. According to the U.S. Energy Information Administration (USEIA), California is the most populous state in the U.S., representing 12 percent of the total national population. It has the largest economy, and is second only to Texas in total energy consumption. However, California has one of the lowest per capita energy consumption levels in the U.S. This is a result of California's mild climate, extensive efforts to increase energy efficiency, and implementation of alternative technologies. California leads the nation in electricity generation from solar, geothermal, and biomass resources (U.S. EIA 2018).

Electricity

In 2017, almost half of California's net electricity generation was from renewable resources, including hydropower (U.S. EIA 2019). In 2017 the California electric system used 292,039 gigawatt hours (GWh) of electricity, nearly 71 percent of which (206,336 GWh) was produced in-state (CEC 2018a). Los Angeles County consumed 67,598 GWh of electricity, about 23 percent of the state's electricity consumption (CEC 2019a).

Southern California Edison (SCE) is the utility provider in Monterey Park. In the 2017 fiscal year, SCE sold approximately 85,879 million kWh of electricity (SCE 2018a); approximately 46 percent of the electricity that SCE delivered to customers came from carbon-free resources, including solar energy (approximately 13 percent, wind energy (approximately 10 percent), and geothermal energy (approximately 8 percent) (SCE 2018b).

Based on the CalEEMod emissions estimates prepared for the Project (see Chapter 4.3.1 and Appendix B), the existing development in the Planning Area is estimated to consume approximately 379,350,590 kWh of electricity per year. Based on a service population¹ of 100,478, this works out to approximately 3,775 kWh/service population, annually.

Natural Gas

California accounts for less than one percent of total U.S. natural gas reserves and production; however, almost two-thirds of California households use natural gas for home heating (EIA 2019). In 2017, California consumed about 25,142 million therms of natural gas. Approximately 18 percent of natural gas was consumed by the residential sector. Los Angeles County consumed approximately 2,956 million therms of natural gas in the same year, accounting for

¹ Service population is defined as the sum of residents and employees in the Planning Area.

approximately 12 percent of statewide consumption. The residential sector made up approximately 38 percent of countywide consumption (CEC 2019b).

The Southern California Gas Company (SoCalGas) provides natural gas service to the Project. SoCalGas is the principal distributor of natural gas in Southern California and provides natural gas for residential, commercial, and industrial markets. The annual natural gas sale to all markets in 2017 was approximately 5,142 million British Thermal Units (Btu)² (CEC 2019c).

Based on the CalEEMod emissions estimates prepared for the Project (see Chapter 4.3.1 and Appendix B), existing development in the Planning Area is estimated to consume approximately 1,226,769,340 kBtu per year. Based on a service population of 100,478, this works out to approximately 12,209 kBtu/service population, annually.

Transportation

California's transportation sector consumed 79.3 million Btu of energy per capita in 2017, which ranked 32nd in the nation (U.S. EIA 2017). Most gasoline and diesel fuel sold in California for motor vehicles is refined in California to meet state-specific formulations required by the California Air Resources Board (CARB).

According to the Board of Equalization (BOE), statewide taxable sales figures indicate a total of 15,584 million gallons of gasoline and 3,124 million gallons of diesel fuel were sold in 2017 (CEC 2019d; CDFTA 2018). Although exact estimates are not available by County, retail fuel outlet survey data indicates Los Angeles County accounted for approximately 23.0 percent and 16 percent of total statewide gasoline and diesel sales, respectively, in 2017 (CEC 2018b).

Using trip generation rates contained in the Traffic Impact Study (TIS) prepared for the Project and default trip generation distances in CalEEMod, the existing land uses in the Planning Area are estimated to generate approximately 1,411,576,106 vehicle miles traveled (VMT) per year.

4.6.2 – REGULATORY FRAMEWORK

Federal

Federal Energy Policy and Conservation Act (42 U.S.C. § 6201, *et seq.*)

In 1975, Congress enacted the Energy and Policy Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards.

Energy Independence and Security Act of 2007 (42 U.S.C. § 17001, *et seq.*)

This Act set increased Corporate Average Fuel Economy (CAFE) standards for motor vehicles and includes the following provisions related to energy efficiency:

- Renewable fuel standards (RFS)
- Appliance and lighting efficiency standards

² One therm is equal to 100,000 Btu, or 100 kBtu.

- Building energy efficiency

This Act requires increasing levels of renewable fuels to replace petroleum. The United States Environmental Protection Agency (U.S. EPA) is responsible for developing and implementing regulations to ensure transportation fuel sold in the United State contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Act, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of GHG emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of the nation’s renewable fuels sector. The updated program is referred to as RFS2 and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline;
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022;
- EISA established new categories of renewable fuel and set separate volume requirements for each one; and
- EISA required the U.S. EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces (U.S. EPA 2015).

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”

Federal Vehicle Standards

In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of carbon dioxide (CO₂) in model year 2025, on an average industry fleetwide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption

are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018-2027 for certain trailers, and model years 2021-2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (U.S. EPA and NHTSA, 2016).

In August 2018, The USEPA and NHTSA released a notice of proposed rulemaking called Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). This rule would modify the existing CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks, and establish new standards covering model years 2021-2026. SAFE standards are expected to uphold model year 2020 standards through 2026 (NHTSA 2018).

State

Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in California. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC).

CALGreen contains both mandatory and voluntary measures. For nonresidential land uses, there are 39 mandatory measures including, but not limited to, exterior light pollution reduction, wastewater reduction by 20 percent, and commissioning of projects over 10,000 square feet. Two tiers of voluntary measures apply to nonresidential land uses, for a total of 36 additional elective measures.

California’s Building Energy Efficiency Standards are updated on an approximately three-year cycle. Starting in 2020, the 2019 standards will improve upon existing standards, focusing on three key areas: proposing new requirements for installation of solar photovoltaics for newly

constructed low-rise residential buildings; updating current ventilation and Indoor Air Quality (IAQ) requirements; and extending Title 24 Part 6 to apply to healthcare facilities. The 2019 Building Energy Efficiency Standards are approximately 53 percent more efficient than the 2016 Title 24 Energy Standards for residential development and approximately 30 percent more efficient for nonresidential development.

Executive Order B-30-15

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, set a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. To achieve this ambitious target, Governor Brown identified five key goals for reducing GHG emissions in California through 2030:

- Increase the amount of renewable electricity provided state-wide to 50 percent;
- Double energy efficiency savings achieved in existing buildings and make heating fuels cleaner;
- Reduce petroleum use in cars and trucks by up to 50 percent;
- Reduce emissions of short-lived climate pollutants; and
- Manage farms, rangelands, forests, and wetlands to increasingly store carbon.

Senate Bill (SB) 375 (Sustainable Communities and Climate Protection Act)

In January 2009, California SB 375, known as the Sustainable Communities and Climate Protection Act, went into effect. The objective of SB 375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce GHG emissions and other air pollutants. SB 375 tasks CARB to set GHG reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In 2010, CARB released the proposed GHG reduction targets for the MPOs. The proposed reduction targets for the SCAG region were 8 percent by year 2020 and 13 percent by year 2035. In September 2010 and February 2011, the 8 percent and the 13 percent targets were adopted, respectively.

SCAG's Regional Council adopted an update to the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future* (2012 RTP/SCS) on April 7, 2016, the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS expands upon the 2012 RTP/SCS's goal of balancing future mobility and housing needs with economic, environmental, and public health goals. Included in the 2016 RTP/SCS are 13 major initiatives primarily focused around preserving and maintaining the existing transportation system, expanding and improving mass transit (with a specific emphasis on passenger rail), decreasing reliance on vehicular modes of transportation through the expansion of pedestrian and bicycle infrastructure, and focusing new growth around transit. In 2018, CARB established new regional GHG reduction targets for SCAG and other MPOs in the state (CARB 2018). The new SCAG targets are an 8 percent reduction in per

capita passenger vehicle GHG reductions by 2020 and a 19 percent reduction by 2035. The 2016 RTP/SCS, however, remains the approved SCS for the SCAG MPO until such time as SCAG prepares an updated SCS.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state’s electricity mix to 20 percent of retail sales by 2017. The *2003 Integrated Energy Policy Report* recommended accelerating that goal to 20 percent by 2010, and the *2004 Energy Report Update* further recommended increasing the target to 33 percent by 2020. The state’s *Energy Action Plan* also supported this goal. In 2006 under Senate Bill 107, California’s 20 percent by 2010 RPS goal was codified. The legislation required retail sellers of electricity to increase renewable energy purchases by at least one percent each year with a target of 20 percent renewables by 2010. Publicly owned utilities set their own RPS goals, recognizing the intent of the legislature to attain the 20 percent by 2010 target.

In 2008, Governor Schwarzenegger signed Executive Order S-14-08 requiring that “all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020.” The following year, Executive Order S-21-09 directed CARB to enact regulations to achieve the goal of 33 percent renewables by 2020.

In 2015, Governor Brown signed Senate Bill 350 to codify ambitious climate and clean energy goals. One key provision of SB 350 is for retail sellers and publicly owned utilities to procure “half of the state’s electricity from renewable sources by 2030.”

The State’s RPS program was further strengthened by SB 100 in 2018. SB 100 revised the State’s RPS Program to require retail sellers of electricity to serve 50 percent and 60 percent of the total kilowatt-hours sold to retail end-use customers be served by renewable energy sources by 2026 and 2030, respectively, and to require that 100 percent of all electricity supplied come from renewable sources by 2045.

Executive Order B-55-18

In 2018, Governor Brown signed EO B-55-18 to achieve carbon neutrality by moving California to 100 percent clean energy by 2045. This Executive Order also includes specific measures to reduce GHG emissions via clean transportation, energy efficient buildings, directing cap-and-trade funds to disadvantaged communities, and better management of the state’s forest land.

Low Carbon Fuel Standard Regulation

CARB initially approved the Low Carbon Fuel Standard (LCFS) regulation in 2009, identifying it as one of the nine discrete early action measures in the *2008 Scoping Plan* to reduce California’s GHG emissions. The LCFS regulation defines a Carbon intensity, or “CI,” reduction target (or standard) for each year, which the rule refers to as the “compliance schedule.” The LCFS regulation requires a reduction of at least 10 percent in the CI of California’s transportation fuels by 2020 and maintains that target for all subsequent years.

CARB has begun the rulemaking process for strengthening the compliance target of the LCFS through the year 2030. For a new LCFS target, the preferred scenario in the *2017 Scoping Plan Update* identifies an 18 percent reduction in average transportation fuel carbon intensity,

compared to a 2010 baseline, by 2030 as one of the primary measures for achieving the state’s GHG 2030 target. Achieving the SB 32 reduction goals will require the use of a low carbon transportation fuels portfolio beyond the amount expected to result from the current compliance schedule (CARB 2017).

Advanced Clean Cars Program

In 2012, CARB approved the Advanced Clean Cars (ACC) Program (formerly known as Pavley II) for model years 2017-2025. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations and the Zero-Emission Vehicle (ZEV) regulation. The program combines the control of smog, soot, and global warming gases with requirements for greater numbers of zero-emission vehicles into a single package of standards. By 2025, new automobiles under California’s Advanced Clean Car program will emit 34 percent less global warming gases and 75 percent less smog-forming emissions.

EO B-48-18, issued by Governor Brown in 2018, establishes a target to have five million ZEVs on the road in California by 2030. This Executive Order is supported by the State’s 2018 ZEV Action Plan Priorities Update, which expands upon the State’s 2016 ZEV Action Plan. While the 2016 plan remains in effect, the 2018 update function as an addendum, highlighting the most important actions State agencies are taking in 2018 to implement the directives of EO B-48-18.

Local

The City of Monterey Park implemented a Climate Action Plan (CAP) to address GHG emissions related to land use patterns, transportation, building design, energy use, water demand, and waste generation. It outlines a roadmap to reduce GHGs and promote economic growth based on clean technology and sustainable practices. The CAP evaluates current GHG emissions; forecasts “business-as-usual” emissions; establishes a policy to reduce the City’s GHG emissions to 15 percent below baseline 2009 levels by 2020; sets an aspirational goal of achieving GHG emissions 49 percent below baseline 2009 levels by 2035; develops reduction strategies that include building energy, transportation, land use, consumption, and solid waste; and maintains consistency with CEQA.

Energy Measures from the CAP

- Efficiency Requirements for New Development
 - Adopt energy efficiency standards that are 15% higher than 2008 Title 24 standards.
- Building Retrofits
 - Perform energy efficiency retrofits in 10% of existing residential and commercial buildings.
- Appliance Upgrade
 - Replace existing appliances with Energy Star qualified appliances in 10% of existing homes and 95% of new homes.
- Smart Meters
 - Help City residents conserve energy by using the enhanced features of their new Smart Meters.

4.6 – Energy

- Solar Water Heating (Residential and Commercial)
 - Install solar hot water heating systems on 10% of residential units and 5% commercial units.
- Alternative Energy Systems (Residential and Commercial)
 - Install solar systems to account for 5% of residential electricity use and 2% of commercial electricity use.

4.6.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Focused General Plan Update would have a significant impact related to energy if it would:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

4.6.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to energy.

Energy Consumption

Impact ENG-1 – Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption or energy resources, during project construction or operation?

Analysis of Impacts

Implementation of the Project could increase the demand for electricity and natural gas within the Planning Area and gasoline consumption in the region during construction and operation of new land use developments.

Electricity

Construction Use. Temporary electric power would be required at various construction sites throughout the Planning Area as growth occurs under Project. Electricity would be consumed by lighting and electronic equipment (e.g., computers) located in trailers used by construction crews, and by small, off-road equipment (e.g., compressors) used during construction activities. However, the electricity used for such activities would be temporary and would have a negligible contribution to the overall energy consumption in the Planning Area.

Operational Use. Development allowed by the Project would require electricity for multiple uses, including, but not limited to: building heating and cooling, lighting, appliance use (e.g., washer, dryer, microwave), and other electronics (e.g., television).

As described in Section 4.6.1 (Environmental Setting), CalEEMod was used to estimate Project emissions from energy uses. Default electricity generation rates in CalEEMod were used (for proposed land uses and climate zone) based on compliance with the 2019 Title 24 Building

Code. Table 4.6-1 summarizes changes in electricity consumption that could occur over the next approximately 20 years of growth allowed by the Project.

**Table 4.6-1
Estimated Operational Change in Electricity Consumption (2019 vs. 2040)**

Metric	Electricity Consumption (kWh)		
	2019	2040	Change
Total Electricity Consumption	379,350,590	352,186,690	-27,163,900
Service Population (SP)	100,478	114,901	+14,423
Electricity Consumption Efficiency (kWh/yr/SP)	3,775	3,065	-710
Source: MIG 2019 (see Appendix B).			

As shown in Table 4.6-1, electricity consumption in the Planning Area in 2040 is expected to decrease by approximately 27,163,900 kWh as compared to 2019 conditions. On an efficiency basis, electricity consumption is estimated to decrease by approximately 19 percent. Although growth may be occurring within the Planning Area under the Project, new development and land use turnover would be required to comply with statewide mandatory energy requirements outlined in Title 24, Part 6, of the California Code of Regulations (the CALGreen Code), which could decrease estimated electricity consumption in new and retrofitted structures. Additional electricity reductions could also be achieved through the implementation of the City's CAP. Furthermore, electricity consumed by development in the Planning Area could continue to be subject to the regulations described in Section 4.6.2 (Regulatory Framework). For these reasons, the electrical energy that would be consumed by the Project is not considered unnecessary, inefficient, or wasteful.

Natural Gas

Construction Use. Substantial natural gas consumption is not anticipated to occur during construction activities that could occur with Project implementation. Fuels used for construction would generally consist of diesel and gasoline, which are discussed in the next subsection ("Diesel and Gasoline Fuel"). Potential natural gas use during construction activities allowed by Project growth would not substantially contribute to overall energy consumption in the Planning Area, and would not be unnecessary, inefficiency, or wasteful.

Operational Use. Natural gas consumption during Project operations would be required for various purposes, such as building heating and cooling. CalEEMod was used to estimate natural gas consumption associated with growth in the Planning Area as allowed by the Project. Table 4-6.2 summarizes estimated changes in natural gas consumption over the next approximately 20 years of growth envisioned by the Project.

**Table 4.6-2
Estimated Operational Change in Natural Gas Consumption (2019 vs. 2040)**

Metric	Natural Gas Consumption (kBtu)		
	2019	2040	Change
Total Natural Gas Consumption	1,226,769,340	788,096,480	-439,672,860
Service Population (SP)	100,478	114,901	+14,423
Natural Gas Consumption Efficiency (kBtu/yr/SP)	12,209	6,859	-5,350
Source: MIG 2019 (See Appendix B)			

Based on the demand calculations shown in Table 4.6-2, which assume the average energy efficiency of structures in the Planning Area would meet the 2019 Title 24 CALGreen efficiency requirements by 2040, natural gas consumption in the Planning Area in 2040 is expected to decrease by approximately 438,672,860 kBtu as compared to 2019 conditions. On an efficiency basis, natural gas consumption is estimated to decrease by approximately 44 percent.

Although growth would occur within the Planning Area over the next approximately 20 years, new development and land use turnover would be required to comply with statewide mandatory energy requirements outlined in Title 24, Part 6, of the California Code of Regulations (the CALGreen Code), which would decrease estimated natural gas consumption in new and retrofitted structures. Natural gas consumed by land uses in the Planning Area would also be subject to the regulations described in Section 4.6.2 (Regulatory Framework). For these reasons, natural gas consumption by proposed land uses in the Project is not considered to be unnecessary, inefficient, or wasteful.

Diesel and Gasoline Fuel

Construction Use. Diesel and gasoline fuels, also referred to as petroleum in this subsection, would be consumed during construction activities as the Planning Area experiences new development. Fuel use by construction equipment would be the primary energy resource consumed during construction activities, and VMT associated with the transportation of construction materials (e.g., deliveries) and worker trips would also result in petroleum consumption. Whereas on-site, heavy-duty construction equipment and delivery trucks would predominantly use diesel fuel, construction workers would generally rely on gasoline-powered vehicles to travel to and from construction sites. State regulations such as LCFS would reduce the carbon intensity of transportation-related fuels, and all construction projects would be required to comply with CARB’s Airborne Toxic Control Measures, which, for example, restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary at each location, necessary for construction activities, and subject to mandatory regulations described above, it would not be unnecessary, wasteful, or inefficient.

Operational Use. Vehicle fuel consumption associated with Project operation would occur over the next approximately 20 years and would primarily be attributable to people traveling to or from the city for work, shopping, school, or other reasons. The amount of diesel and gasoline vehicle fuel consumption in the Planning Area under existing 2019 and forecasted 2040 growth conditions is shown in Table 4.6-3.

**Table 4.6-3
Estimated Vehicle Fuel Consumption Changes (2019 vs. 2040)**

Metric	Vehicle Fuel Consumption (Gallons)		
	2019	2040	Change
Total Diesel Consumption	5,272,868	5,445,730	+172,862
Total Gasoline Consumption	57,160,447	39,845,181	-1,315,266
Total Petroleum Consumption	62,433,315	45,290,911	-17,142,404
Service Population (SP)	100,478	114,901	+14,423
Petroleum Consumption Efficiency (gal/yr/SP)	621	394	-227

Source: MIG 2019 (See Appendix B)

As shown in Table 4.6-3, diesel and gasoline fuel consumption in 2040 with the Project is anticipated to be approximately 5,445,730 and 39,845,181 gallons, respectively. Compared to 2019, this represents approximately 172,862 more gallons of diesel fuel consumed annually, and approximately 17,315,266 fewer gallons of gasoline fuel consumed annually.³ On a service population basis, overall petroleum consumption is expected to decrease by approximately 37 percent. Although VMT is anticipated to increase slightly over the next approximately 20 years, fuel consumption would generally decrease as vehicle fuel efficiency increases to meet State GHG reduction goals.

Numerous regulations are in place that require and encourage fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and ZEVs in California. In addition, per the requirements identified in SB 375, CARB adopted a regional goal for the SCAG region of reducing per-capita GHG emissions from 2005 levels by 8 percent by 2020 and 19 percent by 2035 for light-duty passenger vehicles. As such, actual consumption in the Planning Area could be lower in 2040 than estimated in Table 4.6-3.

Vehicle fuel use in the Planning Area is also anticipated to decrease over the next approximately 20 years due to land use decisions made by the City, and because of fuel efficiency standards enacted at the State level. In addition, vehicle fuel consumption in the Planning Area would be a small fraction of statewide use. As such, petroleum consumption associated with implementation of the Project would not be considered unnecessary, inefficient, or wasteful.

Level of Significance Before Mitigation

As described above, the consumption of electricity, natural gas, and vehicle fuel resources would be necessary to accommodate the planned level of growth envisioned by the Project. The Project supports redevelopment of existing land uses with newer, more efficient development that would reduce energy consumption compared to existing conditions. In addition, the Project supports higher density, mixed use development that reduces VMT and fuel consumption as compared to other types of development. The use of energy resources in the Planning Area

³ These estimates are based on average fuel economy in Los Angeles County during the 2040 calendar year.

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would become substantially more efficient over time with the change in land uses envisioned by the Project and the application of more stringent regulations that reduce energy usage. For these reasons, the Project would not result in the unnecessary, inefficient, or wasteful use of energy resources. This impact would be less than significant.

Mitigation Measures

None required.

Level of Significance After Mitigation

Not applicable.

Renewable Energy

Impact ENG-2 – Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Analysis of Impacts

The Project would not conflict with nor obstruct a State or local plan adopted for the purposes of increasing renewable energy or energy efficiency. The California Building Code contains energy efficiency standards for residential and nonresidential buildings. These standards address electricity and natural gas efficiency in lighting, water, heating, and air conditioning, as well as the effects of the building envelope (e.g., windows, doors, walls and roofs) on energy consumption. Effective in 2020, the 2019 California Building Code requires installation of solar panels on new residential development under three stories. Other State plans, such as increasing the RPS portfolio, and increasing fuel efficiency and the number of electric vehicles on the road, would be implemented at the State level. The Project would not impede the implementation on any of these actions.

Level of Significance Before Mitigation

Since the Project would comply with applicable State standards, and new growth in the Planning Area would be subject to local plans (e.g., the City's CAP), the Project would not conflict with nor obstruct a State or local plan for increasing renewable energy or energy efficiency. This impact would be less than significant.

Mitigation Measures

None required.

Level of Significance After Mitigation

Not applicable.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to energy?

Analysis of Impacts

The analysis presented in Impact ENG-1 and ENG-2 is cumulative in nature. As described in the analyses, the Project would not result in the unnecessary, inefficient, or wasteful use of energy resources, nor would it conflict with or obstruct a State or local plan for increasing renewable energy or energy efficiency.

Level of Significance Before Mitigation

Project implementation would not result in a substantial adverse cumulative impact with respect to energy. This impact would be less than significant.

Mitigation Measures

None required.

Level of Significance After Mitigation

Not applicable.

4.6.5 REFERENCES

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4.7 – Geology and Soils

This chapter describes the geology conditions within the Planning Area, evaluates potential geology, soils, and paleontological impacts associated with implementation of the Monterey Park Focused General Plan Update EIR (Project), and identifies mitigation measures, if required.

4.7.1 – Environmental Setting

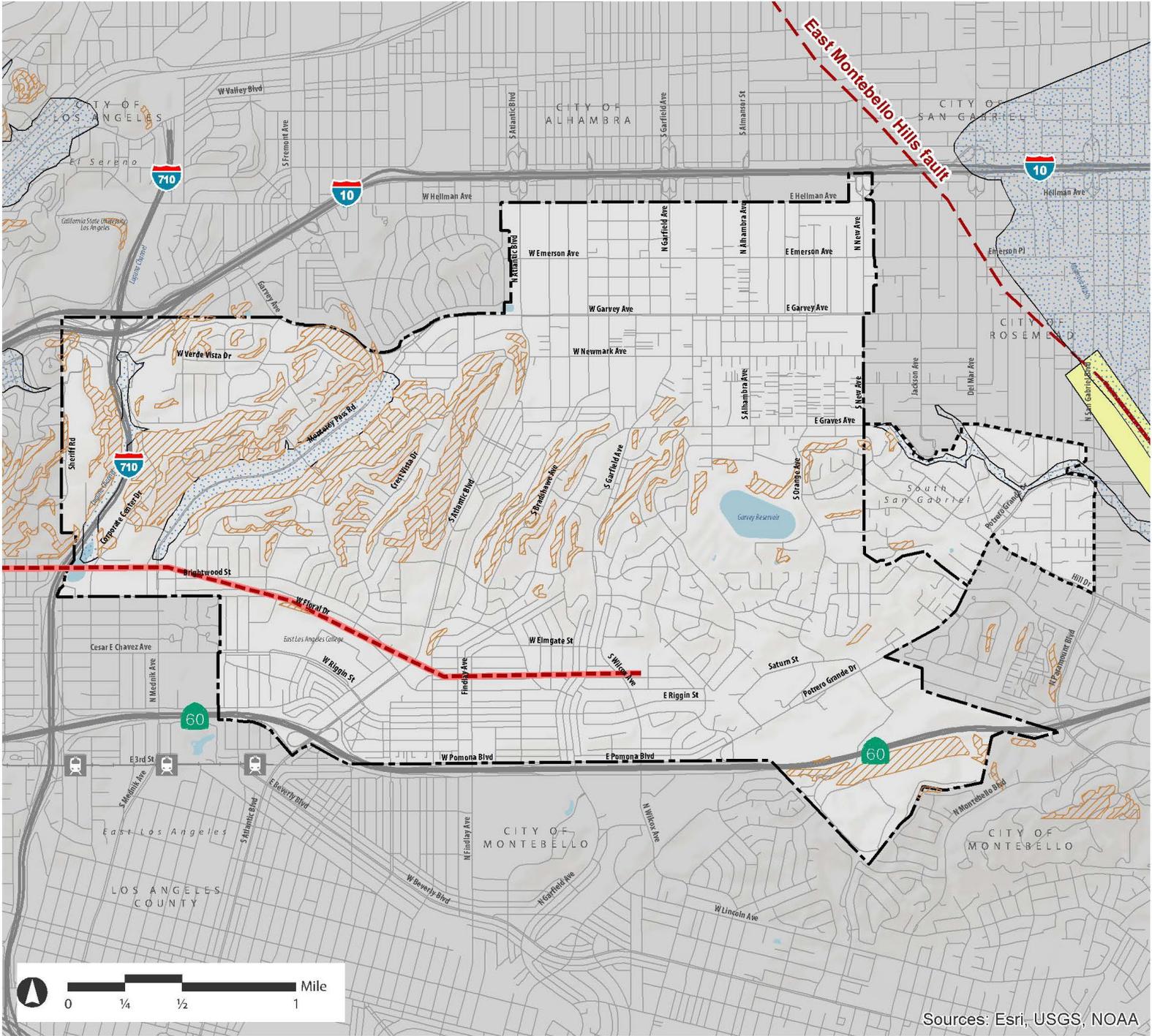
This environmental setting section describes existing geology conditions within the City of Monterey Park. Seismic hazards within the City are shown in Exhibit 4.7-1.

Seismic Activity

Monterey Park is within a region with several active faults and is subject to seismic activity. Active faults are considered those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Earthquake Fault Zone. While no active faults have been identified within the Planning Area, the East Montebello Fault is located east of the City's sphere of influence (California Geological Survey, 2017). The Fault Activity Map of California (2010) shows a fault with late quaternary fault displacement (within the last 700,000 years) located in the southwestern portion of Monterey Park (California Department of Conservation, 2015). Additionally, as noted in the Safety and Community Services Element of the General Plan (City of Monterey Park, 2001), the City overlies several blind thrust faults. These faults are referred to as blind because they do not intercept the ground surface, and, therefore cannot be detected visually. These northwest-dipping low-angle faults have been named the Puente Hills thrust, the Elysian Park thrust, and the East Los Angeles thrust. These faults are capable of movement that could produce ground shaking.

Ground Shaking

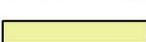
Ground shaking is the movement of the earth's surface in response to a seismic event and, in general, is the primary cause for the collapse of buildings and other structures, injury, and loss of life. The intensity of the ground shaking is determined by magnitude of the earthquake, distance from the fault movement, the characteristics of the surface and subsurface soils, geology, and building type. Due to the Planning Area's location within a seismically-active region, proximity to known faults and blind fault thrusts, the Planning Area will experience earthquake-related ground shaking in the future.



Liquefaction and Landslide

-  Liquefaction
-  Landslides

Faults

-  Accurate Location
-  Approximate Location
-  Inferred Location
-  Fault Zone

Base Map Features

-  Monterey Park Boundary
-  Sphere of Influence Boundary
-  Metro Gold Line and Stations



Sources: City of Monterey Park, State of California, Office of Emergency Services, 2018; Alquist-Priolo, California Department of Conservation, 2018.

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Liquefaction

Liquefaction is a process by which sediments below the water table temporarily lose strength and behave as a viscous liquid rather than a solid. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction. As shown in State of California Seismic Hazard Zones Map, Los Angeles and El Monte Quadrangles, areas within Monterey Park are identified as within liquefaction zones (California Geological Survey, 2017). Areas susceptible to liquefaction are shown in Exhibit 4.7-1.

Landslides

A landslide is the downhill movement of masses of earth material under the force of gravity. The factors contributing to landslide potential are steep slopes, unstable terrain, and proximity to earthquake faults. Earthquake-induced landslides (slope failure) are secondary earthquake hazards, which occur as a result of ground shaking. Seismically induced slope failure occurred during the 1987 Whittier Earthquake when steep slopes along Monterey Park's Abajo Drive failed. Areas susceptible to landslides are shown in Exhibit 4.7-1.

4.7.2 – REGULATORY FRAMEWORK

Federal, state, and local regulations related to geology are described below.

Federal

National Earthquake Hazards Reduction Program

Established by Congress in 1977, the National Earthquake Hazards Reduction Program (NEHRP) leads the federal government's efforts to reduce the fatalities, injuries, and property losses caused by earthquakes. The four basic NEHRP goals are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

In its initial NEHRP authorization, and in subsequent reauthorizations, Congress has recognized that several key federal agencies can contribute to earthquake mitigation efforts.

Federal Antiquities Act of 1906

Established by Congress in 1906, the Antiquities Act (16 U.S.C §§ 431, *et seq.*) provides that archeological and paleontological sites (Subsection 8.16.2.) on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of archaeological and historic sites, structures, and paleontological fossils and unique geological features on these lands.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning (AP) Act (Public Resources Code § 2621, *et seq.*; 14 C.C.R. §§ 3600, *et seq.*) provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The AP Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate most development projects within the zones.

Seismic Hazard Mapping Act

The California Geologic Survey, formerly the California Department of Conservation, Division of Mines and Geology (CDMG), provides guidance with regard to seismic hazards. Under CDMG's Seismic Hazards Mapping Act (1990), seismic hazard zones are to be identified and mapped to assist local governments in land use planning (Public Resources Code §§ 2690, *et seq.*). The intent of these maps is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CDMG's Special Publications 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California," provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.

California Building Code

California law provides a minimum standard for building design through the California Building Code (CBC) (Title 24 of the California Code of Regulations). Chapter 23 of the CBC contains specific requirements for seismic safety. Chapter 29 regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Division of Occupational Safety and Health (Cal/OSHA) regulations (Title 8 of the California Code of Regulations).

California Environmental Quality Act (CEQA)

California Environmental Quality Act (CEQA) has a single directive on paleontology in Appendix G – the Environmental Checklist Form, in which it asks whether the project would "directly or indirectly destroy a unique paleontological resource or site or unique geologic feature."

California Public Resources Code Section 5097.5

Defines any unauthorized disturbance or removal of a fossil site or fossil remains on public land as a misdemeanor and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources.

Local

Monterey Park General Plan - Safety and Community Services Element

The Safety and Community Services Element addresses hazards in the physical and built environment and presents goals and policies focused on reducing the potential risk of death, injuries, property damage, and dislocation for hazards. Goals and policies related to geology and soils are presented below.

- Goal 1.0: Minimize the potential damage to structures and loss of life that could result from earthquakes.
 - Policy 1.1: Continue to implement [California] Building Code seismic safety standards for construction of new buildings and update the City's codes as needed in response to new information and standards developed at the State level.
 - Policy 1.2: When modifications to existing older buildings are proposed, determine whether an engineering evaluation is required to identify seismic retrofit needs. Require that corrections be made to buildings deemed unsafe.
 - Policy 1.3: Encourage residential property owners to implement seismic safety improvements in older buildings, such as anchoring buildings to foundations, bolting water heaters to walls, and performing other preventative measures.
 - Policy 1.4: Participate in local, county, and State-sponsored earthquake preparedness programs.
- Goal 2.0: Ensure that all residents and business owners in Monterey Park have full and equal access to information regarding seismic hazards.
 - Policy 2.1: Promote earthquake preparedness with publications available in the many languages spoken in the community.
 - Policy 2.2: Provide earthquake preparedness information at City-sponsored events.
- Goal 3.0: Protect public and private properties from geologic hazards associated with steep slopes, unstable hillsides, and liquefaction-prone areas.
 - Policy 3.1: Periodically evaluate the effectiveness of the Property Maintenance, Urgency, and Grading Ordinance in preventing mud and debris flows.
 - Policy 3.2: Require that hillside developments incorporate measures that mitigate slope failure potential and provide for long-term slope maintenance.
 - Policy 3.3: Develop a comprehensive approach to remediating unstable hillslopes in the vicinity of Abajo Drive.
 - Policy 3.4: Require liquefaction studies to be prepared for new development proposed to be located in areas of the city with high susceptibility to liquefaction hazards.

City of Monterey Park Natural Hazard Mitigation Action Plan

The Natural Hazards Mitigation Action Plan (Emergency Management Services, September 2004) identifies resources and information to assist Monterey Park residents, public and private sector organizations, and other interested in participating in planning for natural hazards. The

mitigation plan provides a list of activities that may assist Monterey Park in reducing risk and preventing loss from future natural hazard events. The plan addresses multi-hazard types, including earthquakes, flooding, and windstorms.

Monterey Park Municipal Code

Chapter 20.18 of the Monterey Park Municipal Code requires a soils report to, among other things, analyze potential hazards for slope and hillside development. These regulations are applicable to properties with a slope in excess of ten percent, proposed slopes or retaining devices totaling in excess of five feet in height, or where the slope on an adjacent property exceeds ten percent within 25 feet of the property line or has retaining device over five feet tall within 25 feet of the property.

4.7.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Monterey Park General Plan Update would have a significant impact related to geology and soils if it would:

- a) Directly or indirectly cause 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.
 - II. Strong seismic ground shaking.
 - III. Seismic-related ground failure, including liquefaction.
 - IV. Landslides;
- b) Result in substantial soil erosion or the loss of topsoil;
- 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 direct or indirect risks to life or property;
- e) 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; or
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

4.7.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential geology and soils impacts that could result from the implementation of the project and recommends mitigation measures as needed to reduce significant impacts.

Faults, Liquefaction, and Seismic-Related Ground Failure

Impact GEO-1 –Directly or indirectly cause 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. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?

Analysis of Impacts

Rupture of an Earthquake Fault. Although Monterey Park is located in seismically active Southern California, no Alquist-Priolo Earthquake Fault Zones have been identified Monterey Park. One known fault trace is within Monterey Park, located at the southwestern corner of the City. However, this fault is not identified as being active.

Strong Seismic Ground Shaking. Ground shaking can vary greatly due to the variation in soil properties. Monterey Park is subject to strong ground shaking, as is the entirety of southern California. As described above, no Alquist-Priolo Earthquake Fault Zone are located within the Planning Area. However, as with all properties in the seismically active southern California region, all future projects would be susceptible to ground shaking during a seismic event and could expose persons and structure to potentially medium to strong seismic ground motion. All future projects could be exposed to strong ground shaking.

However, all future projects would be designed and constructed in compliance with all applicable City and State codes and requirements, including those established by the California Building Code as adopted by the MPMC. Furthermore, existing General Plan policies within the Safety and Community Services Element address seismic safety. These include:

- Policy 1.1: Continue to implement [California] Building Code seismic safety standards for construction of new buildings and update the City’s codes as needed in response to new information and standards developed at the State level.
- Policy 1.2: When modifications to existing older buildings are proposed, determine whether an engineering evaluation is required to identify seismic retrofit needs. Require that corrections be made to buildings deemed unsafe.

Application of these existing codes and policies would reduce this potential impact to a less-than significant level.

Liquefaction. As shown in Exhibit 4.7-1, portions of Monterey Park are susceptible to liquefaction hazards including areas within the Monterey Pass and Corporate Center focus areas. An existing policy within the Safety and Community Services Element of the General Plan requires liquefaction reports for any development proposed in areas susceptible to liquefaction:

- Policy 3.4: Require liquefaction studies to be prepared for new development proposed to be located in areas of the city with high susceptibility to liquefaction hazards.

Development allowed by the General Plan Focused Update could have the potential to be located within areas susceptible to liquefaction. However, if analysis of a specific site determines liquefaction conditions may be present, appropriate measures identified in the California Building

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Code, including specific provisions for seismic design of structures, would be required. Future development would be subject to the City’s standard environmental review process for evaluation of liquefaction potential and other geologic hazards. With implementation of existing policies and standards, impacts associated with liquefaction or other ground failure will be less than significant.

Landslides. As shown in Exhibit 4.7-1, portions of Monterey Park are susceptible to landslides, including areas within the following focus areas: Corporate Center; Monterey Pass; Corporate Park; North Atlantic; Mid Atlantic; and South Atlantic. Development allowed by the General Plan Update would be subject to Policy 3.2 of the Safety and Community Services Element of the General Plan:

- Policy 3.2: Require that hillside developments incorporate measures that mitigate slope failure potential and provide for long-term slope maintenance.

Furthermore, implementation of existing California Building Code and City practices and policies related to landslides during the environmental review process will assure that appropriate design measures are incorporated where necessary. Implementation of these existing regulations and policies would reduce potential landslide impacts to a less-than-significant level.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation required

Soil Erosion

Impact GEO-2 – Would the project result in substantial soil erosion or the loss of topsoil?

Analysis of Impacts

The Project identifies focus areas for development; these focus areas are currently developed and would likely have minimal topsoil since these areas are primarily covered with paving and structures. All development projects allowed by the Project would be subject to environmental and engineering review, including assessment and prevention of soil erosion. Short-term erosion effects during the construction phase of development associated with the Project implementation would be prevented through required implementation of a storm water pollution prevention plan (SWPPP) and through compliance with the National Pollutant Discharge Elimination System (NPDES) program and the incorporation of best management practices (BMPs) intended to reduce soil erosion (such as covering exposed soil stockpiles and working slopes, lining the perimeter of the construction site with sediment barriers, and protecting storm drain inlets). Soil erosion impacts would be less than significant with implementation of existing regulations.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation required.

Slope Stability and Land sliding

Impact GEO-3 – Would the project 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?

Analysis of Impacts

Please see Impact GEO-1 for a discussion of liquefaction and landslides.

Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Lateral spreading typically damages pipelines, utilities, bridges, and structures.

As discussed above, impacts from liquefaction and other settlement hazards would be considered less than significant with implementation of recommendations from site specific geotechnical engineering and soils reports for future development. Standard engineering techniques would be required, as appropriate, to guard against seismic-related hazards. Such techniques include excavation of collapsible soils and import of suitable fill material and foundation design methods that remain stable under settlement conditions. Impacts related to soil instability would be less than significant with the continued implementation of these existing regulations and practices.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation required

Expansive Soils

Impact GEO-4 – Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Analysis of Impacts

The Planning Area is approximately 3,980 acres, and site specific soil conditions throughout it may vary. Structural damage of buildings or utilities may occur if the potentially expansive and corrosive soils are not considered in the design and construction of development. The California Building Code (CBC) requires special design considerations for foundations of structures built on soils with expansion indices greater than 20. Presence of such soils, and identification of measures to eliminate this constraint such as removal and replacement with suitable engineered materials, would be determined through site-specific geotechnical evaluations to be conducted as part of the City's routine development review procedures. Such routine procedures would apply

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to all future development projects. Compliance with existing regulations and policies, including CBC requirements, would limit hazards related to expansive soil to less than significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required

Septic Tanks

Impact GEO-5 – 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?

Analysis of Impacts

Subsequent development associated with the General Plan Update would connect to the existing City sewer system; no septic tanks or alternative wastewater disposal system are proposed as part of the project.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is required.

Paleontological Resources

Impact GEO-6 – Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Analysis of Impacts

Ground-disturbing activities within the Planning Area could result in damage to or destruction of unique paleontological resources within rock units or geologic features. Paleontological resources have been recorded within the Planning Area (McLeod 2019). However, the Project allows for development and redevelopment including but not limited to road improvements, landscaping, surface parking, and multiple-story subsurface parking, resulting in the disturbance of soils at depths not previously disturbed by existing or past development. Paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities in fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface. Therefore, activities resulting from implementation within the Planning Area, including construction-related and earth-disturbing actions, could damage or destroy fossils or unique geological features that could result in potential significant impacts. Failure to properly evaluate, assess, survey, and if necessary, monitor development within the Planning Area could result in significant impacts to

paleontological resources or unique geological features. Compliance with Section 5097 of the Public Resources Code would result in less than significant impacts with respect to paleontological resources.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to geology and soils?

Analysis of Impacts

Impacts related to geology and soils are generally site specific and not cumulative in nature because each project area has unique geologic considerations that would be subject to uniform site development and construction standards. The potential for cumulative impacts is limited. Impacts associated with potential geologic hazards related to soil or other conditions occur at individual building sites. These effects are site-specific, and impacts would not be compounded by additional development. Adherence to existing policies and code requirements would reduce impacts from geologic hazards to a less-than significant level. Implementation of the Project would not result in a cumulatively considerable impact. Compliance with Section 5097 of the Public Resources Code, and the City's General Plan Policies: 3.1 and 3.2 would result in less than significant impacts with respect to paleontological resources or unique geological features.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required

4.7.5 REFERENCES

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4.8 – Greenhouse Gas Emissions

This chapter describes the existing greenhouse gas (GHG) setting of the Monterey Park Focused General Plan Update Planning Area, identifies associated regulatory requirements, evaluates the Project's potential GHG and climate change impacts, and identifies mitigation measures related to implementation of the Project. The methodologies and assumptions used in the preparation of this chapter follow guidance from the South Coast Air Quality Management District (SCAQMD). Information on existing GHG emissions levels and applicable federal and State regulations was obtained from the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and SCAQMD. This EIR GHG analysis has been closely coordinated with the air quality and energy analyses in Chapters 4.3 and 4.6 of this EIR. Please refer to Appendix B for detailed air quality and GHG emissions estimates (MIG 2019)

4.8.1 – ENVIRONMENTAL SETTING

Climate Change

Climate refers to a change in the state of the climate that can be identified (e.g., using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (e.g., changes in ocean circulation). Human activities can affect the atmosphere through releasing carbon and other greenhouse gases (explained below) by burning fuel (e.g., coal, oil, and other gases) and changing the Earth's surface (e.g., by deforestation and urbanizing large swaths of land). Gas emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs heat, light, and gases from the atmosphere. Evidence demonstrating that rapid climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years;
- Changes in precipitation patterns;
- Melting ice in the Arctic;
- Melting glaciers throughout the world;
- Rising ocean temperatures;
- Acidification of oceans; and
- Range shifts in plant and animal species.

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. Without it, life as experienced by humans on Earth would not exist. Human activities since the beginning of the industrial revolution (approximately 150 years ago) have been adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap energy, thereby contributing to an

average increase in the Earth's temperature. Human activities that exacerbate the greenhouse effect are detailed below.

Greenhouse Gases

Certain gases in the earth's atmosphere, identified as greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters the Earth's atmosphere from space. A portion of the radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Infrared radiation is absorbed by GHGs. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydroflouorocarbons (HFCs), perflouorocarbons (PFCs), and sulfur hexaflouride (SF₆). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.

GHGs are global pollutants with very long atmospheric lifetimes (some last several thousand years). They stand in contrast to criteria pollutants and toxic air contaminants, which have localized air quality effects with relatively short atmospheric lifetimes (about one day). The atmospheric concentrations of CO₂, CH₄, and N₂O have increased to levels unprecedented in at least the last 800,000 years. Human production of GHG has increased steadily since pre-industrial times (approximately pre-1880), and atmospheric CO₂ concentrations have increased from a pre-industrial value of 280 parts per million (ppm) in the early 1800s to approximately 411 ppm in January 2019 (NOAA 2019). From 1750 to 2011, CO₂ emissions from fossil fuel combustion and cement production have released 375 gigatons of carbon (GtC) to the atmosphere, while deforestation and other land use change are estimated to have released 180 GtC. This results in cumulative anthropogenic emissions of 555 GtC, of which approximately 43.2% has accumulated in the atmosphere, 28.8% has accumulated in natural terrestrial ecosystems, and 27.9% has been taken up by the ocean, causing acidification of ocean waters (IPCC 2013).

The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific greenhouse gases — CO₂, CH₄, nitrous oxide (N₂O), and sulfur hexafluoride (SF₆) — and two groups of gases — HFCs and perfluorocarbons (PFCs). These GHG are the primary GHG emitted into the atmosphere by human activities. Water vapor is also a common GHG that regulates the Earth's temperature; however, the amount of water vapor in the atmosphere can change substantially from day to day, whereas other GHG emissions remain in the atmosphere for longer periods of time. Black carbon consists of particles emitted during combustion; although a particle and not a gas, black carbon also acts to trap heat in the Earth's atmosphere. The most common GHG are described below.

- **Carbon Dioxide (CO₂)** is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of CO₂ from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO₂ at the sea surface. CO₂ is also released from plants during wildfires. Volcanic eruptions release a small amount of CO₂ from the Earth's crust. Human activities that affect CO₂ in the atmosphere include burning of fossil fuels, industrial

processes, and product uses. Combustion of fossil fuels used for electricity generation and transportation are the largest source of CO₂ emissions in the United States. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO₂. Emissions from industrial activities also emit CO₂, such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

- **Methane (CH₄)** is emitted from human activities and natural sources. Natural sources of CH₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause CH₄ releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global CH₄ emissions are human generated. Releases from animal digestive processes at agricultural operations are the primary source of human-related CH₄ emissions. CH₄ is produced from landfills as solid waste decomposes. CH₄ is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases CH₄. Wetlands are the primary natural producers of CH₄ because the habitat is conducive to bacteria that produce CH₄ during decomposition of organic material.
- **Nitrous Oxide (N₂O)** is emitted from human sources such as agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N₂O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N₂O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of N₂O, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.
- **Sulfur Hexafluoride (SF₆)** is commonly used as an electrical insulator in high-voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF₆ occur during maintenance and servicing as well as from leaks of electrical equipment.
- **Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs)** are entirely human made and are mainly generated through various industrial processes. These types of gases are used in aluminum production, semiconductor manufacturing, and magnesium production and processing. HFCs and PFCs are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons.

In 1997, the U.S. was a signatory to the Kyoto Protocol; however, the treaty was not sent to Congress for ratification. Thus, while a signatory to the Kyoto Protocol, the U.S. is not an official party to this international agreement and is not subject to any emissions reductions goals established pursuant to the Kyoto Protocol. Although the U.S. is not a party to this agreement, the GHG targeted for reduction by the Kyoto Protocol are also targeted under federal and State GHG reporting and emissions reduction programs.

GHG can remain in the atmosphere long after they are emitted. The potential for a particular greenhouse gas to absorb and trap heat in the atmosphere is considered its global warming potential. The reference gas for measuring global warming potential is CO₂, which has a global warming potential of one. By comparison, CH₄ has a global warming potential of 25, which means that one molecule of CH₄ has 25 times the effect on global warming as one molecule of

CO₂. Multiplying the estimated emissions for non-CO₂ GHG by their global warming potential determines their CO₂ equivalent (CO₂e), which enables a project’s combined global warming potential to be expressed in terms of mass CO₂ emissions. The global warming potentials and estimated atmospheric lifetimes of the common GHG are shown in Table 4.8-1 (Global Warming Potential (GWP) of Common GHG (100-Year Horizon)).

**Table 4.8-1
Global Warming Potential (GWP) of Common GHG (100-Year Horizon)**

GHG	GWP ^(A)	GHG	GWP ^(A)
Carbon Dioxide (CO ₂)	1	Perfluorocarbons (PFCs)	
Methane (CH ₄)	25	CF ₄	6,500
Nitrous Oxide (N ₂ O)	298	C ₂ F ₆	9,200
Hydrofluorocarbons (HFCs)		C ₄ F ₁₀	7,000
HFC-23	14,800	C ₆ F ₁₄	7,400
HFC-134a	1,430	Sulfur Hexafluoride (SF ₆)	22,800
HFC-152a	140		
HCFC-22	1,700		
Source: CARB 2014			
(A) GWPs are based on the United Nations Intergovernmental Panel on Climate Change 4 th Assessment Report.			

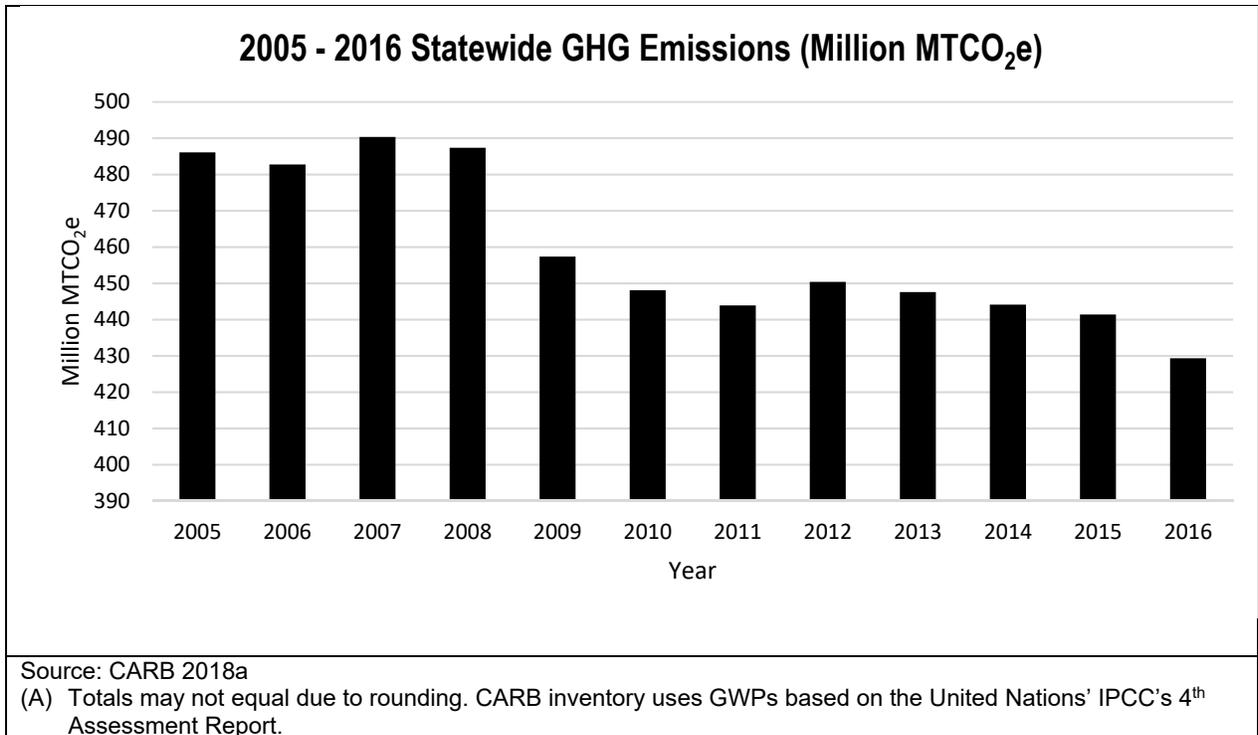
Statewide GHG Emissions

CARB prepares an annual statewide GHG emissions inventory using regional, State, and federal data sources, including facility-specific emissions reports prepared pursuant to the State’s Mandatory GHG Reporting Program. The statewide GHG emissions inventory helps CARB track progress towards meeting California’s GHG emissions target of 431 million metric tons of CO₂ equivalents (MTCO₂e), as well as establish and understand trends in GHG emissions¹. Statewide GHG emissions for the 2005 to 2016 time period are shown in Table 4.8-2.

**Table 4.8-2
2005-2016 Statewide GHG Emissions (Million MTCO₂e)**

Scoping Plan Sector	Year											
	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
Agriculture	34	35	36	36	33	34	35	36	35	36	34	34
Commercial/Residential	42	43	43	44	44	45	46	43	44	37	38	39
Electric Power	108	105	114	120	101	90	88	95	90	88	84	69
High GWP	9	10	11	12	12	14	15	16	17	18	19	20
Industrial	96	93	90	91	88	91	91	91	94	94	92	90
Recycling and Waste	8	8	8	8	8	8	8	8	9	9	9	9
Transportation	189	189	189	178	170	165	162	161	161	162	166	169
Total Million MTCO₂e^(A)	486	483	490	487	457	448	444	450	448	444	441	429

¹ CARB approved use of 431 MMCO₂e as the state’s 2020 GHG emission target in May 2014. Previously, the target had been set at 427 MMCO₂e



As shown in Table 4.8-2, statewide GHG emissions have generally decreased over the last decade, with 2016 levels (429 million MTCO₂e) approximately 11 percent less than 2005 levels (486 million MTCO₂e) and below the State's 2020 reduction target of 431 million MTCO₂e. The transportation sector (165 million MTCO₂e) accounted for more than one-third (approximately 39.4%) of the state's total GHG emissions inventory (429 million MTCO₂e) in 2016.

Climate Change and California

According to the Intergovernmental Panel on Climate Change (IPCC), which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature is expected to increase by 3 to 7 degrees Fahrenheit by the end of the century, depending on future GHG emission scenarios (IPCC 2008). Resource areas other than air quality and global average temperature could be indirectly affected by the accumulation of GHG emissions. For example, an increase in the global average temperature is expected to result in a decreased volume of precipitation falling as snow in California and an overall reduction in snowpack in the Sierra Nevada. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), and is a major source of water supply for the state (including the project site). According to the California Energy Commission (CEC), the snowpack portion of the water supply could potentially decline by 30 to 90% by the end of the 21st century (CEC 2006). A study cited in a report by the California Department of Water Resources projects that approximately 50% of the statewide snowpack will be lost by the end of the century (Knowles and Cayan 2002). Although current forecasts are uncertain, it is evident that this phenomenon could lead to significant challenges in securing an adequate water supply for a growing population. An increase in precipitation falling as rain rather than snow also could lead to increased potential for floods because water that would normally be held in the Sierra Nevada snowpack until spring could run off and flow into the Central Valley concurrently with winter storm events. This scenario would place more pressure on California's levee/flood control system.

Another outcome of global climate change is sea level rise. Sea level rose approximately 7 inches during the last century and it is predicted to rise an additional 7 to 22 inches by 2100, depending on the future levels of GHG emissions (IPCC 2008). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion, and disruption of wetlands (CEC 2006). As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species could become extinct or be extirpated from the state if suitable conditions are no longer available.

The 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) identified anticipated impacts to California due to climate change through extensive modeling efforts. General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevada Mountain Range.
- Some reduction in precipitation is likely by the middle of the century.
- Sea levels will rise up to an estimated 55 inches.
- Extreme events such as heat waves, wildfires, droughts, and floods will increase.
- Ecological shifts of habitat and animals are already occurring and will continue to occur (CNRA 2009).

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections and the interpretation. The potential impacts of global climate change in California are detailed below.

In January 2018, the CNRA adopted Safeguarding California Plan: 2018 Update, which builds on nearly a decade of adaptation strategies to communicate current and needed actions State government should take to build climate change resiliency. It identifies hundreds of ongoing actions and next steps that State agencies are taking to safeguard Californians from climate impacts within a framework of 81 policy principles and recommendations. The 2018 update also has two new chapters and incorporates a feature showcasing the many linkages among policy areas. A new “Climate Justice” chapter highlights how equity is woven throughout the entire plan (CNRA 2018).

Existing Planning Area GHG Emissions

The existing land uses within the Planning Area contribute to existing city, regional, and statewide GHG emissions. The Planning Area’s existing GHG emissions, presented below in Table 4.8-3, were estimated using CalEEMod, Version 2016.3.2. GHG emissions generated within the Project Area primarily come from the area, energy, and mobile sources described in Section 4.3.1, Air Quality (Environmental Setting), as well as the following additional sources specific to GHG emissions:

- **Energy use and consumption:** Emissions generated from purchased electricity and natural gas. As estimated using CalEEMod, the existing land uses in the Planning Area use and consume approximately 379,350,390 kWh of electricity per year and 1,226,769,340 kBtus of natural gas per year.

- **Solid waste disposal:** Emissions generated from the transport and disposal of waste generated by land uses. CalEEMod estimates approximately 41,633.9 tons of solid waste are generated per year by the people working and living within the Planning Area.
- **Water/wastewater:** Emissions from electricity used to supply water to land uses, and treat the resulting wastewater generated. As estimated in CalEEMod, existing land uses within the Planning Area use approximately 3,846.9 million gallons of water per year.

The Planning Area's existing GHG emissions were estimated using default emissions assumptions provided by CalEEMod, with the Project-specific modifications described below:

- **Mobile Sources.** The default, weekday trip generation rates for existing land use types, with the exception of elementary schools, were replaced with trip generation rates contained in the Traffic Impact Study (TIS) prepared for the Project (KOA, 2019). According to the TIS and default elementary school trip rates, the existing land uses generate approximately 527,782 total daily vehicle trips per weekday. CalEEMod does not estimate N₂O emissions from on-road vehicle travel or off-road construction sources. To account for this, CalEEMod emissions estimates were adjusted as follows:
 - N₂O emissions were estimated for the Project by comparing the ratio of CO₂ and N₂O emissions for the on-road (light-duty vehicles) vehicle sector contained in the State's most recent GHG inventory (CARB 2018a). In 2016, statewide CO₂ and N₂O emissions estimates for the on-road transportation sector (light-duty gasoline vehicles) were 115.4 and 0.005 million metric tons, respectively (N₂O emissions are therefore equal to 0.004 percent of CO₂ emissions for this sector).
 - Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7 percent reduction in average carbon intensity content in transportation fuels in 2017. Therefore, the CalEEMod estimate of CO₂ emissions was reduced by 3.7 percent (CARB 2018b).
- **Energy use and consumption.** In addition to natural gas usage, the existing land uses in the Planning Area would generate indirect GHG emissions from electricity use. Southern California Edison (SCE) provides electricity service in the Planning Area. The CalEEMod default GHG intensity values for this electric service provider are from 2012 and do not represent existing and future reductions in GHG intensity that have been achieved under the State's Renewable Portfolio Standard (RPS, see Section 4.8.2). To account for this, CalEEMod default assumptions regarding energy use were adjusted as follows:
 - The SCE GHG intensity value was reduced based on an increase in renewable energy mix from 20 percent under estimated Year 2012 conditions (the CalEEMod default data year) to 32 percent under existing conditions (2019, based on 2017 available data from SCE). This adjustment reduced the estimated amount of CO₂ produced by the SCE energy mix from approximately 702 pounds/megawatt-hour (lbs/mWh) to 539 lbs/mWh.
 - Electricity generation emission factors for CH₄ (0.033 lbs/mWh) and N₂O (0.004 lbs/mWh) were obtained from the U.S. EPA's EGRID database for year 2016, the last year for which data was available at the time this EIR was prepared (U.S. EPA 2016).

The Planning Area’s existing GHG emissions are summarized in Table 4.8-3 below.

**Table 4.8-3
Existing (2019) GHG Emissions in the Project Area**

Source	GHG Emissions (Metric Tons / Year)			
	CO ₂	CH ₄	N ₂ O	Total MTCO ₂ e
Area	7,357	7.5	0.16	7,593
Energy	156,793	6.93	1.89	157,529
Mobile ^(A)	626,610	37.54	25.10	635,017
Waste	8,451	499.46	-	20,938
Water	16,889	111.92	2.74	20,503
Total Existing GHG ^(B)	816,101	663.34	29.85	841,581
Service Population (SP) ^(C)	-	-	-	100,478
Existing GHG Efficiency ^(D)				8.4

Source: MIG 2019 (see Appendix B)

(A) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State’s Low Carbon Fuel Standards (LCFS). Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe emissions) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this EIR analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in 2017. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of .963 to account for the LCFS regulation (CARBb 2018).

(B) Totals may not equal due to rounding.

(C) Service Population is defined as the sum of the number of residents and number of jobs supported by the Project (CAPCOA, 2010).

(D) The GHG efficiency metric averages GHG emissions over the number of people the Planning Area the Project serves, and provides valuable information about the project’s ability to help obtain GHG reduction goals.

4.8.2 – REGULATORY FRAMEWORK

This section summarizes key federal, State, and City statutes, regulations, and policies that would apply to the Project. Global climate change resulting from GHG emissions is an ongoing environmental concern being discussed at the international, national, and statewide levels. At each level, agencies are considering strategies to control emissions of gases that contribute to global climate change.

International and Federal

International Regulation and the Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the “United Nations’ Framework Convention on Climate Change” agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHG in the United States. The plan currently consists of more than 50 voluntary programs for member nations to adopt.

Paris Climate Agreement

On December 12, 2015, representatives from 196 nations entered into the Paris Climate Agreement to adopt green energy sources, cut down on climate change emissions, and limit the rise of global temperatures while also cooperating to cope with the impact of unavoidable climate change. The agreement focuses on attempting to limit the rise in global temperatures to two degrees Celsius (3.6 degrees Fahrenheit). Voluntary pledges, taken by each country that signed the Paris climate agreement, set 2020 as the year in which reductions would begin.

In June 2017, the U.S. announced its intention to withdraw from the Paris Climate Agreement. Per the language in the agreement, the earliest effective date for the United States to withdraw is November 2020.

Federal Regulation and the Clean Air Act

In 2009, the U.S. EPA issued an endangerment finding that current and projected concentrations of the six Kyoto GHGs in the atmosphere (CO₂, CH₄, N₂O, SF₆, HFCs, and PFCs) threaten the public health and welfare of current and future generations. This finding came in response to the Supreme Court ruling in *Massachusetts v. EPA*, which found that GHGs are pollutants under the Federal Clean Air Act. As a result, the U.S. EPA issued its GHG Tailoring Rule in 2010, which applies to facilities that have the potential to emit more than 100,000 MTCO₂e. In 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* (No. 12-1146), finding that the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a “major” source required to obtain a permit pursuant to the “Clean Air Act’s Prevention of Significant Deterioration” or “Title V” operating permit programs. The U.S. EPA’s Greenhouse Gas Reporting Program requires facilities that emit 25,000 MTCO₂e or more of GHG to report their GHG emissions to the U.S. EPA to inform future policy decision makers.

The Current Administration

President Trump and the U.S. EPA have stated their intent to halt various federal regulatory activities to reduce GHG emissions. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. The timing and consequences of these types of federal decisions and potential responses from California and other states are speculative at this time.

State and Regional

Assembly Bill (AB) 32 (California Global Warming Solutions Act) and Related GHG Goals

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and established the timeline for meeting State GHG reduction targets. The deadline for meeting the 2020 reduction target is December 31, 2020.

As part of AB 32, CARB determined 1990 GHG emissions levels and projected a “business-as-usual” (BAU)² estimate for 2020, to determine the amount of GHG emission reductions that

² BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies.

would need to be achieved. In 2007, CARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million MTCO₂e (CARB 2007). In 2008, CARB adopted its *Climate Change Scoping Plan*, which projects 2020 statewide GHG emissions levels of 596 million MTCO₂e and identifies numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 million MTCO₂e of GHG reductions and bring statewide GHG emissions to 1990 levels by 2020 (CARB 2009).

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, set a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. To achieve this ambitious target, Governor Brown identified five key goals for reducing GHG emissions in California through 2030:

- Increase renewable electricity to 50 percent.
- Double energy efficiency savings achieved in existing buildings and make heating fuels cleaner.
- Reduce petroleum use in cars and trucks by up to 50 percent.
- Reduce emissions of short-lived climate pollutants.
- Manage farms, rangelands, forests, and wetlands to increasingly store carbon.

By directing State agencies to take measures consistent with their existing authority to reduce GHG emissions, Executive Order B-30-15 establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown signed Senate Bill (SB) 32 and AB 197 in 2016. SB 32 made the GHG reduction target (to reduce GHG emissions by 40 percent below 1990 levels by 2030) a requirement, as opposed to a goal. AB 197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, “protect the State’s most impacted and disadvantaged communities ...[and] consider the social costs of the emissions of greenhouse gases.”

Scoping Plan

The CARB Scoping Plan is the comprehensive plan primarily directed at identifying the measures necessary to reach California’s GHG reduction targets. The key elements of the 2008 Plan were to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners (including seven states in the United States and four territories in Canada) in the Western Climate Initiative, establish transportation-related targets, and establish fees (CARB 2009). CARB estimated that implementation of these measures will achieve at least 174 million MTCO₂e of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (CARB 2009).

In a report prepared in 2010, CARB noted 40 percent of the reduction measures identified in the Scoping Plan were secured (CARB 2010). Although the cap-and-trade program began on January 1, 2012 (after CARB completed a series of activities dealing with the registration process, compliance cycle, and tracking system), covered entities did not have an emissions

obligation until 2013. In August 2011, the Scoping Plan was reapproved by CARB with the program’s environmental documentation.

On February 10, 2014, CARB released the public draft of the “First Update to the Scoping Plan.” “The First Update” built upon the 2008 Scoping Plan with new strategies and recommendations, and identified opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. “The First Update” defined CARB’s climate change priorities over the next five years, and set the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-12. It also highlighted California’s progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. “The First Update” evaluated how to align the State’s long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. “The First Update” to the Scoping Plan was approved by the Board on May 22, 2014.

The second update to the scoping plan, the 2017 Climate Change Scoping Plan update (CARB 2017), was adopted by CARB in December 2017. The primary objective for the *2017 Climate Change Scoping Plan* is to identify the measures required to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030) established under Executive Order B-30-15 and SB 32. The 2017 Climate Change Scoping Plan identifies an increased need for coordination among State, regional, and local governments to realize the potential for GHG emissions reductions that can be gained from local land use decisions. It notes that emissions reductions targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 Million MTCO_{2e} and 83 Million MTCO_{2e} by 2020 and 2050, respectively. To achieve these goals, the 2017 Scoping Plan Update includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050. The major elements of the 2017 Climate Change Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks.
- LCFS, with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH₄ and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

Senate Bill (SB) 375 (Sustainable Communities and Climate Protection Act)

In January 2009, California SB 375 went into effect known as the Sustainable Communities and Climate Protection Act. The objective of SB 375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB 375 tasks CARB to set GHG reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In August 2010, CARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were eight percent by year 2020 and 13 percent by year 2035. In September 2010 and February 2011, the eight percent and the 13 percent targets were adopted, respectively.

In 2012, SCAG's Regional Council adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future*. The 2012 RTP/SCS included a strong commitment to reduce emissions from transportation sources to comply with SB 375. The document contained a host of improvements to the region's multimodal transportation system. These improvements included closures of critical gaps in the network that hinder access to certain parts of the region, as well as the strategic expansion of the transportation system where there is room to grow in order to provide the region with greater mobility. The RTP/SCS demonstrated the region's ability to attain and exceed the GHG emission-reduction targets set forth by the CARB, and outlined a plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands.

SCAG's Regional Council adopted an update to the 2012 RTP/SCS in April 2016, the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS expands upon the 2012 RTP/SCS's goal of balancing future mobility and housing needs with economic, environmental, and public health goals. Included in the 2016 RTP/SCS are 13 major initiatives primarily focused around preserving and maintaining the existing transportation system, expanding and improving mass transit (with a specific emphasis on passenger rail), decreasing reliance on vehicular modes of transportation through the expansion of pedestrian and bicycle infrastructure, and focusing new growth around transit. Through proactive land use planning and improvements to the transportation network, implementation of the 2016 RTP/SCS will result in an 8 percent reduction in greenhouse gas emissions per capita by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 when compared with 2005 levels. These reductions meet or exceed the State's mandate, which require an 8 percent reduction by 2020 and 13 percent by 2035.

In March 2018, CARB established new regional GHG reduction targets for SCAG and other MPOs in the state (CARB, 2018b). The new SCAG targets are an 8 percent reduction in per capita passenger vehicle GHG reductions by 2020 and a 19percent reduction by 2035. The 2016 RTP/SCS, however, remains the approved SCS for the SCAG MPO until such time as SCAG prepares an updated SCS.

Senate Bill (SB) 350 (Clean Energy & Pollution Reduction Act)

SB 350 was signed into Law in September 2015 and establishes tiered increases to the Renewable Portfolio Standard (RPS). The Bill requires 40 percent of the state’s energy supply to come from renewable sources by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Assembly Bill (AB) 1493

With the passage of AB 1493 (Pavley I) in 2002, California launched an innovative and proactive approach for dealing with GHG emissions and climate change at the state level. AB 1493 requires CARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards apply to automobiles and light trucks from 2009 through 2016. Although litigation was filed challenging these regulations and the U.S. EPA initially denied California’s related request for a waiver, a waiver was granted. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 among light-duty vehicles. In January 2012, CARB approved the Advanced Clean Cars (ACC) program (formerly known as Pavley II) for model years 2017 through 2025. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations and the Zero-Emission Vehicle (ZEV) regulation. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards.

Executive Order (EO) B-30-15, Senate Bill 32 & Assembly Bill 197 (Statewide Interim GHG Targets)

California EO B-30-15 (April 29, 2015) set an “interim” statewide emission target to reduce greenhouse emissions to 40 percent below 1990 levels by 2030, and directed state agencies with jurisdiction over greenhouse gas emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels. Specifically, the Executive Order directed CARB to update the Scoping Plan to express this 2030 target in metric tons. Assembly Bill 197 (AB 197) (September 8, 2016) and Senate Bill 32 (SB 32) (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in EO B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires CARB to consider the social costs of emissions impacting disadvantaged communities.

Title 24 Energy Standards

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC).

CALGreen contains both mandatory and voluntary measures. For non-residential land uses there are 39 mandatory measures including, but not limited to exterior light pollution reduction, wastewater reduction by 20 percent, and commissioning of projects over 10,000 square feet. Two tiers of voluntary measures apply to non-residential land uses, for a total of 36 additional elective measures.

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 standards, adopted May 9, 2018, will go into effect on January 1, 2020 and improve upon existing standards, focusing on three key areas: proposing new requirements for installation of solar photovoltaics for newly constructed low-rise residential buildings; updating current ventilation and Indoor Air Quality (IAQ) requirements; and extending Title 24 Part 6 to apply to healthcare facilities. The 2019 standards also propose several smaller improvements in energy efficiency.

Center for Biological Diversity v. California Department of Fish and Wildlife

In its decision in *Center for Biological Diversity v. California Dep't of Fish and Wildlife (Newhall)* 62 Cal.4th 204 (2015), the California Supreme Court set forth several options that lead agencies may consider for evaluating the cumulative significance of a proposed project's GHG emissions:

1. A calculation of emissions reductions compared to a "business as usual" (BAU) scenario based upon the emissions reductions in CARB's Scoping Plan, including examination of the data to determine what level of reduction from BAU a new land use development at the proposed location must contribute in order to comply with statewide goals.
2. A lead agency might assess consistency with AB 32's goals by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities.
3. Use of geographically specific GHG emission reduction plans to provide a basis for tiering and streamlining of project-level CEQA analysis.
4. A lead agency may rely on existing numerical thresholds of significance for GHG emissions, though use of such thresholds is not required.

Local

City of Monterey Park General Plan

The City's current (2001) General Plan Sustainability Element contains the following goals and policies related to GHG pertaining to land use and transportation:

- Goal 1: Mixed land uses reduce the need for vehicle travel by making other transportation options viable.
 - Policy 1.1 Mixed Use Development: Incentivize and actively facilitate mixed use development near existing and planned transit corridors, including Downtown, East Garvey, and the North Atlantic corridor.
 - Policy 1.2 Uses In and Near Employment Centers: Facilitate supportive uses such as healthy food vendors and other small-scale services within or close to large employment centers.

- Policy 1.3 Community Gathering Places: Encourage the creation of plazas, outdoor dining areas, and other community gathering places in mixed use areas to support use by pedestrians.
- Goal 2: Employers use transportation demand management (TDM) to discourage peak-hour commuting in single-occupancy vehicles.
 - Policy 2.1 Municipal TDM: Maintain a transportation demand management program for City employees.
 - Policy 2.2 Employer-Led TDM: Encourage all employers to adopt transportation demand management programs.
- Goal 3: The city's parking supply is managed to reduce vehicle miles traveled.
 - Policy 3.1 Managed Parking: Manage parking in Downtown, East Garvey, and the North Atlantic corridor to incentivize access by transit and non-vehicular modes of transportation.
 - Policy 3.2 Parking for Businesses: Encourage businesses to dedicate convenient parking areas for motorcycles, carpool vehicles, and zero emissions vehicles. Encourage compliance with California's Parking Cash-Out Law among employers that subsidize employee parking they don't own; eligible employers must offer their employees an option to receive a cash allowance instead of using a parking space.
- Goal 4: Frequent, convenient, and direct transit service allows travel within Monterey Park and access to regional transit networks.
 - Policy 4.1 Bus Waiting Areas: Provide comfortable and safe bus stop areas for waiting and boarding.
 - Policy 4.2 Local and Regional Transit: Promote use of the Spirit Bus and regional transit services and facilitate expansion of transit services.
 - Policy 4.3 Car-sharing Encourage car-sharing services that allow people to access shared cars for short trips in Monterey Park.
- Goal 5: A connected, multimodal transportation network promotes walking and bicycling.
 - Policy 5.1 Pedestrian Realm: Provide streets that are clean, comfortable, and attractive for pedestrian travel, especially in neighborhoods, the larger downtown area, and areas around pedestrian "attractors" such as public facilities, transit stops, schools, parks, and commercial uses.
 - Policy 5.2 Pedestrian Crossings: Provide visible pedestrian crossings at street corners where state law provides pedestrians with the right-of-way, and mid-block where convenient crossings are needed to discourage jaywalking.
 - Policy 5.3 ADA Pedestrian Improvements: Prioritize locations for Americans with Disabilities Act (ADA) improvements along pedestrian pathways, including installation of curb ramps, closing sidewalk gaps, and removing sidewalk obstructions.
 - Policy 5.4 Access from Neighborhoods: Provide safe and convenient pedestrian and bicycle access from surrounding neighborhoods to "attractors" including schools, public facilities, parks, and commercial areas.

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- Policy 5.5 Neighborhood Pedestrian Network: Encourage the creation of pathways through neighborhood common areas, open space, and private property to create more complete pedestrian networks in residential areas.
- Policy 5.6 Multipurpose Trails: Seek opportunities to provide off-street multipurpose trails for biking and walking that increase connectivity throughout the city while providing an attractive environment for walking and bicycling separated from the roadway.
- Goal 6: Amenities along streets and at popular destinations make bicycling and walking trips more enjoyable and convenient
 - Policy 6.1 Public Bicycle Parking: Enhance bicycle parking at City facilities and designated bus stops along transit corridors.
 - Policy 6.2 Bicycle Parking in Development Projects: Require the provision of bicycle parking for new buildings and expansion projects as specified in the California Green Building Standards Code (CALGreen).
 - Policy 6.3 End-of-Trip Facilities at Businesses: Encourage businesses to provide bike parking and other end-of-trip facilities that promote bicycling.
 - Policy 6.4 Pedestrian Environment: Encourage the use of trees, vegetation, shade, and amenities along streets to create a pleasant walking.
- Goal 7: Drivers, cyclists, and pedestrians safely share roadways and trails.
 - Policy 7.1 Safe Routes to School: Provide every child in Monterey Park with a safe environment in which to walk or bicycle to school.
 - Policy 7.2 Safe Driver Behavior: Promote safe driver behavior around bicyclists and pedestrians, including knowing when to yield, looking for other people in the roadway, driving at appropriate speeds, and passing at a safe distance.
 - Policy 7.3 Bicyclist and Pedestrian: Education Encourage and promote the education of community members, including children, as safe and alert bicyclists and pedestrians.

City of Monterey Park Climate Action Plan

The City of Monterey Park has implemented a Climate Action Plan (CAP) to address GHG emissions related to land use patterns, transportations, building design, energy use, water demand, and waste generation. It outlines a roadmap to reduce GHG emissions and promote economic growth based on clean technology and sustainable practices. The CAP evaluates current GHG emissions; forecasts “business-as-usual” emissions; establishes a policy to reduce the City’s GHG emissions to 15 percent below baseline 2009 levels by 2020; sets an aspirational goal of achieving GHG emissions 49 percent below baseline 2009 levels by 2035; develops reduction strategies for building energy, transportation, land use, consumption, and solid waste emissions sources; and maintains consistency with CEQA. The CAP contains the following GHG reduction strategies, actions, and measures to meet the City’s reduction targets:

- Building Efficiency
 - E1. Efficiency Requirements for New Development. Adopt energy efficiency standards that are 15% higher than 2008 Title 24 standards.

- E2. Building Retrofits. Perform energy efficiency retrofits in 10% of existing residential and commercial buildings.
- E3. Appliance Upgrade. Replace existing appliances with Energy Star qualified appliances in 10% of existing homes and 95% of new homes.
- R1. Solar Water Heating (Residential and Commercial). Install solar hot water heating systems on 10% of residential units and 5% commercial units.
- R2. Alternative Energy Systems (Residential and Commercial). Install solar systems to account for 5% of residential electricity use and 2% of commercial electricity use.
- Land Use
 - LU1. Mixed-Use Development. Encourage high-density and mixed-use development near transit.
 - LU2. Service Nodes. Incentivize commercial and shopping opportunities near major office locations.
- Transportation
 - T1.2 Promote Use of Transit Network. Increase the percentage of people who use transit as a transportation mode.
 - T2.1. Expand Pedestrian Network and Increase Bicycle Parking. Increase the percentage of people who walk as a transportation mode. Require new developments to have a designated number of bike parking on-site.
 - T2.2. Provide End-Of-Trip Facilities. Increase the percentage of people who bike and walk as a transportation mode.
 - T3. Transportation Demand Management (TDM). Increase the number of employers that allow and offer amenities to encourage alternate commuting strategies that reduce VMT for employee commutes.
- Water and Waste
 - W1. Conserving Water. Reduce per capita water consumption by 20%.
 - W2. Reducing Waste. Solid waste diversion from landfills of 50%.

4.8.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to GHG emissions if it would:

- a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

In order to provide guidance to local lead agencies on determining the significance of GHG emissions in their CEQA documents, SCAQMD convened the first GHG Significance Threshold Working Group (Working Group) meeting in 2008 (SCAQMD 2008); it convened a total of 15 times, with the last meeting taking place on September 28, 2010 (SCAQMD 2010). Based on

the last Working Group meeting, the SCAQMD identified an interim, tiered approach for evaluating GHG emissions intent on capturing 90 percent of development projects where SCAQMD is not the lead agency. The following describes the basic structure of SCAQMD's tiered, interim GHG significance thresholds:

- A. Tier 1 consists of evaluating whether or not the project qualifies for applicable CEQA exemptions.
- B. Tier 2 consists of determining whether or not a project is consistent with a greenhouse gas reduction plan. If a project is consistent with a greenhouse gas reduction plan, it would not have a significant impact.
- C. Tier 3 consists of using screening values at the discretion of the Lead Agency; however, the Lead Agency should be consistent for all projects within its jurisdiction. The following thresholds were proposed for consideration:
 - a. 3,000 MTCO₂e/yr for all land use types; or
 - b. 3,500 MTCO₂e/yr for residential; 1,400 MTCO₂e/yr for commercial; 3,000 MTCO₂e/yr for mixed use projects.
- D. Tier 4 has three options for projects that exceed the screening values identified in Tier 3:
 - a. Option 1: Reduce emissions from business-as-usual by a certain percentage (currently undefined).
 - b. Option 2: Early implementation of applicable AB 32 Scoping Measures.
 - c. Option 3: For plan-level analyses, analyze a project's emissions against an efficiency value of 6.6 MTCO₂e/yr/SP by 2020 and 4.1 MTCO₂e/yr/SP by 2035. For project-level analyses, analyze a project's emissions against an efficiency value of 4.8 and 3.0 MTCO₂e/yr/SP for the 2020 and 2035 calendar years, respectively.

The Project plans for growth through 2040, five years after SCAQMD's latest Tier 4 interim efficiency target year (2035) identified above. Therefore, to evaluate the Project's GHG emissions against future GHG reduction goals, the plan-level efficiency target has been adjusted based on the GHG reduction targets of SB 32, which sets a target of 40 percent below 1990 levels by 2030, and Executive Order S-03-05, which sets a goal of 80 percent below levels by 2050. The resulting, interpolated efficiency target for the year 2040 is 2.6 MTCO₂e/yr/SP.³

³ To remain on track with future GHG reduction goals, it is necessary to identify the efficiency target for 2040. Pursuant to existing legislation, GHG emissions are required to be reduced to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050 – meaning a 40 percent reduction would need to occur between 2030 and 2050 compared to 1990 levels. 2040 is the halfway point between 2030 and 2050; thus, half the reductions that need to occur between 2030 and 2050 should be achieved by 2040 (i.e., GHG emissions should be 60 percent below 1990 levels by 2040). Using the efficiency metric for 2020, 6.6 MTCO₂e/yr/SP (the same efficiency as 1990 pursuant to AB 32 reduction requirements) and multiplying through by 40 percent (i.e., 60 percent below 1990 levels) results in a derived efficiency metric of 2.6 MTCO₂e/yr/SP for year 2040. The City is not applying or proposing to use 2.6 MTCO₂e/yr/SP as a CEQA GHG significance threshold for general use; rather, it is only intended for use on this Project.

4.8.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to the generation of GHG emissions that may have a significant impact on the environment and any conflicts with applicable plans adopted for the purpose of reducing GHG emissions.

Greenhouse Gas Emissions

Impact GHG-1 – Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Analysis of Impacts

Project implementation allows for construction and operational activities that would generate GHG emissions. As described in more detail below, the GHG emissions generated by the growth allowed by the Project would exceed SCAQMD thresholds and result in a significant and unavoidable impact even with the inclusion of feasible mitigation measures.

Annual Construction Emissions

Project implementation allows for construction activities that would generate GHG emissions primarily from fuel combustion in equipment during demolition, site preparation, grading, building construction, paving, and architectural coating activities, and in worker, vendor, and haul trips to and from future construction projects. Demolition and construction activities would occur intermittently at different sites within the Planning Area over the next approximately 20 years.

To determine if anticipated typical construction activities could result in a significant GHG emissions impact, construction emissions were modeled using CalEEMod V. 2016.3.2. As described under Impact AQ-2, due to the uncertainty of timing and methods of construction activities that could occur for future development projects, the construction emissions analysis assumed that a maximum of 10 percent of the growth envisioned within the Planning Area could be under construction in any given year (see Chapter 4.3, Air Quality, Table 4.3-6).⁴

Generally, SCAQMD recommends amortizing construction GHG emissions over a 30-year period, since construction activities for a project typically only occur towards the start of a project and cease to emit GHG upon the completion of construction activities. This normalizes construction emissions so that they can be grouped with operational emissions and compared to appropriate thresholds, plans, and adopted policies. Since Project growth is allowed to occur over approximately 20 years, with construction potentially occurring every year, the emissions resulting from construction of 10 percent of the Planning Area's growth are assumed to represent potential annual construction emissions and, therefore, are grouped with operational emissions below. The annual construction-related GHG emissions that could occur with Project implementation are shown in Table 4.8-4.

⁴ This is considered a conservative assumption because it represents a doubling of the overall average activity that could occur over an approximately 21-year growth period and thus likely overestimates potential annual construction-related GHG emissions resulting from implementation of the Project.

**Table 4.8-4
Project Construction GHG Emissions Estimates**

Source	GHG Emissions (Metric Tons / Year)			
	CO ₂	CH ₄	N ₂ O	Total MTCO ₂ e
Maximum Annual Construction GHG Emissions				
Demolition	26.9	0.01	-	26.9
Construction	952.8	0.1	-	956.5
<i>Maximum Annual Emissions</i>	980.0	0.1	-	983.4

Source: MIG 2019. See Appendix B

Operational Emissions

As explained in more detail in Chapter 4.3, Air Quality, the Project allows for new residential, commercial, and recreational uses that would operate up to and likely through 2040. Allowed projected growth could include up to an additional 3,816 dwelling units, 607 new hotel rooms, and approximately 1,264,092 additional square feet of non-residential land uses within the Planning Area. The use of existing structures in the Planning Area, as well as the operation of new developments, would result in GHG emissions from mobile, energy, and area sources. Mobile sources, including vehicle trips to and from land uses within the Planning Area, would result primarily in emissions of CO₂, with emissions of CH₄ and NO₂ also occurring in minor amounts. In addition to mobile sources, GHG emissions would also be generated from natural gas usage, electricity use, water conveyance and use, wastewater treatment, and solid waste disposal. Natural gas use would result in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use associated with both the physical usage of development, as well as the energy needed to transport water/wastewater, would result in the production of GHGs if the electricity is generated through non-renewable sources (i.e., combustion of fossil fuels). Solid waste generated by land uses within the Planning Area would contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy when transporting and managing the waste. In addition, landfilling, the most common waste management practice, results in the release of CH₄ from the decomposition of organic materials.

Potential operational GHG emissions resulting from Project operation were modeled using CalEEMod, Version 2016.3.2. The modeling assumes Project growth consistent with the change in land uses shown in Chapter 4.3, Air Quality, Table 4.3-11. The modeling is based on default data assumptions contained in CalEEMod, with the Project-specific modifications described under Impact AQ-2, as well as the following adjustments to default model assumptions:

- **Mobile Sources.** The default, weekday trip generation rates for existing land use types were replaced with trip generation rates contained in the TIS prepared for the Project (KOA, 2019), with the exception of elementary school land use trip rates. According to the TIS and default elementary school trip rates, the Project could generate approximately 568,291 total daily vehicle trips per weekday under projected growth conditions in 2040.
 - N₂O emissions were estimated for the Project by comparing the ratio of CO₂ and N₂O emissions for the on-road (light-duty vehicles) contained in the State's most recent GHG inventory (CARB 2018b). In 2016, statewide CO₂ and N₂O emissions estimates for the on-road transportation sector (light-duty gasoline

vehicles) were 115.4 and 0.005 million metric tons, respectively (N₂O emissions are therefore equal to 0.004% of CO₂ emissions for this sector).

- The CalEEMod estimate of CO₂ emissions was reduced by 20percent to reflect the reduction in carbon intensity that would be achieved under the State’s LCFS (see Section 4.8.2) program by 2030.
- **Energy use and consumption.** In addition to natural gas usage, operation of the proposed Project could generate GHG emissions from electricity use. CalEEMod contains default energy efficiency values that are based on the 2016 energy code. To account for more efficient energy use that is anticipated to occur under the 2019 and subsequent energy codes, CalEEMod default assumptions regarding energy use were adjusted as follows:
 - CalEEMod default energy efficiency values were adjusted downwards by a factor of 0.5 to reflect increased energy efficiency and solar photovoltaic requirements of the 2019 energy code (CEC 2018). Similarly, the non-residential default light energy intensity value was adjusted downwards by a factor of 0.7 to reflect increased lighting efficiency in the 2019 energy code.
- **Water.** Water use was reduced consistent with the requirements of City CAP measure W1 (20 percent reduction).

The total unmitigated GHG emissions estimated to occur under projected 2040 growth conditions are shown below in Table 4.8-5. As described above, SCAQMD recommends the use of an efficiency threshold for plan-level analysis in which potential emissions levels are considered in terms of how many GHG emissions would be produced by each resident and employee using a project’s facilities; thus, an adjusted 2040 project-level efficiency target of 2.6 MTCO₂e/yr/SP was used.

**Table 4.8-5
Project GHG Emissions**

Source	GHG Emissions (MTCO ₂ e / Year)		
	Existing (2019) ^(A)	Forecast Growth (2040)	Net Change
Area	7,593	8,352	+759
Energy	157,529	51,331	-106,199
Mobile ^(B)	635,017	413,537	-221,470
Waste	20,938	23,045	+2,107
Water	20,503	5,795	-14,708
<i>Operational Total^(C)</i>	841,581	502,070	-339,511
Construction	--	983	+983
Total Emissions	841,581	503,053	-338,528
Service Population (SP)	100,478	114,901	14,423
MTCO ₂ e/yr/SP	8.4	4.4	-4.0
SCAQMD Tier 4 Adjusted 2040 Plan Level Efficiency Threshold	--	2.6	--
Exceeds Threshold?	--	Yes	--

4.8 – Greenhouse Gas Emissions

Source: MIG 2019 (see Appendix B)

Notes: See Table 4.8-3 for existing GHG emissions in the Planning Area.

(A) CalEEMod 2016.3.2 does not incorporate GHG emissions reductions resulting from the State's Low Carbon Fuel Standards (LCFS). Although LCFS largely reduces GHG from upstream fuel processing (and not individual tailpipe emissions) the aggregate effect on transportation fuels is a reduction in GHG emissions throughout the state from lower fuel carbon content. Accordingly, this EIR analysis reduces transportation combustion emissions pursuant to LCFS requirements. Based on the latest estimate available from CARB, the LCFS regulation resulted in a 3.7% reduction in average carbon intensity content in 2017 and should result in a 20% reduction in average carbon intensity in 2020. Thus, CalEEMod transportation emissions were adjusted by multiplying by a factor of .963 for existing and 0.8 for project emissions to account for the LCFS regulation (CARB 2018b).

As shown above in Table 4.8-5, the Planning Area could emit approximately 503,053 MTCO₂e annually by 2040. Dividing through by the Project service population (114,901 residents and employees) results in an efficiency metric of 4.4 MTCO₂e/yr/SP for 2040. Although this GHG efficiency level does not meet the adjusted target for 2040 (2.6 MTCO₂e/yr/SP), it does show an appreciable reduction from existing conditions. The GHG efficiency occurring under 2040 growth conditions would be approximately 48 percent less than 2019 conditions.

The primary source of Project GHG emissions would be mobile sources, specifically the single-family residential and regional shopping center land uses, which represent approximately 28 percent and 32 percent, respectively, of total annual VMT occurring under 2040 growth conditions. The TIS prepared for the Project indicates land use trip generation rates were reduced to reflect transit credits for portions of the Planning Area adjacent to high-quality transit lines, such as Metro Rapid lines or transit centers. These credits result in an approximate 5.3 percent reduction in trips generated under the Project's 2040 growth projection.

Level of Significance Before Mitigation

As shown in Table 4.8-5, the Project's 2040 growth projection could result in GHG emissions that exceed the adjusted, SCAQMD derived plan-level efficiency metric. This is considered a **potentially significant** impact.

Mitigation Measures

The Project includes goals and policies that build upon the 2001 General Plan and 2014 Sustainable Community Element, which promote mixed-use developments, transportation demand and parking management strategies, transit service, and other actions that reduce transportation-related GHG emissions. In addition, implementation of Mitigation Measures AQ-2B, AQ-2C, and AQ-2D (in Chapter 4.3, Air Quality) would reduce mobile source emissions and reduce VMT; however, since future, specific development projects are unknown, and some of the measures are voluntary, the emissions reductions that would be achieved by Mitigation Measures AQ-2B, AQ-2C, and AQ-2D are not certain and cannot be guaranteed by the City at this time.

Level of Significance After Mitigation

Mitigation Measures AQ-2B, AQ-2C, and AQ-2D would reduce residential and non-residential vehicle trip emissions by promoting electric vehicle infrastructure, bicycle parking, and non-residential TDM programs. These measures would reduce exhaust emissions from vehicles; however, since future, specific development projects are unknown, and some of the measures are voluntary, the emissions reductions that would be achieved by Mitigation Measures AQ-2B, AQ-2C, and AQ-2D are not certain and cannot be guaranteed by the City at this time. Therefore,

the Project's 2040 growth projection could result in GHG emissions that exceed SCAQMD thresholds. This impact would be **significant and unavoidable** even with implementation of feasible mitigation measures.

Conflicts with Adopted Plans

Impact GHG-2 – Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Analysis of Impacts

CARB Scoping Plan

As discussed under Section 4.8.2, Regulatory Framework, the 2017 Climate Change Scoping Plan is CARB's primary document used to ensure State GHG reduction goals are met. The plan identifies an increasing need for coordination among State, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. The major elements of the 2017 Climate Change Scoping Plan, which is designed to achieve the State's 2030 GHG reduction goal, are listed in Section 4.8.2. Nearly all of the specific measures identified in the 2017 Climate Change Scoping Plan would be implemented at the state level, with CARB and/or another State or regional agency having the primary responsibility for achieving required GHG reductions. The Project, therefore, would have limited ability to directly conflict with any of the specific measures identified in the 2017 Climate Change Scoping Plan. Nonetheless, the overarching goal of the 2017 Climate Change Scoping Plan is to achieve a 40 percent reduction in GHG emissions below 1990 levels by 2030. To achieve this statewide goal, the 2017 Climate Change Scoping Plan recommends a statewide efficiency metric of six metric tons per capita by 2030 and two metric tons per capita by 2050. These statewide per capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the state. Based on the emissions modeling conducted for the Project, the Project growth would result in emissions that exceed the 2017 Climate Change Scoping Plan adjusted statewide 2040 metric of four metric tons per capita employed for this EIR.⁵ It is worth noting that while the Project would exceed the statewide efficiency metrics, which were derived with the overarching goal of a 40percent reduction in GHG emissions below 1990 levels, implementation of the Project would result in an approximately 40 percent reduction compared to current GHG emissions.

SCAG 2016 RTP/SCS

As described in Section 4.11, Land Use, Table 4.11-2, the Project would be consistent with the goals of the 2016 RTP/SCS. The primary goal of SCAG's RTP/SCS is to reduce emissions by 8 percent per capita by 2020, 18 percent per capita by 2035, and 21 percent per capita by 2040, relative to 2005 levels. This level of reduction would meet and exceed the region's GHG targets set by CARB (8 percent per capita by 2020 and 13 percent per capita by 2035). Table 4.8-6 below compares the existing 2019 and 2040 VMT and transportation-related GHG emissions per capita in the Planning Area.

⁵ The Project plans for growth through 2040. Therefore, the 2040 statewide efficiency metric is linearly derived from the State's 2030 (6 MTCO_{2e} per capita) and 2050 (2 MTCO_{2e} per capita) targets. The Project's per capita GHG emissions in 2040 would be approximately 6.2 MTCO_{2e}.

**Table 4.8-6
Transportation GHG Emissions and VMT Per Capita**

Metric	2019	2040 Growth	Percent Change
Population	68,888	80,581	+17%
Annual VMT ^(A)	1,411,576,106	1,531,570,752	+8.5%
VMT per capita	20,491	19,007	-7.2%
Transportation GHG ^(B)	635,017	413,537	-35%
Transportation GHG per capita	9.22	5.14	-44%
Source: MIG 2019 (A) Obtained from CalEEMod outputs, see Appendix B. (B) See Table 4.8-4			

As shown in Table 4.8-6, the Project could, in 2040, result in an approximately 7.2 percent reduction in VMT per capita and an approximate 44percent reduction in transportation GHG per capita as compared to 2019 conditions. 2005 conditions are not known, but are presumed to have a higher (i.e., less efficient) per capita consumption value than 2019 conditions. Since the project would be consistent with the goals of the 2016 RTP/SCS - by reducing VMT per capita by 7.2 percent compared to 2019 conditions, and by reducing transportation GHG emissions per capita by 44 percent compared to 2019 conditions - it would not conflict with the 2016 RTP/SCS.

City of Monterey Park Climate Action Plan (CAP)

As discussed in Section 4.8.2, the City's CAP sets GHG emissions reduction targets of 15 percent below baseline 2009 levels by 2020, and sets a goal of achieving GHG emissions reductions target of 49 percent below baseline 2009 levels by 2035.

The emissions estimation methodologies used in the CAP and this EIR differ, and are not directly comparable. The Project's planned type and location of growth is consistent with the CAP's policies calling for mixed-use development (Policy LU1) and commercial/shopping opportunities near office locations (Policy LU2)., Mitigation Measures AQ-2B, AQ-2C, and AQ-2D in this EIR would reduce transportation-related emissions consistent with CAP policies calling for transit (Policy T1), pedestrian and bicycle facilities (Policy T2.1), end of trip facilities (Policy T2.2), and TDM measures (Policy T3). However, the Project could conflict with the City's CAP for several reasons. First, the total amount of GHG emissions occurring with Project growth in 2040 would be approximately 40 percent less than current 2019 conditions (as estimated in this EIR). This level of reduction is unlikely to be in line with the CAP's aspirational goal to reduce GHG emissions 49 percent below 2009 levels by 2035. Second, the Project could result in an approximate annual average growth rate, in terms of population, of 0.81 percent between 2019 and 2040, whereas the CAP's future GHG emissions are based on a 0.45 percent growth rate between 2020 and 2035.

Since the Project would permit potentially higher levels of growth than currently planned for in the City's CAP, it would be inconsistent with the CAP until such time as the City revises the CAP.

Level of Significance Before Mitigation

As shown in Table 4.8-5, Project growth could result in GHG emissions that exceed the 2017 Climate Change Scoping Plan's recommended efficiency metrics. In addition, the Project has the potential to result in growth that is not planned for in the City's CAP. This is considered a **potentially significant impact**.

Mitigation Measures

See Mitigation Measures AQ-2B, AQ-2C, and AQ-2D.

Level of Significance After Mitigation

Project growth would result in GHG emissions that exceed the 2017 Climate Change Scoping Plan's recommended efficiency metrics. The Project's growth would also exceed the growth rate planned for in the City's CAP. These impacts would remain significant, even with implementation of feasible mitigation measures. Therefore, Project growth would result in a significant and unavoidable conflict with the 2017 Climate Change Scoping Plan and the City's CAP.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to greenhouse gas emissions?

Analysis of Impacts

Global climate change is the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to significantly influence *global* climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable. As described under Impact GHG-1 and GHG-2, the Project would result in GHG emissions that exceed the significance thresholds applied in this EIR and would conflict with the 2017 Climate Change Scoping Plan and City's CAP.

Level of Significance Before Mitigation

The Project's 2040 growth projection and associated GHG emissions could exceed the significance threshold applied in this EIR and pose a conflict with the 2017 Climate Change Scoping Plan and City's CAP. This is considered a **potentially significant impact**.

Mitigation Measures

See Mitigation Measures AQ-2B, AQ-2C, and AQ-2D in EIR Chapter 4.3, Air Quality.

Level of Significance After Mitigation

Even with implementation of feasible mitigation measures, this impact would be ***significant and unavoidable***.

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4.9 – Hazards and Hazardous Materials

This EIR chapter addresses hazards and hazardous materials impacts associated with implementation of the Focused General Plan Update. Potential impacts are identified and mitigation measures are proposed, if required.

4.9.1 – ENVIRONMENTAL SETTING

Hazardous Materials

In Monterey Park, commercial and industrial businesses that use hazardous materials include dry cleaners, auto service providers, landscape contractors, and computer components manufacturers, among others. Residences also generate household hazardous wastes in the form of paints, thinners, pesticides, and fertilizers. Active hazardous materials sites within the Planning Area are summarized below in Table 4.9-1 based on the Department of Toxic Substance Control EnviroStor database (Department of Toxic Substances Control, 2018) (a data management system for tracking cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites), the California State Water Resources Control Board’s (SWRCB) Geotracker database (California State Water Resources Control Board, 2018) (data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater) and the U.S. Environmental Protection Agency Superfund Enterprise Management System database (US Environmental Protection Agency, 2018). A designation of “open” status indicates an ongoing case that has been opened by a regulatory agency and the site is undergoing assessment, remediation or site monitoring. A “closed” status indicates a regulatory agency has determined that no further remediation activities are required. There are over 50 sites within Monterey Park that are considered closed hazardous materials sites.

**Table 4.9-1
Active Hazardous Materials Contamination Sites within the City of Monterey Park
Planning Area**

Name	Address	Type of Case	Clean-Up Status	Case Numbers
Architectural Woodworking Company (Former ITT Inc)	576, 580, 582 Monterey Pass Road	Cleanup Program Site/ Waste Discharge Requirement Site	Open – Site Assessment	Los Angeles RWQCB – Case #1296; CI #: 10249
DHM International Corp	901 Monterey Pass Road	Waste Discharge Requirement Site	Historical	Los Angeles RWQCB – Case 10035
Former Park Cleaners (Vacant Site)	217 Garfield Avenue	Waste Discharge Requirement (WDR) Site	Active - WDR	CI #: 10236
Metropolitan Water District’s Middle Feeder South Pipeline	700 Portrero Grande Drive	Waste Discharge Requirement Site	Draft - WDR	WDR FILE #: 17-046
Alpha Photonic, Inc.	2019 Saturn Street	Tiered Permit – Chemical Storage Facility		
Ross Nameplate Co.	Red Plum Circle, #2	Tiered Permit – Generates Regulated Hazardous Waste		

Name	Address	Type of Case	Clean-Up Status	Case Numbers
Operating Industries, Inc. Landfill	900 Portrero Grande Drive	Federal Superfund	Certified/Operation and Maintenance	
New Cure, Inc	900 Portrero Grande Drive	Hazardous Waste Facility	Undergoing Closure	
Shell	306 E. Garvey Ave.	LUST Cleanup Site	Open - Site Assessment	RB Case #: I-09488A; Loc Case #: 8425-26404
H & C Auto Repair	1500 S. Monterey Pass Road	LUST Cleanup Site	Open – Eligible for Closure	RB Case #: R-07326; Loc Case #: L422394
Blanchard Landfill	4531 Blanchard Street	Land Disposal Site	Open – Closed/with Monitoring	RB Case #: CI-9581
Rothenberger USA Inc.	955 Monterey Pass Road	Cleanup Program Site	Open - Inactive	RB Case #: 0320

Source: Department of Toxic Substances Control, *EnviroStor*; California State Water Resources Control Board, *GeoTracker*; US Environmental Protection Agency, *Superfund Enterprise Management System Database*, (accessed May 8, 2019).

Operating Industries, Inc. Landfill Site

As described in the General Plan Safety and Community Services Element, in 1948 landfill operations began at a 190-acre site in the southeast portion of Monterey Park. The site, which was made up of a northern parcel and a southern parcel, was purchased in 1952 by Operating Industries, Inc. (OII). Construction of the Pomona Freeway in 1968 physically divided the landfill into two areas. Over the years, many different types of residential, commercial, and hazardous waste were deposited into the landfill. In 1984, the landfill, still owned by OII, stopped accepting waste and the site was placed on the EPA’s National Priority List two years later.

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the EPA has worked with Monterey Park and neighboring cities to develop long-term remediation of the site which is designated as a “Superfund” site. Cleanup is expected to continue until 2040 and is concentrated on soil, groundwater, and leachate contamination (leachate forms from liquid industrial wastes as they mix with water and percolate into the soil).

The 45-acre northern parcel was impacted to a lesser degree from landfill operations than the southern parcel. As a result, development of this parcel is possible and currently includes utility and commercial uses. As the south parcel will not be fully remediated for many years, the site will be maintained as open space until the site is considered clean.

Airport Hazards

Los Angeles International Airport is located more than 15 miles to the southwest and El Monte Airport located approximately four miles to the east of Monterey Park. The Planning Area does not fall within the Planning Boundary/Airport Influence Area for these airports (Department of Regional Planning, 2004).

4.9.2 – REGULATORY FRAMEWORK

Federal agencies regulating hazardous materials include the United States Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and the United States Department of Transportation (DOT).

United States Environmental Protection Agency

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), among other things, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the United States Environmental Protection Agency (EPA) is given power to seek parties responsible for any release and compel their cooperation in the cleanup.

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

United States Department of Transportation

The United States Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration regulates the transport of hazardous materials through Title 49 of the Code of Federal Regulations (49 CFR), Subchapter C, "Hazardous Materials Regulations." Parts 171-177 provide general information on hazardous materials and regulation for their packaging and their shipment by rail, air, vessel, and public highway.

State

The management of hazardous materials and waste within California is under the jurisdiction of the California Environmental Protection Agency (CalEPA) and the Department of Toxic Substances Control (DTSC). Additionally, nine Regional Water Quality Control Boards (RWQCB) regulate the quality of water within the state, including contamination of state waters as a result of hazardous materials and/or waste.

California Environmental Protection Agency (CalEPA)

CalEPA implements and enforces environmental laws regulating air, water and soil quality, pesticide use and waste recycling and reduction. It also establishes regulations governing the use of hazardous materials in the state.

California Department of Toxic Substances Control (DTSC)

DTSC oversees hazardous substances and wastes, remedial investigations, and protects drinking water from toxic contamination.

Los Angeles Regional Water Quality Control Board (RWQCB)

The Los Angeles RWQCB (one of nine regional boards in the state) protects surface and groundwater quality from pollutants discharged or threatened to be discharged to the waters of the state. The RWQCB issues and enforces National Pollutant Discharge Elimination System (NPDES) permits and regulates leaking underground storage tanks and other sources of groundwater contamination.

California Highway Patrol and California Department of Transportation

California Highway Patrol (CHP) and California Department of Transportation (Caltrans) have primary regulatory responsibility for the transportation of hazardous wastes and materials.

California Occupational Safety and Health Administration (Cal/OSHA)

Cal/OSHA is responsible for promulgating and enforcing state health and safety standards and implementing federal Occupational Safety and Health Administration (OSHA) laws. Cal/OSHA's regulatory oversight includes minimizing the potential for releases of asbestos and lead during construction and demolition activities.

Local

City of Monterey Park General Plan

The City of Monterey Park Safety and Community Services Element (City of Monterey Park, 2001) includes the following policies related to hazards and hazardous materials:

- Goal 8.0: Protect residents and business employees from potential hazards associated with the use, storage, manufacture, and transportation of hazardous materials in and through the City.
 - Policy 8.1: Continue participation in the Standardized Emergency Management System.
 - Policy 8.2: Partner with Los Angeles County to sponsor household hazardous waste disposal programs for residents to bring pesticides, cleaning fluids, paint cans and other common household toxics to a centralized location for proper disposal.
 - Policy 8.3: Educate the community regarding the proper storage, handling, use and disposal of hazardous household materials.
 - Policy 8.4: Incorporate into the development review and business license issuance processes a means for ascertaining the materials and production methods used by a business and the potential risks posed to adjacent and nearby residential neighborhoods, schools, and other sensitive land uses.

- Goal 10.0: Protect the community from soil, groundwater, and leachate contamination from the OII site.
 - Policy 10.1: Cooperate with the EPA in efforts to remedy contamination at the south parcel and continue implementation of cleanup practices.
 - Policy 10.2: Return the north parcel to a beneficial use by encouraging commercial development.

Standardized Emergency Management System

Monterey Park participates in the Standardized Emergency Management System (SEMS) that provides a framework for coordinating multi-agency emergency responses. The City's SEMS prepares City staff to react quickly and specifically to any hazardous materials accident, with the Fire Department leading the response team. The SEMS includes provisions for the Fire Department to maintain records of all hazardous materials stored and used at businesses in the community to ensure appropriate response to any individual incident. The City's SEMS incorporates mutual aid agreements, establishes lines of communication during emergencies, and standardizes incident command structures.

4.9.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to hazards and hazardous materials if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- b) 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;
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- d) 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;
- 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 or excessive noise for people residing or working in the project area;
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.9.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to hazards and hazardous materials and recommends mitigation measures as needed to reduce significant impacts.

Transport, Use, and Disposal Hazards

Impact HAZMAT-1 – Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Analysis of Impacts

Implementation of the Project would result in an increase in residential dwelling units and commercial and office square footage within the Planning Area. Subsequent construction allowed by the implementation of the Project would likely involve the use and disposal of chemical agents, solvents, paints, and other hazardous materials associated with construction activities. The amount of these chemicals typically present during construction would be limited, would be in compliance with existing government regulations, and would not be considered a significant hazard.

Hazardous materials associated with new residential uses could include, for example, liquid chemical products (e.g., household cleaners), used motor oil, building maintenance supplies, paints and solvents, pesticides, or other similar materials. The limited quantity of such products would not generate significant hazardous emissions or involve the use of acutely hazardous materials that could pose a significant threat to the environment. The following General Plan policies, which address residential use of hazardous materials, would continue to be implemented:

- Policy 8.2: Partner with Los Angeles County to sponsor household hazardous waste disposal programs for residents to bring pesticides, cleaning fluids, paint cans and other common household toxics to a centralized location for proper disposal.
- Policy 8.3: Educate the community regarding the proper storage, handling, use and disposal of hazardous household materials.

Future business development within the Planning Area could involve the storage, use, and disposal of potentially hazardous materials, including building maintenance supplies, paints and solvents, pesticides and herbicides for landscaping and pest control, vehicle maintenance products, and the similar substances. The City would require all new development to follow applicable state and local regulations and guidelines regarding the storage, handling and disposal of hazardous waste. All hazardous materials are required to be stored and handled according to manufacturer's directions and local, state, and federal regulations. Furthermore, the following policy, which addresses new commercial uses that handle hazardous materials, would be applicable:

- Policy 8.4: Incorporate into the development review and business license issuance processes a means for ascertaining the materials and production methods used by a business and the potential risks posed to adjacent and nearby residential neighborhoods, schools, and other sensitive land uses.

Given the existing federal, State, and local hazardous materials regulations already in place, the proposed project's potential threat to public health and safety and the environment from hazardous materials transport, storage, use, and disposal would be less-than-significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Hazardous Materials

Impact HAZMAT-2 – 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?

Analysis of Impacts

As described above, hazardous substances may be generated, stored, transported, used or disposed of related to future development and activities allowed by the Project.

Demolition of existing structures would involve removal and disposal of existing building materials. Some buildings may contain hazardous materials, such as asbestos containing materials or lead based paint. The South Coast Air Quality Management District (SCAQMD) regulates the demolition and renovation of buildings and structures that may contain asbestos, and the manufacture of materials known to contain asbestos. The SCAQMD is vested with authority to regulate airborne pollutants through both inspection and law enforcement, and is to be notified 10 days in advance of any proposed demolition or abatement work. SCAQMD regulations must always be followed when removing asbestos or demolishing buildings.

Development allowed by the Project may involve the transport, storage, use or disposal of hazardous materials. With existing federal, State and local regulation and oversight of hazardous materials, the risk to the public or the environment from upset and accident conditions involving the release of hazardous materials would be a less than significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Emit Hazardous Emissions

Impact HAZMAT-3 – 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?

Analysis of Impacts

There are several schools within the City and development allowed by the Project could occur within one-quarter mile of an existing or proposed school. The new development allowed by the

4.9 – Hazards and Hazardous Materials

Project is expected to be primarily residential, commercial and office uses; these uses are not expected to emit hazardous materials affecting school sites. Hazardous materials associated with new residential, commercial, and offices uses could include, for example, liquid chemical products (e.g., household cleaners), used motor oil, building maintenance supplies, paints and solvents, and pesticides. The limited quantity of such products would not generate significant hazardous air emissions or involve the use of acutely hazardous materials that could pose a significant threat to the environment or human health.

New development within the Planning Area could use and dispose of chemical agents, solvents, paints, and other hazardous materials associated with construction activities. The amount of these chemicals present during construction would be limited, would be in compliance with existing government regulations, and would not be considered a significant hazard.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Hazardous Materials Sites

Impact HAZMAT-4 – 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?

Analysis of Impacts

As shown in Table 4.9-1, there are several active hazardous material release sites in the City of Monterey Park with regulatory oversight from either the RWQCB, DTSC, EPA or Los Angeles County. Some of these sites are included on a list compiled pursuant to Government Code Section 65962.5. Additionally, there may be other hazardous material release sites that are not active but have deed/land-use restrictions associated with a former hazardous materials release. The disturbance of hazardous materials on these sites during earthwork activities could pose a hazard to construction workers, nearby receptors, and the environment.

Any future development would be subject to the City's standard environmental review that would include identification of any contaminated site possibly not already identified and implementation of appropriate cleanup and disposal procedures

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Airports

Impact HAZMAT-5 – 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 or excessive noise for people residing or working in the project area?

Analysis of Impacts

Los Angeles International Airport is located more than 15 miles to the southwest and El Monte Airport located approximately four miles to the east of Monterey Park. The Planning Area does not fall within the Planning Boundary/Airport Influence Area for these airports.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No Mitigation is Required

Adopted Response and/or Evacuation Plans

Impact HAZMAT-6 – Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Analysis of Impacts

No circulation changes are proposed as part of the Focused General Plan Update. The Project would allow for development and redevelopment projects within the City. In accordance with City policies, the City would review all development proposals to determine the possible impacts of each development on emergency services.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Wildland Fires

Impact HAZMAT-7 – Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Analysis of Impacts

The City of Monterey Park is a developed urban area. The development allowed by the Project is expected to occur primarily within Focus Areas; these areas of the City include existing development. Additionally, maps prepared by CAL FIRE do not identify the City of Monterey Park

as a very high fire hazard severity zone (California Department of Forestry and Fire Protection, Fire Resources Assessment Program, 2011).

In accordance with City policies, the City would review all potential development proposals to determine the possible impacts of each development on emergency services. Furthermore, the existing General Plan policies would be applicable to new development on slopes:

- Policy 11.2: Maintain brush clearance and weed abatement programs to reduce the risk of fires.

Please see Chapter 4.20, Wildfire, for additional discussion of wildfire hazards.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is Required

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to hazards and hazardous materials?

Analysis of Impacts

The Project allows for an increase of approximately 1,264,092 square feet of commercial and office uses and 3,816 additional dwelling units within the Planning Area. This new development may include storage, use and disposal of potentially hazardous materials including household cleaners, paints, pesticides for landscaping, fuels and oils, and other similar products. It is expected that future development within the area will comply with federal, state, and local statutes and regulations applicable to hazardous materials. The Planning Area is not located within two miles of a public or private airstrip. The Planning Area is located in an urban/suburban area that is not adjacent to large amounts of natural vegetation that would be susceptible to wildland fire. With applicable federal and State laws, regulations, standards and oversight, and local policies and programs, the cumulative impact to the public or the environment from hazardous materials would be less than significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation required.

4.9.5 REFERENCES

California Department of Forestry and Fire Protection, Fire Resources Assessment Program, 2011. *Very High Fire Hazard Severity Zones in LRA, Los Angeles County*, September (http://frap.fire.ca.gov/webdata/maps/los_angeles/LosAngelesCounty.pdf (accessed May 1, 2019))

California State Water Resources Control Board, 2018. *GeoTracker*, <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=monterey+park>, (accessed May 8, 2019).

City of Monterey Park, 2001. *City of Monterey Park General Plan, Safety and Community Services Element*, July 18.

Department of Regional Planning, 2004. *Los Angeles County Airport Land Use Plan, Los Angeles County Airport Land Use Commission*, Revised December 1.

Department of Toxic Substances Control, 2018. *EnviroStor*, <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Monterey+Park> (accessed May 8, 2019).

US Environmental Protection Agency, 2018. *Superfund Enterprise Management System Database*, <https://cumulis.epa.gov/supercpad/CurSites/srchsites.cfm> (accessed May 8, 2019).

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4.10 – Hydrology and Water Quality

This EIR chapter describes hydrology and water quality impacts associated with implementation of the Monterey Park Focused General Plan Update (Project). The existing environmental setting is described within the context of hydrology, flooding and water quality issues. The potential for impacts are analyzed and identified.

4.10.1 – ENVIRONMENTAL SETTING

Climate and Topography

The City of Monterey Park has a Mediterranean climate, with distinct wet and dry seasons. The climate is characterized by long, dry, summers and mild, relatively wet winters. The average annual precipitation is approximately 14.78 inches, with most of the rainfall occurring between November and March (Western Regional Climate Center, 2019).

Elevations within the Planning Area range from 250 feet above mean sea level (amsl) along Highway 60 to 580 feet at the Garvey Reservoir.

Hydrology and Storm Drainage

The City of Monterey Park is located within the Los Angeles River Watershed. The Los Angeles River watershed covers approximately 834 square miles and includes the City of Monterey Park and 42 other cities. Much of the watershed is highly developed, with residential, open space and agricultural, and commercial/industrial/transportation being the predominant land uses.

Most portions of the Los Angeles River are completely channelized for flood protection, as are many of its tributaries including Alhambra Wash and Rio Hondo, which are located east of the City, and the Laguna Channel, located in the western portion of the City. They are fed by a series of underground storm drain network.

The majority of the storm drain system in Monterey Park is municipally owned and operated; however, about 20 percent are managed by the Los Angeles County Department of Public Works. The storm drain system handles run-off of storm water from all streets and parking facilities. The City of Monterey Park has approximately 855 catch basins or point of entries into the system. These storm drains channel water and other materials directly to the ocean (City of Monterey Park, 2019).

Groundwater

The City's main source of water supply is groundwater pumped from the Main Basin. The Main Basin includes essentially the entire valley floor of the San Gabriel Valley with the exception of the Raymond Basin and Puente Basin. The Main Basin (administered by the Main Basin Water master) is a large groundwater basin replenished by stream runoff from the adjacent mountains and hills, rainfall directly on the surface of the valley floor, subsurface inflow from Raymond Basin and Puente Basin, and by return flow from water applied for overlying uses. Additionally, the Main Basin is replenished with untreated State Water Project (SWP) water, which is delivered directly to spreading grounds in the Main Basin. The Main Basin serves as a natural storage reservoir,

transmission system and filtering medium for wells constructed therein. The City has the legal right to pump groundwater from the Main Basin and has seven active wells. These wells have a combined capacity of about 11,000 gpm. (2015 Urban Water Management Plan, 2016)

Flooding

Flood maps prepared by the Federal Emergency Management Agency (FEMA) do not identify any 100-year flood zones in the Planning Area (Federal Emergency Management Agency, 2019).

Dam Inundation

The Metropolitan Water District (MWD) owns Garvey Reservoir, which has a 1,600 acre-feet capacity and is located within the City of Monterey Park. Garvey Reservoir lies impounded behind a north dam and a south dam. In 1990, a Garvey Reservoir leak resulted in adjacent homes flooding. In 1999, MWD completed a substantial overhaul of the facility to address seepage and ensure overall reservoir integrity.

The Laguna Basin is a component of the Los Angeles County regional flood control system and is maintained by the Los Angeles County Department of Public Works.¹

Catastrophic failure at either of these facilities would result in inundation within the surrounding area. The flood inundation area is shown in Exhibit 4.10-1.

4.10.2 – REGULATORY FRAMEWORK

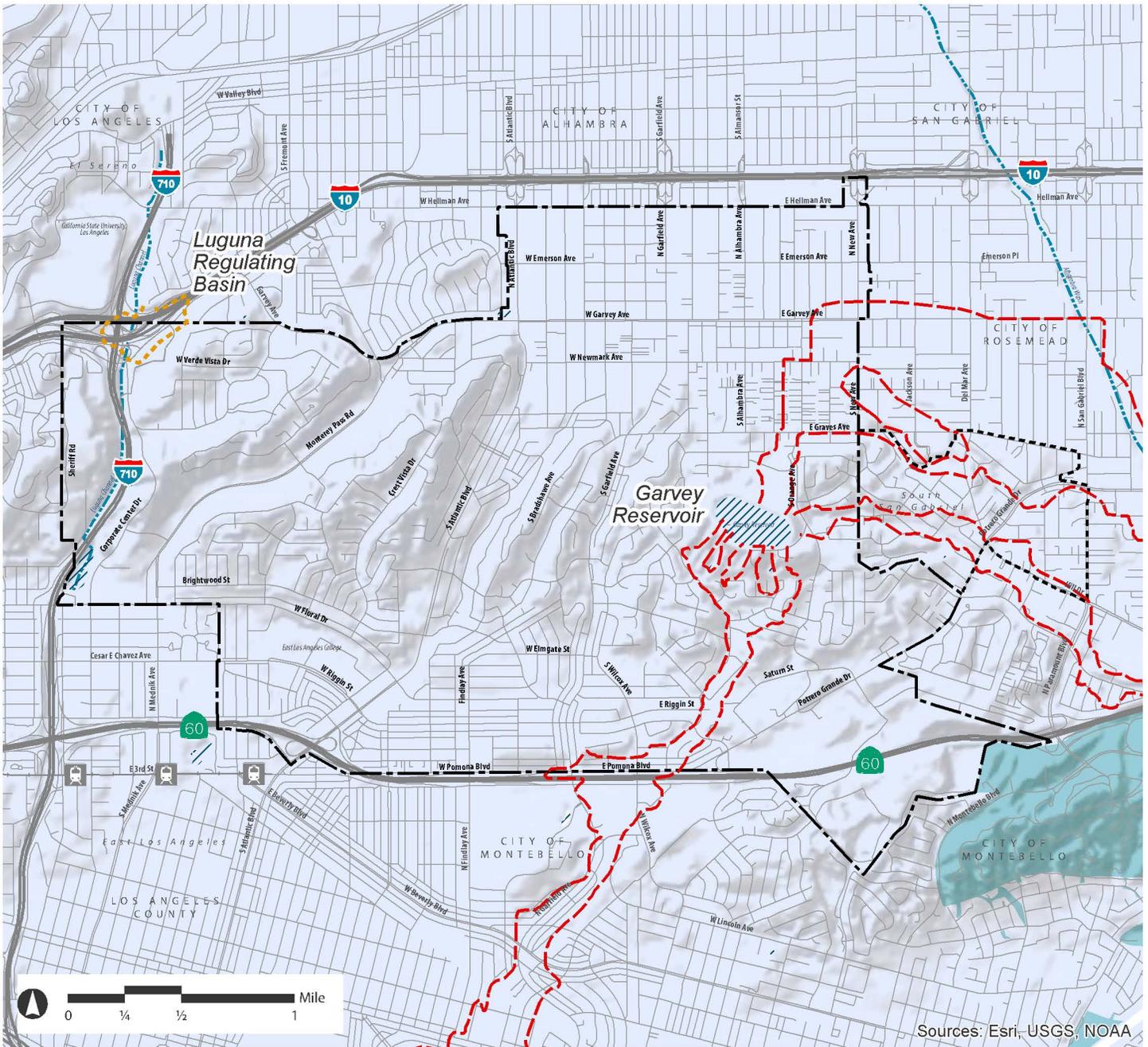
Federal

Clean Water Act (33 USC §§ 1251, *et seq.*)

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry. EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

¹ Please note that documents refer to this facility as either Laguna Basin or Laguna Regulating Basin.



Flood Zones and Dam Inundation Areas

- - - - - Garvey Reservoir
- - - - - Luguna Regulating Basin
- D: Possible but Undetermined Flood Hazards
- X: Area of Minimal Flood Hazard

Water Features

- - - - - Water Courses and Flood Control Channels
- Waterbodies

Base Map Features

- Monterey Park Boundary
- Sphere of Influence Boundary
- M Metro Gold Line and Stations



**Monterey Park
2040**

Sources: Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps (FIRM), Effective Map Date: September 2008; Garvey Reservoir Inundation Map, California Governor's Office of Emergency Services, Dam Inundation Maps, 1972 to 2000.

March 2019

**Exhibit 4.10-1
Flooding Hazards**

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Safe Water Drinking Act (42 U.S.C. § 300f, *et seq.*)

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. Under the SDWA, EPA sets standards for drinking water quality and, with its partners, implements various technical and financial programs to ensure drinking water safety.

National Flood Insurance Program

The National Flood Insurance Program aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners, renters and businesses and by encouraging communities to adopt and enforce floodplain management regulations.

State**Porter-Cologne Act** (Water Code §§ 13000, *et seq.*).__

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. The Porter-Cologne Act established nine Regional Water Boards and the State Water Board, which are charged with implementing its provisions and have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions.

Sustainable Groundwater Management Act (Water Code § 10720, *et seq.*)

In 2014, Governor Jerry Brown signed into law a three-bill legislative package collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California.

Regional**National Pollutant Discharge Elimination System (NPDES) Permits**

Storm water discharges in California are regulated through National Pollutant Discharge Elimination System (NPDES) permits. In the Los Angeles region, the storm water program is a comprehensive program to manage the quality of discharges from the municipal separate storm sewer system in the incorporated and unincorporated areas in Los Angeles County.

Construction General Permit

For storm water discharges associated with construction activity in the State of California, the State Water Resources Control Board has adopted the *General Permit for Storm Water*

Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Projects disturbing one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer.

Municipal Stormwater Permit

The Los Angeles Water Board regulates discharges from medium and large municipal separate storm sewer systems (MS4s) through the Los Angeles County, Long Beach, and Ventura County MS4 Permits. These permits are issued under the NPDES Program. The Municipal Separate Storm Sewer System (MS4) Permit Order No. R4-2012-0175 for Los Angeles County provides a mechanism for the City of Monterey Park to achieve Permit compliance through development of Enhanced Watershed Management Programs (EWMP). EWMP for the Upper Los Angeles River (ULAR) Watershed Management Area (EWMP Area) was developed by the ULAR EWMP Group, which includes the City. The EWMP was developed to maximize the retention and use of urban runoff as a resource for groundwater recharge and irrigation. Monterey Park Municipal Code Section 6.30.030 prohibits the discharge of untreated wastewater to the MS4 including non-stormwater untreated runoff within the City.

Local

City of Monterey Park General Plan

General Plan policies related to hydrology and water quality are listed below:

Safety and Community Services Element

- Goal 3.0: Protect public and private properties from geologic hazards associated with steep slopes, unstable hillsides, and liquefaction-prone areas.
 - Policy 3.1: Periodically evaluate the effectiveness of the Property Maintenance, Urgency, and Grading Ordinance in preventing mud and debris flows.
- Goal 4.0: Protect public and private properties from flood hazards associated with catastrophic dam failure at Garvey Reservoir and the Laguna Basin.
 - Policy 4.1: Support efforts of the State Department of Conservation, Division of Dam Safety to conduct period inspections of Garvey Reservoir and the Laguna Basin.
 - Policy 4.2: Work with the Metropolitan Water District of Southern California to ensure the City is provided with current information regarding reservoir and dam safety, and that the MWD complies fully with the settlement agreement reached with regard to Garvey Reservoir.
 - Policy 4.3: Ensure that City emergency response plans include contingencies for catastrophic dam failure.
- Goal 13.0: Provide adequate sewer, water, and drainage systems to meet the needs of City residents and businesses.

- Policy 13.3: Continue to survey and upgrade the City’s storm drain system.

Resources Element

- Goal 4.0: Conserve and protect groundwater supply and water resources.
 - Policy 4.1: Encourage water conservation through education, use of drought-tolerant landscapes, and water-conserving technology.
 - Policy 4.2: Promote the use of drought-tolerant trees and native plant material in landscapes, especially in City-owned landscapes.
 - Policy 4.3: Encourage use and production of reclaimed water.
 - Policy 4.4: Install treatment facilities as necessary to ensure attainment of water quality standards.
 - Policy 4.5: Work with state and federal agencies to identify the source and cause of contamination plumes with the groundwater basin, and to ensure clean up consistent with state and federal laws.
 - Policy 4.6: Continue enforcement of National Pollution Discharge Elimination System (NPDES) Permit to protect groundwater resources from further contamination.
 - Policy 4.7: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor dry cleaners, film processors, auto service establishments, and other businesses generating hazardous waste materials to ensure compliance with approved disposal procedures.

Monterey Park Municipal Code

Section 20.16.21 of the Monterey Park Municipal Codes includes construction related regulations to address potential damage by erosion, flooding or debris that may result from grading. Additionally, Chapter 6.30 of the MPMC outlines storm water and urban runoff pollution prevention controls.

4.10.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to hydrology and water quality if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would; (i) result in substantial erosion or siltation on-or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite; (iii) 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; or (iv) impede or redirect flood flows;

4.10 – Hydrology and Water Quality

- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.10.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to hydrology and water quality and recommends mitigation measures, as needed.

Water Quality Standards

Impact HYDRO-1 – Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Analysis of Impacts

Development and redevelopment allowed by the implementation of the Focused General Plan Update would be subject to all existing water quality regulations and programs, as described in the regulatory section above, including all applicable construction related permits and regulations. All development projects allowed by the implementation of the Project would be subject to environmental and engineering review, including assessment and prevention of soil erosion, which could affect water quality.

Existing General Plan policies related to water quality would also be applicable to all new development. These policies include the following:

- Policy 4.4: Install treatment facilities as necessary to ensure attainment of water quality standards.
- Policy 4.5: Work with state and federal agencies to identify the source and cause of contamination plumes with the groundwater basin, and to ensure clean up consistent with state and federal laws.
- Policy 4.6: Continue enforcement of National Pollution Discharge Elimination System (NPDES) Permit to protect groundwater resources from further contamination.
- Policy 4.7: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor dry cleaners, film processors, auto service establishments, and other businesses generating hazardous waste materials to ensure compliance with approved disposal procedures.

Implementation of these policies, in conjunction with compliance with existing regulatory programs, would ensure that water quality impacts related to implementation of the Project would be less than significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No Mitigation is required.

Decrease in Groundwater Supplies

Impact HYDRO-2 – Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?

Analysis of Impacts

Development allowed by the Project's implementation is anticipated to, primarily, occur within Focus Areas. These Focus Areas are located within developed areas of the City; the increase in new impervious area within the City is expected to be minimal. Additionally, new development would need to comply with all applicable permit requirements and approvals. Implementation of the Project would not be expected to substantially interfere with groundwater recharge.

As described in Chapter 4.19, Utilities and Service Systems, Monterey Park's primary water source is groundwater from seven active wells. The wells are within the Main San Gabriel Groundwater Basin. Water use would be expected to increase with the estimated increase in population under the Project. Under the existing UWMPs administered by the City of Monterey Park and CalWater, ample water supply is anticipated to serve the Planning Area population in 2040. However, the population anticipated under the Project is greater than the population assumed in the City of Monterey Park UWMP. As such, it is possible that there may be more demand for water than what was considered in the UWMP. Mitigation Measure UTS-1 would ensure that there is adequate water to serve the city and that the Project would not substantially decrease groundwater supplies.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

Mitigation Measures UTS-1

Level of Significance After Mitigation

Less than Significant

Drainage

Impact HYDRO-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 or through the addition of impervious surfaces, in a manner which would:

Result in substantial erosion or siltation on- or off-site:

Analysis of Impacts

The Project identifies Focus Areas for development; these Focus Areas are currently developed and would likely have minimal topsoil since these areas are primarily covered with paving and structures. All development projects allowed by the implementation of the General Plan Update would be subject to environmental and engineering review, including assessment and prevention of soil erosion. Short-term erosion effects during the construction phase of development allowed by the General Plan Update would be prevented through required implementation of a storm water pollution prevention plan (SWPPP) and through compliance with the National Pollutant Discharge Elimination System (NPDES) program and the incorporation of best management practices (BMPs) intended to reduce soil erosion (such as covering exposed soil stockpiles and working slopes, lining the perimeter of the construction site with sediment barriers, and protecting storm drain inlets). Additionally, the following General Plan policy would be applicable for all potential development projects:

- Policy 4.6: Continue enforcement of National Pollution Discharge Elimination System (NPDES) Permit to protect groundwater resources from further contamination.

Soil erosion impacts would be less than significant with implementation of existing regulations.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation required.

Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-offsite;

Analysis of Impacts

Development allowed by the Project is anticipated to occur, primarily, within Focus Areas. These Focus Areas are located within developed areas of the City; the increase in new impervious area within the City is expected to be minimal. All development projects allowed by the implementation of the Project would be subject to environmental and engineering review, including development-specific assessment of on-site drainage facilities, and new development would need to comply with all applicable required permits regulations and approvals. Compliance with existing regulatory programs would ensure flooding would not occur.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

**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;
or;**

Analysis of Impacts

Development allowed by the Project is anticipated to occur, primarily, within Focus Areas. These Focus Areas are located within developed areas of the City; the increase in new impervious area within the City would be minimal and would not be expected to exceed storm water drainage systems. All development projects allowed by the implementation of the General Plan Update would be subject to environmental and engineering review, including development specific assessment of on-site drainage facilities. Short-term erosion effects during the construction phase of development associated with the Project would be prevented through required implementation of a storm water pollution prevention plan (SWPPP) and through compliance with the National Pollutant Discharge Elimination System (NPDES) program and the incorporation of best management practices (BMPs) intended to reduce soil erosion, which could affect water quality. Additionally, the following General Plan policies would be applicable for all potential development projects:

- Policy 4.4: Install treatment facilities as necessary to ensure attainment of water quality standards.
- Policy 4.5: Work with state and federal agencies to identify the source and cause of contamination plumes with the groundwater basin, and to ensure clean up consistent with state and federal laws.
- Policy 4.6: Continue enforcement of National Pollution Discharge Elimination System (NPDES) Permit to protect groundwater resources from further contamination.
- Policy 4.7: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor dry cleaners, film processors, auto service establishments, and other businesses generating hazardous waste materials to ensure compliance with approved disposal procedures.

Potential runoff impacts would be less than significant with implementation of existing regulations.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Impede or redirect flood flows;

Analysis of Impacts

As described above, FEMA does not identify any 100-year flood zones in the Planning Area (Federal Emergency Management Agency, 2019).

Level of Significance Before Mitigation

No impact

Mitigation Measures

No mitigation is required.

Flood Risk

Impact HYDRO-4 – Would the Project be subject to flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Analysis of Impacts

The California Department of Conservation does not identify Monterey Park as within a Tsunami inundation map (California Department of Conservation, 2009).

As described above, the Garvey Reservoir and the Laguna Basin are both located within the Planning Area. A major seismic event has the potential to cause dam failure or seiche conditions at both of these facilities. A seiche can occur as a result of ground vibration in initialing water wave motion. If wave amplitude is high enough, the water may slosh over the shore or barrier containing the water body and flow onto surrounding properties.

A small portion of the Corporate Center Focus Area is within the Laguna Basin inundation area and the Garvey Focus Area is within the Garvey Reservoir inundation area.

In 1999, MWD completed a substantial overhaul of the facility to address seepage and ensure overall reservoir integrity. The State of California Department of Conservation, Division of Dam Safety conducts periodic dam inspections to verify the dam's ability to withstand seismic stresses.

The General Plan includes policies that address both these facilities:

- Policy 4.1: Support efforts of the State Department of Conservation, Division of Dam Safety to conduct period inspections of Garvey Reservoir and the Laguna Basin.
- Policy 4.2: Work with the Metropolitan Water District of Southern California to ensure the City is provided with current information regarding reservoir and dam safety, and that the MWD complies fully with the settlement agreement reached with regard to Garvey Reservoir.
- Policy 4.3: Ensure that City emergency response plans include contingencies for catastrophic dam failure.

Given these policies, and continuing oversight of the reservoir by the Division of Dam Safety, the potential of development associated with implementation of Project to be subject to risk of release of pollutions due to inundation would be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Water Quality***Impact HYDRO-5 – Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

The Los Angeles Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (iii) describes implementation programs to protect all waters in the region. Development allowed by the Project would be required to adhere to requirements of the water quality control plan, including all existing regulation and permitting requirements. This would include the incorporation of best management practices (BMPs) to protect water quality during construction and operational periods.

SGMA requires the California Department of Water Resources (DWR) to establish initial groundwater basin priorities for the basins identified and defined in DWRs Bulletin 118 (Water Code §10722). SGMA identifies the Main Basin as being exempt from establishing a Groundwater Management Plan (GMP) (Stetson Engineers, 2016).

Development and redevelopment allowed by the implementation of the Focused General Plan Update would be subject to all existing water quality regulations and programs, as described in the regulatory section above, including all applicable construction permits. Existing General Plan policies related to water quality would also be applicable to all new development. These policies include the following:

- Policy 4.4: Install treatment facilities as necessary to ensure attainment of water quality standards.
- Policy 4.5: Work with state and federal agencies to identify the source and cause of contamination plumes with the groundwater basin, and to ensure clean up consistent with state and federal laws.
- Policy 4.6: Continue enforcement of National Pollution Discharge Elimination System (NPDES) Permit to protect groundwater resources from further contamination.
- Policy 4.7: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor dry cleaners, film processors, auto service establishments, and other businesses generating hazardous waste materials to ensure compliance with approved disposal procedures.

Implementation of these policies, in conjunction with compliance with existing regulatory programs, would ensure that water quality impacts related to implementation of the Focused General Plan Update would be less than significant.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to hydrology and water quality?

Analysis of Impacts

New development allowed by the implementation of the Focused General Plan Update will primarily result in the redevelopment and intensification of property that is already developed with urban uses, which will have a limited effect on local drainage or runoff characteristics, but these potential changes would be site specific and are not expected to affect backbone drainage facilities. On-going compliance with the NPDES requirements would reduce potential impacts to water quality. New development would be required to implement BMPs to treat storm water runoff, reducing the potential for a cumulative impact with respect to water quality. The City is largely developed, and new development would be, primarily, located within Focus Areas that include significant impervious surfaces; new development would not be anticipated to contribute to a significant groundwater recharge impact. Mitigation Measures UTS-1 would ensure that there is adequate water to serve the city and that the Project would not substantially decrease groundwater supplies. Implementation of the Focused General Plan Update would not cause a substantial adverse cumulative impact with respect to hydrology and water quality.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

4.10.5 REFERENCES

California Department of Conservation, 2009. *Los Angeles County Tsunami Inundation Maps* (<https://www.conservation.ca.gov/cgs/tsunami/maps/los-angeles> accessed May 15, 2019).

City of Monterey Park, Website: Monterey Park Storm Water Pollution/NPDES, (<https://www.montereypark.ca.gov/505/Storm-Water-Pollution-NPDES> accessed May 15, 2019)

Federal Emergency Management Agency, 2019. *Flood Map Service Center, Search by Address* (<https://msc.fema.gov/portal/search?AddressQuery=City%20of%20Monterey%20Park#searchresultsanchor> accessed May 15, 2019).

Stetson Engineers, 2016. *City of Monterey Park 2015 Urban Water Management Plan*, August.

Western Regional Climate Center, 2019. Climate summary for Montebello, California. (<https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5790> accessed May 15, 2019).

4.11 – Land Use and Planning

This EIR chapter describes land use and planning impacts associated with implementation of the Focused General Plan Update.

4.11.1 – ENVIRONMENTAL SETTING

The City of Monterey Park encompasses approximately eight square miles, nearly all of which are developed with urban land uses. Monterey Park's Sphere of Influence consists of the unincorporated community of South San Gabriel located adjacent to the City's eastern boundary south of Graves Avenue between New Avenue and San Gabriel Boulevard. The entire area encompasses 4,270 net acres (i.e., not including road rights-of-way) with approximately 3,980 net acres within the corporate city limits and an additional 289 net acres within the Sphere of Influence (not including right-of-way).

Monterey Park has a variety of land uses. Table 4.11-1 shows the existing land use and acreage within the Planning Area, and Exhibit 3-3, included in Chapter 3, Project Description, shows the existing land uses within the Planning Area. Land uses within the Planning Area are further described below.

Residential Uses. Making up the largest land use category (63 percent of the Planning Area), residential uses are found throughout Monterey Park. Of all residential uses, single-unit residential uses make up the bulk of the residential category (78 percent). Higher density residential use is concentrated between Graves Avenue and Monterey Park's northern boundary, Hellman Avenue. High density residential (30 or more units per acre) exists along Garfield Avenue south of Newmark Avenue, north of East Los Angeles College along Floral Drive, and north of Garvey Avenue.

Commercial, Office, and Industrial Uses. Commercial areas comprise 4 percent of all land uses. Commercial uses are located in Downtown Monterey Park, along Garvey Avenue, Atlantic Boulevard, Garfield Avenue, Monterey Pass Road, Corporate Center Drive, Oll/Edison, and Saturn Park. Office uses (including business, medical, and other) make up 5 percent of land area. Industrial uses are only in the incorporated area and make up 3 percent of total land area.

Parks, Open Space, and Community Facilities. Parks, open space (including a closed landfill), and community facilities make up about 7 percent of the acreage in the Planning Area. Parks and open space include the Monterey Park Golf Course, Highlands Park, Pine Tree Park, Sequoia Park, Sunnyslope Park, Cascade Park, Barnes Park, Bella Vista Park, Sierra Vista Park, MWD Conservation Park, Edison Trails Park, George E. Elder Park, Garvey Ranch Park, La Loma Park, Demonstration Garden, Service Club House, Langley Senior Center, and the closed landfill. Chapter 4.16, Recreation, provides more detail.

**Table 4.11-1
Land Use Distribution by Acres (2019)**

Land Use Category	City		Sphere of Influence		Planning Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Single-Unit	1,876	47.1%	202	69.7%	2,078	48.7%
Multi-Unit	561	14.1%	31	10.8%	592	13.9%
Mobile Home Parks	1	0.0%	-	0.0%	1	0.0%
Residential Care Facilities	4	0.1%	3	1.2%	7	0.2%
Mixed-Use	7	0.2%	-	0.0%	7	0.2%
General Commercial	172	4.3%	2	0.6%	174	4.1%
Offices	194	4.9%	1	0.4%	195	4.6%
Hotel/Motels	8	0.2%	1	0.2%	9	0.2%
Light Industrial	143	3.6%	-	0.0%	143	3.3%
Parking Lots and Structures	16	0.4%	-	0.0%	16	0.4%
Hospitals and Medical	7	0.2%	-	0.0%	7	0.2%
Public Facilities	313	7.9%	1	0.4%	314	7.4%
Utilities	64	1.6%	10	3.4%	74	1.7%
Schools	74	1.9%	-	0.0%	74	1.7%
East Los Angeles College (ELAC)	77	1.9%	-	0.0%	77	1.8%
Nursery	14	0.4%	14	4.8%	28	0.7%
Closed Landfill (Open Space)	148	3.7%	-	0.0%	148	3.5%
Golf Course	47	1.2%	-	0.0%	47	1.1%
Parks and Recreation	105	2.6%	-	0.0%	105	2.5%
Religious Institutions	24	0.6%	0	0.1%	24	0.6%
Vacant Lands	125	3.1%	24	8.4%	149	3.5%
Total	3,980	100.0%	289	100.0%	4,269	100.0%

Source: MIG, 2019.

Public Facilities and Institutional Uses. Public and quasi-public uses include schools (public and private), churches, hospitals, government offices, and utilities. The total land area devoted to public facilities and institutional uses is 570 net acres, or 13 percent of the Planning Area. Public and private schools occupy 74 net acres of the Planning Area (less than 2 percent). East Los Angeles College, located along Avenida Cesar Chavez, encompasses 77 net acres and is the only college in the Planning Area.

Vacant and Other Land Uses. Vacant land exists within Monterey Park; 149 net acres or 4 percent of the land is vacant. Other land uses such as parking lots, hotel and motels, a nursery, and mixed-use properties occupy just over 60 net acres.

Focus Areas

The Monterey Park Focused General Plan Update identifies “Focus Areas,” which are areas of change where the majority of development growth is anticipated through the 2040 planning horizon year. See Exhibit 3-5, included in Chapter 3, Project Description, for the locations of the Focus Areas. The location and existing land uses within these Focus Areas are described below.

Corporate Center. The Corporate Center Focus Area is located along Corporate Center Drive parallel to the I-710 freeway. Existing land uses consist of four-to six-story office buildings.

Corporate Place. The Corporate Place Focus Area is along Corporate Place, just west of Monterey Pass Road and north of Floral Drive. Existing land uses consists of low-scale office and light industrial uses.

Monterey Pass. The Monterey Pass Focus Area is located along Monterey Pass Road. Existing land uses consist of light industrial and small warehouse uses.

Downtown Core. The Downtown Core includes properties around the intersection of Garvey and Garfield Avenues. Existing land uses generally consist of commercial uses, a seven-story hotel, and vacant land.

Downtown Perimeter. The Downtown Perimeter Focus Area parallels the Downtown Core Focus Area and includes commercial, office, and residential uses.

Garvey Corridor. The Garvey Corridor is located along Garvey Avenue, between Atlantic Boulevard and New Avenue. Existing land uses consist of local commercial and office businesses, restaurants, and some automotive repair shops.

North Atlantic. The North Atlantic Focus Area is located along Atlantic Boulevard, between Hellman Avenue and Newmark Avenue. Existing land uses include commercial uses; shopping centers; restaurants; two hotels under construction; and the Atlantic Times Square mixed-use development, consisting of commercial, entertainment, and residential uses.

South Atlantic. The South Atlantic Focus Area is located on the westside of Atlantic Boulevard, between 1st Street and Brightwood Street, adjacent to East Los Angeles College. Existing land uses consist of commercial shopping centers, retail uses, and fast-food restaurants.

4.11.2 – REGULATORY FRAMEWORK

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) is a long-term vision of how the region will address regional transportation and land use challenges and opportunities. The 2016 RTP/SCS identifies goals, which are intended to help carry out the vision for improved mobility, a strong economy, and sustainability. The guiding policies for the 2016 RTP/SCS are intended to help focus future investments on the best-performing projects and strategies to preserve, maintain, and optimize the performance of the existing transportation system.

Monterey Park 2001 General Plan

The Monterey Park General Plan, adopted in 2001, is a guide for the physical development of the City. The General Plan defines the community's vision and guides growth, change, and development over a 20-year period. The General Plan sets the course of all planning efforts, both City-initiated and developer-proposed. The Monterey Park 2001 General Plan has six elements: Land Use, Economic Development, Circulation, Housing, Safety and Community Service, and Resources. The Land Use Element is the only element that would be updated by the Focused General Plan Update.

Monterey Park Zoning Regulations

The zoning regulations in the MPMC implement the City's General Plan, providing specific development standards such as building heights, setbacks, lot size, and other related standards. MPMC Title 21 (Zoning) identifies specific uses allowed within each zoning district and provides specific development requirements/standards. The Zoning Map identifies each parcel's zoning designation.

Specific Plans

A Specific Plan must be consistent with a General Plan; it sets development standards but does so for a specific area which is governed by a Specific Plan . An adopted Specific Plan supersedes the zoning code for a Specific Plan area. Monterey Park's six Specific Plans are:

- Potrero Grande Specific Plan.
- 500 East Markland Drive Specific Plan
- South Garfield Village Specific Plan
- Mid-Atlantic Specific Plan
- Garvey/Garfield Specific
- North Atlantic Specific Plan

4.11.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to land use and planning if it would:

- a) Physically divide an established community; or
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.11.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential land use impacts that could result from implementation of the Project and recommends mitigation measures as needed to reduce significant impacts.

Divide an Established Community

Impact LAND-1 – Would the project physically divide an established community?

Analysis of Impacts

The physical division of an established community typically refers to the construction of a physical feature (such as a highway) or the removal of a means of access (such as a bridge) that would impede or restrict movements within a community. The Focused General Plan Update does not propose any circulation changes to the Planning Area. The majority of development associated with implementation of the Project would occur within already developed Focus Areas within the city.

Furthermore, the Project includes several polices to facilitate travel within the Planning Area, including: prioritize and integrate active transportation strategies into the built environment that increases walking, bicycling, and transit modes of travel, with a focus on improving first and last mile connectivity (Policy 4.6); pursue roadway, sidewalk, crosswalk, and traffic control improvements that would accommodate pedestrian traffic in the district (Policy 17.2); and improve pedestrian and vehicular mobility and safety with urban design interventions such as additional mid-block crossings, designated pedestrian walkways through surface parking lots, and shortened street crossings (Policy 18.5). Implementation of the Focused General Plan Update would not physically divide an established community.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than Significant

Existing Plans, Policies, and Regulations

Impact LAND-2 – Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect?

Analysis of Impacts

This section includes a discussion of potential conflicts between the Focused General Plan Update and applicable planning documents, which are described above. It should be noted that policy conflicts do not, in and of themselves, constitute a significant environmental impact. However, a policy inconsistency is considered to be a significant adverse environmental impact when it is related to a policy adopted for the purpose of avoiding or mitigating an environmental effect and it is anticipated that the inconsistency would result in a significant adverse *physical* impact. Please note that planning documents that pertain to specific technical topics (e.g., Air Quality) are discussed in those topical sections of this Draft EIR. Exhibit 3-6, in Chapter 3, Project Description, shows the proposed Draft General Plan Land Use Map.

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG Regional Council adopted the 2016-2040 RTP/SCS in April 2016. The long-range visioning plan identifies several goals intended to help carry out the vision for improved mobility, a strong economy, and sustainability. These 2016-2040 RTP/SCS goals, and the Focused General Plan Update's relationship to these goals, are presented in Table 4.11-2. As shown below, the implementation of the Project would not cause a significant environmental impact due to a conflict with any land use policy adopted for the purpose of avoiding or mitigating an environmental effect.

**Table 4.11-2
2016-2040 RTP/SCS**

2016-2040 RTP/SCS	Analysis
<p>RTP/SCS G1: Align the plan investments and policies with improving regional economic development and competitiveness.</p>	<p>Implementation of the Project could result in the development of over 1.2 million square feet of commercial and office development. The Project includes the goal of creating a dynamic mix of businesses, uses, and employment that sustain a strong local economy and contributes to a fiscally sustainable tax base (Goal 2). This goal includes policies to facilitate the growth of a diverse business sector resilient to change over time and compatible with a broad range of skills and workers (Policy 2.2), and to create a culture of innovation and growth, encouraging emerging business to attract high-quality jobs (Policy 2.3).</p>
<p>RTP/SCS G2: Maximize mobility and access for all people and goods in the region.</p>	<p>The Focused General Plan Update includes several policies addressing mobility including: build a network of well-connected and vibrant corridors and centers (Policy 1.3); and prioritize and integrate active transportation strategies into the built environment that increases walking, bicycling, and transit modes of travel, with a focus on improving first and last mile connectivity (Policy 4.6).</p>
<p>RTP/SCS G3: Ensure travel safety and reliability for all people and goods in the region.</p>	<p>The Focused General Plan Update includes several policies related to safety including: plan and design for pedestrians when developing new projects and street improvements to create a more walkable and accessible environment (Policy 1.4).</p>
<p>RTP/SCS G4: Preserve and ensure a sustainable regional transportation system.</p>	<p>The Focused General Plan Update includes several polices that address sustainability including: balance development with the preservation of environmental systems and the natural beauty of the area through sustainable practices in site planning, landscaping, construction, maintenance, and operations (Policy 4.2); and ensure that new development is planned in areas that can sustain it long-term – considering air quality, health indicators of residents, existing infrastructure networks and services, and socio-economic factors (Policy 4.5).</p>
<p>RTP/SCS G5: Maximize the productivity of our transportation system.</p>	<p>Implementation of the Project could result in the development of over 1.2 million square feet of commercial and office development and about 3,800 dwelling units. It includes the goal of creating a dynamic mix of businesses, uses, and employment that sustain a strong local economy and contributes to a fiscally sustainable tax base (Goal 2). The Project would focus growth in areas that already have development and infrastructure.</p>

<p>RTP/SCS G6: Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).</p>	<p>The Focused General Plan Update includes several polices that address the environment and health including: balance development with the preservation of environmental systems and the natural beauty of the area through sustainable practices in site planning, landscaping, construction, maintenance, and operations (Policy 4.2); ensure that new development is planned in areas that can sustain it long-term – considering air quality, health indicators of residents, existing infrastructure networks and services, and socio-economic factors (Policy 4.5); and integrate greening buffers and maximize tree canopies within neighborhoods directly adjacent to the SR-60 freeway to help improve air quality (Policy 4.4).</p>
<p>RTP/SCS G7: Actively encourage and create incentives for energy efficiency, where possible.</p>	<p>The Focused General Plan Update allows development within areas of the city with existing infrastructure, which will help realize energy efficient. Additionally the Project includes several policies encouraging alternative transportation modes (Policy 4.6).</p>
<p>RTP/SCS G8: Encourage land use and growth patterns that facilitate transit and active transportation.</p>	<p>The Focused General Plan Update includes the following policy regarding active transportation: prioritize and integrate active transportation strategies into the built environment that increases walking, bicycling, and transit modes of travel, with a focus on improving first and last mile connectivity (Policy 4.6).</p>
<p>RTP/SCS G9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.</p>	<p>This goal is not applicable to the Focused General Plan Update.</p>

2001 Monterey Park General Plan Update

The Focused General Plan Update is an update to the Land Use Element and would replace the existing 2001 General Plan Land Use Element. The changes to the Land Use Element include updates to goals, policies, land use designations, and development standards. The proposed land use designations generally relate to the designations included in the 2001 General Plan (see Exhibit 3-4, Chapter 3, Project Description); however, some land use categories have been refined. No changes are proposed to the other elements of the General Plan; all previously adopted goals and policies within those elements that protect the environment would remain and be in effect.

The Focused General Plan Update builds upon many of the goals identified in the 2001 General Plan. The Focused General Plan Update goals and policies that support the following 2001 General Plan Land Use Element goals are shown in parentheses:

- 2001 Goal 1.0: Create a Downtown that serves as a community focus, provides opportunities for economic development, and accommodates a symbiotic mix of commercial and residential uses. (Focused General Plan Update Goal 21; Policy 21.1; Policy 21.2; Policy 21.3; Policy 21.4; Policy 12.5)

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- 2001 Goal 2.0: Create a successful mixed-use commercial/residential district along East Garvey Avenue. (*Focused General Plan Update Goal 21; Policy 23.1; Policy 23.2; Policy 23.2; Policy 23.3; Policy 23.4; Policy 23.5; Policy 23.6; and Policy 23.7*)
- 2001 Goal 3.0: Establish the North Atlantic area a focal point for diverse retail, entertainment, and hospitality development. (*Focused General Plan Update Goal 22, Policy 22.1, Policy 22.2, and Policy 22.3*)
- 2001 Goal 4.0: Maintain the mid-Atlantic Boulevard subarea as a low-intensity service commercial and office district. (*Focused General Plan Update Goal 18, Policy 18.1, Policy 18.2*)
- 2001 Goal 5.0: Maintain South Atlantic Avenue as a successful retail commercial destination. (*Focused General Plan Update Goal 15, Policy 15.1, Policy 15.2*)
- 2001 Goal 6.0: Create a diverse medical district within the North Garfield Avenue corridor. (*Goal 19, Policy 19.1*)
- 2001 Goal 7.0: Establish Monterey Pass Road as a prime location for new technology-oriented businesses, and create a business district that offers opportunities for a range of complementary businesses. (*Goal 24, Policy 24.1*)
- 2001 Goal 8.0: Create a major regional-serving commercial center south of Potrero Grande Drive, north of the Pomona Freeway. (*Goal 14, Policy 14.1, Policy 14.2, Policy 14.3, Policy 14.4*)
- 2001 Goal 9.0: Maintain Saturn Park as suitable location for diverse industrial and professional office activity, while ensuring that permitted uses do not pose substantial risk to surrounding residential neighborhoods. (*Goal 25, Policy 25.1, Policy 4.5*)
- 2001 Goal 10.0: Maintain the quality and character of Monterey Park's residential neighborhoods. (*Policy 6.1, Policy 7.4, Policy 7.5, Policy 7.7*)
- 2001 Goal 11.0: Continue to provide opportunities for persons of all incomes to find suitable housing. (*Goal 6, Policy 6.2, Policy 6.4*)
- 2001 Goal 12.0: Create vibrant mixed-use districts in which housing represents an important part of the neighborhood fabric. (*Goal 20, Policy 20.1, Policy 20.4, Policy 20.7, Policy 20.8*)
- 2001 Goal 13.0: Ensure long-term compatibility between land uses in Monterey Park and development in adjacent unincorporated Los Angeles County areas. (*Goal 1, Policy 1.5*)
- 2001 Goal 14.0: Create a sense of community and identity for the residents and businesses of Monterey Park. (*Goal 1, Policy 1.2, Policy 1.3, Policy 1.6, Goal 2, Policy 2.2*)

As the Focused General Plan Update would promote the major goals established in the 2001 General Plan and retain all the goals and policies included in the other elements, it would not conflict with the 2001 General Plan. The implementation of the Project would not cause a significant environmental impact due to a conflict with any land use policy adopted for the purpose of avoiding or mitigating an environmental effect.

Zoning Regulations

The zoning regulations in the MPMC detail land use regulations and development standards within the City. The Focused General Plan Update would include revisions to the existing land use plan and development standards within the city. Consistent with State law, the zoning regulations will need to be updated to reflect the Focused General Plan Update. These revisions will ensure that development within the City reflects revised development standards and will be consistent with the development pattern identified within the Focused General Plan Update. The implementation of the Project would not cause a significant environmental impact due to a conflict with any land use policy adopted for the purpose of avoiding or mitigating an environmental effect.

Specific Plans

The Specific Plans, as identified above, will generally be consistent with the intent of the Focused General Plan Update, which is to encourage more residential and commercial development within the city. In some instances, development standards identified within the Focused General Plan Update may be different than those identified within the Specific Plans; these differences may require specific updates to Specific Plans to better reflect the goals and objectives identified within the Focused General Plan Update. The Project would not cause a significant environmental impact due to a conflict with any land use policy adopted for the purpose of avoiding or mitigating an environmental effect.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to land use and planning?

Analysis of Impacts

Anticipated population growth in Los Angeles County would result in land use changes at the regional level; the 2016-2040 RTP/SCS anticipates significant population and housing growth within the Los Angeles County region – and increase of approximately 1,188,600 residents and 452,900 households by 2040. Implementation of the Focused General Plan Update could result in the addition of housing units and commercial and office square footage, which would help to meet the anticipated regional demand by directing development into Focus Areas within the city.

Additionally, the Focused General Plan Update includes several policies to ensure that long-term sustainable development is planned in areas that can sustain it long-term – considering air

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quality, health indicators of residents, existing infrastructure networks and services, and socio-economic factors. Additionally, the Project includes a policy to balance development with the preservation of environmental systems and the natural beauty of the area through sustainable practices in site planning, landscaping, construction, maintenance, and operations. The implementation of the Project would not cause a substantial adverse cumulative impact with respect to land use and planning.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant

4.11.5 REFERENCES

City of Monterey Park, 2001. *City of Monterey Park General Plan*, adopted July 18.

Southern California Association of Governments, 2016. *The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy*, April.

4.12 – Mineral Resources

This EIR chapter addresses mineral resources within the Planning Area and evaluates potential impacts associated with implementation of the Monterey Park Focused General Plan Update.

4.12.1 – ENVIRONMENTAL SETTING

The majority of the Planning Area includes urban uses and development. Correspondence with the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources Division (DOGGR) indicates that a small area of the southeastern portion of the Planning Area is within the northernmost portion of the Montebello oil field. Division records indicate that there are no active oil and gas (O&G) wells, four idle¹ (buried) O&G wells, and approximately 25 plugged² O&G wells (California Department of Conservation, 2019).

Other than the wells described above, no other known mineral resources are located within the Planning Area. The Division of Mine Reclamation's online mapping system does not identify any mines within the Planning Area.

4.12.2 – REGULATORY FRAMEWORK

State

State Surface Mining and Reclamation Act (SMARA)

The Surface Mining and Reclamation Act (SMARA) requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. SMARA provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources.

California Geological Survey - Mineral Resources Program

The mission of the California Geological Survey is to provide scientific products and services about the state's geology, seismology and mineral resources, including their related hazards, that affect the health, safety, and business interests of the people of California. The Mineral Resources Program provides data about California's varied non-fuel mineral resources (such as metals and industrial minerals), naturally occurring mineral hazards (such as asbestos, radon, and mercury), and information about active and historic mining activities throughout the state.

¹ In California, an idle well is a well that has not been used for two years or more and has not yet been properly plugged and abandoned to the Division of Oil, Gas, and Geothermal Resource's (DOGGR) satisfaction.

² Plugging and abandonment involves permanently sealing the well with a cement plug to isolate the oil- and gas-bearing geologic formation from water.

4.12.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Project would have a significant impact related to mineral resources if it would:

- a) 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; or
- b) 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.

4.12.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to mineral resources.

Loss of Statewide or Regional Mineral Resources

Impact MINERAL-1 – 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?

Analysis of Impacts

As described above, a small area of the southeastern portion of the Planning Area is within the northernmost portion of the Montebello oil field. However, within the Planning Area there are no active wells and there are four idle wells. Records included in the DOGGR's online mapping application (Well Finder) indicate that these four idle wells have not been active for decades. Additionally, the Division of Mine Reclamation's online mapping system does not identify any mines within the Planning Area. The Project would not result in the loss of availability of known mineral resource that would be of value to the region and the residents of the state.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is required.

Loss of Locally Important Mineral Resources

Impact MINERAL-2 – 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?

Analysis of Impacts

The existing General Plan does not identify any mineral resource recovery sites within the Planning Area.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to mineral resources?

Analysis of Impacts

As described above, the General Plan does not identify any mineral resource recovery sites within the Planning Area. A small area of the southeastern portion of the Planning Area is within the northernmost portion of the Montebello oil field. However, within the Planning Area there are no active wells and there are four idle wells. Records included in the DOGGR's online mapping application (Well Finder) indicate that these four idle wells have not been active for decades. Implementation of the project would not cause a substantial adverse cumulative mineral resources impact.

Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is required.

4.12.5 REFERENCES

California Department of Conservation, Mine Online (MOL), 2019.
(<http://maps.conservation.ca.gov/mol/index.html> accessed May 14, 2019).

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), Well Finder, 2019. *Well Finder Online Mapping*
(<https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.10192/34.04819/14> accessed May 14, 2019).

Welty, Curtis M, PG. Associate Oil and Gas Engineer, California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. *Correspondence to Samantha Tewasart, Senior Planner, City of Monterey Park*, May 2, 2019.

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4.13 – Noise

This chapter of the EIR provides pertinent background information on the nature of sound and vibration transmission; describes the existing noise environment in the Planning Area; summarizes applicable noise guidelines, standards, and regulations; and evaluates potential noise and vibration impacts that could result from the Monterey Park Focused General Plan Update. Where necessary, this section includes mitigation measures that would avoid or reduce noise and vibration impacts associated with the Project.

4.13.1 – ENVIRONMENTAL SETTING

Fundamentals of Environmental Acoustics

Noise is generally defined as unwanted sound and is widely recognized as a form of environmental degradation. Airborne sound is the rapid fluctuation of air pressure above and below atmospheric pressure. The frequency (pitch), amplitude (intensity or loudness), and duration of a sound all contribute to the effect on a listener, or receptor, and whether or not the receptor perceives the sound as “noisy” or annoying.

Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor. Sound pressure levels are typically expressed on a logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear.

Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, and so on. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50 \text{ decibels} + 50 \text{ decibels} \neq 100 \text{ decibels}$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * 10 \log \left(10^{\left(\frac{50}{10}\right)} + 10^{\left(\frac{50}{10}\right)} \right) = 53 \text{ decibels}$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Sound Characterization

Although humans generally can hear sounds with frequencies between 20 and 20,000 Hz, most of the sounds humans experience do not consist of a single frequency, but rather a broad range of frequencies perceived differently by the human ear. In general, humans are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. Instruments used to measure sound, therefore, include an electrical filter that enables the instrument’s detectors to replicate human hearing. This filter, known as the “A-weighting” or “A-weighted sound level,” filters low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. Most environmental measurements are reported in dBA, meaning decibels on the A-scale. See Table 4.13-1 for a list common noise sources and their A-weighted noise levels.

Sound levels are usually not steady and vary over time. Therefore, a method for describing either the average character of the sound or the statistical behavior of the variations over a period of time is necessary. The continuous equivalent noise level (L_{eq}) descriptor is used to represent the average character of the sound over a period of time. The L_{eq} represents the level of steady-state noise that would have the same acoustical energy as the time-varying noise measured over a given time period. L_{eq} is useful for evaluating shorter time periods over the course of a day. The most common L_{eq} averaging period is hourly, but L_{eq} can describe any series of noise events over a given time period.

Variable noise levels are the values that are exceeded for a portion of the measured time period. Thus, the L_{01} , L_{10} , L_{50} , and L_{90} descriptors represent the sound levels exceeded 1%, 10%, 50%, and 90% of the time the measurement was performed. The L_{90} value usually corresponds to the background sound level at the measurement location.

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable due to the fact that household noise has decreased as people begin to retire and sleep. Noise exposure over the course of an entire day is described by the day/night average sound level, DNL (or L_{dn}), and the community noise equivalent level, or CNEL, descriptors. Both descriptors represent the 24-hour noise exposure in a community or area. For DNL, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM), and a 10 dB “penalty” is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45 dBA nighttime sound level would contribute as much to the overall day-night average as a 55 dBA daytime sound level. The CNEL descriptor is similar to DNL, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during DNL and CNEL calculations are intended to account for a receptor’s increased sensitivity to noise levels during quieter nighttime periods.

**Table 4.13-1
Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet flyover at 1,000 feet	105	
	100	
Gas lawn mower at 3 feet	95	
	90	
Diesel truck at 50 feet at 50 mph	85	Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noise urban area, daytime	75	
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area	65	Normal speech at 3 feet
Heavy traffic at 300 feet	60	
	55	Large business office
Quiet urban daytime	50	Dishwasher next room
	45	
Quiet urban nighttime	40	Theater, large conference room
Quiet suburban nighttime	35	
	30	Library
Quite rural nighttime	25	Bedroom at night
	20	
	15	Broadcast/recording studio
	10	
	5	
Typical threshold of human hearing	0	Typical threshold of human hearing

Source: Caltrans 2013a

Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise-generating source. The strength of the source is often characterized by its “sound power level.” Sound power level is independent of the distance a receiver is from the source and is a property of the source alone. Knowing the sound power level of an idealized source and its distance from a receiver, the sound pressure level at a specific point (e.g., a property line or a receiver) can be calculated based on geometrical spreading and attenuation (noise reduction) as a result of distance and environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and shielding by terrain or barriers.

For an ideal “point” source of sound, such as mechanical equipment, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. In contrast, a “line” source of sound, such as roadway traffic or a rail line, spreads out in

a cylindrical pattern and theoretically attenuates by 3 dB with each doubling of distance from the line source; however, the sound level at a receptor location can be modified further by additional factors. The first is the presence of a reflecting plane such as the ground. For hard ground, a reflecting plane typically increases A-weighted sound pressure levels by 3 dB. If some of the reflected sound is absorbed by the surface, this increase will be less than 3 dB. Other factors affecting the predicted sound pressure level are often lumped together into a term called “excess attenuation.” Excess attenuation is the amount of additional attenuation that occurs beyond simple spherical or cylindrical spreading. For sound propagation outdoors, there is almost always excess attenuation, producing lower levels than what would be predicted by spherical or cylindrical spreading. Some examples include attenuation by sound absorption in air; attenuation by barriers; attenuation by rain, sleet, snow, or fog; attenuation by grass, shrubbery, and trees; and attenuation from shadow zones created by wind and temperature gradients. Under certain meteorological conditions, like fog and low-level clouds, some of these excess attenuation mechanisms are reduced or eliminated due to noise reflection.

Noise Effects

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person’s subjective reaction to a new noise source is to compare it with the existing environment without the noise source, or the “ambient” noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

Groundborne Vibration and Noise

Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration may be caused by natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions.

As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are usually discussed in terms of peak particle velocity (PPV) in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as electron microscopes.

Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

Groundborne noise is noise generated by vibrating building surfaces such as floors, walls, and ceilings that radiate noise inside buildings subjected to an external source of vibration. The vibration level, the acoustic radiation of the vibrating element, and the acoustical absorption of the room are all factors that affect potential groundborne noise generation.

4.13.2 – EXISTING NOISE AND VIBRATION ENVIRONMENT

The City's existing General Plan Noise Element identifies the primary contributors to the city's noise environment as street traffic, freeway traffic, and aircraft overflights.

In addition to the I-10 (which is generally located between 0.1 miles and 0.7 miles north of the city and contains the Metrolink San Bernardino line), the I-710 and SR-60 are located near or adjacent to Monterey Park's western and southern limits, respectively. These major roadways carry more than 100,000 vehicles per day and are a key contributor to ambient noise levels in areas of Monterey Park near these freeways. In addition, many commercial and residential land uses along Monterey Park's Principal and Minor Arterials, such as but not limited to Atlantic Boulevard, Garfield Avenue, Garvey Avenue, Graves Avenue, and Pomona Boulevard, are exposed to noise levels above 65 CNEL; residential neighborhoods are also exposed to traffic noise from Minor Arterials, Collectors, and Local streets.

Air traffic into and out of Los Angeles International Airport, located 25 miles west of Monterey Park, follows an east-west route directly over the middle of the city. Outbound aircraft, in particular, represent an intrusive noise source that impacts residential neighborhoods, three public elementary schools, Monterey Park Hospital on Atlantic Avenue, and several religious institutions in the city.

Other local sources of noise include typical residential neighborhood sounds such as lawnmowers, children at play, and barking dogs.

The General Plan Noise Element notes that industrial and commercial activity in the city occurs largely within enclosed buildings and thus does not generate excessive noise levels.

The existing ambient noise and vibration environment at and near the Planning Area is described in more detail below.

Measured Ambient Noise Levels

The existing ambient noise levels in the Planning Area were monitored in May 2019 (MIG 2019; see Appendix C). Ambient noise levels were measured with three Larson Davis SoundTrack LxT Type 1 sound level meters. Ambient noise measurements were collected in 10-minute intervals. Conditions during the monitoring were generally clear and sunny during the daytime, with a daily high of approximately 70 degrees Fahrenheit, with winds light and variable.

The ambient noise monitoring conducted for this EIR included one long-term (LT) and eight short-term (ST) measurements at locations selected to:

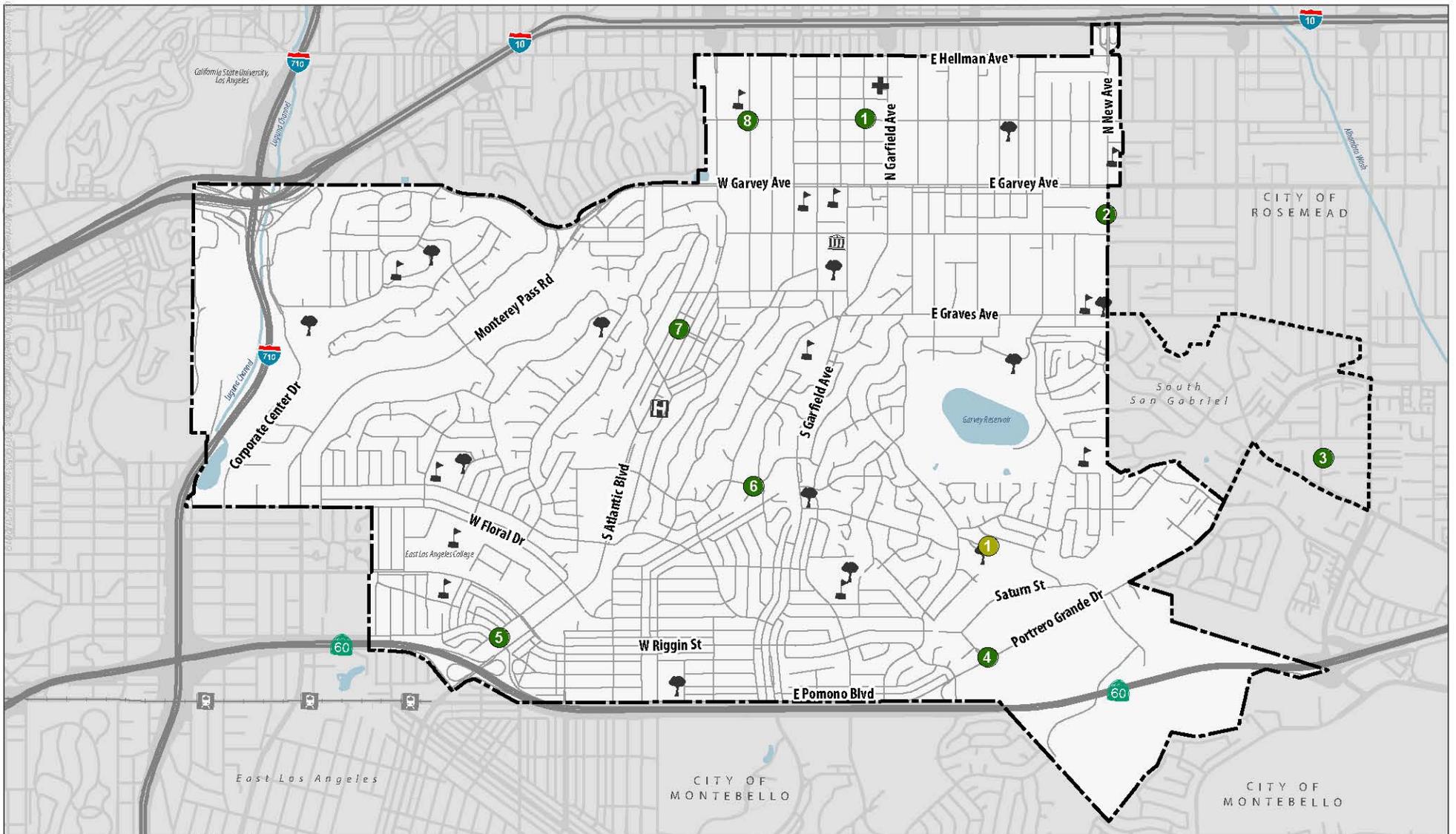
- Provide direct observations of existing noise sources in and in the vicinity of the Planning Area;
- Determine typical ambient noise levels in and in the vicinity of the Planning Area; and
- Evaluate potential project noise levels at nearby sensitive receptors (see “Noise- Sensitive Receptors” below).

The ambient noise monitoring locations are shown on Exhibit 4.13-1 and described below.

- **Location LT-1** was at La Loma Park, in the southeastern portion of the Planning Area. The ambient noise levels measured at location LT-1 are considered representative of 24-hour noise exposure levels in residential areas of the city that consist primarily of Collector and Local streets.
- **Location ST-1** was at the northeast corner of the intersection of East Emerson Avenue and North Baltimore Avenue, in the northern central part of the Planning Area (near the Downtown Perimeter Focus Area). The ambient noise levels measured at location ST-1 are considered representative of background daytime noise levels associated with multi-family residential land uses in the city that are near commercial/office land uses. The Garfield Medical Center is also located in close proximity to ST-1 (within 0.15 miles).
- **Location ST-2** was adjacent to 201 New Avenue, along the western border of the Planning Area (south of the Garvey Avenue Focus Area). The ambient noise levels measured at location ST-2 are considered representative of background daytime noise levels in residential areas near Minor Arterial roadways.
- **Location ST-3** was on Arland Avenue between Celito Drive and Alpaca Street, in the City’s sphere of influence. The ambient noise levels measured at ST-3 are considered representative of the background daytime noise levels in residential areas with primarily local roads.
- **Location ST-4** was at the northeast corner of Potrero Grade Drive and Atlas Avenue, in the southern portion of the Planning Area. The ambient noise levels measured at location ST-4 are considered representative of the background daytime noise levels associated with traffic along Potrero Grande Drive and nearby commercial/industrial activities.
- **Location ST-5** was on West 1st Street, between Collegian Avenue and South Atlantic Boulevard, in the southwestern portion of the Planning Area (within the South Atlantic Focus Area). The ambient noise levels measured at location ST-4 are considered

representative of the background daytime noise levels associated with traffic along South Atlantic Boulevard and SR-60.

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Source: Los Angeles County Assessor, 2019; MIG, 2019

- | | | | |
|--|----------------------------------------|--|---------------------------|
| | Noise Monitoring Location (Long Term) | | City Features |
| | Noise Monitoring Location (Short Term) | | City Hall |
| | | | Hospital |
| | | | Medical |
| | | | Park |
| | | | School or Learning Center |

- | | |
|--|------------------------------|
| | Monterey Park Boundary |
| | Sphere of Influence Boundary |
| | Metro Gold Line and Stations |
| | Water Courses |
| | Waterbodies |



Exhibit 4.13-1 Noise Monitoring Locations

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- **Location ST-6** was at the southeast corner of Repetto Drive and South McPherrin Avenue, in the center of the Planning Area. The ambient noise levels measured at location ST-6 are considered representative of the background daytime noise levels in residential neighborhoods away from heavily travelled roadways.
- **Location ST-7** was within Cascades Park, near an alley that runs parallel to De La Fuente Street and South Atlantic Boulevard, in the center of the Planning Area. The ambient noise levels measured at location ST-7 are considered representative of the background daytime noise levels along Atlantic Boulevard.
- **Location ST-8** was at the southwest corner of West Emerson Avenue and North Chandler Avenue, in the northeastern portion of the Planning Area (within the North Atlantic Focus Area). The ambient noise levels measured at location ST-8 are considered representative of the background daytime noise levels near Major Arterials and commercial development within the city.

Based on observations made during the ambient noise monitoring, the existing noise environment in the Planning Area consists primarily of transportation noise sources, particularly vehicular traffic on main thoroughfares (e.g., Atlantic Boulevard, Garfield Avenue, Potrero Grande, SR-60) and aircraft overflights (planes and helicopters), and activities associated with residential and commercial land uses throughout the Planning Area (e.g., truck loading, landscaping activities). Table 4.13-2 summarizes the results of the ambient noise monitoring conducted for this EIR.

Table 4.13-1
Existing Ambient Noise Levels (dBA)in the Planning Area

Monitoring Site	Duration	Lmin	Lmax	Leq Range			CNEL
				Daytime (7 AM - 7 PM)	Evening (7 PM - 10 PM)	Nighttime (10 PM - 7 AM)	
LT-1	24 Hours	41.3	78.2	49.5 – 57.4	49.5 – 51.3	45.4 – 54.2	57.7
ST-1	30 Minutes	45.6	80.0	59.6 – 62.2	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-2	30 Minutes	44.2	85.3	67.6 – 68.1	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-3	30 Minutes	38.8	73.7	49.5 – 57.3	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-4	30 Minutes	57.6	85.3	73.5 – 74.2	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-5	30 Minutes	57.1	86.9	66.6 – 68.6	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-6	30 Minutes	37.2	72.9	54.9 – 58.2	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-7	30 Minutes	38.8	73.7	49.5 – 57.3	N/A ^(A)	N/A ^(A)	N/A ^(A)
ST-8	30 Minutes	48.1	82.2	64.1 – 65.3	N/A ^(A)	N/A ^(A)	N/A ^(A)

Source: MIG 2019 (see Appendix C)

(A) Data is not available for these noise metrics because noise data was not collected for the time period in question or the noise metric was not available for use in this table.

As seen in Table 4.13-2, daytime noise levels were generally lowest in lower-density residential areas of the Planning Area (LT-1, ST-3, ST-6), and highest near major roads (ST-2, ST-5, and ST-8). Measured noise levels were highest along arterial roadways such as Atlantic Boulevard (ST-8) and near SR-60 (ST-4). In general, the long-term noise monitoring indicates most lower-density residential areas in the Planning Area that are away from major roadways experience a noise exposure of approximately 57 CNEL, while the short-term noise monitoring indicates noise exposure is likely 5 to 10 dB higher in other parts of the Planning Area.

Existing Traffic Noise Levels

Existing (year 2019) traffic noise levels were computed using the U.S. Department of Transportation Federal Highway Administration's Traffic Noise Model (TNM), Version 2.5. The model uses traffic volume, vehicle mix, vehicle speed, roadway geometry, and other variables to compute 24-hour traffic noise levels at user-defined receptor distances from the roadway center. The TNM modeling conducted for this EIR incorporates worst-case assumptions about motor vehicle traffic and noise levels; specifically, calculations are based on "hard" site conditions and do not incorporate any natural or artificial shielding with the exception of modeling for I-10, I-710, and SR-60, which included shielding associated with the sound barrier wall present on these freeways.

Information on existing average daily traffic volumes was obtained from City traffic speed zone surveys (KOA 2017), the traffic impact study (TIS) prepared for the Project (KOA 2019), and Caltrans traffic count information (for I-10, I-710, and SR-60; Caltrans 2018). Traffic noise levels were estimated on a 24-hour, CNEL exposure basis assuming equal hourly distribution of vehicle traffic. The mix of automobiles (95%), medium (2%) and heavy duty trucks (1%), and motorcycles (2%) assigned to the roadway system was generated using the CARB EMFAC2017 model, which contains vehicle population data by different geographic regions. Vehicles were assumed to travel the higher of either the average recorded speed limit (from City speed surveys) or the posted speed limit on each modeled roadway segment. Existing traffic noise contours are shown in Figure 4.13-2 (Existing Traffic Noise Contours). The distances to the CNEL contours for the roadway are shown in Table 4.13-3. Please refer to Appendix C for detailed information on existing traffic noise modeling assumptions.

The results of the traffic noise modeling indicate that 2019 traffic noise levels within the Planning Area are highest along Atlantic Boulevard, Garfield Avenue, Garvey Avenue, Monterey Pass Road, Potrero Grande Drive, and segments of the I-710 that do not have a barrier. Specifically, the modeling shows:

- Traffic noise levels along Atlantic Boulevard are estimated to be approximately 73 to 74 CNEL at a distance of 100 feet from the center of the roadway. A mix of office, general commercial, and low density residential land uses are present along Atlantic Boulevard. The estimated traffic noise levels exceed the City's recommended acceptable noise exposure levels contained in the existing General Plan for low density residential (65 CNEL) land uses, but not for office and general commercial (75 CNEL) land uses.
- Traffic noise levels along Garfield Avenue are estimated to be between approximately 70 and 73 CNEL at a distance of 100 from the center of this roadway. A mix of office, hotel, and low density and multi-family residential land uses are present along Garfield Avenue. The estimated traffic noise levels generally exceed the City's recommended acceptable outdoor noise levels contained in the existing General Plan for hotel (70 CNEL) and low density residential and multi-family residential (65 CNEL) land uses, but not for office land uses (75 CNEL).
- Traffic noise levels along Garvey Avenue are estimated to be between approximately 68 and 72 CNEL at a distance of 100 feet from the center of this roadway. A mix of office, general commercial, and low density and multi-family residential land uses are present along Garfield Avenue. The estimated traffic noise levels exceed the City's recommended

acceptable outdoor noise levels contained in the existing General Plan for low density and multi-family residential (65 CNEL) land uses, but not office and general commercial land uses (75 CNEL).

- Traffic noise levels along Monterey Pass Road are estimated to be approximately 70 to 71 CNEL at a distance of 100 feet from the center of this roadway. These noise levels do not exceed the recommended acceptable noise exposure levels for industrial (80 CNEL) land uses that are predominantly located along Monterey Pass Road.
- Traffic noise levels along Potrero Grande Drive are estimated to be between 71 and 73 CNEL at a distance of 100 feet from the center of this roadway. A mix of low density residential and office land uses are located along Potrero Grande Drive. The estimated traffic noise levels exceed the City's recommended acceptable noise exposure level for low density residential (65 CNEL) land uses, but not for office land uses (75 CNEL).

Future Baseline Traffic Noise Levels

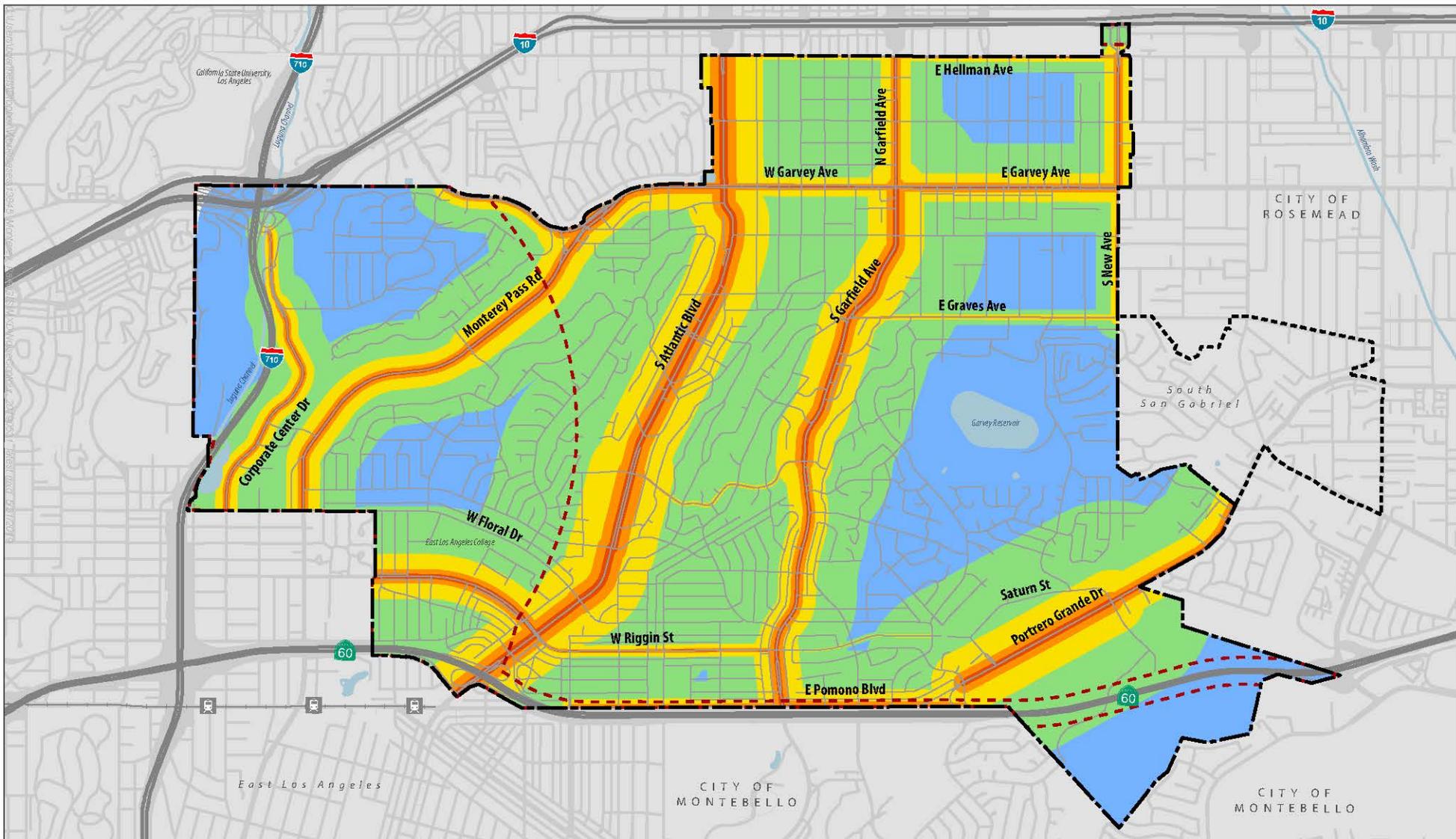
The TIS prepared for the Project includes an analysis of future traffic conditions that would occur in year 2040 without implementation of the Project. This future baseline scenario assumes traffic would grow in the Planning Area by approximately 1.06% compared to existing 2019 conditions.

The future baseline year 2040 traffic noise levels were computed using TNM, Version 2.5 and the same roadway geometry factors assumed for 2019 traffic noise levels. The future vehicle mix was adjusted to account for changes in the vehicle fleet contained within the California Air Resources Board (CARB) EMFAC2017 model; the mix of vehicles assigned to the roadway system was assumed to be automobiles (94%), medium (2%) and heavy duty trucks (1%), and motorcycles (3%). The distances to the CNEL contours for the roadway are shown in Table 4.13-4. Please refer to Appendix C for detailed information on future baseline traffic noise modeling assumptions. The increase in traffic and change in fleet characteristics generally increased noise levels by approximately 0.3 to 0.7 dBA for all modeled roadway segments.

Other Non-Transportation Noise Sources

Non-transportation sources also contribute to the Planning Area's existing noise environment. Commercial and industrial land uses located throughout the Planning Area (but primarily along key roadways like Atlantic Boulevard and Garvey Avenue), schools, outdoor park and recreation facilities, Monterey Park Hospital, and residential land uses generate noise from daily operations of landscaping equipment, stationary sources such as heating, ventilation, and air conditioning (HVAC) equipment, business deliveries, solid waste pickup services, and other common activities. Such sources are considered a local source of noise that influence only the immediate surroundings.

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Source: Los Angeles County Assessor, 2019, MIG, 2019

Community Noise Equivalent Levels (CNEL)

- 55 CNEL
- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL
- 65 CNEL (Freeways)

- Monterey Park Boundary
- Sphere of Influence Boundary
- Metro Gold Line and Stations
- Water Courses
- Waterbodies



Exhibit 4.13-2 Existing 2019 Traffic Noise Contours

Monterey Park Focused General Plan Update

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**Table 4.13-3
Existing (2019) Traffic Noise Level Contour Distances**

ID	Road	Segment	CNEL at 100 Feet (dBA) ^(A)	CNEL Contour and Distance from Roadway Center in Feet			
				70 dBA	65 dBA	60 dBA	55 dBA
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	74.0	251	794	2,512	-- ^(B)
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	73.6	229	724	2,291	-- ^(B)
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	74.3	269	851	2,692	-- ^(B)
1D	Atlantic Blvd	Floral Dr to South City Limit	73.7	234	741	2,344	-- ^(B)
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	71.5	141	447	1,413	4,467
3A	Corporate Ctr Dr	Ramona Blvd to Casuda Canyon Dr	66.5	45	141	447	1,413
3B	Corporate Ctr Dr	Casuda Canyon Dr to Floral Drive	68.4	69	219	692	2,188
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	60.7	12	37	117	372
5A	Garfield Ave	Hellman Ave to Garvey Ave	69.7	93	295	933	2,951
5B	Garfield Ave	Garvey Ave to El Repetto Dr	72.5	178	562	1,778	5,623
5C	Garfield Ave	El Repetto Dr to Riggins St	70.8	120	380	1,202	3,802
5D	Garfield Ave	Riggins St to South City Limit	71.5	141	447	1,413	4,467
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	68.4	69	219	692	2,188
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	71.7	148	468	1,479	4,677
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	67.7	59	186	589	1,862
6D	Garvey Ave	Garfield Ave to New Ave	69.5	89	282	891	2,818
7A	Graves Ave	Garfield Ave to East City Limit	61.9	15	49	155	490
8A	Hellman Ave	West City Limit to Garfield Ave	63.8	24	76	240	759
8B	Hellman Ave	Garfield Ave to East City Limit	64.9	31	98	309	977
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	71.1	129	407	1,288	4,074
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	70.2	105	331	1,047	3,311
10A	New Ave	Hellman Ave to Garvey Ave	69.4	87	275	871	2,754
10B	New Ave	Garvey Ave to Graves Ave	66.4	44	138	437	1,380
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67.0	50	158	501	1,585
11B	Pomona Blvd	Garfield Ave to Markland Ave	70.5	112	355	1,122	3,548
12A	Potrero Grande Dr	Markland Dr and Saturn St	73.1	204	646	2,042	6,457
12B	Potrero Grande Dr	Saturn St and East City Limit	71.3	135	427	1,349	4,266
13A	Riggins St	Atlantic Blvd to Findlay Ave	65.3	34	107	339	1,072
13B	Riggins St	Findlay Ave to Garfield Ave	65.9	39	123	389	1,230
13C	Riggins St	Garfield Ave to Fulton St	57.6	6	18	58	182
14	I10	Adjacent to City Limits	71.1	129	407	1,288	4,074
15A	I710 with Barrier	Within / Adjacent to City Limits	65.2	33	105	331	1,047
15B	I710 no Barrier	Within / Adjacent to City Limits	83.4	2,188	6,918	-- ^(B)	-- ^(B)
16A	SR60	Within / Adjacent to City Limits	68.8	76	240	759	2,399

Source: KOA 2019, Caltrans 2018, and MIG 2019 (see Appendix C)

(A) All CNEL values at listed distances are measured from the center of the modeled roadway.

(B) Distances to these contours are more than 1.5 miles and are not presumed to be representative due to effects on propagation at these distances.

**Table 4.13-4
Future No Project (2040) Traffic Noise Level Contour Distances**

ID	Road	Segment	CNEL at 100 Feet (dBA) ^(A)	CNEL Contour and Distance from Roadway Center in Feet			
				70 dBA	65 dBA	60 dBA	55 dBA
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	74.3	269	851	2,692	-- ^(B)
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	74	251	794	2,512	-- ^(B)
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	74.6	288	912	2,884	-- ^(B)
1D	Atlantic Blvd	Floral Dr to South City Limit	74	251	794	2,512	-- ^(B)
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	71.9	155	490	1,549	4,898
3A	Corporate Ctr Dr	Ramona Blvd to Casuda Canyon Dr	66.9	49	155	490	1,549
3B	Corporate Ctr Dr	Casuda Canyon Dr to Floral Drive	68.8	76	240	759	2,399
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	61.1	13	41	129	407
5A	Garfield Ave	Hellman Ave to Garvey Ave	70.2	105	331	1,047	3,311
5B	Garfield Ave	Garvey Ave to El Repetto Dr	73.2	209	661	2,089	6,607
5C	Garfield Ave	El Repetto Dr to Riggins St	71.3	135	427	1,349	4,266
5D	Garfield Ave	Riggins St to South City Limit	72	158	501	1,585	5,012
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	68.9	78	245	776	2,455
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	72.1	162	513	1,622	5,129
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	68.2	66	209	661	2,089
6D	Garvey Ave	Garfield Ave to New Ave	70	100	316	1,000	3,162
7A	Graves Ave	Garfield Ave to East City Limit	61.5	14	45	141	447
8A	Hellman Ave	West City Limit to Garfield Ave	64.3	27	85	269	851
8B	Hellman Ave	Garfield Ave to East City Limit	65.3	34	107	339	1,072
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	71.5	141	447	1,413	4,467
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	70.7	117	372	1,175	3,715
10A	New Ave	Hellman Ave to Garvey Ave	69.9	98	309	977	3,090
10B	New Ave	Garvey Ave to Graves Ave	66.8	48	151	479	1,514
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67.5	56	178	562	1,778
11B	Pomona Blvd	Garfield Ave to Markland Ave	71	126	398	1,259	3,981
12A	Potrero Grande Dr	Markland Dr and Saturn St	73.5	224	708	2,239	7,079
12B	Potrero Grande Dr	Saturn St and East City Limit	71.8	151	479	1,514	4,786
13A	Riggins St	Atlantic Blvd to Findlay Ave	65.7	37	117	372	1,175
13B	Riggins St	Findlay Ave to Garfield Ave	66.3	43	135	427	1,349
13C	Riggins St	Garfield Ave to Fulton St	58	6	20	63	200
14	I10	Adjacent to City Limits	71.7	148	468	1,479	4,677
15A	I710 with Barrier	Within / Adjacent to City Limits	65.8	38	120	380	1,202
15B	I710 no Barrier	Within / Adjacent to City Limits	83.9	2,455	7,762	-- ^(B)	-- ^(B)
16A	SR60	Within / Adjacent to City Limits	69.4	87	275	871	2,754

Source: KOA 2019, Caltrans 2018, and MIG 2019 (see Appendix C)

(A) All CNEL values at listed distances are measured from the center of the modeled roadway.

(B) Distances to these contours are more than 1.5 miles and are not presumed to be representative due to effects on propagation at these distances.

Noise-Sensitive Receptors

Noise-sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, motels and hotels, hospitals and health care facilities, school facilities, and parks are examples of noise receptors that could be sensitive to changes in existing environmental noise levels. In general, the noise-sensitive receptors within the Planning Area include, without limitation (see Figure 4-13.1):

- Existing low density, medium density, high density, and mixed use residential receptors within the City.
- Existing schools and education or institutional facilities, such as Monterey Vista Elementary School, Monterey Highlands Elementary School, Macy Intermediate School, and Saint Thomas Aquinas private school.
- Existing overnight/long-term medical care facilities, such as Monterey Park Hospital.
- Existing parks, such as Barnes Park, Cascades Park, Edison Trails Park, and Sierra Vista Park.

The Project allows for an increase development density in Monterey Park and allows for new residential and mixed use residential and commercial opportunities. The Project would also continue the City's existing land use policy to create a vibrant, mixed use downtown and encourage new housing development within mixed use areas along key roadways in the city, including roadways that have high noise levels (above 65 CNEL).

4.13.3 – REGULATORY FRAMEWORK

Federal

Federal Transit Administration (FTA)

No federal regulations apply to noise or vibration from the proposed project, but the FTA's 2018 *Transit Noise and Vibration Impact Assessment Manual* document sets groundborne vibration annoyance criteria for general assessments. The criteria vary by the type of building being subjected to the vibrations, and the overall number of vibration events occurring each day. Category 1 buildings are considered buildings where vibration would interfere with operation, even at levels that are below human detection. These include buildings with sensitive equipment, such as research facilities and recording studios. Category 2 buildings include residential lands and buildings where people sleep, such as hotels and hospitals. Category 3 buildings consist of institutional land uses with primarily daytime uses. The FTA standards vary for "frequent" events (occurring more than 70 times per day, such as a rapid transit project), "occasional" events (occurring between 30 to 70 times per day), and "infrequent" events (occurring less than 30 times per day). The FTA's vibration annoyance criteria are summarized in Table 4.13-5.

**Table 4.13-5
FTA Ground-Borne Vibration Impact Criteria for General Assessment**

Vibration Land Use Category/Type	Frequent Events	Occasional Events	Infrequent Events
Category 1 – Buildings with sensitive equipment	65 VdB	65 VdB	65 VdB
Category 2 – Buildings where people sleep	72 VdB	75 VdB	80 VdB
Category 3 – Institutional buildings	75 VdB	78 VdB	83 VdB
Source: FTA 2018 Note: VdB = Velocity decibel			

State

California Building Standards Code

The California Building Standards Code is contained in Title 24 of the California Code of Regulations and consists of 11 different parts that sets forth various construction and building requirements. Part 2, California Building Code, Section 1207, Sound Transmission, establishes sound transmission standards for interior walls, partitions, and floor/ceiling assemblies. Specifically, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room.

California Green Building Standards Code

The California Green Building Standards Code is Part 11 to the California Building Standards Code. Chapter 5, Nonresidential Mandatory Standards, Section 5.507 establishes the following requirements for nonresidential development that may be applicable to the Project.

- Section 5.507.4.1.1 sets forth that buildings exposed to a noise level of 65 dBA Leq (1-hour) during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composting sound transmission class (STC) rating of at least 45 (or an outdoor indoor transmission class [OITC] of 35), with exterior windows of a minimum STC of 40.
- Section 5.507.4.2 sets forth that wall and roof assemblies for buildings exposed to a 65 dBA Leq pursuant to Section 5.507.4.1.1 shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation. This requirement shall be documented by an acoustical analysis documenting interior sound levels prepared by personnel approved by the architect or engineer of record.

Caltrans

The California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* provides a summary of vibration criteria that have been reported by researchers, organizations, and governmental agencies (Caltrans 2013). Chapters Six and Seven of this manual summarize vibration detection and annoyance criteria from various agencies and provide Caltrans' recommended guidelines and thresholds for evaluating potential vibration

impacts on buildings and humans from transportation and construction projects. These thresholds are summarized in Table 4.13-6 and Table 4.13-7.

**Table 4.13-6
Caltrans' Vibration Threshold Criteria for Building Damage**

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Extremely fragile buildings, ruins, monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans 2013b Note: PPV = peak particle velocity		

**Table 4.13-7
Caltrans' Vibration Threshold Criteria for Human Response**

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
Source: Caltrans 2013b Note: PPV = peak particle velocity		

Local

City of Monterey Park General Plan Safety and Community Services Element

The City of Monterey Park's General Plan Safety and Community Services Element includes several noise control programs designed to protect the city's citizens from the adverse effects of uncontrolled noise by controlling noise at its source, as well as attenuating noise between the source and the receiver. The General Plan includes the following noise control programs relevant to the Focused General Plan Update:

- Goal 5: Minimize the impact of point-source noises and ambient noise levels throughout the community.
 - Policy 5.1 - Continue to enforce the noise ordinance to control point-source noise.
 - Policy 5.2 - Incorporate noise impact considerations into the development review process, particularly the relationship of parking and ingress/egress, loading, and refuse collection areas to surrounding residential and other noise-sensitive land uses.

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- Policy 5.3 - Require that new multi-family residential developments incorporate design features and approaches which minimize the intrusion of ambient noise into private and common outdoor spaces.
- Policy 5.4 - Enforce and revise as necessary city ordinances regulating hours for construction activity.
- Policy 5.5 - Direct the Police Department to aggressively enforce state motor vehicle code regulations pertaining to vehicle noise.
- Policy 5.6 - Support efforts of state and federal agencies to reduce motor vehicle noise in newer-model vehicles.
- Policy 5.7 - Ensure that city operated buses are maintained to minimize noise production.
- Goal 6: Minimize the noise impacts associated with the development of residential uses above or near commercial uses in mixed use developments.
 - Policy 6.1 - Require that mixed use structures be designed to prevent transfer of noise and vibration from the commercial to the residential use.
 - Policy 6.2 - Locate balconies and windows of residential units in mixed use projects away from the primary street and other major noise sources.
- Goal 7: Reduce aircraft noise impacts on Monterey Park residents and businesses.
 - Policy 7.1 - Work with surrounding jurisdictions to impress upon local congresspersons and U.S. senators the need to improve aircraft noise standards and ensure that the impacts created by airports are equally shared throughout the Los Angeles basin.
 - Policy 7.2 - Restrict the establishment of helipads to those areas of the city where overflights of residential neighborhoods can be avoided, except where such operations are needed to support critical medical and emergency response facilities.

Additionally, the City's General Plan Safety and Community Services Element establishes land use compatibility standards shown in Table 4.13-8.

**Table 4.13-8
Noise/Land Use Compatibility Guidelines**

Land Use Category	CNEL Acceptability			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low-Density Single-Family, Duplex, Mobile Homes	50-60	60-65	65-75	75+
Residential - Multi-Family	50-60	60-65	65-75	75+
Commercial - Motels, Hotels, Transient Lodging	50-60	60-70	70-80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-70	70-80	80+
Amphitheaters, Concert Hall, Auditorium, Meeting Hall	<50	50-65	N/A	65+
Sports Arenas, Outdoor Spectator Sports	<50	50-70	N/A	70+
Playgrounds, Neighborhood Parks	50-70	N/A	70-75	75+
Golf Courses, Riding Stables, Water Rec., Cemeteries	50-70	N/A	70-80	80+
Office Buildings, Business Commercial, Professional, and Mixed-Use Developments	50-65	65-75	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	85+	N/A

Source: Monterey Park, 2001

Monterey Park Municipal Code

MPMC Chapter 9.40 (Noise) regulates noise within the City. MPMC Section 9.53.040 sets noise levels for non-transportation noise sources for various land uses. These standards provide restrictions on the amount and duration of noise generated at a property, as measured at the property line of the noise receptor. The MPMC prohibits persons from creating or allowing noise levels exceeding the median ambient noise levels or the allowable noise levels set in the MPMC, whichever is greater. The MPMC sets the following noise levels:

- Residential
 - 7:00 AM – 10:00 PM: 55 dBA L(50)
 - 10:00 PM – 7:00 AM: 50 dBA L(50)
- Commercial
 - 7:00 AM – 10:00 PM: 65 dBA L(50)

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- 10:00 PM – 7:00 AM: 55 dBA L(50)
- Industrial
 - Anytime: 70 dBA L(50)

MPMC Section 9.53.50 sets forth the following permitted increases in noise levels as prescribed in MPMC Section 9.53.040, summarized above:

- 5 dBA increase for no more than 15 minutes per hour
- 10 dBA increase for no more than 5 minutes per hour
- 15 dBA increase for no more than 1 minutes per hour
- 20 dBA increase for less than 1 minute per hour

MPMC Section 9.53.070, construction activity is exempt from noise regulations in the City of Monterey Park as long as it occurs between the hours of 7:00 AM and 7:00 PM Monday through Friday, and the hours of 9:00 AM and 6:00 PM on Saturdays, Sundays, and holidays.

4.13.4 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, Project implementation would have a significant impact related to noise or vibration if it would result in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- b) Generation of excessive groundborne vibration or groundborne noise levels; or
- c) For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels.

For the purposes of this EIR, a substantial permanent increase in ambient noise is defined as: 1) an increase of 5 dBA or more where the ambient noise level would remain normally or conditionally acceptable; 2) An increase of 3 dBA or more that causes the existing ambient noise level to change from normally or conditionally acceptable to normally unacceptable; or 3) an increase of 1 dBA or more that causes the existing ambient noise level to change from normally unacceptable to clearly unacceptable, or where the existing ambient noise levels are already clearly unacceptable.

4.13.5 – IMPACTS AND MITIGATION MEASURES

This section describes potential noise and vibration impacts associated with implementation of the Focused General Plan Update and recommends mitigation measures as needed to reduce significant impacts.

Existing Noise Regulations

Impact NOISE-1 – Would the project result in generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Analysis of Impacts

Project implementation would involve construction that would result in temporary noise generation, primarily from the use of heavy-duty construction equipment.

The Project allows for more mixed use developments and allows for the increase of the overall amount of development (both residential units and non-residential square footage) within the Planning Area. The Project would focus new development in Focus Areas identified during the General Plan Update process (see Chapter 3, Project Description). While low density residential land uses would remain the predominant land use under the Project, key changes in land uses include an emphasis on mixed use development in the northern part of the city (the North Atlantic, Downtown Core, and Garvey Corridor Focus Areas), a transition from light industrial land uses to employment/technology/corporate-based industrial and commercial land uses along Monterey Pass Road and Corporate Center Drive (Corporate Center Drive, Corporate Place, and Monterey Pass Focus Areas), and a transition from general commercial to office land uses along Atlantic Boulevard, near the city's southern limit (South Atlantic Focus Area). Although the Project would focus on new development in certain areas, future individual construction and development projects could occur throughout the Planning Area over the approximately 20-year span of the Focused General Plan Update. These projects could occur on any property (based on land uses allowed by the Land Use Plan) and could affect existing or future land uses, including potentially sensitive residential, commercial, park, or school land uses that may or may not currently be present near future development areas. Thus, this analysis addresses the potential for the Project to result in temporary construction noise impacts, wherever they might occur.

Since individual project-specific information is not available at this time, potential short-term (construction-related) noise impacts can only be evaluated based on the typical construction activities associated with residential, commercial, and retail development. Potential construction source noise and vibration levels were developed based on methodologies, reference noise levels, typical equipment usage, and other operating factors documented and contained in the Federal Highway Administration's (FHWA) Construction Noise Handbook (FHWA 2006), Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment document (FTA 2018), and Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2013a). Reference levels are noise emissions for specific equipment or activity types that are well-documented and for which their usage is common practice in the field of acoustics.

Construction activities associated with future development projects could include: staging, demolition, site preparation (e.g., land clearing), grading, utility trenching, foundation work (e.g., excavation, pouring concrete pads, drilling for piers), material deliveries (requiring travel along Planning Area roads), building construction (e.g., framing, concrete pouring, welding), paving, coating application, and site finishing work. In general, these activities would involve the use of worker vehicles, delivery trucks, dump trucks, and heavy-duty construction equipment such as, but not limited to, backhoes, tractors, loaders, graders, excavators, rollers, cranes, material lifts, generators, and air compressors. Table 4.13-9 presents the noise levels associated with typical

types of construction equipment that could be used in the Planning Area for future individual projects.

**Table 4.13-9
Typical Construction Equipment Noise Levels (dBA)**

Equipment	Reference Noise Level at 50 Feet (L _{max}) ^(A)	Percent Usage Factor ^(B)	Predicted Noise Levels (Leq) at Distance ^(C)					
			50 Feet	100 Feet	200 Feet	300 Feet	400 Feet	500 Feet
Bulldozer	85	40	81	75	71	67	64	62
Backhoe	80	40	76	70	66	62	59	57
Compact Roller	80	20	73	67	63	59	56	54
Concrete Mixer	85	40	81	75	71	67	64	62
Crane	85	16	77	71	67	63	60	58
Excavator	85	40	81	75	71	67	64	62
Generator	82	50	79	73	69	65	62	60
Pneumatic tools	85	50	82	76	72	68	65	63
Scraper	85	40	82	76	72	68	64	62
Delivery Truck	85	40	81	75	71	67	64	62
Vibratory Roller	80	20	73	67	63	59	56	54

Sources: Caltrans 2013a and FHWA 2010

(A) L_{max} noise levels based on manufacturer's specifications.

(B) Usage factor refers to the amount of time the equipment produces noise over the time period.

(C) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2009: L_{eq} (hourly) = L_{max} at 50 feet – 20log (D/50) + 10log (UF), where: L_{max} = reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.

Demolition, site preparation, and grading phases typically result in the highest temporary noise levels due to the use of heavy-duty equipment such as bulldozers, excavators, graders, loaders, scrapers, and trucks. As shown in Table 4.13-9, the worst-case Leq and L_{max} noise levels associated with the operation of, for example, a bulldozer, excavator, or scraper, are predicted to be approximately 82 and 85 dBA, respectively, at a distance of 50 feet from the equipment operating area. At an active construction site, it is not uncommon for two or more pieces of construction equipment to operate at the same time and in close proximity. The concurrent operation of two or more pieces of construction equipment would result in noise levels of approximately 85 to 88 dBA at a distance of 50 feet from equipment operating areas¹.

The magnitude of each individual future project's temporary and periodic increase in ambient noise levels would be dependent upon a number of project-specific factors that are not known at this time, including: the amount and type of equipment being used; the distance between the area where equipment is being operated and the location of the specific land use or receptor where noise levels are being evaluated; the time of day construction activities are occurring; the presence or absence of any walls, buildings, or other barriers that may absorb or reflect sound

¹ As shown in Table 4.13-9, a single bulldozer provides a sound level of 81 dBA Leq at a distance of 50 feet; when two identical sound levels are combined, the noise level increases to 84 dBA Leq and when three identical sound levels are combined, the noise level increases to 86 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas.

waves; the total duration of the construction activities; and the existing ambient noise levels near construction areas. For example, a noise level of 88 dBA L_{max} would be similar to typical L_{max} levels measured throughout the Planning Area (see Appendix XYZ), but sustained Leq levels of 85 dBA would be approximately 28 dBA above ambient conditions in most low to medium density residential areas in the Planning Area (e.g., LT-1, ST-3, ST-6; see Table 4.13-2), to 17 to 18 dBA above ambient conditions in most commercial and industrial areas in Planning Area (e.g., ST-2 and ST-5; see Table 4.13-2). Typically, sustained construction noise levels of 80 to 85 dBA or higher would require the implementation of construction noise control practices such as staging area restrictions (e.g., siting staging areas away from sensitive receptors), equipment controls (e.g., covered engines and use of electrical hook-ups instead of generators), and/or the installation of temporary noise barriers of sufficient height, size (length or width), and density to achieve targeted noise reductions.

The City's existing General Plan Safety and Community Services Element protects Monterey Park residents from excessive construction noise levels that could disturb and disrupt human activities and affect the physical and psychological health of individuals. Specifically, Goals 5 and 6 focus on minimizing impacts of point-noise sources, ambient noise levels throughout the community, and minimizing impacts of noise associated with commercial land uses to residential developments. Furthermore, MPMC Section 9.53.40, establishes the maximum permissible noise levels that may intrude into adjacent property lines, and Section 9.53.70 limits the hours of construction activity to 7:00 AM and 7:00 PM Monday through Friday, and the hours of 9:00 AM and 6:00 PM on Saturdays, Sundays, and holidays.

The MPMC does not have specific, numeric noise standards (e.g., 90 dB, Leq) for construction noise. Although the General Plan sets forth a requirement to assess and minimize noise levels into the development review process, it does not specifically establish a requirement for project proponents to minimize potential construction noise levels (e.g., through the use of best management practices or noise control measures such as sound barriers). While all projects in the city would be subject to the permissible construction hours established by the MPMC, it is possible that some discretionary and non-discretionary construction activities could result in temporary increases in noise levels above ambient conditions of 10 to 30 dBs or more during permissible time frames, which would be perceived by noise-sensitive land uses as doubling or quadrupling of noise volume, respectively. This situation is most likely to occur in areas where the Project would permit increased development density and a mix of land uses (e.g., North Atlantic, Downtown Core, and Garvey Corridor Focus Areas).

Level of Significance Before Mitigation

Potential temporary construction-related noise increases of more than 10 dBA above ambient conditions during permissible construction hours would be a potentially significant impact.

Mitigation Measures

Mitigation Measure NOISE-1. To ensure that future development projects implement appropriate construction noise controls, the City will require development projects that are subject to discretionary review and that are located near (i.e., within 200 feet) of noise-sensitive land uses (e.g., residential, school, or long term medical care facilities) to assess potential construction noise levels and minimize substantial adverse impacts by implementing feasible construction noise control measures that reduce construction noise levels at sensitive receptor locations. Such measures may include, without limitation: 1) construction management techniques (e.g., providing advance notice of construction activities to nearby noise-sensitive receptors, siting staging areas

away from noise-sensitive land uses, phasing activities to take advantage of shielding/attenuation provided by topographic features or buildings, monitoring construction); 2) construction equipment controls (e.g., ensuring equipment has mufflers, use of electric hook-ups instead of generators); 3) use of temporary sound barriers (equipment enclosures, berms, walls, blankets, or other devices) when necessary; 4) preparation of a plan, procedures, or other mechanism to receive track, respond, and resolve construction noise complaints, including designation of an on-site appointee to handle such complaints, and report back to the City Manager, or designee; and 4) monitoring of actual construction noise levels to verify any need for noise controls.

Level of Significance After Mitigation

Although specific construction activities and noise levels associated with future development projects are not known at this time, Mitigation Measure NOISE-1 would require the implementation of feasible construction noise control measures when development occurs near noise-sensitive land uses and, therefore, would render potential construction noise impacts from future development projects a **less than significant impact with mitigation**.

Impact NOISE-2 – Would the project result in generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Analysis of Impacts

Project implementation could have the potential to change the existing amounts and types of land uses within the Planning Area. These potential land use changes could increase the number of residents and employees. This possible increase in population and employment could lead to increased vehicle traffic on the local roadway system, which could result in traffic-related noise levels that pose land use compatibility issues or result in a substantial permanent increase in traffic-related noise levels throughout the Planning Area.

Project implementation could also involve increases in stationary noise and other sources of noise within the Planning Area. These potential effects are evaluated below.

Increases in Traffic Noise Levels

Although the Focused General Plan Update in itself does not authorize any specific development project or increase in existing vehicular traffic levels, the City contracted with a professional transportation engineering firm (KOA) to prepare estimates of the potential total net increase in trips resulting from the land use changes associated with potential Project growth (KOA 2019; see Chapter 4.17, Transportation, and Appendix D). The vehicle trip estimates prepared for the Project provide a sufficient level of detail to generally evaluate the potential future increases in traffic-related noise levels associated with Project growth.

Future development could be exposed to incompatible traffic noise levels. In addition, existing development within the Planning Area may also be exposed to increases in traffic noise as a result of potential land use changes resulting from the Project. Residential development, schools, libraries, hospitals, convalescent homes, and places of worship are considered the most noise-sensitive land uses with regards to community noise. High density and mixed-use residential, commercial, and industrial developments are less noise-sensitive because uses are primarily indoors, and typically noise exposure can be reduced through design and material choices (e.g.,

outdoor activity areas are located in courtyards surrounded by structures, materials with greater insulation are used).

Future 2040 traffic noise levels with the Project were computed using the same methodology (TNM Version 2.5) and data sources used to calculate existing 2019 and future baseline 2040 traffic noise levels (see Section 4.13.2), except that Project traffic levels were obtained from the TIS prepared for the Project and entered into the traffic model. In addition, the 2040 mix of automobiles (94%), medium (2%) and heavy duty trucks (2%), and motorcycles (3%) assigned to the roadway system was generated using CARB's EMFAC2017 model. Future traffic noise contours are shown in Figure 4.13-3 (Project 2040 Transportation Noise Contours). The distances to the modeled CNEL contours for the roadway are shown in Table 4.13-10. In addition, Table 4.13-11 summarizes the net change in average daily traffic (ADT) and traffic noise levels (at a distance of 100 feet) that would occur with implementation of the Project. Refer to Appendix C for detailed existing and future traffic noise modeling results.

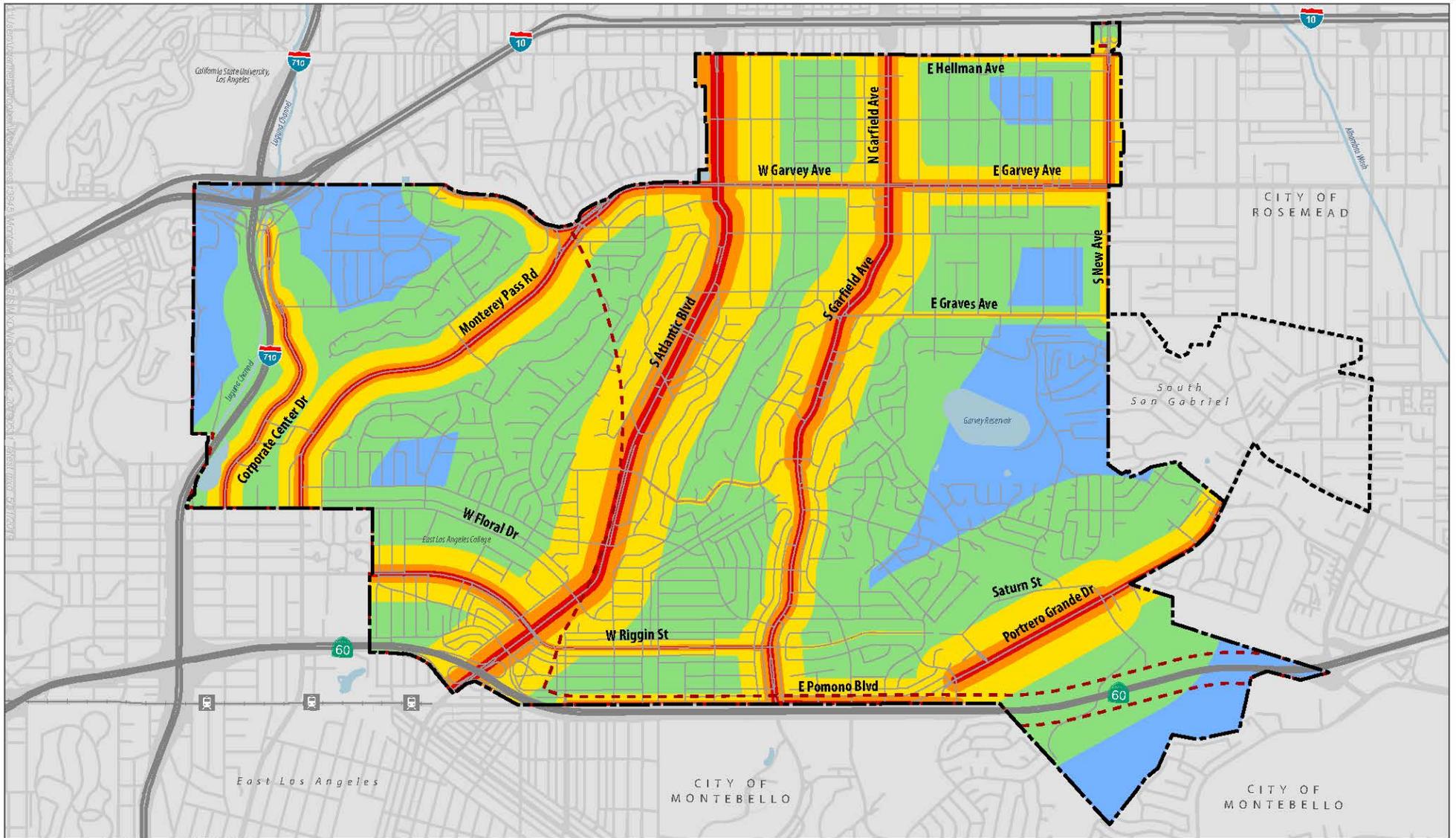
The results of the traffic noise modeling indicate that existing traffic noise levels within the Planning Area would continue to be highest along major travel corridors such as Atlantic Boulevard, Garfield Avenue, Garvey Avenue, Monterey Pass Road, and Potrero Grande Drive. Specifically, the modeling shows:

- Traffic noise levels along all segments of Atlantic Boulevard could increase by no more than 2 dBA.² For all segments, including segments with low density residential land uses, traffic noise levels are estimated to increase to levels above 75 CNEL. In addition:
 - Traffic noise levels along the segment of Atlantic Boulevard from Hellman Avenue to Garvey Avenue (within the North Atlantic Focus Area) are estimated to increase from approximately 74 to 76 CNEL at a distance of 100 feet from the center of this roadway segment. This noise level would exceed the City's conditionally acceptable noise level for commercial, office, business, professional, and mixed use land uses (75 CNEL). Although the increase in traffic noise levels would be below the level that is normally discernible by the typical human (3 dB), noise levels would change from conditionally acceptable to normally unacceptable for these land uses.
 - Traffic noise levels along the segment of Atlantic Boulevard from El Repetto Drive to Floral Drive would increase by 1.1 dBA and change noise exposure levels for the adjacent low density residential land uses along this segment of Atlantic Drive from normally unacceptable to clearly unacceptable (greater than 75 CNEL).
 - Traffic noise levels along the segment of Atlantic Boulevard from Floral Drive to the south city limit (within the South Atlantic Focus Area) would increase by approximately 1 dBA and would remain within the conditionally acceptable noise level for commercial, office, business, professional, and mixed use land uses (75 CNEL).
- Traffic noise levels along all segments of Corporate Center Drive (within the Corporate Center and Corporate Place Focus Areas) could increase by approximately 1.5 to 2.0 dBA but remain within the conditionally acceptable noise level for commercial, office, business, professional, and mixed use land uses (75 CNEL).

² For the purposes of this noise analysis and consistent with the California Environmental Quality Act (CEQA), all Project 2040 increases in noise are compared against existing 2019 noise levels. This provides a conservative approach (i.e., likely to overestimate the Project impact) because traffic noise increases are expected to occur in the Planning Area over time even without the Project.

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- Traffic noise levels along all segments of Garfield Avenue are estimated to increase by approximately 1.3 to 3.4 dBA to levels above 72 CNEL.
 - Traffic noise levels along the segment of Garfield Avenue from Hellman Avenue to Garvey Avenue (within the Downtown Core Focus Area) could increase by 3.4 dBA but remain within the conditionally acceptable noise level for commercial, office, business, professional, and mixed use land uses (75 CNEL).
- Traffic noise levels along all segments of Garvey Avenue are estimated to increase to levels between approximately 72 and 76 CNEL. In addition:
 - Traffic noise levels along the segment of Garvey from Fremont Avenue to Atlantic Boulevard (within the Monterey Pass Focus Area) are estimated to increase by approximately 1 dBA and remain within the conditionally acceptable noise level for light industrial land uses (80 CNEL) as well as commercial, office, business, professional, and mixed use land uses.
 - Traffic noise levels along the segment of Garvey from Atlantic Boulevard to New Avenue (within the North Atlantic, Downtown Core, and Garvey Corridor Focus Areas) could increase by approximately 1 to 1.4 dBA and remain within the conditionally acceptable noise level for commercial, office, business, professional, and mixed use land uses (75 CNEL).
- Traffic noise levels would increase by approximately 1 to 1.5 dBA along other roadway segments where existing low, medium, and high density residential land uses are already exposed to normally unacceptable noise levels (i.e., noise levels greater than 65 CNEL), including:
 - Cesar Chavez Avenue Boulevard between the west city Limit and Atlantic Boulevard
 - New Avenue between Hellman Avenue and Graves Avenue
 - Riggin Street between Atlantic Boulevard and Garfield Avenue



Source: Los Angeles County Assessor, 2019; MIG, 2019

Community Noise Equivalent Levels (CNEL)

- 55 CNEL
- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL
- 65 CNEL (Freeways)

- Monterey Park Boundary
- Sphere of Influence Boundary
- Metro Gold Line and Stations
- Water Courses
- Waterbodies



Exhibit 4.13-3 Future 2040 Traffic Noise Contours

Monterey Park Focused General Plan Update



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**Table 4.13-10
Future Project (2040) Traffic Noise Level Contour Distances**

ID	Road	Segment	CNEL at 100 Feet (dBA) ^(A)	CNEL Contour and Distance from Roadway Center in Feet			
				70 dBA	65 dBA	60 dBA	55 dBA
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	76	398	1,259	3,981	-- ^(B)
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	75.4	347	1,096	3,467	-- ^(B)
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	75.4	347	1,096	3,467	-- ^(B)
1D	Atlantic Blvd	Floral Dr to South City Limit	75	316	1,000	3,162	-- ^(B)
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	72.5	178	562	1,778	5,623
3A	Corporate Ctr Dr	Ramona Blvd to Casuda Canyon Dr	68	63	200	631	1,995
3B	Corporate Ctr Dr	Casuda Canyon Dr to Floral Drive	70.4	110	347	1,096	3,467
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	62	16	50	158	501
5A	Garfield Ave	Hellman Ave to Garvey Ave	73.1	204	646	2,042	6,457
5B	Garfield Ave	Garvey Ave to El Repetto Dr	74.3	269	851	2,692	8,511
5C	Garfield Ave	El Repetto Dr to Riggin St	72	158	501	1,585	5,012
5D	Garfield Ave	Riggin St to South City Limit	73.1	204	646	2,042	6,457
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	69.2	83	263	832	2,630
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	72.9	195	617	1,950	6,166
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	68.8	76	240	759	2,399
6D	Garvey Ave	Garfield Ave to New Ave	70.9	123	389	1,230	3,890
7A	Graves Ave	Garfield Ave to East City Limit	62.5	18	56	178	562
8A	Hellman Ave	West City Limit to Garfield Ave	65.2	33	105	331	1,047
8B	Hellman Ave	Garfield Ave to East City Limit	66.3	43	135	427	1,349
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	72.4	174	550	1,738	5,495
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	71.5	141	447	1,413	4,467
10A	New Ave	Hellman Ave to Garvey Ave	70.5	112	355	1,122	3,548
10B	New Ave	Garvey Ave to Graves Ave	67.1	51	162	513	1,622
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67.8	60	191	603	1,905
11B	Pomona Blvd	Garfield Ave to Markland Ave	72.1	162	513	1,622	5,129
12A	Potrero Grande Dr	Markland Dr and Saturn St	74	251	794	2,512	7,943
12B	Potrero Grande Dr	Saturn St and East City Limit	72	158	501	1,585	5,012
13A	Riggin St	Atlantic Blvd to Findlay Ave	66.7	47	148	468	1,479
13B	Riggin St	Findlay Ave to Garfield Ave	67.3	54	170	537	1,698
13C	Riggin St	Garfield Ave to Fulton St	59	8	25	79	251
14	I10	Adjacent to City Limits	71.7	148	468	1,479	4,677
15A	I710 with Barrier	Within / Adjacent to City Limits	65.9	39	123	389	1,230
15B	I710 no Barrier	Within / Adjacent to City Limits	84	2,512	7,943	-- ^(B)	-- ^(B)
16A	SR60	Within / Adjacent to City Limits	69.5	89	282	891	2,818

Source: KOA 2019, Caltrans 2018, and MIG 2019 (see Appendix C)

(A) All CNEL values at listed distances are measured from the center of the modeled roadway.

(B) Distances to these contours are more than 1.5 miles and are not presumed to be representative due to effects on propagation at these distances.

Table 4.13-11
Net Change in ADT and Traffic Noise Levels

ID	Road	Segment	Existing		Future		Net Change	
			ADT	CNEL ^(A)	ADT	CNEL ^(A)	ADT	CNEL ^(A)
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	33,571	74	52,974	76 ^(B)	19,403	2
1B	Atlantic Blvd	Garvey Ave to El Repetto	27,550	73.6	40,196	75.4 ^(B)	12,646	1.8
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	31,414	74.3	40,196	75.4 ^(B)	8,782	1.1^(C)
1D	Atlantic Blvd	Floral Dr to South City Limit	31,137	73.7	41,324	75 ^(B)	10,187	1.3
2A	Cesar Chavez Ave	West Limit to Atlantic Blvd	17,683	71.5	21,432	72.5 ^(B)	3,749	1
3A	Corporate Ctr Dr	Ramona Blvd to Casuda	5,640	66.5	7,768	68	2,128	1.5
3B	Corporate Ctr Dr	Casuda Cny Dr to Floral Dr	7,879	68.4	12,032	70.4	4,153	2
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	1,706	60.7	2,264	62	558	1.3
5A	Garfield Ave	Hellman Ave to Garvey Ave	26,150	69.7	55,245	73.1 ^(B)	29,095	3.4
5B	Garfield Ave	Garvey Ave to El Repetto	26,436	72.5	36,011	74.3	9,575	1.8
5C	Garfield Ave	El Repetto Dr to Riggins St	25,161	70.8	31,496	72	6,335	1.2
5D	Garfield Ave	Riggins St to South Limit	24,207	71.5	33,387	73.1	9,180	1.6
6A	Garvey Ave	Casuda Cny Dr to Fremont	11,257	68.4	12,768	69.2	1,511	0.8
6B	Garvey Ave	Fremont Ave to Atlantic	22,067	71.7	27,875	72.9	5,808	1.2
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	20,473	67.7	25,311	68.8	4,838	1.1
6D	Garvey Ave	Garfield Ave to New Ave	24,765	69.5	32,866	70.9 ^(B)	8,101	1.4
7A	Graves Ave	Garfield Ave to East Limit	5,554	61.9	7,371	62.5	1,817	0.6
8A	Hellman Ave	West Limit to Garfield Ave	9,003	63.8	11,948	65.2 ^(B)	2,945	1.4
8B	Hellman Ave	Garfield Ave to East Limit	9,867	64.9	13,095	66.3 ^(B)	3,228	1.4
9A	Monterey Pass Rd	Garvey Ave to Vagabond	17,882	71.1	23,192	72.4	5,310	1.3
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	16,829	70.2	21,532	71.5	4,703	1.3
10A	New Ave	Hellman Ave to Garvey Ave	18,495	69.4	22,574	70.5 ^(B)	4,079	1.1
10B	New Ave	Garvey Ave to Graves Ave	10,294	66.4	11,558	67.1 ^(B)	1,264	0.7
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	8,073	67	9,261	67.8	1,188	0.8
11B	Pomona Blvd	Garfield Ave to Markland	20,477	70.5	28,120	72.1 ^(B)	7,643	1.6
12A	Potrero Grande Dr	Markland Dr and Saturn St	21,057	73.1	24,963	74	3,906	0.9
12B	Potrero Grande Dr	Saturn St and East Limit	14,030	71.3	15,764	72	1,734	0.7
13A	Riggins St	Atlantic Blvd to Findlay Ave	10,095	65.3	13,397	66.7 ^(B)	3,302	1.4
13B	Riggins St	Findlay Ave to Garfield Ave	10,925	65.9	14,499	67.3 ^(B)	3,574	1.4
13C	Riggins St	Garfield Ave to Fulton St	4,396	57.6	5,834	59	1,438	1.4
14	I10	Adjacent to City Limits	212,000	71.1	228,680	71.7	16,680	0.6
15A	I710 with Barrier	Within / Adj. to City Limits	127,000	65.2	138,436	65.9	11,436	0.7
15B	I710 no Barrier	Within / Adj. to City Limits	127,000	83.4	138,436	84	11,436	0.6
16A	SR60	Within / Adj. to City Limits	246,500	68.8	265,309	69.5	18,809	0.7

Source: MIG 2019 (See Appendix C).

(A) All CNEL values are presented at a distance of 100 feet from the center of the modeled roadway.

(B) *Italicized* text indicates future ambient noise levels at residential receptor locations (at a distance of 100 feet from the roadway center) would either change (i.e., from normally acceptable to conditionally acceptable) or continue to be normally unacceptable (or worse) but would not increase ambient noise levels by more than 3.0 dBA. See Section 4.13.4, Significance Thresholds.

(C) ***Bold and italicized*** text indicates a net increase of 5.0 dBA or more where noise levels remain below normally acceptable levels, or a net increase of 3.0 dBA or more where noise levels change from normally or conditionally acceptable to normally unacceptable, or a net increase of 1.0 dBA or more where noise levels change from normally unacceptable to clearly unacceptable. These increases are considered a potentially significant impact. See Section 4.13.4, Significance Thresholds.

As shown in Table 4.13-11, traffic noise levels within the Planning Area could increase. In general, traffic noise levels could increase by less than 3 dBA along all roadway segments, with the exception of Garfield Avenue, between Hellman Avenue and Garvey Avenue; however, estimated noise levels along this roadway segment would remain conditionally acceptable. Although estimated noise levels would cause noise exposure along certain roadway segments to change from conditionally acceptable levels to conditionally unacceptable levels, the total increase in noise levels would be less than 3 dBA and would, therefore, not likely be discernible to the typical noise-sensitive receptor.

Pursuant to the State noise standards, California Building Code, Section 1207.4, new residential structures would be required to be constructed such that interior noise levels do not exceed an hourly Leq value of 45 dBA. Standard construction techniques and materials are commonly accepted to provide a minimum exterior to interior noise attenuation (i.e., reduction) of 22–25 dBA with all windows and doors closed (HUD 2009a and 2009b).³ These interior noise reductions would be adequate for some developments occurring under the Project. New residential and mixed use developments within the North Atlantic, Downtown Core, and Garvey Corridor Focus Areas are likely to require additional noise attenuation design features since traffic noise levels along these roadways are estimated to exceed 70 CNEL under existing and future conditions. Adherence to the State’s mandatory noise standards would ensure residential and mixed use structures within the Planning Area meet or exceed the 45 dBA Leq standard.

Furthermore, the City’s General Plan includes goals and policies that serve to minimize the impact of ambient noise levels throughout the City. For example, General Plan Safety and Community Services Element Policy 5.2 requires the City to incorporate noise impact considerations into the development review process, ensuring City standards are addressed during project design and development.

Although City policies and State standards require noise to be addressed for new development, existing development could be exposed to increased noise levels that result in a change in terms of compatibility (i.e., from normally acceptable to conditionally acceptable), and as shown in Table 4.13-11, *traffic-related noise levels would increase by more than 1 dB along Atlantic Boulevard between El Repetto and Floral Drive, resulting in clearly unacceptable noise levels at adjacent low density residential land uses. Therefore, the City is incorporating Mitigation Measure NOISE-2 into the Project to reduce potential noise levels along Atlantic Boulevard.*

Increases in Stationary and Other Sources of Noise

Stationary and other sources of noise in the Planning Area include those associated with typical activities associated with different types of land use. These sources could include, but are not limited to, landscape and building maintenance activities, stationary mechanical equipment (e.g., pumps, generators, HVAC units), garbage collection activities, commercial and industrial activities, and other stationary and area sources such as people’s voices, amplified music, and public address systems.

³ The U.S. Department of Housing and Urban Development (HUD) Noise Guidebook and supplement (2009a, 2009b) includes information on noise attenuation provided by building materials and different construction techniques. As a reference, a standard exterior wall consisting of 5/8-inch siding, wall sheathing, fiberglass insulation, two by four wall studs on 16-inch centers, and 1/2-inch gypsum wall board with single strength windows provides approximately 35 dBs of attenuation between exterior and interior noise levels. This reduction may be slightly lower (2-3 dBs) for traffic noise due to the specific frequencies associated with traffic noise. Increasing window space may also decrease attenuation, with a reduction of 10 dBs possible if windows occupy 30% of the exterior wall façade.

Noise generated by residential or commercial uses is generally short-term and intermittent. Industrial uses may generate noise on a more continual basis due to the types of their activities. The Project could provide for increases in residential and commercial development within the Planning Area, and could also provide for mixed use development in which residential and commercial uses are integrated into a single development project. These types of developments tend to have higher noise levels associated with the mix of land uses contained within them. Future planned development could also result in new stationary and area sources as well as exposure of new sensitive land uses to existing stationary and area sources.

The City's existing General Plan includes goals and policies that minimize the impact of ambient noise levels throughout the City. For example, General Plan Safety and Community Services Element Policy 5.2 requires the City to incorporate noise impact considerations into the development review process, ensuring City standards are addressed during project design and development. Policy 5.3 specifically requires new multi-family residential developments to incorporate design features to minimize intrusion of ambient noise into private and common outdoor spaces. Goal 6, Policy 6.1 requires mixed use structures to be designed to prevent the transfer of noise from commercial areas to residential use areas, while Policy 6.2 would require balconies and windows of residential units contained within a mixed use development to be located away from the primary adjacent street and other major noise sources.

The City's existing General Plan policies would protect residents from excessive stationary noise sources and ensure new land uses meet the MPMC's noise standards through evaluation and design considerations. Thus, stationary and other sources of noise would be controlled by the General Plan goals and policies, and the MPMC, which limit allowable noise levels at adjacent properties. Therefore, future stationary noise sources would comply with City standards and would not expose people to a substantial permanent increase in noise levels.

Level of Significance Before Mitigation

The increase in traffic noise levels along Atlantic Boulevard resulting in clearly unacceptable low density residential noise exposure levels is considered a potentially significant impact.

The City's existing General Plan policies and MPMC requirements would protect residents from excessive stationary noise sources and ensure new land uses meet the MPMC's noise standards. Therefore, potential growth under the Project would not expose people to a substantial permanent increase in noise levels from stationary and other non-transportation sources of noise. This impact would be less than significant.

Mitigation Measures

Mitigation Measure NOISE-2. The City should periodically (at least every five years), conduct ambient noise monitoring or site-specific modeling to determine the 24-hour CNEL at the low density residential land uses along Atlantic Boulevard, between El Repetto Drive and Floral Drive. The purposes of the monitoring or modeling is to determine if CNEL values are approaching the clearly unacceptable noise level limit of 75 CNEL for low density residential land uses. When measured or modeled noise levels associated with traffic noise reach 75 CNEL, as measured at the project property line for the low density residential land uses closest to Atlantic Boulevard, the City will evaluate the benefits, costs, and logistical feasibility (e.g., permits, right of way considerations, aesthetic considerations) of installing a noise barrier capable of reducing noise exposure levels to conditionally acceptable levels (at minimum). If such a barrier is found to be feasible and reasonable pursuant to Caltrans or Federal Highway Administration barrier

acceptance criteria, the City may proceed with constructing a barrier capable of achieving the barrier's noise reduction goal.

Level of Significance After Mitigation

The application of the policies and objectives outlined in the City's current General Plan and Focused General Plan Update would reduce the amount of future vehicle trips on Planning Area roadways; however, the potential level of reduction is uncertain at this time and would be contingent on the characteristics of each individual future development project. In addition, a noise barrier may or may not be feasible to install along Atlantic Boulevard, given cost and logistical variables. Since a reduction in vehicle trips cannot be guaranteed, and future noise levels would increase by 1 dB or more and/or potentially expose noise-sensitive low density residential land uses on Atlantic Boulevard between El Repetto Drive and Floral Drive to clearly unacceptable noise levels, this impact would remain **significant and unavoidable**.

Groundborne Vibration and Noise Levels

Impact NOISE-3– Would the project result in generation of excessive groundborne noise levels?

Analysis of Impacts

Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Vibration generated by construction equipment spreads through the ground and diminishes with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, result in low rumbling sounds and detectable vibrations at moderate levels, and at high levels can cause sleep disturbance in places where people normally sleep or annoyance in buildings that are primarily used for daytime functions and sleeping (e.g., a hospital). Ground vibration can also potentially damage the foundations and exteriors of existing structures even if it does not result in a negative human response. Pile drivers and other pieces of high-impact construction equipment are generally the primary cause of construction-related vibration impacts. The use of such equipment is generally limited to sites where there are extensive layers of very hard materials (e.g., compacted soils, bedrock) that must be loosened or penetrated to achieve grading and foundation design requirements. The need for such methods is usually determined through site-specific geotechnical investigations that identify the subsurface materials within the grading envelope, along with foundation design recommendations and the construction methods needed to safely permit development of a site.

Construction equipment and activities are categorized by the nature of the vibration they produce. Equipment or activities typical of continuous vibration include excavation equipment, static compaction equipment, vibratory pile drivers, and pile-extraction equipment. Equipment or activities typical of transient (single-impact) or low-rate repeated impact vibration include impact pile drivers, and crack-and-seat equipment. Pile driving and blasting activities produce the highest levels of ground vibration and can result in structural damage to existing buildings.

Since individual project-specific information is not available at this time, potential short-term construction-related vibration impacts can only be evaluated based on the typical construction activities associated with residential, commercial, and industrial development. Potential construction source vibration levels were developed based on methodologies, reference noise levels, and typical equipment usage and other operating factors documented and contained in

4.13 – Noise

the FHWA’s Construction Noise Handbook (FHWA, 2006), FTA’s Transit Noise and Vibration Impact Assessment document (FTA 2018), and Caltrans’ Transportation and Construction Vibration Guidance Manual (Caltrans, 2013b). Reference levels are vibration emissions for specific equipment or activity types that are well-documented and for which their usage is common practice in the field of acoustics.

Future development as a result of the Project could occur in primarily urban settings where land is already disturbed and, therefore, is not likely to require blasting, which is typically used to remove unwanted rock or earth. Standard construction equipment (e.g., bulldozers, trucks, jackhammers) generally does not cause vibration that could cause structural or cosmetic damage but may be felt by nearby receptors. Table 4.13-12 presents the typical types of equipment that could be used for future development activities in the Planning Area.

**Table 4.13-12
Groundborne Vibration and Noise from Typical Construction Equipment**

Equipment	Peak Particle Velocity (in/sec) ^(A)			Velocity Decibels (VdB) ^(B)		
	25 feet	50 feet	100 feet	25 feet	50 feet	100 feet
Small bulldozer	0.003	0.001	0.001	58	49	40
Jackhammer	0.035	0.016	0.008	79	70	61
Rock Breaker	0.059	0.028	0.013	83	74	65
Loaded truck	0.076	0.035	0.017	86	77	68
Auger Drill Rig	0.089	0.042	0.019	87	78	69
Large bulldozer	0.089	0.042	0.019	87	78	69
Vibratory Roller	0.210	0.098	0.046	94	85	76
Impact Pile Driver (upper range)	1.518	0.708	0.330	112	103	94
Impact Pile Driver (typical)	0.644	0.300	0.140	104	95	86
Sonic Pile Driver (upper range)	0.734	0.42	0.160	105	96	87
Sonic Pile Driver (typical)	0.170	0.079	0.037	93	84	75
Sources: Caltrans 2013b and FTA 2018						
(A) Estimated PPV calculated as: $PPV(D)=PPV(ref)*(25/D)^{1.1}$ where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.1 for dense compacted hard soils).						
(B) Estimated Lv calculated as: $Lv(D)=Lv(25\text{ feet})-30\text{Log}(D/25)$ where Lv(D)= estimated velocity level in decibels at distance, Lv(25 feet)= RMS velocity amplitude at 25 ft; and D= distance from equipment to receiver.						

As shown in Table 4.13-12, specific vibration levels associated with typical construction equipment are highly dependent on the type of equipment used. Vibration levels dissipate rapidly with distance, such that even maximum impact pile driving activities would result in vibration levels below Caltrans’ recommended 0.5 PPV threshold for transient vibration-induced damage in historic, older buildings at a distance 100 feet; all other activities would be below Caltrans’ threshold for transient vibration-induced damage in historic, older buildings at a distance of 25 feet. For human responses, maximum impact pile driving activities would result in groundborne

vibration and noise levels below Caltrans' threshold for a distinctly perceptible response (0.24 PPV) and the FTA's vibration standard for infrequent events at residential lands (80 VdB) at a distance of approximately 150 feet and 300 feet, respectively. All other activities may be barely to distinctly perceptible when occurring within approximately 150 feet of sensitive land uses.

Level of Significance Before Mitigation

Typical construction activities may be barely to distinctly perceptible when occurring within approximately 150 feet of sensitive land uses. Most construction equipment does not operate in the same location for prolonged periods of time. Therefore, even if construction equipment were to operate near a building where receptors may feel vibration, it would only be for a temporary amount of time and would not be considered excessive. This impact is considered less than significant.

Mitigation Measures

None required.

Excessive Noise Levels within Airport Vicinity

Impact NOISE-4 – For a project located within the vicinity of a private airstrip or 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?

Analysis of Impacts

The closest airport to the Planning Area is the San Gabriel Valley Airport, located approximately four miles northeast of the Planning Area. This public airport has one runway and does not generate substantial airport-related noise in the Planning Area.

Noise from overhead flights was observed during the ambient noise monitoring conducted for the Project, and the City's General Plan indicates outbound flights from Los Angeles International Airport (LAX) are known to fly over the middle of the city. LAX is located approximately 14 miles southwest of the Planning Area. This intermittent aircraft related noise is not considered excessive. The Project would not result in a substantial number of new residential units below flight paths; rather, new units would be congregated in mixed used developments in the northern part of the city.

The City's General Plan establishes the City's overall goal and intent to reduce aircraft noise impacts on Monterey Park residents and businesses by working with surrounding jurisdictions to improve aircraft noise standards and restricting helipad locations. The implementation of these General Plan policies would ensure potential airport and heliport noise would not be excessive within the Planning Area.

There are no private airstrips located in the Planning Area.

Level of Significance Before Mitigation

The Project is not located within the vicinity of a private air strip or an airport land use plan and would not expose people residing or working in the Planning Area to excessive airport-related noise levels. This impact would be less than significant.

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to noise or vibration?

Analysis of Impacts

Project implementation would result in construction noise and vibration as individual development projects are constructed over time. Each individual development would be subject to City regulations and policies regarding construction noise and vibration (See Impacts NOISE-1 and NOISE-3), as well as Mitigation Measure NOISE-1 contained in this EIR. These policies and measures establish the overall goal and intent of the City to protect residents from excessive construction noise and vibration, to require the appropriate evaluation of construction noise and vibration impacts at sensitive receptor locations, and to implement feasible construction noise and vibration control measures when development occurs near noise-sensitive land uses. Therefore, construction noise would not make a cumulatively considerable contribution to a significant cumulative construction noise impact.

Once constructed, development projects would contribute to the potential permanent increases in noise levels evaluated under Impact NOISE-2. The long-term increases in traffic in the Planning Area would result in a cumulatively considerable increase in noise levels along Atlantic Avenue between El Repetto Drive and Floral Drive to clearly unacceptable levels.

As discussed under Impact NOISE-2, each individual development project would be subject to City regulations and policies that limit and control non-transportation noise generation and exposure from these noise sources, and that render potential cumulative increases in noise levels from non-transportation noise sources to a less than significant level.

Level of Significance Before Mitigation

The long-term increases in traffic in the Planning Area would result in a cumulatively considerable increase in noise exposure to clearly unacceptable levels along Atlantic Avenue between El Repetto Drive and Floral Drive. This is considered a potentially significant impact.

Mitigation Measures

See Mitigation Measure NOISE-2.

Level of Significance After Mitigation

The potential effectiveness of Mitigation Measure NOISE-2 is uncertain at this time. Since a reduction in vehicle trips cannot be certain and the installation of noise barrier is not guaranteed and may not be feasible, future noise levels would increase by 1 dB or more and/or potentially expose noise-sensitive low density residential land uses on Atlantic Boulevard between El Repetto Drive and Floral Drive to clearly unacceptable noise levels. This impact would remain **significant and unavoidable**.

4.13.6 REFERENCES

California Department of Transportation (Caltrans)

2013a Technical Noise Supplement to the Traffic Analysis Protocol. Sacramento, CA. September 2013.

2013b *Transportation and Construction Vibration Guidance Manual*. Prepared by the California Department of Transportation: Division of Environmental Analysis Environmental Engineering – Hazardous Waste, Air, Noise, Paleontology Office. Report No. CT-HWANP-RT-13-069.25.3. Sacramento, CA. September 2013.

KOA

2019 City of Monterey Park General Plan Update Transportation Impact Study. May 2019.

MIG

2019. Monterey Park Focused General Plan Update Ambient Noise Monitoring Data. May 2019.

U.S. Federal Highway Administration (FHWA)

2010 “Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges.” *U.S. Department of Transportation FHWA*. August 24, 2017. Accessed April 1, 2018 at:
http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

U.S. Federal Transit Administration (FTA)

2018 *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.

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4.14 – Population and Housing

This EIR chapter describes population and housing impacts associated with implementation of the Monterey Park Focused General Plan Update.

4.14.1 – ENVIRONMENTAL SETTING

Monterey Park is a diverse community in the West San Gabriel Valley. With a population of 60,269 in 2010, the City experienced relatively flat growth in the prior decade, particularly during the economic downturn that began in 2007. However, regional growth pressures and regional growth policies focused on providing opportunities for new housing in urban Los Angeles County communities like Monterey Park.

Population

The City estimates that the 2019 population of the City is 64,240 residents and the population of the City's Sphere of Influence is 4,648 residents.¹ The California Department of Finance estimates that the January 2019 population for Los Angeles County was 10,253,716 residents (California Department of Finance, 2019).

The Southern California Association of Governments (SCAG) develops socioeconomic estimates and growth projections including population, households, and employment. These estimates and projections provide the analytical foundation for SCAG's transportation planning and other programs. The growth forecast included in the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) for Los Angeles County and the City of Monterey Park are included in Table 4.14-1. The City's current population estimate (2019) exceeds the 2035 population forecast identified in the 2016-2040 RTP/SCS by 140 persons.

**Table 4.14-1
Population Forecasts included in the 2016-2040 RTP/SCS**

	2020	2035	2040	Growth Between 2020 - 2040
County of Los Angeles	10,326,200	11,145,100	11,514,800	+1,188,600
City of Monterey Park	62,600	64,100	65,000	+2,400

Source: 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction.

¹ The 2019 population and housing estimates for the Planning Area are derived from a variety of informational sources including: the California Department of Finance, Demographic Research Unit, Population and Housing Estimates, January 2018; Urban Footprint and CoreLogic 2019 parcel attribute data; and MIG, 2019. It should be noted that, to provide a conservative analysis, an occupancy rate was not applied to the existing and future population estimates. The California Department of Finance estimates a 4.4 percent vacancy rate (95.6 occupancy rate) for 2018.

Housing

The City estimates there are 20,965 dwelling units within the City; these include 12,219 single-family units and 8,746 multi-family units.² The City’s Sphere of Influence includes 1,517 units; these include 1,269 single-family units and 248 multi-family units.³ According to the California Department of Finance, as of January 2019 there were approximately 3,568,898 housing units within Los Angeles County (California Department of Finance, 2019). As noted above, SCAG develops socioeconomic estimates and growth projections including population, households, and employment. Table 4.14-2 shows the anticipated growth in households for both Los Angeles County and the City of Monterey Park. It should be noted that the City’s existing housing supply (2019) exceeds SCAG’s 2020 forecast for housing units by 165 dwellings.

**Table 4.14-2
Household Forecasts included in the 2016-2040 RTP/SCS**

	2020	2035	2040	Growth between 2020 - 2040
County of Los Angeles	3,493,700	3,809,300	3,946,600	+452,900
City of Monterey Park	20,800	21,300	21,500	+700

Source: 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction.

4.14.2 – REGULATORY FRAMEWORK

Federal

2010-2015 HUD Consolidated Plan

The Consolidated Plan is a five-year plan that must be prepared by jurisdictions entitled to receive federal housing funds. As an entitlement jurisdiction, Monterey Park has prepared a Consolidated Plan to identify the overall housing and community development needs, and outline a strategy to address those needs over a five-year period from 2015 to 2020. This Plan satisfies the Department of Housing and Urban Development’s (HUD) statutory requirements for the Community Development Block Grant (CDBG) and HOME Investment Partnership (HOME) programs.

State

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) is a long-term vision of how the region will address regional transportation and land use challenges and opportunities. The 2016-2040 RTP/SCS identifies goals, which are intended to help carry out the vision for improved mobility, a strong economy and sustainability. The guiding policies for the 2016 RTP/SCS are intended to help focus future investments on the best-performing projects and strategies to preserve, maintain and optimize the performance of the existing transportation system.

² Ibid.

³ Ibid.

Regional Housing Needs Allocation

State Housing Element law requires the California Department of Housing and Community Development, in consultation with the local regional planning agency, Southern California Association of Governments (SCAG), to periodically create a plan that summarizes regional housing needs for both existing conditions, as well as for an eight-year planning period. This plan, known as the Regional Housing Needs Assessment (RHNA), allocates regional housing needs by income level among member jurisdictions. SCAG has determined the City's housing needs for the period 2013-2021 to be: 205 units for Very Low Income; 123 units for Low Income; 137 units for Moderate Income; and 350 units for Above Moderate Income.

The City notes that during SCAG's process of developing the RHNA for the region, the City petitioned to have its allocation reduced since the data used to develop the RHNA overestimated Monterey Park's population by approximately 5,000 residents, which meant that erroneous growth rates were incorporated into the calculations. The City was unsuccessful in its effort to have the RHNA reduced.

Local

City of Monterey Park General Plan – Housing Element

The Housing Element is one of the seven mandatory elements of the General Plan; it specifies ways in which the housing needs of existing and future resident populations can be met. It must be updated every four or eight years, consistent with State Housing Element laws; this Housing Element covers a period extending from January 2014 through September 30, 2021. The Housing Element establishes the City's priorities for allocating resources on housing programs. While housing policies do not commit the City to directly producing new housing units consistent with regional housing goals, the Element shows how Monterey Park will accommodate the desires of property owners and the development community to provide housing for residents of all income ranges and needs. Goals and policies included in the Housing Element are listed below:

- Goal 1: Conserve and improve existing affordable housing in Monterey Park.
 - Policy 1.1: Encourage the rehabilitation of substandard residential properties by homeowners and landlords.
 - Policy 1.2: Promote investment of public and private resources to reverse neighborhood deterioration trends where they may occur.
 - Policy 1.3: Continue to provide rehabilitation and home improvement assistance to low- and moderate-income households.
 - Policy 1.4: Coordinate with non-profit housing providers in the acquisition and rehabilitation of older apartment complexes as long-term affordable housing.
 - Policy 1.5: Work to preserve existing affordable low-income housing in the City that is considered at risk of converting to non-low-income use.
 - Policy 1.6: Pursue initiatives that allow for increased home ownership of single family residences, townhomes, and condominiums.
- Goal 2: Remove or reduce governmental constraints on affordable housing development.
 - Policy 2.1: Continue efforts to streamline administrative procedures for granting approvals and permits. Review residential development standards, regulations,

4.14 – Population and Housing

- ordinances, review procedures and permitting fees related to the development of housing. Adjust, as appropriate, those that are determined to be a constraint to the development of housing.
- Policy 2.2: Encourage the use of density bonuses and provide other regulatory concessions to facilitate affordable housing development.
 - Policy 2.3: Provide appropriate standards in the Zoning Code to allow and facilitate the development of housing for lower-income and special needs persons.
 - Goal 3: Provide adequate housing by location, type of unit, and price to meet existing and future needs of City residents.
 - Policy 3.1: Encourage a wide range of housing types, prices, and ownership forms.
 - Policy 3.2: Assist private developers in identifying and preparing vacant land suitable for lower-income and senior citizen housing developments.
 - Policy 3.3: Provide adequate and accessible community facilities and services to residential neighborhoods.
 - Policy 3.4: Implement the Land Use Element, and facilitate development of mixed-use residential projects in areas designated for mixed-use near the Central Business District, and along North Atlantic Boulevard, East Garvey Avenue, and Pomona Boulevard.
 - Policy 3.5: Continue to encourage second units in single-family residential areas and residential units within mixed-use developments.
 - Goal 4: Assist in the provision of housing that meets the needs of all economic segments of the community.
 - Policy 4.1: Encourage greater development and utilization of federal, State, and local programs to ensure adequate funding of housing programs.
 - Policy 4.2: Promote the development of new housing units designed for the elderly and disabled persons to be in close proximity to public transportation and community services.
 - Policy 4.3: Encourage the design of residential developments that are secure, safe, and environmentally sensitive. Support the use of cost-saving and energy-conserving construction techniques.
 - Policy 4.4: Support favorable home purchasing options for lower- and moderate-income households.
 - Policy 4.5: Continue to support rental assistance for very low-income households who are overpaying for housing.
 - Goal 5: Promote equal housing opportunities for all residents.
 - Policy 5.1 Prohibit discrimination in the sale or rental of housing with regard to race, ethnic background, religion, handicap, income, sex, age, and household composition.
 - Policy 5.2 Provide fair housing services to Monterey Park residents, and ensure that residents are aware of their rights and responsibilities regarding fair housing.

- Policy 5.3 Support housing construction or alterations that meet the needs of residents with special needs such as the elderly, disabled, and families with children.

4.14.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the project would have a significant impact related to population and housing if it would:

- a) Induce substantial unplanned 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); or
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

4.14.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to population growth and recommends mitigation measures, as needed.

Population Growth

Impact POP-1 – Would the Project induce substantial unplanned 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)?

Analysis of Impacts

The Focused General Plan Update anticipates a population increase of approximately 11,693 residents within the Planning Area between 2019 and 2040. All new development is anticipated to occur within already developed Focus Areas within the city. While site-specific development infrastructure improvements may be required to serve new development, no significant infrastructure improvements or extension of roads are proposed. The Focused General Plan Update would not indirectly induce substantial unplanned population growth through road or infrastructure extensions.

Implementation of the project would result in a 17 percent population increase within the Planning Area over the next 20 years. This population increase within the Planning Area (11,693 residents) is more growth than the 2016-2040 RTP/SCS anticipates for the City of Monterey Park between 2020 and 2040 (2,400 residents); however, the City's estimated current population exceeds the 2016-2040 RTP/SCS 2035 population forecast for the City. For a conservative analysis, an occupancy rate was not applied to the City's calculation of existing and future estimated population numbers. The California Department of Finance does use a 4.4 percent vacancy rate (95.6 occupancy rate) for 2018, so while the Project would increase population beyond what the 2016-2040 RTP/SCS forecasts, the 2016-2040 RTP/SCS has different occupancy assumptions than what was used by the City, plus the 2016-2040 RTP/SCS does not reflect current population levels identified by the City.

The 2016-2040 RTP/SCS does anticipate significant population and housing growth within the Los Angeles County region – an increase of approximately 1,188,600 residents and 452,900

4.14 – Population and Housing

households by 2040. Implementation of the Focused General Plan Update would result in the addition of planned housing units, which would help to meet the anticipated regional housing demand. Implementation of the Project would not result in substantial unplanned population growth within an area.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant

Housing Displacement

Impact POP-2 – Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Analysis of Impacts

The Focused General Plan Update anticipates an increase in residents due directly to an increase in housing units. Over the next 20 years, the projected increase in the number of housing units within the Planning Area is 3,816 units, an approximately 17 percent increase from the existing 22,482 units to 26,298 units. The City anticipates that these units would be multi-family units located within focus areas identified within the General Plan; the City anticipates a small decrease in single-family units.

The Housing Element includes many policies related to the preservation of existing housing stock, including:

- Policy 1.1: Encourage the rehabilitation of substandard residential properties by homeowners and landlords.
- Policy 1.2: Promote investment of public and private resources to reverse neighborhood deterioration trends where they may occur.
- Policy 1.3: Continue to provide rehabilitation and home improvement assistance to low- and moderate-income households.
- Policy 1.4: Coordinate with non-profit housing providers in the acquisition and rehabilitation of older apartment complexes as long-term affordable housing.
- Policy 1.5: Work to preserve existing affordable low-income housing in the City that is considered at risk of converting to non-low-income use.
- Policy 3.5: Continue to encourage second units in single-family residential areas and residential units within mixed-use developments.

The projected increase in total units within the Planning Area (3,816 units) would be anticipated to offset potential impacts related to the limited amount of potential displacement of housing units or people that may result from implementation of the project.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to population and housing?

Analysis of Impacts

The 2016-2040 RTP/SCS anticipates significant population and housing growth within Los Angeles County region – an increase of approximately 1,188,600 residents and 452,900 households by 2040. Implementation of the project would result in an increase in residential dwelling units within the county. New development associated with implementation of the Focused General Plan Update would occur within already developed areas of the City. As development would be located within urban areas of the City, it is possible that some displacement of people or existing housing could occur; however, the projected increase in total units within the Planning Area (3,816 units) would be anticipated to offset potential impacts related to the limited amount of potential displacement of housing units by providing a net increase in housing units. Implementation of the project would not cause a substantial adverse cumulative impact with respect to population and housing.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant

4.14.5 REFERENCES

California Department of Finance, 2019. *California Tops 39.9 Million Residents at New Year Per New State Demographic Report*, May 1.

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California Department of Finance, 2019. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark*.

(<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/> accessed May 17, 2019).

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Southern California Association of Governments, 2012. *5th Cycle Regional Housing Needs Assessment Final Allocation Plan, 1/1/2014 – 10/1/2021*, August 29.

(<http://www.scaq.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf>, accessed May 17, 2019.)

4.15 – Public Services

This EIR chapter addresses impacts to public services allowed by the City of Monterey Park Focused General Plan Update (Project). Issues of interest are public services impacts identified by the CEQA Guidelines: whether the Project will result in substantial adverse physical impacts associated with the provision of public services and public service facilities, which could cause significant environmental impacts.

4.15.1 – ENVIRONMENTAL SETTING

In this section, the existing conditions, as they relate to fire protection, police protection, schools, parks and library services.

Fire Protection

Fire services are provided in the Planning Area by the Monterey Park Fire Department (City of Monterey Park, 2019a); the department has three stations. Station 61, Department headquarters, (350 W. Newmark Ave.) has one Quint (an apparatus that serves both as an engine and ladder truck), and an engine and a rescue ambulance. Station 62 (2001 S. Garfield Ave.) has one engine and an ambulance; Station 63 (704 Monterey Pass Road) has one engine. According to the City of Monterey Park GPU Existing Conditions Atlas (2019b), response times range from 8-14 minutes with an average of 10 minutes. The City requires new residential and non-residential developments to pay fire services development impact fees.

Police Protection

Police services within the Planning Area are provided by the Monterey Park Police Department. The Police Department is located at 320 W. Newmark Ave (City of Monterey Park, 2019a). According to a Police Department representative, the Department has 75 sworn officers and about 45 non-sworn staff. The Police Department confirms it meets the response time goals:

- Priority 1 calls (life threatening situation): 4.5 minutes.
- Priority 2 calls (includes trespassing or disturbance): 5.75 minutes
- Priority 3 calls (no threat to life or property): 9 minutes
- Priority 4 calls (routine calls): 5 minutes, 50 seconds

While the Department does not have formal staff ratio goals, it would like to have a one officer per 1,000 residents. The Department representative reported that the Police Department facilities are inadequate, in terms of size, for both existing needs and future needs due to population growth anticipated under the Project. The City requires new residential and non-residential developments to pay development impact fees to off-set incremental demand growth for police services.

Schools

The Monterey Park Planning Area is served by four different school districts. All four school districts require the payment of developmental impact fees. The following describes the schools

4.15 – Public Services

located within or serving the Planning Area and their 2018-2019 school year enrollment. (California Department of Education DataQuest website, 2019);

The Alhambra Unified School District operates four elementary schools in the north and western portion of the Planning Area:

- Brightwood Elementary School, K-8, 928 students
- Monterey Highlands Elementary School, K-5, 1025 students
- Repetto Elementary School, K-8, 825 students
- Ynez Elementary School, K-8, 810 students

Mark Keppel High School, 9-12, 2,257 students, is located in Alhambra but serves Monterey Park residents who live within the District's boundary; this also includes students who live within the Garvey School District boundary.

The Garvey School District operates two K-5 elementary schools in the northeastern portion of the Planning Area:

- Hillcrest Elementary, 383 students
- Monterey Vista Elementary School, 523 students

The Los Angeles Unified School District (LAUSD) operates one elementary school, Robert Hill Lane Elementary School, K-6, 381 students located in southwestern portion of the Planning Area. There are four schools, within LAUSD, that serve middle school aged students within three miles of the Planning Area:

- Belvedere Middle School, 972 students
- Brooklyn Avenue Elementary (K-8), 577 students
- Griffith Middle School STEAM Magnet, 1519 students
- El Sereno Middle School, 1,118 students

Monterey Park residents living within the LAUSD boundary attend Garfield High School, 9-12, 2,569 students, in East Los Angeles.

The Montebello Unified School District, located in the southern portion of the Planning Area, operates Bella Vista Elementary School, K-5, 531 students and Macy Intermediate School, 6-8, 795 students. Monterey Park residents attend Schurr High School (2,723 students) in Montebello.

East Los Angeles College (ELAC), a Los Angeles Community College District community college, is located in the southwestern portion of the City. With an enrollment of approximately 35,000, ELAC is the largest campus in the Los Angeles Community College District.

Parks

Parks and Monterey Park Golf Course comprise 3.8% of the Planning Area. Monterey Park parks are managed by the Department of Public Works (City of Monterey Park, 2019a). They include the following:

- Barnes Park (11 acres)
- Bella Vista Park (4 acres)
- Cascades Park (1 acre)
- Edison Trails Park (12 acres)
- Garvey Ranch Park (18 acres)
- George Elder Park (13 acres)
- Highlands Park (7 acres)
- La Loma Park (7 acres)
- Pine Tree Park (<0.5 acres)
- Sequoia Park (1 acre)
- Sierra Vista Park (3 acres)
- Sunnyslopes Park (4 acres)
- Metropolitan Water District Conservation Park (2 acres)
- Monterey Park Golf Course (47 acres)

The City requires new residential and non-residential developments to pay development impact fees to pay for parks. The City implements the Quimby Act, a provision of state law allows a city to require the dedication of land, payment of an in-lieu fee, or a combination of both, for park and recreational facilities as a condition of approving a residential subdivision.

Library Services

Monterey Park is served by the Monterey Park Bruggemeyer Library, located at 318 S Ramona Ave. According to the Strategic Plan 2015-2018 (Monterey Park Library n.d.), the library is overseen by the Library Board of Trustees which is appointed by the City Council. The library was last expanded in 2006. The City requires new residential developments to pay development impact fees for library services.

4.15.2 – REGULATORY FRAMEWORK

The following summarizes regulations as they relate to public services in the Planning Area.

Federal

No federal regulations are applicable to the Planning Area's public services as they relate to CEQA.

State

California Fire Code (Title 24, Part 9, California Code of Regulations)

The California Fire Code incorporates the International Fire Code with necessary California amendments. This Code prescribes regulations consistent with nationally recognized good practices for the safeguarding, to a reasonable degree, of life and property from the hazards of fire explosion. It also addresses dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; conditions hazardous to life or property in the use or occupancy of buildings or premises; and provisions to assist emergency response personnel.

California Health and Safety Code (Sections 13000 et seq.)

This Code establishes State fire regulations, including regulations for building standards (also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Education Code Section 17620

Education Code Section 17620 allows school districts to assess fees on new residential and commercial construction within their respective boundaries. These fees can be collected without special City or County approval, to fund the construction of new school facilities necessitated by the impact of residential and commercial development activity. In addition, these fees can also be used to fund the reconstruction of school facilities or reopening schools to accommodate development-related enrollment growth. Fees are collected immediately before the time of the issuance of a building permit by the City or the County.

Leroy F. Green School Facilities Act (1998)

Government Code Section 65995 (The Leroy F. Green School Facilities Act of 1998) sets base limits and additional provisions for school districts to levy development impact fees and to help fund expanded facilities to house new pupils that may be generated by the development project. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. These fees may be adjusted by the District over time as conditions change.

State Public Park Preservation Act (Public Resources Code Section 5400 – 5409)

The State Public Park Preservation Act is the primary instrument for protecting and preserving parkland in California. Under the act cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This ensures a no net loss of parkland and facilities.

Quimby Act (1975)

The Quimby Act allows cities and counties to adopt park dedication standards/ordinances requiring residential subdivisions to set aside land, donate conservation easements, or pay in lieu fees towards parkland.

Local

City of Monterey Park General Plan

General Plan *Land Use and Urban Design Element* policies related to public services are listed below:

Citywide Goals and Policies

- Goal 3: Distinctive, complete residential neighborhoods that enhance the quality of life and promote a healthy community
 - Policy 3.5: Improvement Prioritization. Prioritize siting new public facilities and public spaces using creative use of land and streets and facilitate new infrastructure improvements within a disadvantaged neighborhood.
- Goal 5: A community that is equitable and inclusive
 - Policy 5.1: Equitable Access. Expand equitable access to community resources that improve quality of life; community resources include cultural and natural amenities, health care services, education, commercial services, parks and recreation, and healthy foods.

Public Facilities Goals and Policies

- Goal 28: State-of-the-art community facilities that support established programs, accommodate future needs, and are accessible to all community members
 - Policy 28.1: Functional and Flexible. Maintain multi-functional, flexible, and complementary space at Monterey Park’s community buildings and spaces.
 - Policy 28.2: Maximize Use. Maximize public facility use by sharing with nonprofit organizations, school districts, and community organizations.
 - Policy 28.3: New Facilities. Locate new community facilities in neighborhoods and centers where they will serve populations of the greatest needs. Look for opportunities to create joint-use community space at facilities owned by private organizations such as faith-based groups, service groups, and hospitals.
 - Policy 28.4: Library. Maintain a state-of-the art library collection in an attractive and inviting facility capable of accommodating users of all ages and abilities.

Open Space Goals and Policies

- Goal 30: Unique new open spaces to complement the City’s established and well-used park and trails systems
 - Policy 30.1 Trails System. Create and maintain a system of trails, sidewalks, linear parks, and other connections that provide residents of all abilities with opportunities to exercise, enjoy nature, and access recreation facilities within a five-minute walk from home. Activate and encourage discovery along urban trails.
 - Policy 30.2 Green Space. Consider the development of new park land or green space through the repurposing of excess street right-of-way.

4.15 – Public Services

- Policy 30.3 Gardens. Pursue the use of Edison Trails Park for community gardens and urban agriculture.
- Policy 30.4 Public Spaces. Develop guidelines for commercial and mixed-use development projects to incorporate accessible plazas, paseos, and other public spaces into project design.
- Policy 30.5 Community Gathering Spaces. Design, construct, and program community gathering spaces, plazas, and an outdoor stage/amphitheater in the Downtown Core, Garvey Corridor, North Atlantic, and South Atlantic focus areas.
- Policy 30.6 Parkland. Require parkland dedications and/or provision of usable onsite public space for significant development projects involving new residential construction.
- Policy 30.7 Surplus Land. Consider the acquisition of surplus land owned by public agencies for future open space.
- Policy 30.9 Recreational Space. Enhance street corridors, parkways, and public property between buildings to serve as green space and functional recreation space (e.g., community gardens, parklets, play spaces, public seating).

City of Monterey Park Development Impact Fees

The City of Monterey Park requires new developments (both residential and non-residential) to pay fees for the cost of providing public services to serve the new developments. Specifically, the City requires fees to pay for police, fire, parks, and library.

4.15.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, a significant impact related to public services occurs if the project would result:

- a) 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:
 - I. Fire protection;
 - II. Police protection;
 - III. Schools;
 - IV. Parks;
 - V. Other public facilities.

4.15.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to the provision of public services, which could result from the implementation of the project.

Impact PS-1 – 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:

I. Fire Protection

Analysis of Impacts

Implementation of the proposed Focused General Plan Update would not directly or immediately create the need for any new or expanded fire protection facilities because the project does not authorize any specific development project or construction activities. However, the projected new development for the Project's 2040 time projection would result in population and employment increases, thus may result in a potential increase in demand for fire services.

If a fire facility is to be expanded or constructed, the fire facility would undergo a development review process and be subject to environmental review pursuant to CEQA. The environmental review would address site-specific CEQA-related issues and, specifically, physical changes resulting from fire station expansion, construction of new fire stations, or trenching needed for fire flow and water supply. Mitigation would be identified, if necessary, to reduce impacts related to fire and emergency service facilities expansion or new construction, as mandated by CEQA and implemented by the City through its review procedures. Additionally, any developments in the City are required to pay developmental impact fees for fire services; these fees would be used to pay for any new or expanded fire services in the Planning Area and will offset the potential incremental demand for services resulting from Project Implementation.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

II. Police Protection

Analysis of Impacts

Implementation of the land uses provided for by the Project could result in an increase of an estimated 11,693 residents and 2,730 employees within the Planning Area. As such, additional police protection services and possibly new or expanded facilities may occur. The Project does not address new police facilities. If a facility were to be built in the future, as a result of population and employment growth, it would need to comply with existing environmental regulations. An analysis of the impacts associated with a police protection facility expansion or construction is too speculative because the facility's size, design, and location are not known. Regardless, the facility would be subject to a development review process and environmental review pursuant to CEQA. Environmental review would identify site-specific conditions and physical changes resulting from police station expansion and construction of new stations.

Mitigation would be identified, as necessary, to reduce impacts related to police service facilities expansion or new construction, as mandated by CEQA and implemented by the City through its local environmental review procedures. Additionally, developments in the City are required to pay developmental impact fees for police protection services; these fees would be used to pay for any new or expanded police protection services in the Planning Area and will offset the incremental demand for services resulting from Project Implementation.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

III. Schools

Analysis of Impacts

Implementation of the land uses provided for by the Project could result in additional students within the Planning Area. New homes would be occupied by a variety of households, including those with school-aged children. The population growth could result in the need for expanding existing schools or building new schools. Any required expansion or construction of school facilities would be subject to environmental review pursuant to State law and CEQA. Environmental review would identify site-specific conditions and physical changes resulting from school expansion or construction. Consistent with the Leroy F. Green School Facilities Act, the collection of fees by school districts is sufficient in mitigating for any potential impacts to school facilities resulting from long-term growth in the community.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

IV. Parks

Analysis of Impacts

Implementation of the land uses provided for by the Project could result in an increase park demand. While the Project does not explicitly include the construction of new parklands and related facilities, the Project has policies addressing maintaining, and improving parks, open spaces, and other recreation facilities:

- Policy 30.1 Trails System.
- Policy 30.2 Green Space.
- Policy 30.3 Gardens.
- Policy 30.4 Public Spaces.

- Policy 30.5 Community Gathering Spaces.
- Policy 30.6 Parkland.
- Policy 30.7 Surplus Land.
- Policy 30.9 Recreational Space.

In addition, any new or expanded parks or recreation facilities that are proposed due to population growth would be subject to CEQA review as a part of local review and permitting. Also, new developments, both residential and non-residential, are required to pay developmental impact fees directly related to new park facilities and will offset the incremental demand for services resulting from Project implementation.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

V. Library Services

Analysis of Impacts

Implementation of the land uses provided for by the Project could result in an increase in population and employees, which could result in increased library services. The Project provides policy regarding the maintenance and improvement of library facilities. As discussed above for other public services, any new proposed library facility would be subject to environmental review under CEQA. Environmental review would identify site-specific conditions and physical changes resulting from library expansion or construction. New residential and non-residential developments within the City of Monterey Park are required to pay developmental impact fees for libraries; this will offset the incremental demand for library services.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to public services?

Analysis of Impacts

Implementation of the proposed Project may result in a population increase of 11,693 residents and 2,730 employees by 2040. This may create an overall increase in public services' demand.

4.15 – Public Services

In addition, the Project provides policies encouraging the maintenance, improvement, and expansion of public services to maintain standards and to meet additional demand over the approximately 20-year term of the Project. As such, environmental impacts may occur when new facilities are constructed, or existing facilities are expanded. However, these projects would be subject to environmental review, as required by CEQA, at the time they were proposed. The environmental review would address environmental impacts, if any, with various mitigation measures. In addition, incremental demand for services and related expanded or new facilities will be offset by the payment of development impact fees for new construction.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

4.15.5 REFERENCES

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City of Monterey Park Library (n.d.). Strategic Plan. Accessed May 16, 2019: <https://www.montereypark.ca.gov/DocumentCenter/View/5175/Strategic-Plan-2015?bidId=>

City of Monterey Park Police Department (2019). Email communication from Captain Steven Coday.

4.16 – Recreation

This EIR chapter addresses recreation impacts associated with the Monterey Park Focused General Plan Update. This section describes existing recreational facilities identifies associated regulatory requirements and evaluates potential adverse impacts on recreational facilities as a result of Project implementation.

4.16.1 – ENVIRONMENTAL SETTING

The City currently has twelve parks and a golf course (see Table 4.16-1). A review of the City's Parks and Recreation Department website (City of Monterey Park, 2019a) and the Monterey Park Development Impact Fee Calculation and Nexus Report (City of Monterey Park, 2016) show that the City contains approximately 129.8 acres of City-owned open space across 13 parks (82.80 acres) and one golf course (47 acres). The parks and open spaces provide residents, families, and visitors a place for recreational opportunities such as picnicking, playing sports, and walking, and also provide youths with after-school programs and activities. Table 4.16-1 lists parks and open spaces within Monterey Park, and Exhibit 4.16-1 locates them on a map.

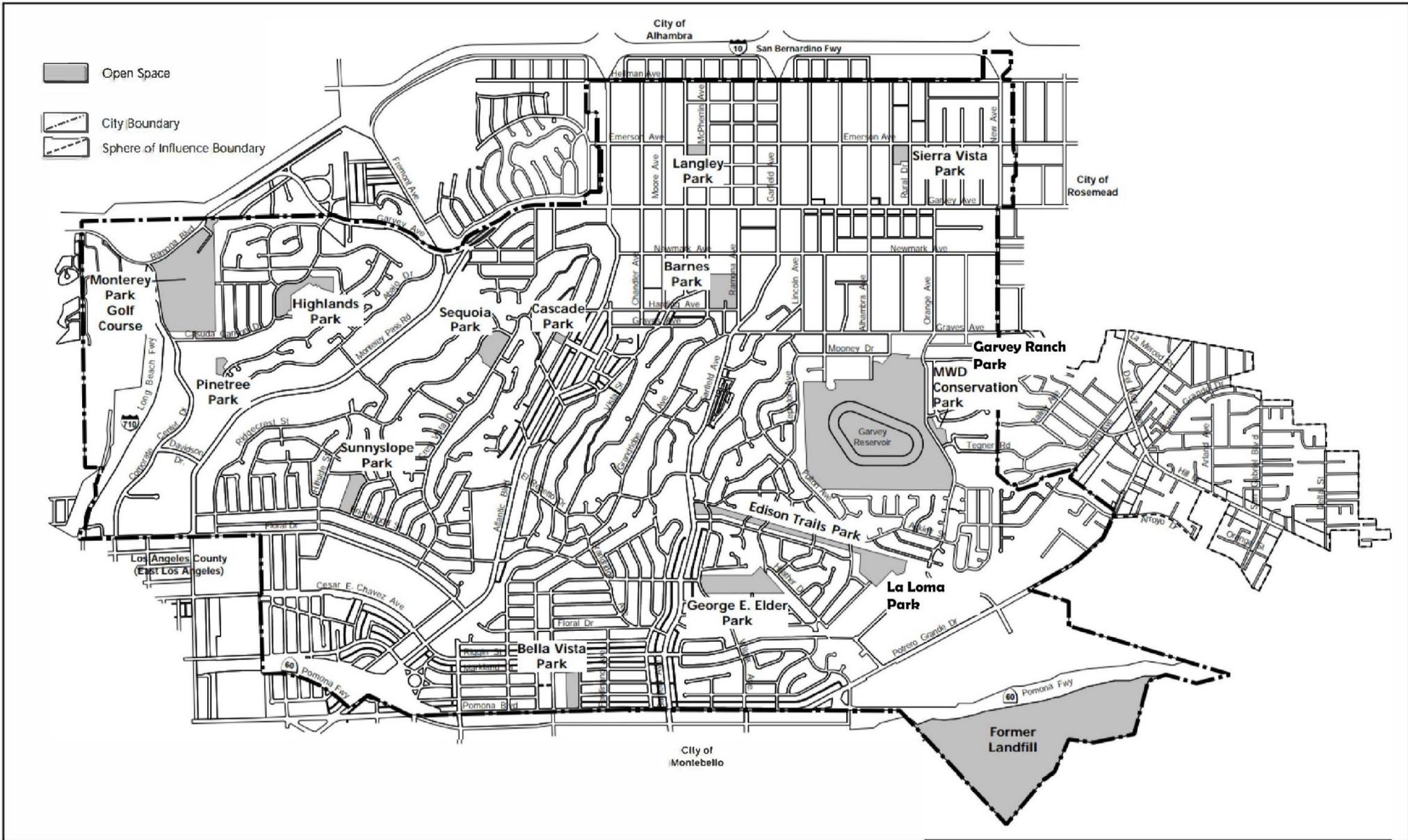
**Table 4.16-1
City of Monterey Park Existing Recreation Facilities**

Facility Name	Acreage*	Location
Barnes Park	12.4	350 S. McPherrin Avenue
Bella Vista Park	4.0	400 W. Pomona Boulevard
Cascades Park	1.26	El Portal Place
Edison Trails Park	2.25	1600 S. Garfield Avenue
Garvey Ranch Park	21.66	781 S. Orange Avenue
George Elder Park	12.85	1950 Wilcox Avenue
Highlands Park	5.5	Monterey Highlands Elementary School
La Loma Park	8.05	1950 Fulton Avenue
Beth Ryan Park	0.3	400 Emerson Avenue
Pinetree Park	0.5	2167 Arriba Drive
Sequoia Park	7.17	750 Ridgecrest Street
Sierra Vista Park	3.0	311 N. Rural Drive
Sunnyslope Park	3.86	Brightwood Elementary School
Monterey Park Golf Course	47	3600 W. Ramona Boulevard
Source: City of Monterey Park, 2019		
* Rounded to the nearest whole number.		

As shown in Table 4.16-1, parks (including the golf course) make up about 3.8 percent of the acreage in the Planning Area. City parks located in the Planning Area are managed by the Department of Public Works (City of Monterey Park, 2019b) In 2016, the City performed an inventory of the City's existing parks at the time and identified the ratio of park land per resident allowable under Quimby Act (§66477 of the Government Code) for residential developments involving the subdivision of land and the Mitigation Fee Act (§66000 of the Government Code) for the construction of residential developments not involving the subdivision of land. The existing per capita standard is then utilized to calculate the park dedication requirement for future residential development. As shown in the report, the City currently possesses a modicum standard of 1.334 acres of owned park land per 1,000 residents (82.80 acres ÷ [62,063 residents ÷ 1,000], rounded). The 1.334 acres per 1,000 residents standard is lower than the threshold

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benchmark of 3.0 acres per 1,000 persons contained in Section 66477 of the California Government Code relating to dedication of parks and triple what most cities have as a target standard. The City requires new residential and non-residential developments to pay development impact fees for parks.



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4.16.2 – REGULATORY FRAMEWORK

Federal

No federal regulations are applicable to the proposed project.

State

Quimby Act

Government Code Section 66477, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

Allowable Park Standard

Under §66477 of the Government Code, the City may charge new residential development based on a standard of 3.0 acres per 1,000 residents even if the City does not presently possess a ratio of 3.0 acres per 1,000 for the existing population. The Government Code also enables a city to charge development based on a standard higher than 3.0 acres (to a maximum of 5.0 acres) if the municipality can demonstrate that it currently exceeds the minimum benchmark ratio of 3.0 acres per 1,000 residents. Most cities adopt the 3.0 acres standard. The maximum standard, for Quimby Act application, is capped at 5.0 acres per 1,000 residents.

The law states that "if the amount of existing neighborhood and community park area ... exceeds the [3 acres of park area per 1,000 person] limit ... the legislative body may adopt the calculated amount as a higher standard not to exceed 5 acres per 1,000 persons" (California Government Code, Title 7, Division 2, Section 66447 (b)). Park fees may be required by the City provided that the City meets certain conditions including:

- The amount and location of land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park by the future inhabitants of the subdivision.
- The legislative body has adopted a General Plan containing a recreational element, and the park and recreational facilities are in accordance with definite principles and standards contained therein.
- The city ... shall develop a schedule specifying how, when, and where it will use the land or fees, or both, to develop park or recreational facilities ... Any fees collected under the ordinance shall be committed within five years after the payment of such fees.

The City, with its 1.334 acres per 1,000 residents *de facto* standard falls short Quimby minimum of 3.0 acres per 1,000 residents and far short of the Quimby allowable maximum cap of 5.0 acres per 1,000 residents (Government Code §66447 (a) (2) could be used in the remainder of the Chapter for park *construction*. Most public agencies use the 3.0 acres per 1,000 resident standard at the lower end of the Quimby calculation.

Local

City of Monterey Park General Plan Resources Element

Since Monterey Park is a built-out urban community, the City offers few "natural" resources such as forests, wildlife habitat, or agricultural land. The Resources Element, therefore, directs policy toward preserving those resources important in the urban environment of Monterey Park and critical to preserving this city's heritage for future generations. This includes City parks and other improved open space areas. The following goals and policies of the City of Monterey Park General Plan Resources Element pertain to parks and recreation and, therefore, are applicable to the parks and recreation analysis of the Focused General Plan Update:

- Goal 1.0 – Optimize use of established public parks, and provide park facilities that meet the needs of the City's population.
 - Policy 1.1 – On a regular basis, assess usage of park facilities, and identify physical changes needed to accommodate anticipated use patterns.
 - Policy 1.2 – Preserve existing park space.
 - Policy 1.3 – Continue to work cooperatively with the school districts to maintain and expand playground use through joint-use agreements.
 - Policy 1.4 – Work with East Los Angeles Community College to make the College's recreation facilities available to Monterey Park residents.

- Goal 2.0 – Create additional passive recreation opportunities in the City to further enhance the quality of life in all areas of the community.
 - Policy 2.2 – Encourage future commercial development to incorporate public squares, plazas, or similar spaces.
 - Policy 2.3 – Incorporate pocket parks, parkways, and similar recreation spaces into residential neighborhoods.
 - Policy 2.4 – Incorporate into the development review process a means for new development to contribute to existing recreational facilities and/or to address maintenance and staffing needs.
 - Policy 2.5 – Provide for the expansion of the city library and other community services as needed to benefit all Monterey Park residents.

Quimby Act and Parks Development Impact Fees

The City has an adopted regulations requiring new development to pay for park land and equipment (Monterey Park Municipal Code Chapters 3.110 and 12.10).

Planned Park Improvements

In addition to adding park improvements to the current 82.80 park acres, the City could acquire an additional 11.3 park acres, and develop these new parks to serve the additional 3,781 residents anticipated at General Plan build-out to merely maintain the existing 1.334 acres per 1,000 residents. Without adding 11.3 acre of parkland, the standard would drop to 1.258 at General Plan build-out. It should be noted that the Quimby Act does allow for the use of receipts raised by

the adoption of a Quimby Act park Impact Fee to be used for rehabilitation of existing park configurations (City of Monterey Park, 2016).

4.16.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Focused General Plan Update would have a significant impact related to recreation if it would:

- a) 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; or
- b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.16.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to recreation which could result from implementation of the Project, and recommends mitigation measures as needed to reduce significant impacts.

Local and Regional Recreational Facilities

Impact REC-1 – 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?

Analysis of Impacts

The City of Monterey Park currently possesses a modicum standard of 1.334 acres of owned park land per 1,000 residents. The Project could result in increased population and a subsequent increase in demand for parks. The Project does not explicitly include the construction of new parkland and related facilities. However, any new or expanded parks that are proposed due to population growth associated with the Project would be subject to CEQA review as a part of local review and permitting. Additionally, new developments, both residential and non-residential, are required to pay developmental impact fees directly related to new park facilities, which would help offset the incremental demand for services resulting from Project Implementation.

Planning Area residents, employees, and visitors could also use nearby parks and recreation facilities. As shown in Table 4.16-1, the City currently has approximately 129.8 acres of City-owned open space. The 2016 standard of 1.334 acres per 1,000 residents is lower than the threshold benchmark of 3.0 acres per 1,000 persons contained in Section 66477 of the California Government Code relating to dedication of parks and triple what most cities have as a target standard. Moreover, using 2019 population estimates, the City's parkland-to-resident ratio is now approximately 2.11 acres per 1,000 residents (Department of Finance, 2018).¹ The City's General Plan Resources Element does not include an adopted parkland-to-resident ratio. However, the City's ratios for both 2000 and 2019 are considered below the National Park and Recreation

¹ The Department of Finance estimates the City had a population of approximately 61,828 people as of January 1, 2019.

$$61,828 \div 1,000 = 61.828$$

$$130.5 \text{ acres of open space} \div 61.828 = 2.11 \text{ acres per 1,000 residents}$$

4.16 – Recreation

Association’s (NRPA) guideline of 2.5 to 4.0 acres of parkland for every 1,000 residents (NRPA, 2019). While the City does not meet the NRPA standard for parkland, implementation of the Project is not expected to reduce the existing ratio of 2.11 acres per 1,000 residents. The Focused General Plan Update allows for up to 3,816 new dwelling units, up to 11,693 new residents, and up to 1,264,092 additional square feet of non-residential building area. All new residential development resulting from the Project would be subject to development impact fees and, for residential tentative tract maps, the City’s Quimby Ordinance. These three parks funding mechanisms would offset the incremental increase in demand for park facilities from implementation of the Project.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Expansion of Recreational Facilities

Impact REC-2 – 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?

Analysis of Impacts

As described directly above, the Project does not explicitly include the construction of new parkland and related facilities. However, any new or expanded parks that are proposed due to population growth associated with the Project would be subject to CEQA review as a part of local review and permitting. All new residential development resulting from the Project would be subject to development impact fees and, for residential tentative tract maps, the City’s Quimby Ordinance. Even though the City of Monterey Park is in a “moderate” need category for parkland, the project is not expected to reduce the existing ratio of 2.11 acres per 1,000 residents. The impact would be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to Recreation?

Analysis of Impacts

Development of other residential projects in the Planning Area could increase the usage of parks and recreational facilities in Monterey Park and the surrounding area, potentially causing the

need for additional parks and recreational facilities due to the population increase. Any new or expanded parks that are proposed due to population growth associated with the Project would be subject to CEQA review as a part of local review and permitting. Also, new development would be subject to development impact fees, the citywide facilities CFD and, for residential tentative maps, the City's park and recreation mitigation fee regulations. These three parks funding mechanisms would help offset the incremental increase in demand for park facilities from implementation of the Project. Potential cumulative impacts on recreational facilities would be less than significant.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

4.16.5 REFERENCES

City of Monterey Park. *Development Impact Fee Calculation and Nexus Report for the City of Monterey Park, CA*. February 3, 2016.

City of Monterey Park (2019a). City of Monterey Park website. Accessed May 2019.
<https://www.montereypark.ca.gov>

City of Monterey Park (2019b). *City of Monterey Park General Plan: Resources Element*. 2000.

National Recreation and Park Association. *2019 NRPA Agency Performance Review: Park and Recreation Agency Performance Benchmarks*. 2019.

State of California Department of Finance. E-1 Population Estimates for Cities, Counties, and the State – January 1, 2018 and 2019. Accessed May 2019.
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4.17 Transportation

This EIR chapter addresses transportation impacts associated with the Monterey Park Focused General Plan Update including issues identified by the CEQA Guidelines, such as: the Project's consistency with circulation programs and policies, the potential for design hazards, the adequacy of emergency access. A traffic impact study (TIS), completed by KOA, informs this EIR chapter and is included as Appendix D. The tables and graphics in this chapter are from the KOA report.

4.17.1 ENVIRONMENTAL SETTING

The Planning Area includes a mix of residential, commercial, industrial, institutional, and open space uses, and is surrounded by well-established neighborhoods.

Existing Roadway System

The Planning Area's local roadway system is comprised of Principal Arterials, Minor Arterials, Collectors Streets, and Local Roads. The key roadways' characteristics within the study area¹ are provided in Table 4.17-1. Exhibit 4.17-1 shows the City's existing roadway classifications.

Study Area Intersections and Roadways

A total of 30 intersections and 15 roadway segments are included in the study area, as illustrated in Exhibit 4.17-2 and listed below.

Intersections

1. Atlantic Boulevard & Hellman Avenue
2. Garfield Avenue & Hellman Avenue
3. New Avenue & Hellman Avenue
4. Atlantic Boulevard & Emerson Avenue
5. Garfield Avenue & Emerson Avenue
6. Atlantic Boulevard & Garvey Avenue
7. Garfield Avenue & Garvey Avenue
8. New Avenue & Garvey Avenue
9. Corporate Center Drive & Ramona Boulevard
10. I-10 EB Off-Ramp & Ramona Boulevard
11. Corporate Center Drive & I-710 NB Off-Ramp
12. Fremont Avenue & Monterey Pass Road
13. Garfield Avenue & Newmark Avenue
14. Atlantic Boulevard & Brightwood Street
15. I-710 NB On-Ramp/Ford Boulevard & Floral Drive

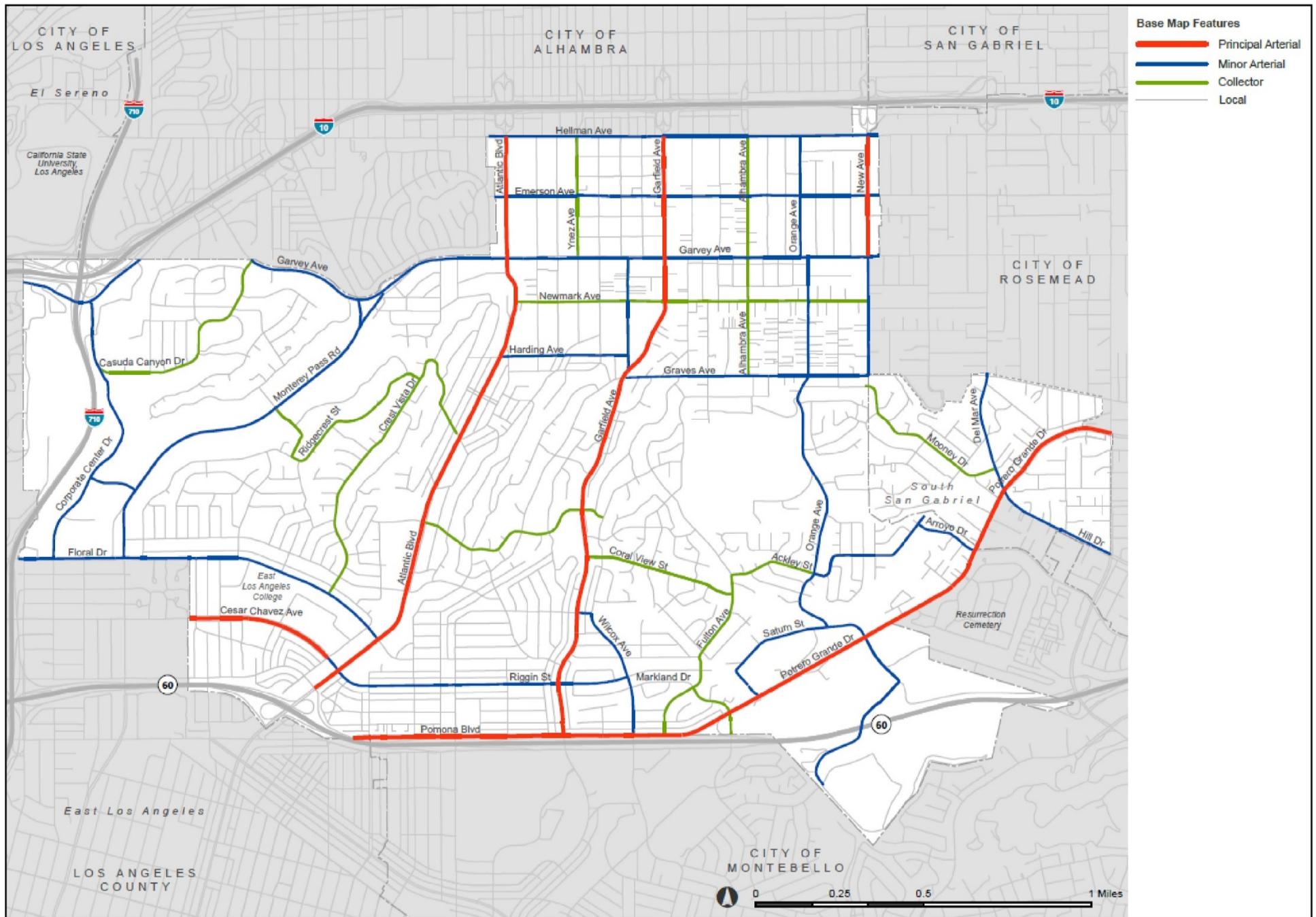
¹ In the context of transportation engineering, "study area" refers to the physical boundaries of the transportation analysis (e.g., the area covered by the collection of intersections and roadway segments evaluated for the Project). The term is not synonymous with "Planning Area." Therefore, for the purposes of this EIR chapter, the term "study area" is retained when distinguished from "Planning Area."

**Table 4.17-1
Existing Roadway Description**

Segment	Classification	# Lanes		Median Type	General Land Use	Posted Speed Limit
		NB / EB	SB / WB			
NORTH-SOUTH ROADWAYS						
Corporate Center Drive						
Ramona Drive - Monterey Park Golf Club driveway	Secondary	2	2	DY	Commercial/Industrial	40
Monterey Park Golf Club driveway - Casuda Canyon Dr	Secondary	2	2	RM	Commercial	40
Casuda Canyon Dr - Floral Dr	Secondary	2	2	2WLTL	Office	35
Monterey Pass Road						
Garvey Ave - Newmark Ave	Minor	2	-	-	Residential	40
Newmark Ave - Vagabond Dr	Minor	2	2	2WLTL	Industrial	40
Vagabond Dr - Floral Dr	Secondary	2	2	2WLTL	Commercial/Industrial	40
Atlantic Boulevard						
Hellman Ave - Emerson Ave	Primary	2	2	DY	Commercial	30
Emerson Ave - Sevilla St	Primary	2	2	2WLTL	Commercial	30
Sevilla St - Floral Dr	Primary	2	2	2WLTL	Commercial/Residential	40
Floral Dr - CA-60 EB Off-Ramp	Primary	3	3	RM	Commercial	35
Garfield Avenue						
Hellman Ave - Newmark Ave	Primary	2	2	DY	Commercial	30
Newmark Ave - Riggin St	Primary	2	2	2WLTL	Residential	40
Riggin St - Pomona Blvd	Primary	2	2	RM	Commercial	35
New Avenue						
I-10 - Hellman Ave	Secondary	2	2	RM	-	35
Hellman Ave - Garvey Ave	Secondary	2	2	DY	Residential	35
Garvey Ave - Graves Ave	Secondary	1	1	SBY	Residential	25*
EAST - WEST ROADWAYS						
Hellman Avenue						
Hathaway Ave - Atlantic Blvd	Secondary	1	1	SBY	Residential	25*
Atlantic Blvd - New Ave	Secondary	1	1	DY	Residential	35
Ramona Boulevard						
Ameron Wy - Monterey Park Golf Club driveway	Secondary	2	2	DY	Commercial/Office	35
Garvey Avenue						
Casuda Canyon Dr - Monterey Pass Rd	Secondary	2	2	RM	Residential	40
Monterey Pass Rd - Dequine Ave	Primary	2	2	RM	Commercial	35
Graves Avenue						
Garfield Ave - Russell Ave	Secondary	1	1	DY	Residential	30
Russell Ave - New Ave	Secondary	1	1	SBY	Residential	25*
Floral Drive						
I-710 - Ford Blvd	Secondary	1	1	DY	-	35
Ford Blvd - Corporate Center Dr	Secondary	2	1	DY	Office/Residential	35
Corporate Center Dr - Ridgecrest St	Secondary	2	2	DY	Commercial	35
Ridgecrest St - Atlantic Blvd	Secondary	1	1	DY	Residential/School	40
Atlantic Square - Garfield Ave	Minor	1	1	SBY	Residential	25*
Avenida Cesar Chavez/Riggin Street						
Vancouver St - Collegian Ave	Primary	2	2	DY	Commercial/Residential	35
Collegian Ave - Atlantic Blvd	Primary	2	2	RM	Commercial	35
Atlantic Blvd - Gerhart Ave	Primary	2	2	DY	Commercial/Residential	35
Gerhart Ave - Ferdinand Ave	Primary	1	1	2WLTL	Residential	35
Ferdinand Ave - Garfield Ave	Primary	1	1	SBY	Residential	35
Garfield Ave - End of Street	Minor	1	1	SBY	Residential	25*
Pomona Boulevard/Potrero Grande Drive						
CA-60 - Hendricks Ave	Primary	-	2	-	Residential	40
Hendricks Ave - Potrero Grande Dr	Secondary	-	3	-	Commercial/Residential	40
Markland Dr - East City Limit	Primary	2	2	2WLTL	Office/Residential	45

Notes: DY - Double Yellow, SBY - Single Broken Yellow, 2WLTL - 2-Way Left Turn Lane, RM - Raised Median, NPAT - No Parking Anytime, NSAT - No

* Speed not posted. Prima facia residential speed of 25mph applies.



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16. Corporate Center Drive/McConnell Avenue & Floral Drive
17. Monterey Pass Road/Mednik Avenue & Floral Drive
18. Atlantic Boulevard & Floral Drive
19. Bleakwood Avenue & Avenida Cesar Chavez
20. Collegian Avenue & Avenida Cesar Chavez
21. Atlantic Boulevard & Avenida Cesar Chavez
22. Atlantic Boulevard & 1st Street/SR-60 WB Off-Ramp
23. Atlantic Boulevard & SR-60 EB Off-Ramp
24. Garfield Avenue & Riggin Street
25. Garfield Avenue & Pomona Boulevard
26. Garfield Avenue & Via Campo
27. Wilcox Avenue & Pomona Boulevard
28. Markland Drive & Potrero Grande Drive/SR-60 WB Off-Ramp
29. Atlas Avenue & Potrero Grande Drive (unsignalized)
30. Saturn Street/Market Place Drive & Potrero Grande Drive

Roadway Segments

- A. Atlantic Boulevard between Hellman Avenue & Garvey Avenue
- B. Garfield Avenue between Hellman Avenue & Garvey Avenue
- C. New Avenue between Hellman Avenue & Garvey Avenue
- D. Garvey Avenue between Fremont Avenue & Atlantic Boulevard
- E. Garvey Avenue between Atlantic Boulevard & Garfield Avenue
- F. Monterey Pass Road between Garvey Avenue & Vagabond Drive
- G. Corporate Center Drive between Floral Drive & Casuda Canyon Drive
- H. Atlantic Boulevard between Garvey Avenue & Floral Drive
- I. Garfield Avenue between Garvey Avenue & El Repetto Drive
- J. Garfield Avenue between El Repetto Drive & Riggin Street
- K. Cesar Chavez Avenue between Vancouver Avenue & Atlantic Boulevard
- L. Atlantic Boulevard between Floral Drive & 1st Street
- M. Garfield Avenue between Riggin Street & Pomona Boulevard
- N. Pomona Boulevard between Garfield Avenue & Gerhart Avenue
- O. Potrero Grande Drive between Markland Drive & Saturn Street/Market Place Drive

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Existing Transit Service

The study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), City of Monterey Park, and City of Montebello. Table 4.17-2 summarizes the study area transit services. The existing transit routes are illustrated on Exhibit 4.17-3.

**Table 4.17-2
Existing Transit Service**

Agency	Line	To	From	Via	Peak Period Frequency (minutes)
Monterey Park	1	Hellman Avenue & Alhambra Avenue	Monterey Park City Hall	Garfield Avenue, 1st Street, Atlantic Boulevard, Emerson Avenue	40
Monterey Park	2	Garfield Avenue & Elmgage	Monterey Park City Hall	Garfield Avenue, Riggin Street, Floral Drive, Brightwood Avenue, Atlantic Boulevard	40
Monterey Park	3	Emerson Avenue & Rural Drive	Monterey Park City Hall	Garvey Avenue, Emerson Avenue, Orange Avenue, Fulton Avenue, Graves Ave	40
Monterey Park	4	Garvey Avenue & Atlantic Boulevard	Monterey Park City Hall	Garvey Avenue, Monterey Pass Road, Corporate Center Drive, Casuda Canyon Drive, Emerson Avenue, Hellman Avenue	40
Monterey Park	5	Potrero Grande Drive & Saturn Street	California State University Los Angeles	Corporate Center Drive, Floral Drive, Riggin Street, Saturn Street, Potrero Grande Drive	30
Monterey Park	Link	900 Corporate Center Drive	California State University Los Angeles	Corporate Center Drive	30
Metro	68	Montebello	Los Angeles	Spring Street, Cesar Chavez Avenue, Riggin Street, Main Street	15
Metro	70	El Monte Station	Los Angeles	Olive Street, Cesar Chavez Avenue, Ramona Boulevard, Garvey Avenue	12
Metro	106	L.A. County + USC Medical Center	East L.A. College Transit Center	1st Street, Indiana Station, Soto Street, Whittier Boulevard, Boyle Avenue, State Street	50
Metro	176	Montebello	Highland Park	Pasadena Avenue, Garfield Avenue, Main Street, Mission Drive, Tyler Avenue, Rush Street, Paramount Boulevard	40
Metro	258	Paramount	Altadena	Lake Avenue, Fremont Avenue, Monterey Pass Road, Eastern Avenue	40
Metro	260	Compton	Altadena	Fair Oaks Avenue, Atlantic Boulevard, Artesia Boulevard	15
Metro	762	Compton	Pasadena	Fair Oaks Avenue, Atlantic Boulevard, Artesia Boulevard	30
Metro	770	El Monte Station	Downtown Los Angeles	Garvey Avenue, Cesar E. Chavez Avenue, Grand Avenue, Olive Avenue	15
Metro	Gold	Azusa	East Los Angeles	Monrovia, Pasadena, Highland Park, Montecito Heights, Union Station, Boyle Heights	7
Montebello	10	East L.A. College	Whittwood Mall, Whittier	Whittier Boulevard, Atlantic Boulevard	11
Montebello	20	Las Tunas, San Gabriel	Telegraph Road, Montebello	Greenwood Avenue, Montebello Boulevard, San Gabriel Boulevard	20
Montebello	30	South Gate	San Marino	Garfield Avenue	40
Montebello	70	The Shops at Montebello	Montebello	Mines Avenue, Wilcox Avenue, Potrero Grande Drive, Hill Drive, Paramount Boulevard	40
Los Angeles County	City Terrace/East L.A. College	East L.A. College	City Terrace	Cesar Chavez Avenue, Gage Avenue, Eastern Avenue, Floral Drive, Atlantic Boulevard	60
MetroLink	San Bernardino	San Bernardino	Downtown Los Angeles	Rialto, Fontana, Rancho Cucamonga, Upland, Montclair, Claremont, Pomona, Covina, Baldwin Park, El Monte, Cal State L.A.	22

Source: City of Monterey Park Spirit Bus; City of Montebello; Los Angeles County; Los Angeles County Metropolitan Transportation Authority (Metro) 2019; MetroLink

Existing Bikeways

Caltrans developed statewide standards and definitions for the planning, design, and implementation of bicycle facilities, as summarized below. The “Class” numbering standard is being partially phased out, as the name of the facility type becomes more commonplace.

4.17 – Transportation and Traffic

Class I (Bicycle Path) – A bicycle path is a facility designed exclusively for the use of bicycles. The paths are physically separated from motor vehicle traffic by a physical barrier or landscaped area. Bicycle paths are more often used for recreation and are generally provided along river channels, former railroad rights-of-way, and similar recreation-oriented features.

Class II (Bicycle Lane) – A bicycle lane is a facility where a portion of the paved roadway area is marked as a lane for use by bicycles only. The lane is identified by signage along the street that denotes “Bike Lane,” pavement markings, and lane line markings. Motor vehicles are prohibited from driving in bike lanes except when turning to and from driveways, intersections, or on-street parking.

Class III (Bicycle Route) – A bicycle route is a bicycle way designated within a public right-of-way. The purpose of the bicycle route is to encourage a sharing of the roadway between vehicles and bicycles. The routes are identified by signage along the street that denotes “Bike Route.” No other pavement markings are employed with bicycle routes.

A “bicycle boulevard” is an enhanced bicycle route. The purpose of a bicycle boulevard is to more visibly denote the sharing of a roadway by vehicles and bicycles. The boulevards are typically identified by signage along the street that depicts a bicycle with text that denotes “Share the Road” and also by roadway striping that shows a bicycle with chevrons/arrows denoting a shared lane. Some bicycle boulevards denote the lane sharing with a color-shaded lane, or color-shading at conflict points such as intersections and driveways. The shared-lane markings are called “sharrows.” Traffic calming measures along the corridor, and enhanced directional signage, are often included on bicycle boulevards.

Class IV (Separated Bicycle Lane) – This is a newer facility designation. These are often called cycle tracks. With this treatment, a bicycle lane is located between the sidewalk and either on-street parking or a travel lane and separated by a curb, median, or other barrier. The benefits are similar to a bicycle path. Separated bicycle lanes often require special treatments at intersections, depending on the setback from the travel lane and visibility issues.

The Monterey Park’s bicycle facilities, shown on Exhibit 4.17-4, are:

Bike Lanes

- N. Alhambra Avenue, between north city limit and Newmark Avenue
- W. Riggin Street, between Gerhart Avenue and Ferdinand Avenue

Sharrows Bicycle Boulevards

- W. Riggin Street, between Atlantic Boulevard and Gerhart Avenue
- W. Riggin Street, between Ferdinand Avenue and Wilcox Avenue
- Gerhart Avenue, between W. Riggin Street and south city limit

The routes of these bikeways are illustrated below.

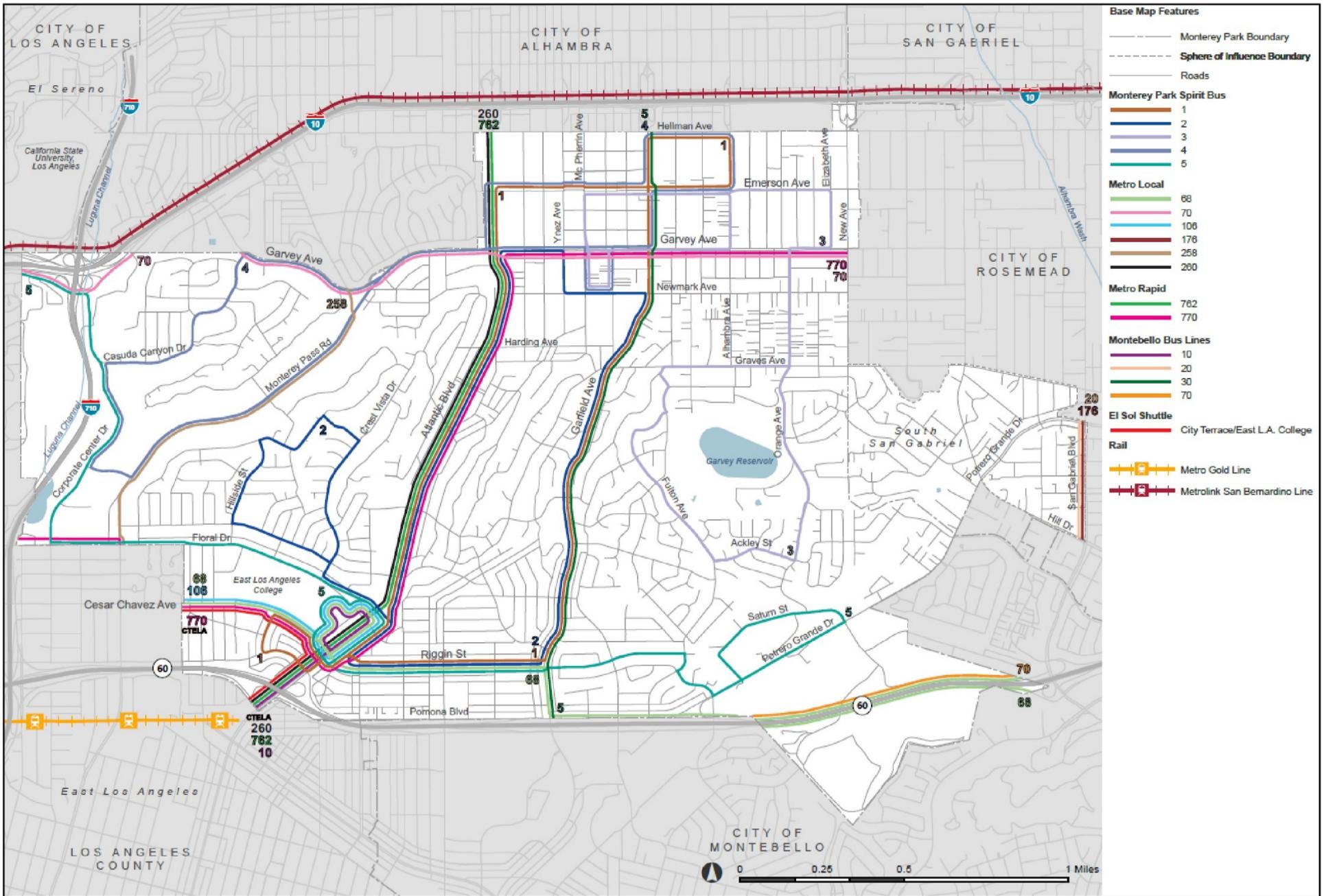
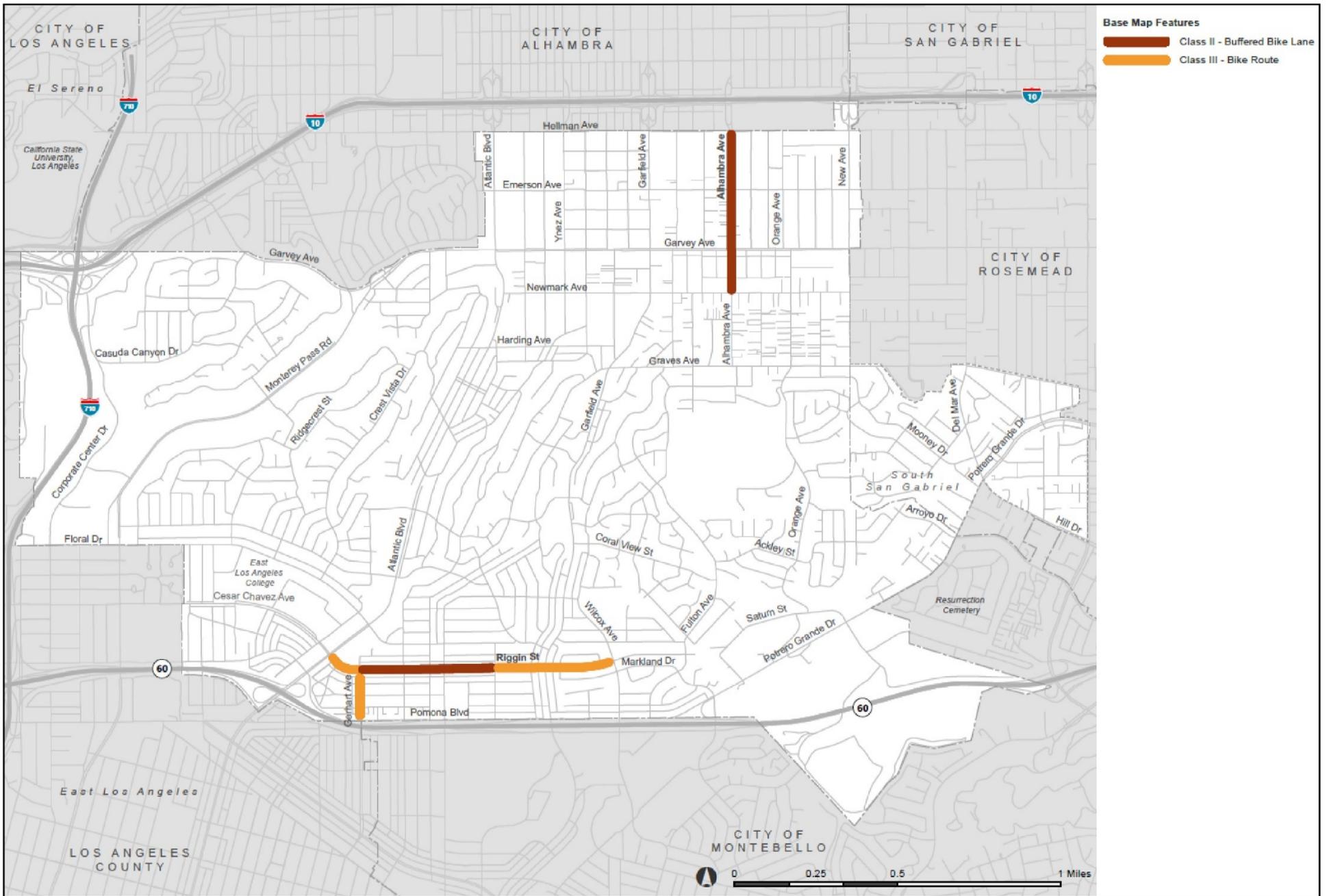


Exhibit 4.17-3 Existing Public Transportation Network



Traffic Analysis Scenarios

Traffic impacts were analyzed at the study intersections for the weekday a.m. and p.m. peak hours. These periods were analyzed due to typical commuting patterns in the area. The Project TIS analysis includes three scenarios:

- Existing Conditions
- Future (2040) without General Plan Update (without Project) Conditions
- Future (2040) with General Plan Update (with Project) Conditions

Project impacts were analyzed based on the incremental, cumulative traffic impacts of all the Project's proposed land use intensity/use changes. Growth rates and the cumulative development assumptions for "future without Project" conditions are discussed in Section 4.17.4 (Impacts and Mitigation Measures).

Existing Traffic Conditions

This section describes the 2019 operating conditions in the study area in terms of roadway facilities, transit service, and traffic.

Existing Intersection Level of Service

Volume-to-capacity ratios (the volume of traffic compared to the capacity of the roadway to accommodate traffic) and corresponding levels of service (LOS) were determined for each of the study intersections during the weekday a.m. and p.m. peak hour. LOS is a system for labeling traffic operations. LOS A generally indicating free-flow traffic; LOS F indicates a traffic jam. The calculations are based on the intersection lane configurations and the 2019 traffic volumes. Table 4.17-3 summarizes the intersection capacity utilization and LOS values for existing traffic conditions.

As shown below, 24 of the 30 study intersections currently operate at acceptable LOS C or better during the weekday a.m. and p.m. peak hour. The following intersections operate at LOS D or worse during either the a.m. or p.m. peak hours:

- Atlantic Boulevard & Hellman Avenue (p.m. peak hour)
- Garfield Avenue & Hellman Avenue (a.m. and p.m. peak hours)
- New Avenue & Hellman Avenue (a.m. peak hour)
- I-10 Eastbound Off-Ramp & Ramona Boulevard (p.m. peak hour)
- Garfield Avenue & Riggin Street (a.m. peak hour)

**Table 4.17-3
Existing Intersections Level of Service**

Study Intersections		AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
1	Atlantic Boulevard & Hellman Avenue	0.769	C	0.827	D
2	Garfield Avenue & Hellman Avenue	0.875	D	0.847	D
3	New Avenue & Hellman Avenue	0.852	D	0.765	C
4	Atlantic Boulevard & Emerson Avenue	0.555	A	0.586	A
5	Garfield Avenue & Emerson Avenue	0.620	B	0.628	B
6	Atlantic Boulevard & Garvey Avenue	0.670	B	0.722	C
7	Garfield Avenue & Garvey Avenue	0.704	C	0.760	C
8	New Avenue & Garvey Avenue	0.639	B	0.682	B
9	Corporate Center Drive & Ramona Boulevard	0.642	B	0.561	A
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.436	A	0.884	D
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.466	A	0.399	A
12	Fremont Avenue & Monterey Pass Road	0.699	B	0.739	C
13	Garfield Avenue & Newmark Avenue	0.635	B	0.725	C
14	Atlantic Boulevard & Brightwood Street	0.577	A	0.721	C
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.655	B	0.752	C
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.586	A	0.669	B
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.630	B	0.709	C
18	Atlantic Boulevard & Floral Drive/Driveway	0.567	A	0.638	B
19	Bleakwood Avenue & Avenida Cesar Chavez	0.405	A	0.394	A
20	Collegian Avenue & Avenida Cesar Chavez	0.538	A	0.549	A
21	Atlantic Boulevard & Avenida Cesar Chavez	0.627	B	0.746	C
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.751	C	0.709	C
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.666	B	0.633	B
24	Garfield Avenue & Riggins Street	0.817	D	0.800	C
25	Garfield Avenue & Pomona Boulevard	0.775	C	0.688	B
26	Garfield Avenue & Via Campo	0.688	B	0.760	C
27	Wilcox Avenue & Pomona Boulevard	0.568	A	0.608	B
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.608	B	0.793	C
29	Atlas Avenue & Potrero Grande Drive *	11.6	B	14.3	B
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.423	A	0.627	B

Existing Roadway Segment Level of Service

Daily traffic counts were collected at the analyzed roadway segments. The LOS value for each segment was calculated to determine daily traffic operations. This existing conditions analysis is based on year 2019 conditions. Table 4.17-4 provides the weekday LOS values for the study roadway segments, based on the defined daily roadway capacity (“daily volume” of vehicles).

**Table 4.17-4
Roadway Segment Daily Operations – Existing Conditions**

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	33,571	0.839	D
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	26,150	0.654	B
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	18,495	0.617	B
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	22,069	0.552	A
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	20,473	0.512	A
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	17,882	0.596	A
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	7,879	0.263	A
H	Atlantic Boulevard	Garvey Avenue	Flora Drive	4	40,000	27,550	0.689	B
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	26,436	0.661	B
J	Garfield Avenue	El Repetto Drive	Riggin Street	4	40,000	25,161	0.629	B
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	17,683	0.442	A
L	Atlantic Boulevard	Floral Drive	I st Street	6	60,000	31,137	0.519	A
M	Garfield Avenue	Riggin Street	Pomona Boulevard	4	40,000	24,207	0.605	B
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	8,073	0.359	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Driv	4	40,000	21,057	0.526	A

As shown above, the Atlantic Boulevard, between Hellman Avenue and Garvey Avenue roadway segment operates at LOS D.

Existing Traffic Volumes

Traffic counts for the 30 study intersections were conducted during weekday peak periods on April 11, 2019. Daily roadway segment traffic counts were collected for 24 hours, also on April 11, 2019. These traffic counts were used to determine existing traffic conditions. Fieldwork within the study area was undertaken to identify the condition of key study area roadways including traffic control and approach lane configurations at each study intersection, and on-street parking restrictions. Existing daily roadway traffic volumes are shown on Exhibit 4.17-5.

Airports

The closest airport to Monterey Park is El Monte (San Gabriel Valley) Airport, located approximately five miles northeast of the City. The airport, which has one runway, is operated by the American Airports Corporation.

4.17.2 REGULATORY FRAMEWORK

Federal

No federal agencies or regulations directly apply to the Project transportation impacts.

State

State of California Department of Transportation (Caltrans)

The State of California Department of Transportation (Caltrans) implements State planning priorities in all plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact State highway facilities. Pursuant to Public Resources Code § 21092.4, for projects of statewide, regional, or area-wide significance, the lead agency must consult with transportation planning agencies and public agencies that have transportation facilities which could be affected by a project. The City of Monterey Park Focused General Plan Update is subject to Caltrans review.

Local

Southern California Association of Governments (SCAG)

The Southern California Association of Governments (SCAG) leads the development of the Regional Transportation Plan (RTP), which presents the vision for transportation throughout most of Southern California, including Los Angeles County. Senate Bill 375 (SB 375) was passed to reduce greenhouse gas emissions from both automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under SB 375, SCAG is tasked with developing a Sustainable Communities Strategy (SCS). The SCS, as a component of the RTP, provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board. The 2016 RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the region. The Regional Transportation Improvement Plan (RTIP), also prepared by SCAG based on the RTP, lists all of the regional, funded/programmed improvements within the next seven years. In order to qualify for CEQA streamlining benefits under SB 375, a project must be consistent with the RTP/SCS.

County of Los Angeles Congestion Management Program (CMP) (Government Code § 65088, *et seq.*)

Proposition 111 created the Congestion Management Program (CMP) in 1990 to address concerns related to increased traffic and congestion. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by the Los Angeles

County Metropolitan Transportation Authority (Metro), the local CMP agency, designating a highway network that includes all State highways and principal arterials within the County of Los Angeles. The LOS at each CMP monitoring station is supervised by local jurisdictions in order to implement the statutory requirements of the CMP. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the countywide plan. Individual cities within Los Angeles County are responsible for implementing the CMP.

The City of Monterey Park requires traffic impact studies to meet the County of Los Angeles guidelines. These guidelines use a standardized volume to capacity (V/C) ratio method to determine the intersection LOS. The City's threshold for identifying an impact is 0.8. If this

threshold is exceeded due to traffic expected from a project, that project is required to make improvements to the intersection in order to attain an acceptable LOS. Criteria for significant impacts can be found in the Los Angeles County Metropolitan Transportation Authority 2010 Congestion Management Program. The program defines a significant impact when the proposed project "...increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$), causing LOS F ($V/C > 1.00$)." In the case of an area already with LOS F "...a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$)."

Monterey Park Bike Master Plan

The City of Monterey Park partnered with BikeSGV, Baldwin Park, San Gabriel, El Monte, and South El Monte to develop the San Gabriel Valley Bicycle Master Plan, adopted in 2014. The plan guides the creation and maintenance of a comprehensive bicycle network for the next 20 years, and guides bicycling promotion, education, and supportive policies. The majority of the Monterey Park's bikeway network consists of the bike paths along the San Gabriel River and Rio Hondo. The plan proposes a variety of enhancements to the network, such as shared-use paths, bike lanes, and signed bike routes. The adoption of the Bicycle Master Plan allows Monterey Park and the partner cities to be highly competitive when applying for State and federal grants to implement priority bicycle projects and programs.

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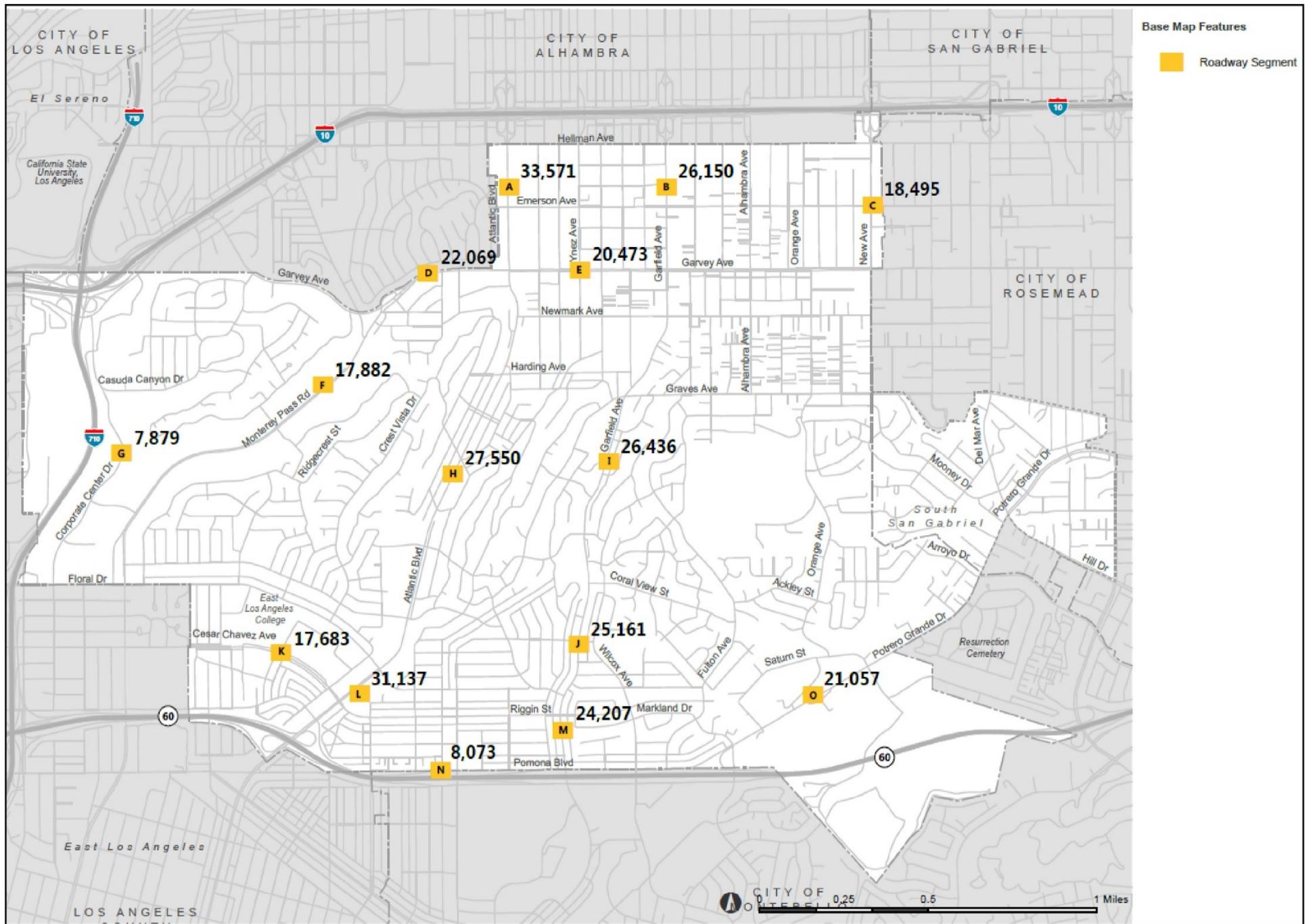


Exhibit 4.17-5 Existing Daily Roadway Traffic Volumes

Monterey Park General Plan Land Use Element Update
 Monterey Park, California

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4.17.3 SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Focused General Plan Update would have a significant impact related to transportation if it would:

- a) Conflict with program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- d) Result in inadequate emergency access.

See Section 4.17.4 (Impacts and Mitigation Measures, “Analysis of General Plan Update Traffic Impacts and Mitigation Measures”), below, for a detailed description of the City’s specific significance thresholds.

4.17.4 IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to transportation which could result from implementation of the Project and recommends mitigation measures as needed to reduce significant impacts. The Project is a focused update to the General Plan consisting solely of revisions to the Land Use and Urban Design Element, last comprehensively updated in 2001.

Traffic forecasting for a general plan takes into account the type and density of future land uses within the analyzed area, and the location and potential interaction of various land use types, as well as the characteristics and capacity of each of the major roadways and intersections. Under the Focused General Plan Update, residential growth would be focused in areas designated by the current City Housing Element update, and new commercial and office development would be focused in areas designated by the proposed Land Use Plan (see Chapter 3, Project Description).

Analysis Methodology

The Project TIS was based on the City of Monterey Park Traffic Impact Study Guidelines (2006). The Traffic Study Guidelines provide information on traffic analysis format, analysis methodology, and thresholds of significance. Key tasks undertaken for the TIS included: 1) definition of study approach, 2) determination of existing traffic conditions, 3) trip generation forecasts of the Project land uses, 4) assignment of Project-generated trips to the study area roadway system, and 5) evaluation of the impacts of cumulative traffic at the study intersections.

Project Trip Generation and Distribution

Project trip generation was based on land use intensities and trip rates defined by *Trip Generation, 10th Edition*, published by the Institute of Transportation Engineers (ITE). Under the Focused General Plan Update, the residential land use growth would be focused in areas designated by the current City Housing Element update, and new commercial and office development would be focused in areas designated by the proposed Land Use Plan (see Chapter 3, Project Description). Proposed land use changes were analyzed by geographically defined traffic analysis zone (TAZ). A TAZ is defined by one or more census blocks from the United States Census. The study area analysis zones are based on these TAZs but customized to analyze smaller segments of the study area.

Future Without-General Plan (“Without Project”) Conditions

In order to account for traffic growth in the study area, an ambient/background traffic growth rate of 0.29 percent per year, which results in an overall 21-year growth of approximately 6 percent, was reviewed and approved by City engineering staff. The growth rate was based on the Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program’s anticipated growth for the Regional Statistical Area (RSA) that encompasses Monterey Park. The levels of service at the study intersections for “future without Project” conditions are discussed in further detail below.

Future With-General Plan (“With Project”) Conditions

Based on the “future without Project” volumes plus traffic from the land uses allowed by the Project, the “future with Project” traffic volume conditions were determined and analyzed. The levels of service for this scenario are discussed in further detail below.

Level of Service Methodology

The City of Monterey Park has designated the Intersection Capacity Utilization (ICU) methodology as the desired analysis tool. The concept of roadway level of service (LOS) under the ICU is calculated as the volume of vehicles that passes through the facility divided by the capacity of that facility. A facility is “at capacity” (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes, signal phasing, and approach lane configurations on each leg of the intersection.

For the stop-controlled (“Stop” sign) study intersections, LOS values were calculated using the unsignalized intersection analysis methodology defined by the Highway Capacity Manual (HCM). For this methodology, conditions are based upon intersection delay, defined as the worst-case approach delay experienced by users of the intersection who must stop or yield to free-flow through traffic. This methodology is applicable to unsignalized and partially controlled intersections on major streets where there is potential for crossing difficulty from the minor approaches due to heavy traffic volumes on the major approaches.

LOS values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway. Table 4.17-5 defines the level of service criteria applied to the study intersections.

**Table 4.17-5
Intersection Level of Service Definitions**

LEVEL OF SERVICE	DEFINITION	SIGNALIZED	UNSIGNALIZED
		Volume to Capacity Ratio	Delay per Vehicle (seconds)
A	Excellent operation. Free-flow speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.	0.00-0.600	<10
B	Very good operation. Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.	0.601-0.700	>10 and <15
C	Good operation. Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.	0.701-0.800	>15 and <25
D	Fair operation. Speeds begin to decline slightly with increasing flows. In this range, density begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.	0.801-0.900	>25 and <35
E	Poor operation. Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.	0.901-1.000	>35 and <50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000	>50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 2012, 1982

Significant Project Traffic Impacts

In general, traffic impacts are identified if a project would result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic would cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below an acceptable LOS and project traffic would cause a further decline below the threshold. As defined by the City of Monterey Park's traffic study guidelines, significant impacts of a proposed project on a facility must be mitigated to a level of insignificance, where feasible. The transportation implications of the Focused General Plan Update are discussed below.

Existing Circulation System Plans, Ordinances, and Policies

Impact TRANS-1 – Would the project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Analysis of Impacts

Project Traffic

This section describes the traffic that could be generated by the Project in a three-step process: trip generation, trip distribution, and trip assignment. Project-related traffic impacts were determined by comparing the intersection LOS without and with the Project. Significant adverse

traffic impacts were identified based on the City of Monterey Park’s criteria for significant adverse project impacts, as described above.

Focused General Plan Update Land Use

Trip generation for the Project’s allowed land uses was analyzed and impacts were examined. Generally, traffic forecasting for a General Plan takes into account the type and density of allowed land uses within the analyzed area, and the location and potential interaction of various land use types, as well as the characteristics and capacity of each of the major roadways and intersections.

Under the Focused General Plan Update, residential land use growth would be focused in areas designated by the current City Housing Element update, and new commercial and office development would be focused in areas designated by the proposed Land Use Plan (see Chapter 3, Project Description).

Future traffic potentially generated under the proposed Land Use Plan would occur primarily near the identified Focus Areas. The incremental (net) development increase/decrease by traffic analysis zone (TAZ) was derived by calculating net new trips based on new development intensities and trip generation rates. The traffic analysis was based on the following allowed increases under the Project:

- Multi-Family Residential Units: +3,836 units
- General Commercial: +619,932 square feet
- General Office: +883,902 square feet
- Hotel Rooms: +607 rooms
- College Students: +3,697 students

The Focused General Plan Update anticipates that there will be a reduction in single-family residential units (by 20 units) and light industrial facilities (by 239,742 square feet) throughout the Planning Area. Exhibit 4.17-6 shows the TAZs overlain on the proposed Land Use Plan.

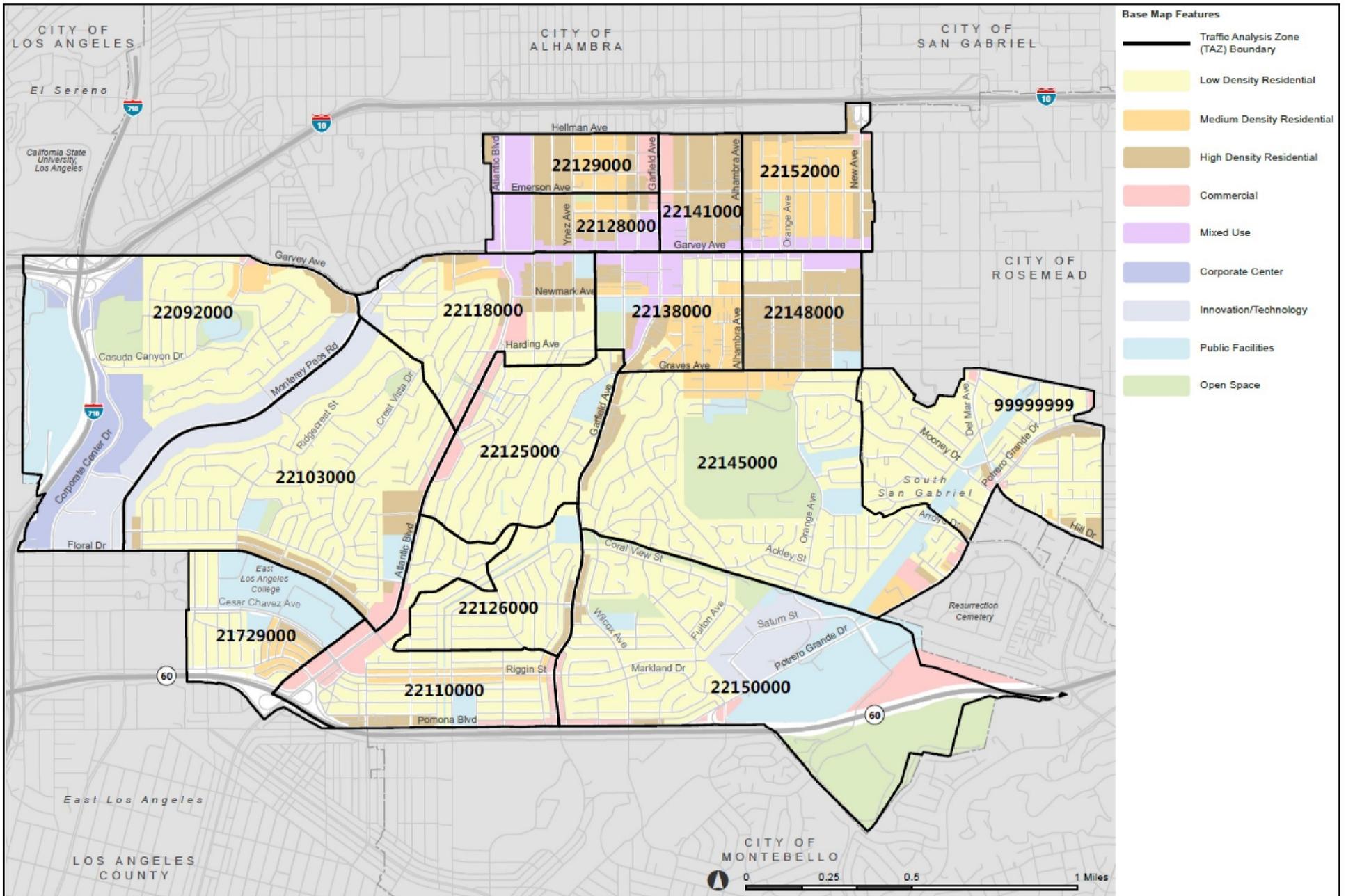


Exhibit 4.17-6 Traffic Analysis Zones and General Plan Land Use

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Project Trip Generation

The Project's trip generation was calculated using nationally accepted trip rates defined by *Trip Generation (10th edition)*, published by the Institute of Transportation Engineers (ITE), as shown in Table 4.17-6. The Land Use Plan was divided into the 16 TAZs. No internal trip capture credits (e.g., walking to a restaurant from the office during lunch hour) were taken to adjust the trip generation (a conservative approach). Pass-by trip credits (e.g., stopping at a store on the drive home from work) were taken for three TAZs that had exclusively commercial uses. Transit credits were also taken for sections of the TAZs adjacent to high-quality transit lines (such as Metro Rapid lines) or transit centers (such as the one near East Los Angeles Community College).

**Table 4.17-6
Trip Generation Rates**

Land Use	ITE Code	Units	Daily Total	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
Employment/Technology (Industrial)	110	KSF	4.96	88%	12%	0.7	13%	87%	0.63
Low Density Residential (Single-Family)	210	DU	9.44	25%	75%	0.74	63%	37%	0.99
Medium Density Residential (Multi-Family)	220	DU	7.32	23%	77%	0.46	63%	37%	0.56
Hotel/Motel	310	ROOMS	8.36	59%	41%	0.47	51%	49%	0.6
Office	710	KSF	9.74	83%	17%	0.37	20%	80%	0.4
Commercial	820	KSF	37.75	62%	38%	0.94	48%	52%	3.81
Public Facilities and Utilities (College)	540	Students	1.15	81%	19%	0.11	56%	44%	0.11

DU: Dwelling Units; KSF: 1,000 square-feet of floor area

Table 4.17-7 shows the net total vehicle trips that would be generated by the Project.

**Table 4.17-7
Project Trip Generation by Traffic Analysis Zones (TAZs)**

TAZ	TOTAL RESIDENTIAL USES							TOTAL NON-RESIDENTIAL USES						
	DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR			DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR		
	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
22129000	4,779	69	231	300	230	135	365	33,446	516	316	832	1,620	1,756	3,376
22141000	3,303	47	160	207	159	94	253	10,896	168	104	272	528	571	1,099
22152000	4,063	58	198	256	196	115	311	0	0	0	0	0	0	0
22128000	3,882	56	188	244	187	110	297	686	23	16	39	25	24	49
22092000	81	1	4	5	4	2	6	14,876	598	166	764	236	607	843
22118000	1,228	18	59	77	59	35	94	1,534	24	14	38	75	79	154
22138000	7,322	106	354	460	353	207	560	1,045	35	24	59	38	37	75
22148000	3,224	46	156	202	155	92	247	0	0	0	0	0	0	0
22103000	0	0	0	0	0	0	0	1,504	48	9	57	13	49	62
22125000	0	0	0	0	0	0	0	10,651	164	101	265	516	558	1,074
22145000	403	6	19	25	19	12	31	1,135	18	10	28	55	60	115
99999999	1,510	30	88	118	100	58	158	376	6	3	9	18	20	38
22126000	7	0	0	0	0	1	1	0	0	0	0	0	0	0
22150000	0	0	0	0	0	0	0	8,673	134	82	216	420	455	875
21729000	114	2	5	7	6	3	9	3,614	280	66	346	774	609	1,383
22110000	385	6	18	24	19	10	29	6,834	106	64	170	331	359	690
Total	30,301	445	1,480	1,925	1,487	874	2,361	95,270	2,120	975	3,095	4,649	5,184	9,833

Implementation of the Focused General Plan Update may generate 125,571 net new weekday daily trips, including 5,020 vehicle trips during the weekday a.m. peak hour (2,565 inbound trips and 2,455 outbound trips), and 12,194 vehicle trips during the weekday p.m. peak hour (6,136 inbound trips and 6,058 outbound trips).

Project Trip Distribution

Trip distribution is the process of assigning the directions from which traffic will travel through roadways and intersections. Trip distribution is dependent upon land use characteristics, local roadway network, and the general location of other land uses to which anticipated traffic would originate or terminate. Trips were distributed to the study area based on directional distribution percentages from the local RSA, defined by the Metro regional planning model for the CMP. The local area roadway network and routes to and from area freeway interchanges were also considered.

Exhibit 4.17-7 illustrates the trip distribution percentages that were used for Project traffic.

Project Trip Assignment

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system. Exhibit 4.17-8 illustrates the Project daily traffic volumes along the study roadway segments.

Future Without General Plan Update Conditions

This section provides an analysis of future traffic conditions in the study area with background growth added, but without Project traffic. The General Plan Update buildout horizon is 2040, which defines the future analysis year.

Ambient Growth

In order to account for traffic growth in the study area, an ambient/background traffic growth rate of 0.29 percent per year, which results in an overall 21-year growth of approximately 6 percent, was reviewed and approved by City engineering staff. The growth rate was based on the Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program's anticipated growth for the Regional Statistical Area (RSA) that encompasses Monterey Park (RSA #25).

Future Without General Plan Update Intersection Level of Service (LOS)

Table 4.17-8 summarizes intersection operations under Future without General Plan Update Conditions. In the table, "ICU" stands for "Intersection Capacity Utilization," which is a traffic engineering tool for transposing V/C ratios into LOS.

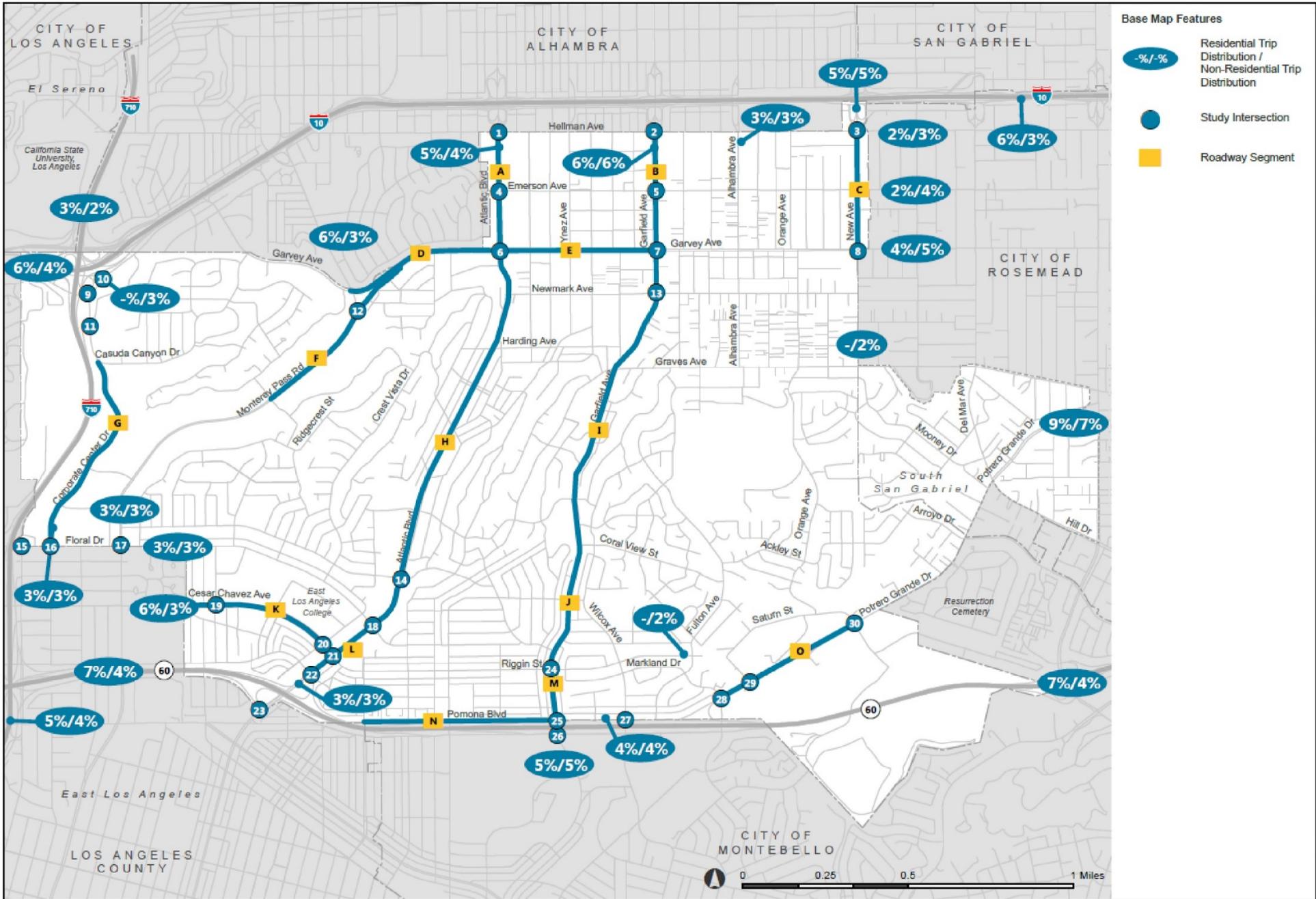


Exhibit 4.17-7 Trip Distribution

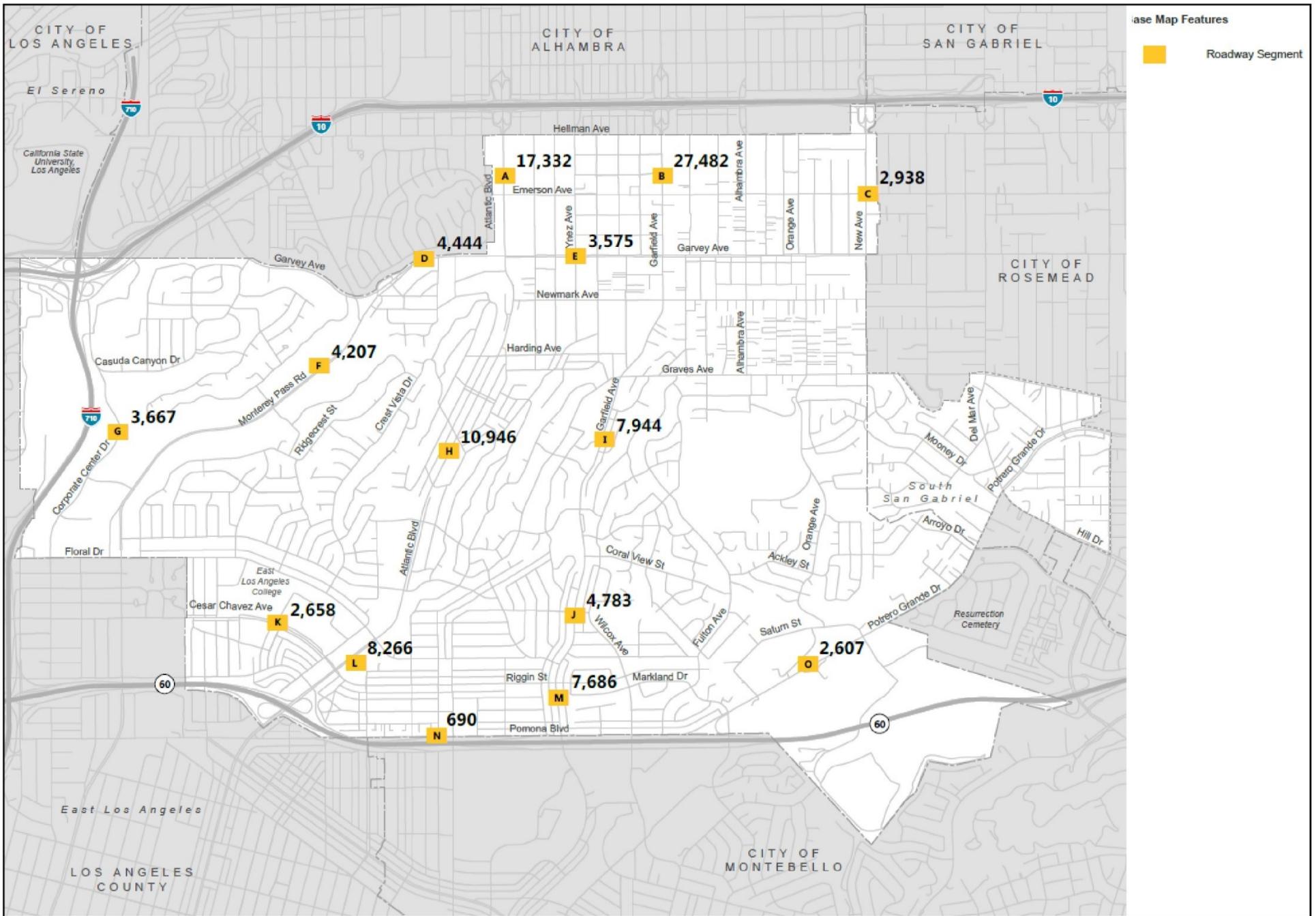


Exhibit 4.17-8 General Plan Daily Roadway Traffic Volumes

Monterey Park General Plan Land Use Element Update
 Monterey Park, California

**Table 4.17-8
Intersection Performance – Future Without General Plan Update Conditions**

Study Intersections	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
1 Atlantic Boulevard & Hellman Avenue	0.810	D	0.872	D
2 Garfield Avenue & Hellman Avenue	0.923	E	0.893	D
3 New Avenue & Hellman Avenue	0.898	D	0.806	D
4 Atlantic Boulevard & Emerson Avenue	0.583	A	0.623	B
5 Garfield Avenue & Emerson Avenue	0.652	B	0.661	B
6 Atlantic Boulevard & Garvey Avenue	0.705	C	0.761	C
7 Garfield Avenue & Garvey Avenue	0.742	C	0.800	C
8 New Avenue & Garvey Avenue	0.673	B	0.719	C
9 Corporate Center Drive & Ramona Boulevard	0.675	B	0.589	A
10 I-10 East Bound Off-Ramp & Ramona Boulevard	0.456	A	0.933	E
11 Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.494	A	0.417	A
12 Fremont Avenue & Monterey Pass Road	0.736	C	0.779	C
13 Garfield Avenue & Newmark Avenue	0.668	B	0.764	C
14 Atlantic Boulevard & Brightwood Street	0.607	B	0.759	C
15 I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.689	B	0.792	C
16 Corporate Center Drive/McDonnell Avenue & Floral Drive	0.611	B	0.704	C
17 Monterey Pass Road/Mednik Avenue & Floral Drive	0.655	B	0.755	C
18 Atlantic Boulevard & Floral Drive/Driveway	0.605	B	0.671	B
19 Bleakwood Avenue & Avenida Cesar Chavez	0.423	A	0.412	A
20 Collegian Avenue & Avenida Cesar Chavez	0.555	A	0.576	A
21 Atlantic Boulevard & Avenida Cesar Chavez	0.660	B	0.794	C
22 Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.791	C	0.747	C
23 Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.701	C	0.666	B
24 Garfield Avenue & Riggin Street	0.861	D	0.838	D
25 Garfield Avenue & Pomona Boulevard	0.817	D	0.724	C
26 Garfield Avenue & Via Campo	0.724	C	0.800	C
27 Wilcox Avenue & Pomona Boulevard	0.601	B	0.652	B
28 Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.639	B	0.836	D
29 Atlas Avenue & Potrero Grande Drive *	12.0	B	15.3	C
30 Saturn Street/Market Place Drive & Potrero Grande Drive	0.443	A	0.660	B

Note: Blue highlight represents unacceptable LOS

* *Unsignalized intersection analyzed based on HCM methodology.*

As shown in Table 4.17-8, under Future without General Plan Update conditions, 22 of the 30 study intersections would continue to operate at a LOS C or better during the weekday a.m. and p.m. peak hours. The operation of the following intersections would worsen to or within LOS D or LOS E:

- **Atlantic Boulevard & Hellman Avenue** intersection operation would worsen to LOS D during the weekday a.m. peak period and within LOS D during the p.m. peak hour.
- **Garfield Avenue & Hellman Avenue** intersection operation would worsen to LOS E during the a.m. peak hour and within LOS D during the p.m. peak hour.
- **New Avenue & Hellman Avenue** intersection operation would worsen within LOS D during weekday a.m. and to LOS D during the p.m. peak hour.
- **I-10 Eastbound Off-Ramp & Ramona Boulevard** intersection operation would worsen to LOS E during the weekday p.m. peak hour.
- **Garfield Avenue & Riggins Street** intersection operation would worsen within LOS D during the weekday a.m. peak hour and to LOS D during the p.m. peak hour.
- **Garfield Avenue & Pomona Boulevard** intersection operation would worsen to LOS D during the weekday a.m. peak hour and to LOS C during the p.m. peak hour.
- **Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp** intersection operation would worsen to LOS D during the weekday p.m. peak hour.

Future Without General Plan Update Roadway Segment Level of Service

Regional growth for year 2040 applied to the 15 study roadway segments was based on the same growth rate used for the study intersections. Table 4.17-9 provides the weekday LOS values for the study roadway segments, based on the defined roadway volume daily capacities.

**Table 4.17-9
Roadway Segment Performance – Future Without General Plan Conditions**

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	35,642	0.891	D
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	27,763	0.694	B
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	19,636	0.655	B
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	23,431	0.586	A
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	21,736	0.543	A
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	18,985	0.633	B
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	8,365	0.279	A
H	Atlantic Boulevard	Garvey Avenue	Flora Drive	4	40,000	29,250	0.731	C
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	28,067	0.702	C
J	Garfield Avenue	El Repetto Drive	Riggins Street	4	40,000	26,713	0.668	B
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	18,774	0.469	A
L	Atlantic Boulevard	Floral Drive	1st Street	6	60,000	33,058	0.551	A
M	Garfield Avenue	Riggins Street	Pomona Boulevard	4	40,000	25,701	0.643	B
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	8,571	0.381	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Drive	4	40,000	22,356	0.559	A

As shown in Table 4.17-9, the operation of the following roadway segment would worsen to or within LOS D or LOS E:

- **Atlantic Boulevard, between Hellman Avenue and Garvey Avenue** segment operation would worsen within LOS D.

Exhibit 4.17-9 shows the roadway segment daily volumes.

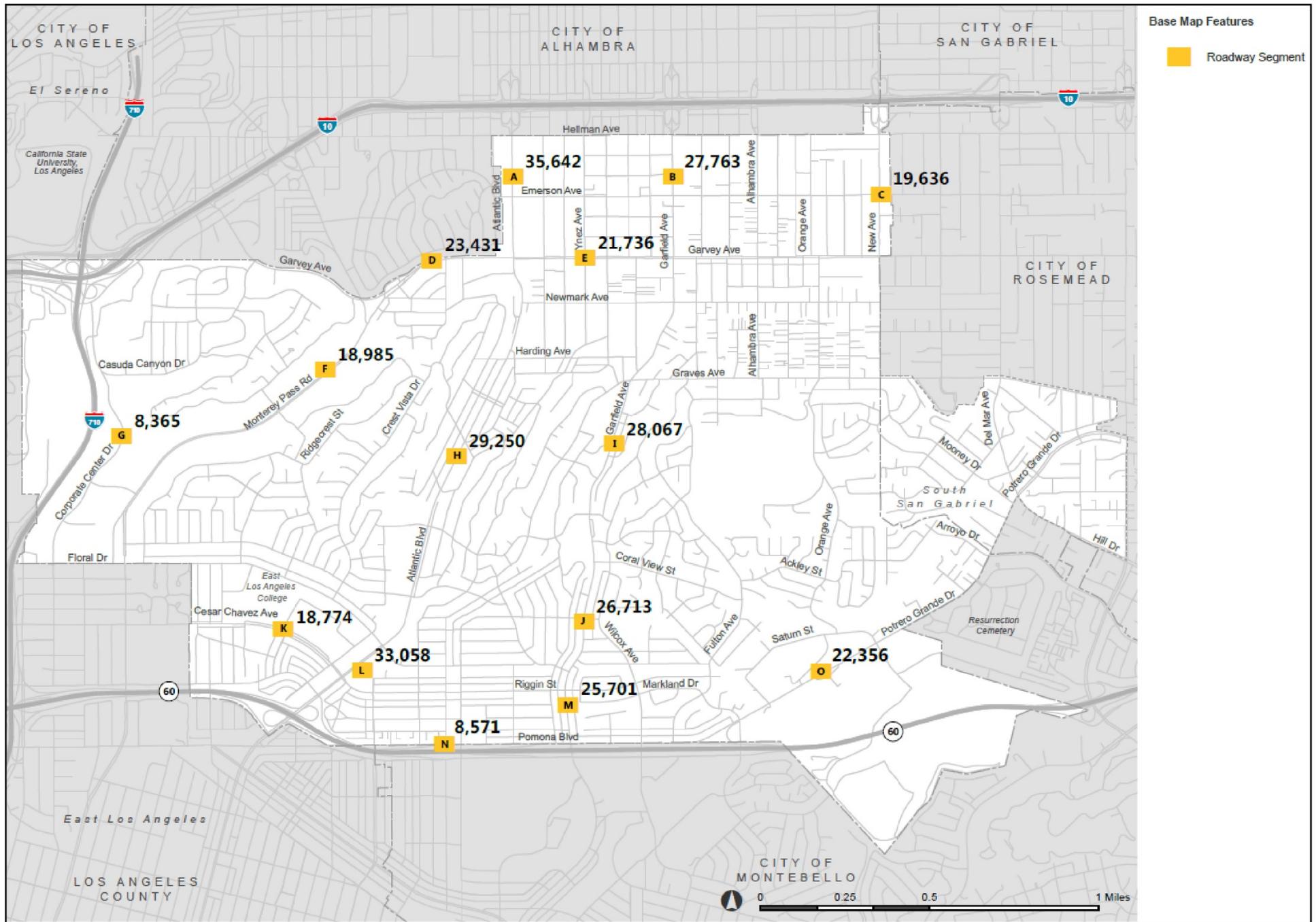


Exhibit 4.17-9 Future (2040) Without General Plan Daily Roadway Traffic Volumes

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Future With General Plan Update Conditions

This section documents future traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding anticipated Project trips to the Future without General Plan Update volumes.

Future With General Plan Update Intersection Level of Service (LOS)

Table 4.17-10 summarizes intersection operations under Future with General Plan Update Conditions. In the table, “ICU” stands for “Intersection Capacity Utilization,” which is a traffic engineering tool for transposing V/C ratios into LOS.

**Table 4.17-10
Intersection Performance – Future with General Plan Update Conditions**

Study Intersections		AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
1	Atlantic Boulevard & Hellman Avenue	1.040	F	1.412	F
2	Garfield Avenue & Hellman Avenue	1.230	F	1.582	F
3	New Avenue & Hellman Avenue	1.054	F	1.071	F
4	Atlantic Boulevard & Emerson Avenue	0.786	C	1.094	F
5	Garfield Avenue & Emerson Avenue	0.944	E	1.305	F
6	Atlantic Boulevard & Garvey Avenue	0.778	C	0.990	E
7	Garfield Avenue & Garvey Avenue	0.923	E	1.148	F
8	New Avenue & Garvey Avenue	0.785	C	0.914	E
9	Corporate Center Drive & Ramona Boulevard	0.810	D	0.679	B
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.503	A	0.933	E
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.507	A	0.477	A
12	Fremont Avenue & Monterey Pass Road	0.853	D	0.920	E
13	Garfield Avenue & Newmark Avenue	0.755	C	0.934	E
14	Atlantic Boulevard & Brightwood Street	0.673	B	0.927	E
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.797	C	1.088	F
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.716	C	0.824	D
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.736	C	0.894	D
18	Atlantic Boulevard & Floral Drive/Driveway	0.669	B	0.875	D
19	Bleakwood Avenue & Avenida Cesar Chavez	0.433	A	0.414	A
20	Collegian Avenue & Avenida Cesar Chavez	0.619	B	0.747	C
21	Atlantic Boulevard & Avenida Cesar Chavez	0.760	C	1.039	F
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.832	D	0.903	E
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.735	C	0.813	D
24	Garfield Avenue & Riggin Street	0.941	E	1.178	F
25	Garfield Avenue & Pomona Boulevard	0.858	D	0.868	D
26	Garfield Avenue & Via Campo	0.756	C	0.938	E
27	Wilcox Avenue & Pomona Boulevard	0.630	B	0.740	C
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.659	B	0.893	D
29	Atlas Avenue & Potrero Grande Drive *	12.5	B	17.3	C
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.460	A	0.721	C

Note: Blue highlight represents unacceptable LOS * *Unsignalized intersection analyzed based on HCM methodology.*

As shown in Table 4.17-10, under Future with General Plan Update Conditions, seven of the 30 study intersections would continue to operate at LOS C or better during the weekday a.m. and p.m. peak hour. The operation of the following intersections would worsen to or within LOS D, E, or F with General Plan Update generated traffic:

- **Atlantic Boulevard & Hellman Avenue** intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.
- **Garfield Avenue & Hellman Avenue** intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.
- **New Avenue & Hellman Avenue** intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.
- **Atlantic Boulevard & Emerson Avenue** intersection operation would worsen to LOS F during the weekday p.m. peak period.
- **Garfield Avenue & Emerson Avenue** intersection operation would worsen to LOS E during the weekday a.m. peak period and LOS F during the p.m. peak period.
- **Atlantic Boulevard & Garvey Avenue** intersection operation would worsen to LOS E during the weekday p.m. peak period.
- **Garfield Avenue & Garvey Avenue** intersection operation would worsen to LOS E during the weekday a.m. and to LOS E during the p.m. peak hour.
- **New Avenue & Garvey Avenue** intersection operation would worsen to LOS E during the weekday p.m. peak period.
- **Corporate Center Drive & Ramona Boulevard** intersection operation would worsen to LOS D during the weekday a.m. peak period.
- **Fremont Avenue & Monterey Pass Road** intersection operation would worsen to LOS D during the a.m. peak hour and within LOS E during the weekday p.m. peak hour.
- **Garfield Avenue & Newmark Avenue** intersection operation would worsen within LOS E during the weekday p.m. peak hour.
- **Atlantic Boulevard & Brightwood Street** intersection operation would worsen within LOS E during the weekday p.m. peak hour.
- **I-710 Northbound On-Ramp-Ford Boulevard & Floral Drive** intersection operation would worsen within LOS F during the weekday p.m. peak hour.
- **Corporate Center Drive-McDonnell Avenue & Floral Drive** intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- **Monterey Pass Road-Mednik Avenue & Floral Drive** intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- **Atlantic Boulevard & Floral Drive** intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- **Atlantic Boulevard & Avenida Cesar Chavez** intersection operation would worsen to LOS F during the p.m. peak hour.
- **Atlantic Boulevard & 1st Street/SR-60 Westbound Off-Ramp** intersection operation would worsen to LOS D during the a.m. peak hour and LOS E during the p.m. peak hour.
- **Atlantic Boulevard & SR-60 Eastbound Off-Ramp** intersection operation would worsen to LOS D during the p.m. peak hour.
- **Garfield Avenue & Riggin Street** intersection operation would worsen to LOS E during the weekday a.m. peak hour and to LOS F during the p.m. peak hour.

- **Garfield Avenue & Pomona Boulevard** intersection operation would worsen within LOS D during the weekday a.m. peak hour and to LOS D during the p.m. peak hour.
- **Garfield Avenue & Via Campo** intersection operation would worsen to LOS E during the p.m. peak hour.
- **Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp** intersection operation would worsen within LOS D during the weekday p.m. peak hour.

Future With General Plan Update Roadway Segment Level of Service

The Future with General Plan Update trip generation was also added to the analyzed roadway segments. Table 4.17-11 provides the weekday LOS values for the study roadway segments, based on the defined roadway volume daily capacities.

**Table 4.17-11
Roadway Segment Performance – Future With General Plan Update Conditions**

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	52,974	1.324	F
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	55,245	1.381	F
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	22,574	0.752	C
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	27,875	0.697	B
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	25,311	0.633	B
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	23,192	0.773	C
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	12,032	0.401	A
H	Atlantic Boulevard	Garvey Avenue	Floral Drive	4	40,000	40,196	1.005	F
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	36,011	0.900	E
J	Garfield Avenue	El Repetto Drive	Riggin Street	4	40,000	31,496	0.787	C
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	21,432	0.536	A
L	Atlantic Boulevard	Floral Drive	1st Street	6	60,000	41,324	0.689	B
M	Garfield Avenue	Riggin Street	Pomona Boulevard	4	40,000	33,387	0.835	D
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	9,261	0.412	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Drive	4	40,000	24,963	0.624	B

Note: Blue highlight represents unacceptable LOS

* *Unsignalized intersection analyzed based on HCM methodology.*

The operation of the following roadway segments would worsen to or within LOS D or worse:

- **Atlantic Boulevard between Hellman Avenue and Garvey Avenue** segment operation would worsen to LOS F.
- **Garfield Avenue between Hellman Avenue and Garvey Avenue** segment operation would worsen to LOS F.
- **Atlantic Boulevard between Garvey Avenue and Floral Drive** segment operation would worsen to LOS F.
- **Garfield Avenue between Garvey Avenue and El Repetto Drive** segment operation would worsen to LOS E.
- **Garfield Avenue between Riggin Street and Pomona Boulevard** segment operation would worsen to LOS D

Exhibit 4.17-10 illustrates the daily roadway segment volumes under General Plan Update Conditions.

Analysis of General Plan Update Traffic Impacts and Mitigation Measures

Determination of Traffic Impacts

This section describes the significant transportation impacts of the Project by comparing Future with General Plan Update Conditions versus Future without General Plan Update Conditions.

Generally, traffic impacts are identified if traffic from a proposed project would result in a significant change in traffic conditions at a study intersection or roadway segment. A significant impact is typically identified if project-related traffic would cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency.

The City of Monterey Park has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. Table 4.17-12 shows the increases in peak-hour V/C ratios that are considered significant impacts. In the table, “ICU” stands for “Intersection Capacity Utilization,” which is a traffic engineering tool for transposing V/C ratios into LOS.

**Table 4.17-12
Determination of Significant Impacts**

Level of Service	Existing ICU	Project-Related Increase in ICU Value
A and B	0.00 – 0.690	Equal to or greater than 0.060
C	0.700 – 0.790	Equal to or greater than 0.040
D	0.800 – 0.890	Equal to or greater than 0.020
E and F	0.900 or more	Equal to or greater than 0.010

The City of Monterey Park does not have significant impact criteria for unsignalized intersections. For the Focused General Plan Update, operations at signalized locations were reviewed for LOS values and percentage of volume increase due to Project-generated traffic. One unsignalized intersection was analyzed. The Highway Capacity Manual (HCM) method was used to calculate intersection LOS and any increment in intersection delay.

Project Traffic Impacts – Future With General Plan Update

Table 4.17-13 defines significant impacts of the proposed General Plan Update land uses at the study intersections, by the future analysis year of 2040.

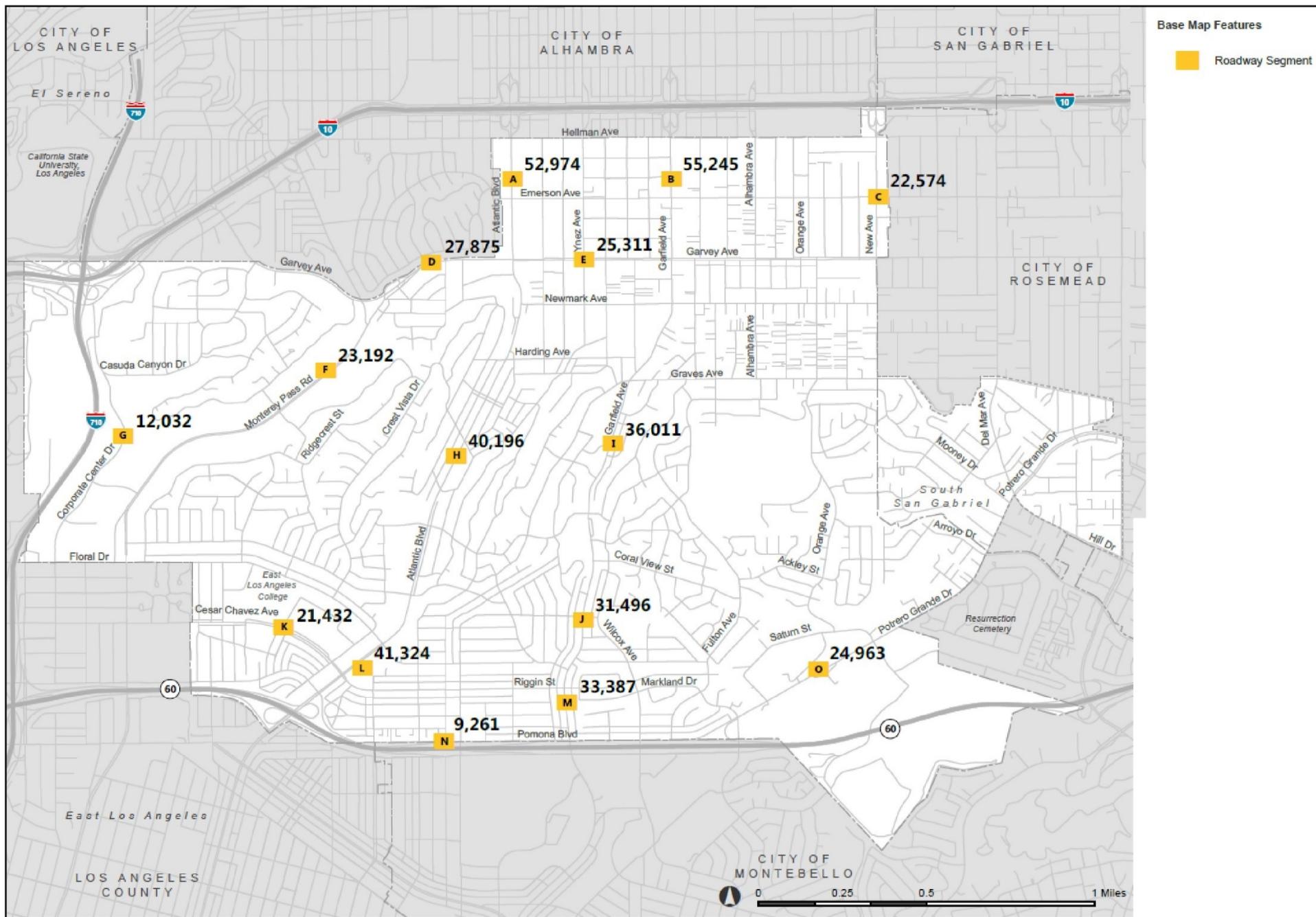


Exhibit 4.17-10 Future (2040) With General Plan Daily Roadway Traffic Volumes

**Table 4.17-13
Determination of Project Impacts – Future 2040 With General Plan Update Conditions**

Study Intersections		AM Peak Hour						PM Peak Hour					
		Future without-Plan		Future with-Plan		ICU Change	Sig Impact?	Future without-Plan		Future with-Plan		ICU Change	Sig Impact?
		ICU	LOS	ICU	LOS			ICU	LOS	ICU	LOS		
1	Atlantic Boulevard & Hellman Avenue	0.810	D	1.040	F	0.230	Yes	0.872	D	1.412	F	0.540	Yes
2	Garfield Avenue & Hellman Avenue	0.923	E	1.230	F	0.307	Yes	0.893	D	1.582	F	0.689	Yes
3	New Avenue & Hellman Avenue	0.898	D	1.054	F	0.156	Yes	0.806	D	1.071	F	0.265	Yes
4	Atlantic Boulevard & Emerson Avenue	0.583	A	0.786	C	0.203	Yes	0.623	B	1.094	F	0.471	Yes
5	Garfield Avenue & Emerson Avenue	0.652	B	0.944	E	0.292	Yes	0.661	B	1.305	F	0.644	Yes
6	Atlantic Boulevard & Garvey Avenue	0.705	C	0.778	C	0.073	Yes	0.761	C	0.990	E	0.229	Yes
7	Garfield Avenue & Garvey Avenue	0.742	C	0.923	E	0.181	Yes	0.800	C	1.148	F	0.348	Yes
8	New Avenue & Garvey Avenue	0.673	B	0.785	C	0.112	Yes	0.719	C	0.914	E	0.195	Yes
9	Corporate Center Drive & Ramona Boulevard	0.675	B	0.810	D	0.135	Yes	0.589	A	0.679	B	0.090	Yes
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.456	A	0.503	A	0.047	No	0.933	E	0.933	E	0.000	No
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.494	A	0.507	A	0.013	No	0.417	A	0.477	A	0.060	Yes
12	Fremont Avenue & Monterey Pass Road	0.736	C	0.853	D	0.117	Yes	0.779	C	0.920	E	0.141	Yes
13	Garfield Avenue & Newmark Avenue	0.668	B	0.755	C	0.087	Yes	0.764	C	0.934	E	0.170	Yes
14	Atlantic Boulevard & Brightwood Street	0.607	B	0.673	B	0.066	Yes	0.759	C	0.927	E	0.168	Yes
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.689	B	0.797	C	0.108	Yes	0.792	C	1.088	F	0.296	Yes
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.611	B	0.716	C	0.105	Yes	0.704	C	0.824	D	0.120	Yes
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.655	B	0.736	C	0.081	Yes	0.755	C	0.894	D	0.139	Yes
18	Atlantic Boulevard & Floral Drive/Driveway	0.605	B	0.669	B	0.064	Yes	0.671	B	0.875	D	0.204	Yes
19	Bleakwood Avenue & Avenida Cesar Chavez	0.423	A	0.433	A	0.010	No	0.412	A	0.414	A	0.002	No
20	Collegian Avenue & Avenida Cesar Chavez	0.555	A	0.619	B	0.064	Yes	0.576	A	0.747	C	0.171	Yes
21	Atlantic Boulevard & Avenida Cesar Chavez	0.660	B	0.760	C	0.100	Yes	0.794	C	1.039	F	0.245	Yes
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.791	C	0.832	D	0.041	Yes	0.747	C	0.903	E	0.156	Yes
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.701	C	0.735	C	0.034	No	0.666	B	0.813	D	0.147	Yes
24	Garfield Avenue & Riggins Street	0.861	D	0.941	E	0.080	Yes	0.838	D	1.178	F	0.340	Yes
25	Garfield Avenue & Pomona Boulevard	0.817	D	0.858	D	0.041	Yes	0.724	C	0.868	D	0.144	Yes
26	Garfield Avenue & Via Campo	0.724	C	0.756	C	0.032	No	0.800	C	0.938	E	0.138	Yes
27	Wilcox Avenue & Pomona Boulevard	0.601	B	0.630	B	0.029	No	0.652	B	0.740	C	0.088	Yes
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ram	0.639	B	0.659	B	0.020	No	0.836	D	0.893	D	0.057	Yes
29	Atlas Avenue & Potrero Grande Drive *	12.0	B	12.5	B	0.5	-	15.3	C	17.3	C	2.0	-
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.443	A	0.460	A	0.017	No	0.660	B	0.721	C	0.061	Yes

Note: Blue highlight represents unacceptable LOS

* Unsignalized intersection analyzed based on HCM methodology.

As shown in Table 4.17-13, significant impacts would occur at 27 of the 30 study intersections during one or both of the analyzed peak periods:

- **Atlantic Boulevard & Hellman Avenue** during the a.m. and p.m. peak periods
- **Garfield Avenue & Hellman Avenue** during the a.m. and p.m. peak periods
- **New Avenue & Hellman Avenue** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & Emerson Avenue** during the a.m. and p.m. peak periods
- **Garfield Avenue & Emerson Avenue** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & Garvey Avenue** during the a.m. and p.m. peak periods
- **Garfield Avenue & Garvey Avenue** during the a.m. and p.m. peak periods
- **New Avenue & Garvey Avenue** during the a.m. and p.m. peak periods
- **Corporate Center Drive & Ramona Boulevard** during the a.m. and p.m. peak periods
- **Corporate Center Drive & I-710 Northbound Off-Ramp** during the p.m. peak period
- **Fremont Avenue & Monterey Pass Road** during the a.m. and p.m. peak periods
- **Garfield Avenue & Newmark Avenue** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & Brightwood Street** during the a.m. and p.m. peak periods
- **I-710 Northbound On-Ramp/Ford Boulevard & Floral Drive** during the a.m. and p.m. peak periods
- **Corporate Center Drive/McDonnell Avenue & Floral Drive** during the a.m. and p.m. peak periods
- **Monterey Pass Road/Mednik Avenue & Floral Drive** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & Floral Drive** during the a.m. and p.m. peak periods
- **Collegian Avenue & Avenida Cesar Chavez** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & Avenida Cesar Chavez** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & 1st Street/SR-60 Westbound Off-Ramp** during the a.m. and p.m. peak periods
- **Atlantic Boulevard & SR-60 Eastbound Off-Ramp** during the p.m. peak period
- **Garfield Avenue & Riggin Street** during the a.m. and p.m. peak periods
- **Garfield Avenue & Pomona Boulevard** during the a.m. and p.m. peak periods
- **Garfield Avenue & Via Campo** during the p.m. peak period
- **Wilcox Avenue & Pomona Boulevard** during the p.m. peak period
- **Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp** during the p.m. peak period
- **Saturn Street/Marketplace Drive & Potrero Grande Drive** during the p.m. peak period

To help mitigate future transportation impacts at these locations, transit improvements, pedestrian improvements, bicycle facility improvements, and roadway capacity improvements, all balanced in an equitable manner and as feasible, are recommended, as described below in “Mitigation Feasibility Analysis.” These measures would be implemented over multiple years as individual projects are developed near these locations, in coordination with the land use policies of the Focused General Plan Update, to mitigate the identified significant transportation impacts.

Mitigation Measure Trans -1 Feasibility Analysis

Potential physical mitigation measures were researched for all the significantly impacted study intersections. Table 4.17-14 at the end of this section summarizes the mitigation measures and their effectiveness in either partially or fully mitigating significant impacts. The feasibility of mitigation measures is discussed in more detail below.

Intersection 1: Atlantic Boulevard and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Atlantic Boulevard and is at the northern city limit with the City of Alhambra. The signalized intersection has protected-permissive phasing at the southbound and eastbound approaches and permitted phasing for the northbound and westbound approaches.

Level of Service (LOS) at this location can be improved by restriping the eastbound approach to provide a left-turn lane and a shared left-through-right lane. Similarly, the westbound approach will also need to be restriped to accommodate a left-turn lane, a shared through-right-turn lane, and an exclusive right-turn lane. Split left-turn phasing will be required for the east- and westbound approaches in order to accommodate these changes. These improvements will partially mitigate intersection operations during the peak periods, but the significant impacts will still remain.

To fully mitigate the significant impact, the intersection would need to be widened along the east- and westbound approaches. However, widening the roadway at this intersection in any direction would be infeasible as it would require significant land acquisition of residential and commercial properties.

This impact is considered significant and unavoidable.

Intersection 2: Garfield Avenue and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Garfield Avenue and is at the northern city limit with the City of Alhambra. The signalized intersection provides protected left-turns at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. The significant impact could be mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 3: New Avenue and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at New Avenue and is at the eastern city limit with the City of Rosemead. The signalized intersection provides protected left-turns on the northbound and southbound approaches and permissive phasing for the eastbound and westbound approaches.

LOS operations at this location can be improved by providing northbound permitted left-turn phasing and eastbound protected left-turn phasing. However, these measures are not sufficient to fully mitigate the significant impact at the intersection.

The significant impact could be fully mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 4: Atlantic Boulevard and Emerson Avenue

The signalized intersection provides protected-permitted phasing at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. Although the significant impact could be mitigated by providing additional lanes to Atlantic Boulevard and Emerson Avenue, neither roadway has the capacity to accommodate another traffic lane. Any additional lanes could only be accommodated through significant property acquisition and elimination of on-street parking. Thus, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 5: Garfield Avenue and Emerson Avenue

The signalized intersection provides permitted phasing at all approaches. The immediate area around this location is primarily occupied by commercial uses. Intersection operations could be improved by providing southbound and westbound protected/permitted left-turn phasing; however, these measures would be insufficient to fully mitigate the significant impact.

Additional intersection improvements could be made with an additional thru lane on both Emerson Avenue and Garfield Avenue, supplemented with additional left- and right-turn pockets. However, these measures would still be insufficient in mitigating the significant impact. There are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 6: Atlantic Boulevard and Garvey Avenue

The signalized intersection provides protected left-turn phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing right-turn lane on the eastbound and westbound approaches to a thru-right-turn lane.

Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 7: Garfield Avenue and Garvey Avenue

The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue and an improvement along Garfield Avenue at the northbound approach (as part of a potential development project at the southeast corner of the intersection), a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. The northbound approach would also add an exclusive northbound right-turn lane, allowing two northbound thru lanes.

Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 8: New Avenue and Garvey Avenue

The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. Although this would be a physically feasible improvement and would mitigate the a.m. peak-period significant impact, it would not fully mitigate the significant impact during the p.m. peak period.

An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 9: Corporate Center Drive and Ramona Boulevard

The signalized intersection is located south of I-710 and I-10 interchange and provides protected left-turn phasing on the northbound and westbound approaches.

The significant impact during the p.m. peak period can be eliminated by restriping the westbound approach to include a left-turn lane, a shared left-through lane, and a through lane; split phasing would be provided for the east- and westbound approaches. However, these measures will not eliminate the a.m. significant impact at this location.

The significant impact could be eliminated by providing an additional east-west through lane. However, this would require widening Ramona Boulevard which would not be physically feasible due to freeway right-of-way north of the intersection, and which would require significant highway interchange reconfiguration.

This impact is considered significant and unavoidable.

Intersection 11: Corporate Center Drive and I-710 Northbound Off-Ramp

The intersection is signal-controlled and provides protected split phasing at the eastbound and westbound approaches and permitted phasing at the southbound approach. The significant impact at this location during the p.m. peak period would be fully mitigated by providing northbound right-turn overlap phasing.

This impact would be less than significant after mitigation.

Intersection 12: Fremont Avenue and Monterey Pass Road

The Fremont Avenue and Monterey Pass Road intersection is signalized and has protected left-turn phasing for the southbound approach (Fremont Avenue SB) and permitted left-turn phasing for the eastbound approach (Monterey Pass Road northeast-bound).

The current lane configuration for the southbound approach on Fremont Avenue consists of a left-turn lane and a channelized free right-turn lane; the eastbound approach (Monterey Pass Road northeast-bound) has a left-turn and two through lanes; while the westbound (Monterey Pass Road southwest-bound) approach includes a through lane and a channelized right-turn.

The significant impacts at this intersection can be eliminated by increasing roadway capacity and restriping all three approaches. Additional roadway capacity can be achieved by removing or resizing existing medians and vegetation. With the additional space, the new southbound approach would have enough space to accommodate dual left-turns with protected phasing and a right-turn lane. The eastbound approach would have dual left-turn lanes with protected phasing and only one through lane; while the westbound approach would include a through lane and a shared through-right-turn lane. All of these measures would take place on public right-of-way.

This impact would be less than significant after mitigation.

Intersection 13: Garfield Avenue and Newmark Avenue

The signalized intersection has protected phasing at the northbound and southbound approaches and permitted phasing on the eastbound and westbound approaches. Intersection LOS can be improved by providing southbound permitted left-turn phasing and eastbound protected/permitted left-turn phasing. However, these measures are not sufficient to eliminate the significant impacts.

Full mitigation of the significant impact would require additional travel lanes along Newmark Avenue, which would require private property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 14: Atlantic Boulevard and Brightwood Street

The signalized intersection contains permitted left-turn phasing on all approaches. The impact at the study intersection could be eliminated by restriping the northbound approach to provide a left-turn lane, two through lanes, and a shared through-right turn lane; the three through lanes would not be continuous and would change back to two northbound lanes north of Brightwood Street. In addition, the southbound approach would need to provide protected left-turn phasing and the eastbound approach protected/permitted phasing.

This impact would be less than significant after mitigation.

Intersection 15: I-710 NB On-Ramp/Ford Blvd and Floral Drive

The signalized intersection is signal-controlled and provides permitted phasing at all approaches. LOS operations at this location can be improved by restriping the northbound approach to provide a shared left-through lane and a right-turn lane. Similarly, the eastbound approach would need to be restriped to include a shared through-left turn and a shared through-right-turn lane. These measures would only mitigate the a.m. peak hour impact; the p.m. peak hour impact would remain.

The p.m. significant impact could be mitigated by adding another through lane to Floral Drive. However, any improvements to Floral Drive would require removing on-street parking and widening the I-710 underpass to allow for an additional travel lane. Any improvements would also require coordination with Los Angeles County as south of Floral Drive is unincorporated East Los Angeles. As a result, there are no feasible mitigation measures for the p.m. impact at this intersection.

This impact is considered significant and unavoidable.

Intersection 16 - Corporate Center Drive/McDonnell Avenue and Floral Drive

The signalized intersection provides permitted left-turn phasing at the northbound and southbound approaches and protected left-turn phasing at the eastbound and westbound approaches.

LOS operations can be improved by restriping the southbound approach to provide dual left-turn lanes and a shared thru-right-turn lane. These measures would improve intersection operations but not fully mitigate the significant impact.

The a.m. peak hour significant impact could be fully mitigated with the removal of the northbound parking lane on McDonnell Avenue and replacing it with two lanes: one northbound through-left and one northbound through-right lane. However, McDonnell Avenue south of Floral Drive is outside the City of Monterey Park jurisdiction and would require coordination with Los Angeles County. Aside from this improvement, there are no other feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 17 - Monterey Pass Road-Mednik Avenue and Floral Drive

The signalized intersection provides permitted left-turn phasing at all approaches.

LOS operations at this location can be improved by implementing protected/permitted left-turn phasing to the eastbound approach. However, this measure is not sufficient to mitigate significant impacts during both peak hours.

The a.m. peak-hour significant impacts could be fully mitigated by adding an additional southbound left-turn lane; however, this would not be physically feasible as it would require property acquisition. As a result, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 18 - Atlantic Boulevard and Floral Drive/Driveway

The signalized intersection provides protected northbound and southbound left-turn phasing, and eastbound and westbound split phasing. The intersection approaches are fully developed. Widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 20 - Collegian Avenue and Avenida Cesar Chavez

The signalized intersection provides permitted left-turn phasing at all approaches.

Intersection operations can be improved by implementing protected/permitted left-turn signal phasing to the westbound approach. However, this measure would only mitigate the a.m. peak-hour impacts.

This intersection is surrounded by areas that are fully built-out, and any improvements would require significant private property acquisitions. As such, there are no feasible mitigation measures for the p.m. impacts at this intersection.

This impact is considered significant and unavoidable.

Intersection 21 - Atlantic Boulevard and Avenida Cesar Chavez

The signalized intersection provides protected left-turn phasing in all directions. The intersection approaches are fully developed, and widening is not possible without significant property acquisition and building demolition. As such, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 22 - Atlantic Boulevard and 1st Street/SR-60 West Bound Off-Ramp

The signalized intersection provides permitted left-turns in all directions.

The a.m. peak-hour impact could be fully mitigated by restriping the eastbound approach to provide dual left turns and an exclusive right-turn lane. The eastbound approach is approximately 30 feet, so three approach lanes could be provided.

The p.m. peak-hour impact could only be mitigated by providing additional north-south lanes along Atlantic Boulevard. This would require significant private property acquisitions and encroach onto the SR- 60 freeway right-of-way, making this an infeasible measure.

This impact is considered significant and unavoidable.

Intersection 23 - Atlantic Boulevard and SR-60 East Bound Off-Ramp

The signalized intersection provides permitted phasing in all directions. The significant impact could be fully mitigated by adding a southbound through lane in currently underutilized pavement area. This will require restriping of the southbound approach and potentially a median reduction to accommodate the new through lane. This measure would also require coordination with Los Angeles County but would not require any new right-of-way.

This impact would be less than significant after mitigation.

Intersection 24 - Garfield Avenue and Riggin Street

The signalized intersection provides permitted left-turn phasing in all directions. Intersection operations could be improved by restriping the southbound approach to include dual left-turn lanes with protected phasing, and incorporating protected/permitted phasing to the eastbound approach. The dual left-turn lanes would need to be accommodated by eliminating on-street parking on the south side of Riggin Street, east of Garfield Avenue. However, these changes would only fully mitigate a.m. peak-hour impacts and will not be sufficient to fully mitigate significant impacts during the p.m. peak hour.

This impact is considered significant and unavoidable.

Intersection 25 - Garfield Avenue and Pomona Boulevard

The signalized intersection provides north- and southbound split left-turn phasing, and westbound permitted left-turn phasing.

Significant impacts can be mitigated by restriping the north- and southbound approaches. The northbound approach would include dual left-turn lanes with protected phasing and a through lane; while the southbound approach would provide one through lane, one through-right-turn lane, and an exclusive right-turn lane. This improvement would require coordination with Caltrans and the City of Montebello.

This impact would be less than significant after mitigation.

Intersection 26 - Garfield Avenue and Via Campo

This intersection is entirely outside the City of Monterey Park. It provides north- and southbound split left-turn phasing, and east- and westbound permitted left-turn phasing.

The LOS at this intersection could be improved by restriping the southbound and eastbound approaches and adding protected left-turn phases to the north- and southbound approaches. The southbound approach will include a left-turn lane and two through lanes; while the eastbound will have a through-left-turn lane, two through lanes, and a right-turn lane.

However, this measure is not sufficient to eliminate the p.m. peak-hour significant impact. In addition, the area is fully developed, and widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection. Furthermore, the intersection is completely within City of Montebello jurisdiction, so coordination with the City would be required.

This impact is considered significant and unavoidable.

Intersection 27 - Wilcox Avenue and Pomona Boulevard

The signalized intersection provides northbound protected left-turn phasing, and south- and westbound permitted left-turn phasing.

Intersection operations could be improved by providing left-turn protected signal phasing; however, the p.m. peak-hour significant impact would not be fully mitigated. Significant impacts could be mitigated by adding an additional westbound right-turn lane and an additional southbound right-turn lane. However, widening is not possible without significant property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection.

This impact is considered significant and unavoidable.

Intersection 28 - Markland Drive and Potrero Grande Drive/SR-60 West Bound Off-Ramp

The signalized intersection provides north/south permitted left-turn phasing, and east/west protected left-turn phasing. The significant p.m. peak-period impact could be mitigated by restriping the eastbound approach to include: one left-turn lane, one through lane, one shared through-right-turn lane, and one exclusive right-turn lane. The approach currently has 40 feet, so there is enough roadway width to restripe the approach in this manner. This measure would require extensive coordination with Caltrans but would not require any new right-of-way.

This impact would be less than significant after mitigation.

Intersection 30 - Saturn Street/Market Place Drive and Potrero Grande Drive

The signalized intersection provides eastbound and westbound protected left-turn phasing, and northbound and southbound permitted left-turn phasing.

The significant p.m. peak-hour impact could be fully mitigated by restriping the northbound approach to provide: one left turn, one through lane, and one shared through-right-turn lane.

This impact would be less than significant after mitigation.

Summary and Conclusions

As discussed above, and shown in Table 4.17-14 below, significant impacts will occur at 27 of the 30 project study intersections. Potential physical mitigation measures were researched at all the significantly impacted intersections. Lane reconfiguration, signal phasing alterations, and roadway widening measures were explored. Improvements to signal phasing and lane reconfigurations would result in a reduction of eight significant impacts during both peak hours, resulting in 13 intersections with significant impacts during the a.m. peak hour and 19 intersections during the p.m. peak hour that would require extensive land acquisitions in order to fully mitigate impacts. As roadway widening could require purchase and partial or full demolition of neighboring properties, could negatively affect sidewalk widths, or as on-street parking removal could cause other significant impacts, improvements at most locations were deemed infeasible due to physical limitations or due to the estimated ineffectiveness of traffic signal configurations changes.

Congestion Management Program

This section describes this EIR transportation analysis' conformance with the regional impact analysis procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP for Los Angeles County requires that the traffic impacts of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where a proposed project would add 50 or more vehicle trips during either the a.m. or p.m. weekday peak hour.
- At CMP mainline freeway-monitoring locations, where a project would add 150 or more trips, in either direction, during the either the a.m. or p.m. weekday peak hour.

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**Table 4.17-14
Summary of Mitigation Measures**

Impacted Intersections	Recommended Mitigations	Feasible? (Y/N)	AM Peak Hour										PM Peak Hour										
			Future without Plan		Future with Plan		ICU Change	Sig Impact?	Future with Plan-Mitigation		ICU Change	Sig Impact?	Future without-Plan		Future with Plan		ICU Change	Sig Impact?	Future with Plan-Mitigation		ICU Change	Sig Impact?	
			ICU	LOS	ICU	LOS			ICU	LOS			ICU	LOS	ICU	LOS			ICU	LOS			ICU
1	Atlantic Boulevard & Hellman Avenue	Restripe EB approach to: 1 left-turn lane & 1 left-thru-right lane. Restripe WB approach to 1 left-turn lane, 1 thru-right lane, 1 right-turn lane. EB/WB split phasing.	Y	0.81	D	1.040	F	0.23	Yes	0.918	E	0.108	Yes	0.872	D	1.412	F	0.54	Yes	1.281	F	0.409	Yes
2	Garfield Avenue & Hellman Avenue		-	0.923	E	1.230	F	0.307	Yes	1.230	F	0.307	Yes	0.893	D	1.582	F	0.689	Yes	1.582	F	0.689	Yes
3	New Avenue & Hellman Avenue	NB to permitted left-turn phasing. EB to protected left-turn phasing.	Y	0.898	D	1.054	F	0.156	Yes	1.054	F	0.156	Yes	0.806	D	1.071	F	0.265	Yes	1.033	F	0.227	Yes
4	Atlantic Boulevard & Emerson Avenue		-	0.583	A	0.786	C	0.203	Yes	0.786	C	0.203	Yes	0.623	B	1.094	F	0.471	Yes	1.094	F	0.471	Yes
5	Garfield Avenue & Emerson Avenue	SB & WB Prot+Perm left-turn phasing.	Y	0.652	B	0.944	E	0.292	Yes	0.859	D	0.207	Yes	0.661	B	1.305	F	0.644	Yes	1.132	F	0.471	Yes
6	Atlantic Boulevard & Garvey Avenue	Convert exclusive right-turn lane on east/west approaches to shared thru-right-turn lane (assuming three through lanes in each direction along Garvey Avenue as part of I-710 mitigation).	Y	0.705	C	0.778	C	0.073	Yes	0.754	C	0.049	Yes	0.761	C	0.99	E	0.229	Yes	0.946	E	0.185	Yes
7	Garfield Avenue & Garvey Avenue	Provide two east/west thru lanes in each direction plus allow for shared through-right at east/west approaches; northbound approach, provide additional NB right-turn lane and provide two NB thru lanes.	Y	0.742	C	0.923	E	0.181	Yes	0.84	D	0.098	Yes	0.8	C	1.148	F	0.348	Yes	1.002	F	0.202	Yes
8	New Avenue & Garvey Avenue	Provide two east/west thru lanes in each direction plus allow for shared through-right at east/west approaches.	Y	0.673	B	0.785	C	0.112	Yes	0.677	B	0.004	No	0.719	C	0.914	E	0.195	Yes	0.779	C	0.060	Yes
9	Corporate Center Drive & Ramona Boulevard	Restripe WB approach to: 1 left-turn, 1 shared thru-left, and 1 thru lane. WB and EB split phasing	Y	0.675	B	0.81	D	0.135	Yes	0.813	D	0.138	Yes	0.589	A	0.679	B	0.09	Yes	0.645	B	0.056	No
10	-																						
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	NB right-turn overlap phasing.	Y	0.494	A	0.507	A	0.013	No	0.507	A	0.013	No	0.417	A	0.477	A	0.06	Yes	0.47	A	0.053	No
12	Fremont Avenue & Monterey Pass Road	Intersection redesign. SB approach (Fremont Ave) to 2 left-turns & 1 right-turn. EB approach to 2 left-turns, 1 thru. Restripe WB approach to 1 thru, 1 shared thru-right turn lane and maintain two-way left-turn. Median removal/resizing will be required.	Y	0.736	C	0.853	D	0.117	Yes	0.482	A	-0.254	No	0.779	C	0.92	E	0.141	Yes	0.534	A	-0.245	No
13	Garfield Avenue & Newmark Avenue	Convert to SB permitted left-turn phasing & EB Prot+Perm left-turn phasing.	Y	0.668	B	0.755	C	0.087	Yes	0.716	C	0.048	Yes	0.764	C	0.934	E	0.17	Yes	0.831	D	0.067	Yes
14	Atlantic Boulevard & Brighwood Street	Restripe NB approach to: 1 left-turn, 2 thru, 1 shared thru-right turn lane. SB protected left-turn phasing. EB prot+perm left-turn phasing	Y	0.607	B	0.673	B	0.066	Yes	0.628	B	0.021	No	0.759	C	0.927	E	0.168	Yes	0.788	C	0.029	No
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	Restriping NB approach to 1 shared thru-left & 1 right-turn lane. Restripe EB approach to 1 shared left-thru & 1 shared thru-right	Y	0.689	B	0.797	C	0.108	Yes	0.719	C	0.030	No	0.792	C	1.088	F	0.296	Yes	0.906	E	0.114	Yes
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	Restriping SB to dual left-turn and 1 shared thru-right turn lane.	Y	0.611	B	0.716	C	0.105	Yes	0.695	B	0.084	Yes	0.704	C	0.824	D	0.12	Yes	0.773	C	0.069	Yes
17	Monterey Pass Road/Mednik Avenue & Floral Drive	Provide Prot+Perm EB signal phasing.	Y	0.655	B	0.736	C	0.081	Yes	0.736	C	0.081	Yes	0.755	C	0.894	D	0.139	Yes	0.833	D	0.078	Yes
18	Atlantic Boulevard & Floral Drive/Driveway		-	0.605	B	0.669	B	0.064	Yes	0.669	B	0.064	Yes	0.671	B	0.875	D	0.204	Yes	0.875	D	0.204	Yes
19	-																						
20	Collegian Avenue & Avenida Cesar Chavez	Prot+Per WB signal phasing.	Y	0.555	A	0.619	B	0.064	Yes	0.535	A	-0.020	No	0.576	A	0.747	C	0.171	Yes	0.676	B	0.100	Yes
21	Atlantic Boulevard & Avenida Cesar Chavez		-	0.66	B	0.76	C	0.1	Yes	0.76	C	0.100	Yes	0.794	C	1.039	F	0.245	Yes	1.039	F	0.245	Yes
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	Add EB left-turn & EB left-turn prot phasing	Y	0.791	C	0.832	D	0.041	Yes	0.799	C	0.008	No	0.747	C	0.903	E	0.156	Yes	0.856	D	0.109	Yes
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	Add SB thru-lane in currently underutilized pavement area.	Y	0.701	C	0.735	C	0.034	No	0.674	B	-0.027	No	0.666	B	0.813	D	0.147	Yes	0.654	B	-0.012	No
24	Garfield Avenue & Riggin Street	Dual SB left-turn & protected phasing; Prot+Perm EB left-turn phasing.	Y	0.861	D	0.941	E	0.08	Yes	0.86	D	-0.001	No	0.838	D	1.178	F	0.34	Yes	0.981	E	0.143	Yes
25	Garfield Avenue & Pomona Boulevard	Restriping NB approach to dual left-turns & 1 thru lane + NB protected left-turn phasing. Restripe SB approach to 1 thru, 1 shared thru-right, and 1 right turn.	Y	0.817	D	0.858	D	0.041	Yes	0.799	C	-0.018	No	0.724	C	0.868	D	0.144	Yes	0.759	C	0.035	No
26	Garfield Avenue & Via Campo	Restripe SB: 1 left-turn & 2 thru lanes; Restripe EB: 1 left-turn, 2 thru, 1 right-turn lane. NB & SB protected left-turn phasing.	Y	0.724	C	0.756	C	0.032	No	0.685	B	-0.039	No	0.8	C	0.938	E	0.138	Yes	0.855	D	0.055	Yes
27	Wilcox Avenue & Pomona Boulevard	Convert to WB left-turn protected phasing.	Y	0.601	B	0.63	B	0.029	No	0.63	B	0.029	No	0.652	B	0.74	C	0.088	Yes	0.725	C	0.073	Yes
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	Restripe EB approach to: 1 left-turn lane, 1 thru lane, 1 thru-right lane, and 1 exclusive right-turn lane.	Y	0.639	B	0.659	B	0.02	No	0.659	B	0.020	No	0.836	D	0.893	D	0.057	Yes	0.823	D	-0.013	No
29	-																						
30	Saturn Street/Market Place Drive & Potrero Grande Drive	Restriping NB approach: 1 left-turn, 1 thru, & 1 shared thru-right lane.	Y	0.443	A	0.46	A	0.017	No	0.45	A	0.007	No	0.66	B	0.721	C	0.061	Yes	0.684	B	0.024	No

Note: Blue highlight represents unacceptable LOS
* Unsignalized intersection analyzed based on HCM methodology.

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Intersection Impact Analysis

Per the 2010 CMP document, there are no CMP arterial monitoring stations in the Planning Area. The nearest CMP location is in Alhambra:

- CMP ID 1 – Fremont Avenue and Valley Boulevard, approximately 1.5 miles north of Monterey Park city limits.

Based on the trip generation identified in Table 4.17-7 and trip distribution illustrated on Exhibit 4.17-7, it is not expected that 50 or more Project trips per hour would be added to the nearest CMP intersection. Therefore, no further analysis of potential CMP impacts is required.

Freeway Impact Analysis

The nearest CMP mainline freeway monitoring location to the Planning Area is on the Interstate 10 freeway, near Atlantic Boulevard. The Project is expected to add more than 150 new trips per hour to this CMP freeway segment. The Project is not expected to add more than 150 new trips per hour to any other freeway segment (I-710 and SR-60) in the vicinity of the Planning Area.

Freeway mainline impacts would be subject to fair-share contributions by future developments to freeway corridor improvements planned by Caltrans. Individual, approved development projects would be required to contribute their fair-share contributions toward CMP freeway mainline improvements, based on formulas adopted and administered by Caltrans.

Conflicts with CEQA

Impact TRANS-2 – Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Analysis of Impacts

CEQA Guidelines Section 15064.3 subdivision (b) has been added to the 2019 CEQA Guidelines as part of the implementation of SB 743, which requires local jurisdictions to use Vehicle Miles Traveled (VMT) instead of Level of Service (LOS) methodologies for the purpose of determining the significance of traffic impacts under CEQA. Also, as part of the implementation of SB 743, local jurisdictions are given until July 1, 2020 to develop and implement thresholds of significance criteria and methodologies for evaluating VMT under the new SB 743 requirements. Therefore, at this time, Section 15064.3(b) of the CEQA Guidelines is not applicable to the Focused General Plan Update.

Level of Significance Before Mitigation

Not applicable

Mitigation Measures

None required.

Design Feature Hazards

Impact TRANS-3 - Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Analysis of Impacts

The Focused General Plan Update could facilitate new development within the context of the Land Use Plan, which has been formulated specifically to ensure compatible land uses, as evaluated throughout this EIR. The feasible transportation mitigations described in this chapter can be implemented through professional traffic engineering and design, with no substantial increase in hazards due to geometric design features.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Emergency Access

Impact TRANS-4 – Would the project result in inadequate emergency access?

Analysis of Impacts

The Project would maintain existing road access throughout the Planning Area. All individual project proposals would be subject to review and approval by the Monterey Park Fire Department, including for emergency access.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Transportation Cumulative Impacts

TRA Cumulative Impacts - Would the project cause substantial adverse cumulative impacts with respect to transportation?

The analysis for Impact TRANS-1 evaluated existing conditions (Table 4.17-3), Future (2040) without General Plan Update Conditions (Table 4.17-8), and Future (2040) with General Plan Update Conditions (Table 4.17-10). In order to account for traffic growth in the study area over time without the Project, an ambient/background traffic growth rate of 0.29 per year, which results in an overall 21-year growth of approximately 6 percent, was assumed for year 2040 conditions

without the Project. As shown in Impact TRANS-1, significant impacts will occur at 27 of the 30 study intersections. Potential physical mitigation measures were researched at all of the significantly impacted intersections. Lane reconfiguration, signal phasing alterations, and roadway widening measures were explored. Improvements to signal phasing and lane reconfigurations would result in a reduction of eight significant impacts during both peak hours, resulting in 13 intersections with significant impacts during the a.m. peak hour and 19 intersections during the p.m. peak hour that would require extensive land acquisitions in order to fully mitigate impacts. As roadway widening could require purchase and partial or full demolition of neighboring properties, could negatively affect sidewalk widths, or as on-street parking removal could cause other significant impacts, improvements at most locations were deemed infeasible due to physical limitations or due to the estimated ineffectiveness of traffic signal configurations changes.

Level of Significance Before Mitigation

Potentially significant

Mitigation Measures

No feasible mitigation exists for various potential impacts. See “Mitigation Feasibility Analysis,” above.

Level of Significance After Mitigation

Significant and unavoidable

4.17.5 REFERENCES

KOA. (2019). *Traffic Impact Study: City of Monterey Park General Plan Update EIR*. Completed for the City of Monterey Park. May 2019.

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4.18 – Tribal Cultural Resources

This EIR chapter addresses tribal cultural resource impacts allowed by the implementation of the Monterey Park Focused General Plan Update EIR. The chapter will evaluate whether the Project will cause a substantial adverse change in tribal cultural resources.

4.18.1 – ENVIRONMENTAL SETTING

See Cultural Resources Section 4.5

4.18.2 – REGULATORY FRAMEWORK

See Cultural Resources Section 4.5

4.18.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the General Plan Update would have a significant impact related to tribal cultural resources if it would:

- a) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is;
- b) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- c) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.18.4 - IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to tribal cultural resources which could result from the implementation of the Project and recommends mitigation measures as needed to reduce significant impacts.

Analysis of Impacts

Ground-disturbing activities allowed by the subsequent development carried out under the Project could result in damage to or destruction of Tribal Cultural Resources as defined in Public Resources Code Section 5020.1(k). Impacts would be less than significant with mitigation incorporated. Native American tribes and bands have occupied areas in and around the Planning Area for at least 3,000 years. Tribal Cultural Resources are the physical artifacts associated with the spiritual and religious lives of native people that ties them together with their environment, each other, and their place in the universe. Archaeological materials associated with past occupation within the Planning Area are known to exist and have the potential to provide important

4.18 – Tribal Cultural Resources

cultural and religious significance to contemporary Native American tribes as well as scientific information regarding the history and prehistory of the Planning Area and the region. Compliance with Public Resources Code Section 5020.1(k) and adherence to General Plan policies for the protection of historic and cultural resources (Policy 3.1 and 3.2) will ensure that impacts to Tribal Cultural Resources will be less than significant.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

No mitigation required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to tribal cultural resources?

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation required.

4.18.5 REFERENCES

See Cultural Resources Section 4.5

4.19 – Utilities and Service Systems

This EIR chapter addresses impacts to utility services associated with implementation of the City of Monterey Park Focused General Plan Update (Project). Issues evaluated include whether the Project would require construction of new utility facilities (water, wastewater, storm water, electric power, or other infrastructure), have sufficient water supplies, have sufficient wastewater treatment capacity, have sufficient landfill capacity, and comply with federal, State, and local requirements related to solid waste.

4.19.1 – ENVIRONMENTAL SETTING

This section describes existing conditions in the Planning Area related to water, wastewater, storm water drainage, solid waste, electric power, natural gas, and telecommunications.

Water Supply

Water is provided by multiple providers within the Planning Area. The majority (95 percent) of the Planning Area obtains water from the City of Monterey Park. California Water Service (Cal Water), East Los Angeles District provides water to the remaining 5 percent of the Planning Area. Both providers contract with wholesalers for access to “imported” State Water Project (SWP) water.

The 2015 Urban Water Management Plan (UWMP) (City of Monterey Park, 2016) notes that the primary water source in the city is groundwater from seven active wells. The wells are within the Main San Gabriel Groundwater Basin. Monterey Park has 6,704 acre-feet per year (AFY) of adjudicated water rights from the Basin and has access to imported water from the San Gabriel Valley Water District (SGVWD), a wholesaler. The SGVWD’s contract with the SWP for 28,800 AFY is used to replenish groundwater in Monterey Park and surrounding communities. Monterey Park also has emergency connections with both SGVWD (11,000 gallons per minute [gpm]) and the Metropolitan Water District of Southern California (MWD) (7,000 gpm).

The City currently does not use storm water or recycled water for supply purposes; however, the City plans to use recycled water over the term of the Focused General Plan Update. Overall, the City plans to have 90 percent of future water supplied by groundwater and 10 percent by recycled water (City of Monterey Park, 2016). The UWMP concludes that the City can meet water demand scenarios during normal, single dry, and multiple dry years over the next 20 years. The volume of water provided to Monterey Park was 8,391 AF in 2015; the UWMP predicts water use of up to 10,430 AFY of potable and raw water by 2040, as well as 800 AFY of recycled water.

Cal Water operates the East Los Angeles District, which serves a portion of Monterey Park. The District serves approximately 26,000 municipal connections and, in 2015, supplied over 14,000 AF (California Water Service Company, 2016). The service area includes East Los Angeles (an unincorporated part of Los Angeles County), and portions of Montebello, Commerce, Vernon, and the Monterey Park Planning Area. The service area population is 150,729, with small portion located in Monterey Park. The District operates 10 groundwater wells, 17 storage tanks, 26 booster pumps, four imported water connections, and 260 of miles of pipeline, and delivered

an average of 19.5 million gallons of water per day (mgd) through 2015 (California Water Service Company, 2016).

Cal Water's Allowed Pumping Allocation is 11,774 AFY (80 percent of the adjudicated right); however, in the recent past, Cal Water did not have the ability to deliver this quantity. A new well was constructed, which greatly increased the pumping capacity in 2014; nearly 9,000 AF of groundwater was produced in 2015 as compared to 5,000 AF in the past. Cal Water projects that there will be 800 AF of recycled water available after 2020. The remaining water demand, not met by groundwater or recycled water, comes from imported water purchased from the Central Basin Municipal Water District (CBMWD). Cal Water purchases from CBMWD accounted for 37 percent of its water in 2015. CBMWD obtains imported water through MWD from either the Colorado River or the SWP. Delivery of imported water is made through three service connections to the MWD network. The total rated capacity of these three service connections is 22,500 gpm (32.4 mgd).

Water use in the Cal Water system in 2015 was lower than previous years due to water conservation under drought conditions; as such, Cal Water's 2015 UWMP projected water use to increase to approximately 17,500 AFY of potable and raw water in 2020. Then, the UWMP projects a small decrease in water demand through 2040 (16,861 AFY). The UWMP attributes this decrease (in spite of continued population growth) to passive savings (e.g., increased use of efficient appliances, low flush toilets, compliance with CalGreen Code). Similar to the City of Monterey Park UWMP, Cal Water has a contingency plan to address reduced water availability due to drought and resulting critical shortages (reduction in supply in excess of 35 percent). The Cal Water UWMP concludes that there is adequate water supply to meet projected demand within the Cal Water Service Area.

Wastewater

The Planning Area's gravity flow sewer system is comprised of 126 miles of main line sewers and is maintained by the City. The sewage is transported to a County trunk line and then sent to various wastewater reclamation (treatment) plants.

The Sanitation Districts of Los Angeles County (LACSD) treats the wastewater generated in the Planning Area. The District serves 73 cities and unincorporated areas; the system currently treats 510 million mgd. Wastewater is conveyed to the following plants: (1) Los Coyotes Water Reclamation Plant (LCWRP), (2) Long Beach Water Reclamation Plant (LBWRP); and (3) Joint Water Pollution Control Plant (JWPCP). According to the City of Monterey Park 2015 UWMP, LACSD estimates 80 gallons per person per day of wastewater generation within LACSD's service area, resulting in an estimated 4.5 million mgd of wastewater.

The following summarizes the existing capacity at the three wastewater treatment plants that serve the Planning Area:

- The LCWRP provides primary, secondary, and tertiary treatment for 37.5 mgd. The plant currently treats an average of 20.99 mgd (Sanitation Districts of Los Angeles County [LACSD], 2018).
- The LBWRP provides primary, secondary, and tertiary treatment for up to 25 mgd. The plant currently treats an average of 11.13 mgd (LACSD, 2018).
- The JWPCP provides both primary and secondary treatment for approximately 256 mgd. The facility has a total permitted capacity of 400 mgd (LACSD, 2018).

Overall, approximately 160 mgd of capacity is available at the three treatment facilities serving the Planning Area.

Storm Water Drainage

Los Angeles County Flood Control District (LACFCD) manages Monterey Park's Storm water drainage and management facilities, although the City cleans and clears catch basins within the City limits. LACFCD serves more than 2,700 square miles within six major watersheds. The District includes drainage infrastructure for 86 incorporated cities as well as the unincorporated areas of Los Angeles County. This infrastructure includes the following:

- 14 major dams and reservoirs
- 483 miles of open channel and 27 spreading grounds
- 3,330 miles of underground storm drains,
- 47 pump plants
- 172 debris basins
- 27 sediment placement sites
- 3 seawater intrusion barriers
- 82,000 estimated catch basins (Los Angeles County Flood Control District, 2019).

Any new projects within the Planning Area will need to comply with the Los Angeles County MS4 permit and include storm water Low Impact Development (LID) Best Management Practices (BMPs). Additionally, under Title 6 (Health and Sanitation), the City's municipal code addresses Stormwater and Urban Runoff Pollution Prevention Controls (Chapter 6.30). The purpose of the practices and controls is to manage both the potential impacts of both the quantity of storm water runoff as well as impacts related to storm water quality.

Solid Waste

Solid waste collection within Monterey Park is provided by Athens Services for residential services; Athens Services and Ware Disposal are contracted for commercial waste and recycling services. According to CalRecycle (2019), Monterey Park had an annual per capita disposal rate of 4.0 pounds. According to the Los Angeles County Integrated Waste Management Plan (2019), waste from Monterey Park is sent to several different landfills and waste facilities in the region:

- Antelope Valley Recycling and Disposal Facility in Palmdale (Estimated remaining capacity: 12.3 million tons [County of Los Angeles, 2019])
- Azusa Land Reclamation in Azusa (Estimated remaining capacity: 55.7 million tons – inert waste only)
- Chiquita Canyon Landfill in Castaic (Estimated remaining capacity: 59.1 million tons)
- Commerce Refuse-to-Energy Facility in Commerce (Capacity does not apply)
- Lancaster Landfill in Lancaster (Estimated remaining capacity: 10.3 million tons)
- Savage Canyon Landfill in Whittier (Estimated remaining capacity: 4.7 million tons)

4.19 – Utilities and Service Systems

- Southeast Resource Recovery Facility in Long Beach (Transformation facility)
- Sunshine Canyon City/County Landfill in Sylmar (Estimated remaining capacity: 68.0 million tons)

According to the County of Los Angeles Countywide Integrated Waste Management Plan 2017 Annual Report (2019), a shortfall in permitted landfill capacity is not anticipated to occur in the next 15 years.

Electric Power and Natural Gas

Electrical service in the Planning Area is provided by Southern California Edison (SCE). SCE's service area covers approximately 50,000 square miles and includes 180 incorporated cities located in Central and Southern California. Natural Gas services are provided by SoCalGas (a subsidiary of Sempra Energy). SoCalGas serves 21.8 million customers in an approximately 24,000 square-mile service area located in Southern and Central California.

Telecommunication Facilities

Numerous telecommunications companies provide the Planning Area with an array of services.

4.19.2 – REGULATORY FRAMEWORK

Federal

Clean Water Act.

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) are responsible for ensuring implementation and compliance with the provisions of the Federal CWA.

National Pollution Discharge Elimination System (NPDES)

NPDES is a program created for consistency with the CWA. The CWA prohibits discharging "pollutants" through a "point source" into a "water of the United States" unless the action has an NPDES permit. The permit contains limits on what can be discharged, creates monitoring and reporting requirements, and mandates other provisions to ensure the discharge does not diminish water quality and people's health.

State

California Integrated Waste Management Act of 1989 (Public Resources Code §§ 40000, *et seq.*)

This Act requires cities and counties to prepare integrated waste management plans (IWMPs) and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. It also requires cities and counties to prepare Source Reduction and Recycling Elements (SRRE) as part of the IWMP. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the

purchase of recycled products.

California Safe Drinking Water Act (Health and Safety Code § 116270, *et seq.*)

The California Safe Drinking Water Act (SDWA), administered by The State Water Resources Control Board in coordination with the California Department of Public Health (CDPH), is the main law that ensures the quality of drinking water. It states, “This act shall be construed to ensure consistency with the requirements for states to obtain and maintain primary enforcement responsibility for public water systems under the federal Safe Drinking Water Act...”

California Department of Resources Recycling and Recovery (CalRecycle)

CalRecycle oversees, manages, and monitors waste generated in California. It provides limited grants and loans to help California cities, counties, businesses, and organizations meet the State waste reduction, reuse, and recycling goals. It also provides funds to clean up solid waste disposal sites and co-disposal sites, including facilities that accept hazardous waste substances and non-hazardous waste. CalRecycle develops, manages, and enforces waste disposal and recycling regulations (see below).

Water Supply Assessment and Verification (Water Code §§ 10910 through 10915)

The Water Code requires detailed information regarding water availability (water supply assessment, or WSA) to be provided to City decision-makers before considering residential developments (greater than 500 dwelling units). WSAs must be furnished to local governments for inclusion in any environmental document for certain projects as defined in Water Code § 10912, subject to the California Environmental Quality Act (CEQA). General Plans do not require their own WSAs, but future projects may require a WSA.

Statewide Water Conservation Act of 2009 (Water Code § 10608, *et seq.*)

In general, this Act requires a 20 percent reduction in per capita urban water use by 2020 with an interim 10 percent target in 2015. The legislation requires urban water users to develop consistent water use targets and to use those targets in their UWMPs. The Act also requires certain agricultural water suppliers to implement a variety of water conservation and management practices and to submit Agricultural Water Management Plans.

State Water Resources Control Board

The SWRCB, in coordination with nine Regional Water Quality Control Boards (RWQCBs), performs functions related to water quality, including issuance and oversight of wastewater discharge permits, other programs regulating storm water runoff, and underground and above-ground storage tanks. The SWRCB has also issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of a sewer system management plan (SSMP).

Title 22 of California Code of Regulations

Title 22 of the California Code of Regulations governs the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping, and other non-

agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and the California Department of Public Health (CDPH).

Urban Water Management Planning Act

In 1983 the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610–10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt an urban water management plan (UWMP) at least once every five years and submit it to the Department of Water Resources. Noncompliant urban water suppliers are ineligible to receive funding pursuant to Division 24 or Division 26 of the California Water Code, or to receive drought assistance from the State, until the UWMP is submitted and deemed complete pursuant to the Urban Water Management Planning Act.

Local

Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit

The City of Monterey Park is a permittee under the current Municipal Separate Storm Sewer System (MS4) Permit for Los Angeles County (Order No. R4-2012-0175). In order to comply with the updated MS4 Permit, a “Low Impact Development (LID) Standards Manual” was developed by the County (2014), in advance of the final permit, that details actions for compliance with the LID regulations, such as land development policies pertaining to LID and hydromodification for new development and significant redevelopment projects. The MS4 Permit became effective December 28, 2012 and contains requirements to improve efforts to reduce the discharge of pollutants in storm water runoff to the maximum extent practicable and to achieve water quality standards.

4.19.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Focused General Plan Update would have a significant impact related to utilities and service systems if it would:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- b) Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;
- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;
or
- e) Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

4.19.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to utilities and service systems that could result from implementation of the Project and recommends mitigation measures as needed to reduce significant impacts.

Impact UTS-1 – Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Analysis of Impacts

Water use could be expected to increase with the population allowed by the Project. The existing UWMP anticipates ample water supply is available to serve the projected Planning Area population in 2040. However, the population allowed by the Project is greater than the population assumed in the City of Monterey Park UWMP. It is foreseeable that there may be more demand for water than what was considered in the UWMP. Further low-water use techniques and increased use of water reuse/recycling would likely reduce the per capita use. Additionally, the providers have multiple stages of action, due to drought severity, that can significantly reduce water use during dry years. It should be noted that the projected increase in water use is partially offset by an anticipated increase in the use of recycled water for irrigation. However, it is possible that new or expanded facilities may be needed over the term of the Project to meet water demand. Any future expansion of existing facilities or construction of new facilities would be required to undergo environmental review pursuant to CEQA. Water-related impacts would be identified, along with measures to mitigate any significant impacts, as part of the CEQA compliance process for future project-specific proposals.

Wastewater is currently treated at multiple facilities in the region, including the following plants: (1) Los Coyotes Water Reclamation Plant (LCWRP), (2) the Long Beach Water Reclamation Plant (LBWRP); and (3) the Joint Water Pollution Control Plant (JWPCP). Combined, these plants have approximately 160 mgd of remaining capacity. The anticipated population increase in the Planning Area could likely increase the amount of wastewater delivered to the treatment facilities. Project implementation could increase the Planning Area population by 11,693 by the year 2040.

Using the LACSD estimate of 80 gallons per person per day of wastewater generation, a population increase of 11,693 could increase wastewater generation by approximately 0.94 mgd. This is well within the current capacity of the existing facilities. However, these facilities have larger service areas than what is covered by the Planning Area. Accordingly, population growth would likely result in increased incremental demand for wastewater facilities over the term of the Project. However, no immediate changes to the system or construction are needed to meet the incremental demands of growth anticipated under the Project. Over time, future development could require expanded wastewater facilities to meet the demand from anticipated population growth. Such impacts would be identified, along with measures to mitigate any significant impacts, as part of the CEQA compliance process for future project-specific proposals.

Storm water facilities are managed by LACFCD. Any new projects within the Planning Area would need to comply with the Los Angeles County MS4 permit and include storm water

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LIDBMPs. For example, as part of individual project design, storm water could be captured and used on-site via harvest and reuse or treated by biofiltration.

The potential increase in population allowed by the Project could also create the potential need for new or upgraded electric power, natural gas, and telecommunication facilities. These projects, if proposed, would need to comply with adopted, mandatory environmental regulations, including CEQA.

Level of Significance Before Mitigation

Less than significant

Mitigation Measures

None required.

Impact UTS-2 – Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Analysis of Impacts

As discussed under Impact UTS-1 above, water districts in the Planning Area completed UWMPs that assessed water supply availability under various scenarios, including average years, dry years, and multiple dry years. The assessments conclude that there is an ample supply of water; however, conservation practices would continue to be required, and contingency planning (such as reducing demand by 35-50 percent in a Stage 4 drought) would be required as necessary. The Project allows for growth in excess of what was considered in the Monterey Park UWMP. Therefore, it is not yet clear that sufficient water supplies exist based simply on the UWMP. It is possible that further conservation measures may be needed during multiple dry year periods.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

MM-UTS-1: The City will cooperate with the local water service providers, including CalWater, during the development of the Urban Water Management Plans (UWMP) over the term of the Project. The City will coordinate with these providers to ensure that future assessments of water reliability consider population projections as allowed by the Project. Additionally, the City (also a water provider) will consider the population growth, as anticipated under the Project, when developing UWMPs over the term of the proposed General Plan. If it is determined that existing conservation measures are inadequate to meet future water needs, the City will develop additional conservation measures or expand other options such as increased use of recycled water in coordinate with local water service providers.

Level of Significance After Mitigation

Less than Significant

Impact UTS-3 – 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?

Analysis of Impacts

As discussed under Impact UTS-1 above, the existing wastewater facilities have ample capacity for the increased demand for wastewater treatment as allowed by the Project. However, the facilities serve several other communities in the County as well. It is possible that the incremental increases in demand, as anticipated under the Project in conjunction with increased demand for other communities, could result in the need for future new or expanded wastewater treatment facilities. These projects, if proposed, would need to comply with adopted, mandatory environmental regulations, including CEQA.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

Impact UTS-4 – Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Analysis of Impacts

The City, working with private providers, will continue to implement a variety of solid waste reduction, recycling, and reuse measures to meet its legal obligations. These efforts will be coordinated with waste management programs; therefore, future landfill diversion rates may improve. However, although per-capita waste generation rates may improve, the Planning Area's population may grow with implementation of the Project. Under the Project, the Planning Area is expected to accommodate more commercial land uses. In order to estimate solid waste generation under the Project, a per-capita waste generation rate for the City of Monterey Park was used (4 pounds per day per resident). In 2040, the Planning Area may have an increase in population of 11,693. The net new amount of waste generated annually within the Planning Area (may be approximately 46,772 pounds per day (or 8,536 tons per year). This is likely a worse-case scenario as per-capita waste generation rates are expected to decline through various solid waste management practices. Currently, the County does not anticipate any shortfalls in landfill capacity through the next 15 years. However, a possibility of exceeding capacity towards the end of the Project planning horizon (2040) may occur. Any proposed new or expanded solid waste facility would need to comply with adopted, mandatory environmental regulations, including CEQA.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

Impact UTS-5 – Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Analysis of Impacts

Any individual, future project completed under the Focused General Plan Update is required to comply with all applicable federal, State, and local statutes and regulations related to solid waste management and reduction.

Level of Significance Before Mitigation

No impact

Mitigation Measures

None required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to utilities and service systems?

Analysis of Impacts

The Project forecasts a population increase of 11,693 residents and 2,730 employees through the year 2040. This growth would result in an overall increase in demand for utility services, likely requiring new or expanded facilities over the approximately 20-year planning horizon of the Project. Environmental impacts could occur when new or expanded facilities are constructed. Any proposed new or expanded facility is required to comply with adopted, mandatory environmental regulations, including CEQA.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

None required.

4.19.5 REFERENCES

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4.20 – Wildfire

This section describes the existing wildfire setting within the City of Monterey Park Planning Area identifying wildfire related regulations and evaluates the project's potential wildfire impacts

4.20.1 – ENVIRONMENTAL SETTING

Wildfires present a substantial hazard to life and property in communities built within or adjacent to hillsides and mountainous areas. Conventional development and changing weather patterns in Southern California resulted in a present and future risk of property damage/loss and threat to human health/safety because of wildland/urban interface fires.

Due to its weather, topography, and native vegetation, the entire Southern California area is at risk from wildland fires. Droughts characteristic of California's Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires. Furthermore, native vegetation typically has a high oil content that makes it highly flammable. The area is also intermittently impacted by Santa Ana winds, which are hot dry winds that blow across southern California in the spring and late fall.

As described in the Monterey Park Natural Hazards Mitigation Plan, three categories of interface fires occur: the classic wildland/urban interface exists where well-defined urban and suburban development presses up against open expanses of wildland areas; the mixed wildland/urban interface is characterized by isolated homes, subdivisions and small communities situated predominantly in wildland settings; and the occluded wildland/urban interface exists where islands of wildland vegetation occur inside a largely urbanized area. Certain conditions must be present for significant interface fires to occur. The most common conditions include hot, dry, and windy weather; the inability of fire protection forces to contain or suppress the fire; the occurrence of multiple fires that overwhelm committed resources; and a large fuel load (dense vegetation). Once a fire has started, several conditions influence its behavior including fuel, topography, weather, drought, and proximity to developed areas.

Monterey Park is a city that includes, and is surrounded by, urban development. The closest area identified by CAL FIRE as a Very High Fire Hazard Severity Zone is within the City of Los Angeles, approximately one-mile northwest of the City of Monterey Park (California Department of Forestry and Fire Protection, 2011). The largest undeveloped area near the City is associated with the recreational facilities southeast of the City; major roadways separate the City from these undeveloped areas. The Planning Area includes development located on grass and brush covered hillsides; the development within these areas are generally residential, recreational, or utility uses.

The Planning Area includes grass and brush covered hillsides that facilitate the rapid spread of fire. Additionally, the Planning Area typically has mild winters that can lead to an annual growth of grasses and plants. This vegetation dries out during the hot summer months and is exposed to Santa Ana wind conditions in the fall. Winds exceeding 40 miles per hour are typical; gusts in excess of 100 miles per hour may occur locally. In the Monterey Park area, these winds tend to travel from north to south. However, when combined with winds generated from burning vegetation, wind direction is likely to be extremely erratic.

4.20.2 – REGULATORY FRAMEWORK

State and local regulations related to wildfire are described below.

State

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wildlands. In addition, CAL FIRE provides varied emergency services in 36 of the State's 58 counties via contracts with local governments. The Department's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn more than 172,000 acres annually (California Department of Forestry and Fire Protection Website, 2019).

The Office of the State Fire Marshal supports the mission of CAL FIRE by focusing on fire prevention and provides support through a wide variety of fire safety responsibilities including: regulating buildings in which people live, congregate, or are confined; controlling substances and products that may, in and of themselves, or by their misuse, cause injuries, death and destruction by fire; providing statewide direction for fire prevention within wildland areas; regulating hazardous liquid pipelines; developing and reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

Part of CAL FIRE's mission is to prevent fires. The Department's Fire Prevention Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement. Common projects include fire break construction and other fire fuel reduction activities that lessen the risk of wildfire to communities. This may include brush clearance around communities, along roadways and evacuation routes.

State Fire Regulations

The State Fire Marshal (and Monterey Park Fire Department) is responsible for enforcing the California Fire Code which is promulgated by Title 24 of the California Code of Regulations, as adopted by the MPMC.

Public Resources Code Sections 4201–4204 - Fire Hazard Severity Zones

The Public Resources Code classify lands within state responsibility into fire hazard severity zones. Each zone is based on fuel loading, slope, fire weather, and other relevant factors present. The City of Monterey Park is not designated as a “very high fire hazard severity zone” within a Local Responsibility Area (California Department of Forestry and Fire Protection, Fire Resources Assessment Program, 2011).

Local

Monterey Park General Plan - Safety and Community Services Element

The Safety and Community Services Element addresses hazards in the physical and built environment and presents goals and policies focused on reducing the potential risk of death, injuries, property damage, and dislocation from hazards. Goals and policies related to wildfire are presented below:

- Goal 11.0: Provide City residents and the business community with a high level of fire protection.
 - Policy 11.1: Continue to fund maintenance and staffing to ensure a five- to six-minute fire response time citywide.
 - Policy 11.2: Maintain brush clearance and weed abatement programs to reduce the risk of fires.
 - Policy 11.4: Maintain mutual aid agreements with fire departments from surrounding jurisdictions.

City of Monterey Park Natural Hazard Mitigation Action Plan

The Natural Hazards Mitigation Action Plan identifies resources and information to assist City residents, public and private sector organizations, and other interested in participating in planning for natural hazards. The mitigation plan provides a list of activities that may assist Monterey Park in reducing risk and preventing loss from future natural hazard events. The plan addresses multi-hazard types, including earthquakes, flooding and wind storms.

4.20.3 – SIGNIFICANCE THRESHOLDS

Per the CEQA Guidelines, implementation of the Monterey Park General Plan Update would have a significant impact related wildfire if the project would be located in or near state responsibility areas or lands classified as very high hazard severity zones , if the project would:

- a) Substantially impair an adopted emergency response plan or emergency evacuated plan;
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- c) Require the installation or maintenance of associated infrastructure such as roads fuel breaks, emergency water sources, power lines or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result or runoff, post-fire slope instability, or drainage changes? sensitive receptors to substantial pollutant concentrations.

4.20.4 – IMPACTS AND MITIGATION MEASURES

This section describes potential impacts related to wildfires that could result from the implementation of the project and recommends mitigation measures as needed to reduce significant impacts.

Emergency Response Plans

Impact WIL-1 – Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Analysis of Impacts

No circulation changes are proposed as part of the Project.

Implementation of the Project would result in development and redevelopment projects within the City. In accordance with City polices, the City would review all development proposals to determine the possible impacts of each development on emergency services.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required.

Prevailing winds

Impact WIL-2 – Would the project result in impacts due to slope, prevailing winds, and other factors, exacerbating wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Analysis of Impacts

The City of Monterey Park is a developed urban area. The development associated with the Project is expected to occur primarily within Focus Areas; these areas of the City are developed. Additionally, maps prepared by CAL FIRE do not identify the City of Monterey Park as a very high fire hazard severity zone (California Department of Forestry and Fire Protection, 2011). The closest area identified by CAL FIRE as a very high fire hazard severity zone within a Local Responsibility Area is within the City of Los Angeles, approximately one mile northwest of the City of Monterey Park (California Department of Forestry and Fire Protection, 2011). The closest area identified by CAL FIRE as a very high fire hazard severity zone within a State Responsibility Area is within unincorporated Los Angeles County, approximately four miles southeast of the City of Monterey Park (California Department of Forestry and Fire Protection, 2007). In accordance with applicable law, the City will review all potential development proposals to determine the possible impacts of each development on emergency services. Furthermore, the existing General Plan policies would be applicable to new development on slopes:

- Policy 11.2: Maintain brush clearance and weed abatement programs to reduce the risk of fires.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required.

Maintenance of Infrastructure

Impact WIL-3 – Would the project require the installation or maintenance of associated infrastructure such as roads, fuel breaks, emergency water resources, powerlines, or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Analysis of Impacts

The City of Monterey Park is a developed urban area that currently includes roads, powerlines, and other utility infrastructure. Maps prepared by CAL FIRE do not identify the City of Monterey Park as within a very high fire hazard severity zone. The closest area identified by CAL FIRE as a very high fire hazard severity zone within a Local Responsibility Area is within the City of Los Angeles, approximately one mile northwest of the City of Monterey Park (California Department of Forestry and Fire Protection, 2011). The closest area identified by CAL FIRE as a very high fire hazard severity zone within a State Responsibility Area is within unincorporated Los Angeles County, approximately four miles southeast of the City of Monterey Park (California Department of Forestry and Fire Protection, 2007).

Any subsequent development associated with implementation of the Project is expected to be concentrated within Focus Areas; these areas of the City are already developed. The Project would not install utilities or infrastructure that would exacerbate fire risk. Also, if site specific development proposal involves the construction of such facilities they would be evaluated for fire risk through the City's development review process. The City will review all potential development proposals in accordance with applicable law to determine the possible impacts of each development on emergency services and potential fire risk.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required.

Expose People or Structures to Risk

Impact WIL-4 – Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Analysis of Impacts

The City of Monterey Park is a developed urban area. The subsequent development allowed by the Project is expected to occur primarily within Focus Areas; these areas of the City include existing development. Maps prepared by CAL FIRE do not identify the City of Monterey Park as within a very high fire hazard severity zone. The Project is not expected to expose people or structures to hazards associated with post-fire slope instability. The City will review all potential development proposals in accordance with applicable law to determine the possible impacts of each development on emergency services. Furthermore, the existing General Plan policies would be applicable to new development on slopes and further reduce any potential impact. The relevant policies are listed below.

- Policy 3.2: Require that hillside developments incorporate measures that mitigate slope failure potential and provide for long-term slope maintenance.
- Policy 3.3: Develop a comprehensive approach to remediating unstable hillslopes in the vicinity of Abajo Drive.

4.20 – Wildfire

- Policy 11.2: Maintain brush clearance and weed abatement programs to reduce the risk of fires.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required.

Cumulative Impacts

Would the project cause substantial adverse cumulative impacts with respect to Wildfire?

Analysis of Impacts

The City of Monterey Park is a developed urban area. The subsequent development allowed by the Project is expected to occur primarily within Focus Areas; these areas of the City include existing development. Additionally, maps prepared by CAL FIRE do not identify the City of Monterey Park as within a very high fire hazard severity zone. Implementation of the General Plan Update would not cause a substantial adverse cumulative impacts with respect to wildfire.

Level of Significance Before Mitigation

Less than Significant

Mitigation Measures

No mitigation is required

4.20.5 REFERENCES

California Department of Forestry and Fire Protection Website, 2019.
(<http://calfire.ca.gov/about/about> access April 30, 2019).

California Department of Forestry and Fire Protection, Fire Resources Assessment Program, 2011. *Very High Fire Hazard Severity Zones in LRA, Los Angeles County*, September
(http://frap.fire.ca.gov/webdata/maps/los_angeles/LosAngelesCounty.pdf accessed May 1, 2019)

California Department of Forestry and Fire Protection, Fire Resources Assessment Program, 2007. *Very High Fire Hazard Severity Zones in SRA, Los Angeles County*, November 7.

City of Monterey Park, 2001. *City of Monterey Park General Plan, Safety and Community Services Element*, July 18.

Emergency Management Services, September 2004, *City of Monterey Park, Natural Hazards Mitigation Planning*.

5 – Alternatives

CEQA Guidelines Section 15126.6 requires an EIR to *"describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."* The section also states that *"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 those alternatives would impede to some degree the attainment of the project objectives, or would be more costly."*

Pursuant to CEQA Guidelines Section 15126.6, this chapter describes three alternatives to the Monterey Park Focused General Plan Update including the CEQA-mandated "No Project" Alternative; it compares the impacts of each alternative to the Focused General Plan Update. Pursuant to the CEQA Guidelines, the ability of the alternatives to meet the basic project objectives is also described, and the "environmentally superior" alternative among the three is identified.

5.1 – RATIONALE FOR ALTERNATIVE SELECTION

In accordance with CEQA Guidelines Section 15126.6(a), an EIR does not need to evaluate every conceivable alternative. A feasible range of alternatives has been evaluated that allows decision-makers to make a reasoned choice and that meet most of the project objectives. The project objectives included in Chapter 3, Project Description, are:

1. Encourage economic investment and revitalization within the City's Focus Areas.
2. Create new housing opportunities for a full range of housing types and to increase housing affordability.
3. Encourage infill development within underutilized areas of the City.
4. Accommodate job-generating land uses in order to increase employment in the City.
5. Accommodate commercial/retail uses in order to expand the City's tax base.

While selecting alternatives to be considered for analysis, the City focused on analyzing those alternatives that could potentially reduce the significant unavoidable effects related to the Project and which would also achieve project objectives.

5.2 – ALTERNATIVES CONSIDERED

The three alternatives evaluated are:

- Alternative 1: No Project/Existing 2001 General Plan
- Alternative 2: Market Demand
- Alternative 3: Reduced Density/Intensity

In accordance with CEQA Guidelines Section 15126.6(d), the discussion of impacts associated with the alternatives is less detailed than the evaluation included in Chapters 4.1 through 4.20 of the impacts associated with implementation of the Focused General Plan Update. Table 5-1 shows the development assumptions of each alternative. Table 5-2 shows how impacts associated with the implementation of the alternatives compare to the impacts associated with implementation of the Project; the reader is advised to refer to the accompanying text for a fuller explanation.

**Table 5-1
Land Use Alternatives**

Land Use	Existing Conditions	Proposed Project	Net Change		
			Alternatives		
			No Project	Market Demand	Reduced Density/Intensity
Commercial (SF)	5,741,492	+619,932	0	+513,000	+413,247
Office (SF)	5,252,164	+ 883,902	0	+380,000	+597,608
Industrial (SF)	2,025,800	-239,742	0	0	-159,812
Hotels/Motels (rooms)	727	+607	0	+100	+405
Residential (units)	22,482	+3,816	+1,870	+1,020	+2,544
Population	68,888	+11,693	+5,722	+3,121	+7,785

Source: MIG, 2019.

**Table 5-2
Alternatives' Impacts Compared to Project Impacts**

	Alternative 1: No Project/2001 General Plan	Alternative 2: Market Demand	Alternative 3: Reduced Density/Intensity
Aesthetics	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Agriculture and Forestry Resources	Similar no impact	Similar no impact	Similar no impact
Air Quality	Reduced to less-than-significant impacts	Reduced significant unavoidable impacts	Reduced significant unavoidable impacts
Biological Resources	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Cultural Resources	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Energy	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Geology and Soils	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Greenhouse Gas Emissions	Reduced to less-than-significant impacts	Reduced significant unavoidable impacts	Reduced significant unavoidable impacts
Hazards and Hazardous Materials	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Hydrology and Water Quality	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Land Use and Planning	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Mineral Resources	Similar no impact	Similar no impact	Similar no impact
Noise	Reduced to less-than-significant impacts	Reduced significant unavoidable impacts	Reduced significant unavoidable impacts

	Alternative 1: No Project/2001 General Plan	Alternative 2: Market Demand	Alternative 3: Reduced Density/Intensity
Population and Housing	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Public Services	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Recreation	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Transportation	Reduced significant unavoidable impacts	Reduced significant unavoidable impacts	Reduced significant unavoidable impacts
Tribal Cultural Resources	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Utilities and Service Systems	Reduced less-than-significant impacts	Reduced less-than-significant impacts	Reduced less-than-significant impacts
Wildfire	Similar less-than-significant impacts	Similar less-than-significant impacts	Similar less-than-significant impacts
Source: MIG, 2019			

5.3 – ALTERNATIVE 1: NO PROJECT/EXISTING 2001 GENERAL PLAN

5.3.1 – Principal Characteristics

The No Project/Existing 2001 General Plan Alternative (No Project Alternative) assumes that development would occur within the Planning Area, but only development anticipated under the 2001 General Plan. Development assumptions for this alternative are shown in Table 5-1. The 2001 General Plan is 20 years old. Accordingly, the baseline data used for the original analysis is unavailable. For this alternative, it is assumed that only new residential development could occur; no new office, commercial, industrial, or hotel development would be constructed. Additionally, no new policies, goals, or development standards associated with the Focused General Plan Update would be implemented; the standards, goals, and policies associated with the 2001 General Plan would be applicable.

5.3.2 – Analysis of No Project/Existing 2001 General Plan Alternative

The potential impacts associated with the No Project Alternative are described below.

- a. **Aesthetics.** The No Project Alternative assumes development would occur under the existing development standards. The Focused General Plan Update includes changes to the development standards to allow for an increase in height and density. Because the development under the No Project Alternative would occur with existing development standards, development under this alternative would likely be less tall and less intense. However, as with the Project, aesthetic impacts are anticipated to be less-than-significant under the No Project Alternative; no protected scenic views are identified by the 2001 General Plan, and there are no scenic highways within or adjacent to the Planning Area. Any new development under the No Project Alternative would be required to undergo design review, which would ensure compliance with regulations and review for potential light and glare. This alternative would result in a reduced less-than-significant impact, when compared to the Project, given the significant reduction in development associated with this alternative.

- b. Agriculture and Forestry Resources. No agriculture or forestry resources are within the Planning Area. Similar to the Project, this alternative would have no impact on agriculture and forestry resources.
- c. Air Quality. The Project would result in a significant unavoidable air quality impact. This alternative would result in a significant reduction in development compared to the Project; as such, there would be a significant reduction in the air quality emissions associated with the alternative. While no specific air quality modeling was undertaken for the alternative, it is likely that the air quality significant impacts associated with the Project would be reduced to a less-than-significant level under this alternative.
- d. Biological Resources. As with the Project, development under this alternative would occur within urban areas that currently have existing development. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including site-specific pre-construction surveys when development projects are proposed. Similar to the Project, this alternative would have a less-than-significant impact on biological resources with the implementation of identified mitigation measures.
- e. Cultural Resources. As with the Project, development under the No Project Alternative could uncover previously unknown cultural resources or destroy/change structures that could be considered historic. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including evaluation of structures over 45 years old to determine historic significance. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with implementation of the identified mitigation and adherence to existing regulations.
- f. Energy. As with the Project, development associated with the No Project Alternative would require the consumption of electricity, natural gas, and vehicle fuel resources to accommodate growth. Development under this alternative would have reduced energy consumption compared to the Project. Given the reduced level of development, this alternative would have a reduced less-than-significant energy impact compared to the Project.
- g. Geology and Soils. The same policies and regulations regarding geology and soils would be applicable to the No Project Alternative as to the Project. In addition, both the alternative and the Project would be exposed to the same existing geologic conditions within Monterey Park. The No Project Alternative would have a less-than-significant geology impact, and would be considered similar to the Project.
- h. Greenhouse Gas Emissions. The Project would result in a significant unavoidable greenhouse gas (GHG) emissions impact. This alternative would result in a significant reduction in development compared to the Project; as such, there would be a significant reduction in GHG emissions associated with the alternative. While no specific GHG modeling was undertaken for the alternative, it is likely that the GHG emissions significant impacts associated with the Project would be reduced to a less-than-significant level under this alternative.
- i. Hazards and Hazardous Materials. Hazardous materials would be present during construction and operation of development associated with the No Project Alternative. The amount and use of these chemicals present during construction would be limited, would be in compliance with existing government regulations, and would not be considered a significant hazard. As with the Project, any future development under this alternative would be subject to the City's standard environmental review, which would include identification of any contaminated sites possibly not already identified and implementation of

appropriate cleanup and disposal procedures. The No Project Alternative would have a less-than-significant hazards and hazardous materials impact, and would be considered similar to the Project.

- j. Hydrology and Water Quality. Development associated with implementation of the No Project Alternative would be subject to all existing water quality regulations and programs. This alternative assumes a population and housing increase that would be less than the Project; however, the mitigation measure regarding water supply would still be required under this alternative. The No Project Alternative would have a less-than-significant hydrology and water quality impact, and would be considered similar to the Project.
- k. Land Use and Planning. As with the Project, the No Project Alternative would not physically divide an established community. Development would be consistent with the adopted 2001 General Plan, and would not conflict with regulations adopted to avoid environmental effects. Similar to the Project, this alternative would have a less-than-significant land use and planning impact.
- l. Mineral Resources. There are no regionally valuable mineral resources or mineral resource recovery sites within the Planning Area. Similar to the Project, this alternative would have no impact on mineral resources.
- m. Noise. The Project would result in a significant unavoidable noise impact. The No Project Alternative would result in significantly less development than the Project. Under this alternative, measures would still be required to ensure that construction noise is mitigated for projects located near sensitive receptors. Due to the substantial reduction in development along Atlantic Boulevard under this alternative, the traffic noise impact would likely be reduced to a less-than-significant level compared to the Project.
- n. Population and Housing. This alternative would result in less residential development and population growth compared to the Project, and would be more in-line with population forecasts prepared by SCAG. Given the reduction in population and housing, this alternative would result in a reduced less-than-significant impact related to population and housing.
- o. Public Services. This alternative would result in a reduced amount of residential development, and population and employment growth, which would result in less demand for public services compared to the Project. This alternative would result in a reduced less-than-significant public services impact compared to the Project.
- p. Recreation. This alternative would result in a reduced amount of residential development and population growth, which would result in less demand for recreational facilities compared to the Project. This alternative would result in a reduced less-than-significant recreation impact compared to the Project.
- q. Transportation. The Project would result in a significant unavoidable transportation impact. This alternative would result in significantly less development than would occur with implementation of the Project. Given the significant reduction in development associated with this alternative, it is likely that several of the intersections that were impacted by the Project would not be impacted under this alternative. The transportation impacts associated with this alternative would be reduced when compared to the Project, but significant unavoidable impacts are expected to remain.
- r. Tribal Cultural Resources. As with the Project, development under the No Project Alternative could uncover previously unknown Tribal Cultural Resources. Compliance with existing regulations regarding burial grounds and consultation with Native American tribes

would ensure that potential impact would be reduced. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with adherence to existing regulations.

- s. Utilities and Service Systems. This alternative would result in a reduced amount of development and population and employment growth, which would result in less demand for utilities services compared to the Project. While this alternative assumes a population and housing increase that would be less than the Project, the mitigation measure regarding water supply would still be required under this alternative. This alternative would have a reduced less-than-significant utilities and service system impact when compared to the Project.
- t. Wildfire. As with the Project, under the No Project Alternatives the Planning Area is not within areas identified as a very high fire hazard severity zone. The existing Safety and Community Services Element policies regarding brush clearance and weed abatement would continue to be applicable, and in accordance with City policies, the City would review all potential development proposals to determine the possible impacts of each development on emergency services and potential fire risk. Similar to the Project, this alternative would result in a less-than-significant wildfire impact.

Attainment of Project Objectives

As this alternative does not include commercial, office, or hotel development, the No Project Alternative would not meet the following project objectives:

- 1. Encourage economic investment and revitalization within the City's Focus Areas.
- 2. Accommodate job-generating land uses in order to increase employment in the City.
- 3. Accommodate commercial/retail uses in order to expand the City's tax base. Given the significant reduction in residential development associated with this alternative, the No Project Alternative would attain the following objective, but not to the same degree as the Project:
- 4. Create new housing opportunities for a full range of housing types and to increase housing affordability.
- 5. Encourage infill development within underutilized areas of the City.

5.4 – ALTERNATIVE 2: MARKET DEMAND

5.4.1 – Principal Characteristics

Alternative 2 is a “market-adjusted” development scenario that evaluates the portion of Focused General Plan Update capacity that would likely be built by 2040, based on current and foreseeable market trends. The Market Demand Alternative reflects a reduced amount of residential, commercial, office and hotel development. This alternative assumes that policies, goals, or development standards associated with the Focused General Plan Update would apply to this alternative. Development assumptions for this alternative are shown in Table 5-1.

5.4.2 – Analysis of Market Demand Alternative

- a. Aesthetics. While the total amount of development under the Market Demand Alternative would be less than the Project, the Market Demand Alternative assumes new development

would occur under the proposed development standards, which would allow for denser and taller structures than currently allowed. As with the Project, aesthetic impacts are anticipated to be less-than-significant under the Market Demand Alternative; no protected scenic views are identified by the General Plan and there are no scenic highways within or adjacent to the Planning Area. Any new development under the Market Demand Alternative would be required to undergo design review, which would ensure compliance with regulations and review potential for light and glare. Given the reduction in the total amount of development, this alternative would result in a reduced less-than-significant impact on aesthetics.

- b. **Agriculture and Forestry Resources.** No agriculture or forestry resources are within the Planning Area. Similar to the Project, this alternative would have no impact on agriculture and forestry resources.
- c. **Air Quality.** The Project would result in a significant unavoidable air quality impact. While the Market Demand Alternative would substantially decrease the amount of residential development when compared to the Project, this alternative would likely not be consistent with SCAG forecasts for Monterey Park; as such, this alternative would likely not be consistent with the SCAQMD 2016 Air Quality Management Plan (2016 AQMP). Given the reduction in non-residential square footage (commercial and office) combined with a substantial reduction in residential units, air emissions associated with the alternative would be reduced compared to the Project. However, it is likely that air quality mitigation measures needed for the Project would also be required for this alternative. Air quality emissions associated with this alternative would be reduced compared to the Project but would still be expected to be significant and unavoidable.
- d. **Biological Resources.** As with the Project, development under this alternative would occur within urban areas that currently have existing development. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including site-specific pre-construction surveys when development projects are proposed. Similar to the Project, this alternative would have less-than-significant impact on biological resources with the implementation of identified mitigation measures.
- e. **Cultural Resources.** As with the Project, development associated the Market Demand Alternative could uncover previously undiscovered cultural resources or destroy/change structures that could be considered historic. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including evaluation of structures over 45 years old to determine historic significance. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with implementation of the identified mitigation and adherence to existing regulations.
- f. **Energy.** As with the Project, development associated with the Market Demand Alternative would require the consumption of electricity, natural gas, and vehicle fuel resources to accommodate growth. This alternative supports redevelopment of existing land uses with newer, more efficient development that would reduce energy consumption compared to existing conditions. Given the reduction in development, this alternative would have a reduced less-than-significant energy impact compared to the Project.
- g. **Geology and Soils.** The same policies and regulations regarding geology and soils would be applicable to the Market Demand Alternative as to the Project. In addition, both the alternative and the Project would be exposed to the same existing geologic conditions

within Monterey Park. The Market Demand Alternative would have a less-than-significant geology impact, and would be considered similar to the Project.

- h. Greenhouse Gas Emissions. The Project would result in a significant unavoidable greenhouse gas (GHG) emissions impact. This alternative has a reduced amount of development compared to the Project. While overall GHG emissions associated with the alternative would be reduced, it is likely that mitigation measures identified for the Project would also be required for this alternative. GHG emissions associated with this alternative would be reduced compared to the Project but would still likely result in significant and unavoidable impacts.
- i. Hazards and Hazardous Materials. Hazardous material would be present during construction and operation of development associated with the Market Demand Alternative. The amount and use of these chemicals present during construction would be limited, would be in compliance with existing government regulations, and would not be considered a significant hazard. As with the Project, any future development under the Market Demand Alternative would be subject to the City's standard environmental review, which would include identification of any contaminated sites possibly not already identified and implementation of appropriate cleanup and disposal procedures. The Market Demand Alternative would have a less-than-significant hazards and hazardous materials impact, and would be considered similar to the Project.
- j. Hydrology and Water Quality. Development associated with implementation of this alternative would be subject to all existing water quality regulations and programs. This alternative assumes a population and housing increase that would be less than the Project; however, the mitigation measure regarding water supply would still be required under this alternative. The Market Demand Alternative would have a less-than-significant hydrology and water quality impact, and would be considered similar to the Project.
- k. Land Use Planning. As with the Project, the Market Demand Alternative would not physically divide an established community. All goals and policies associated with the Project would be applicable to this alternative as well. Similar to the Project, this alternative would have a less-than-significant land use impact.
- l. Mineral Resources. No regionally valuable mineral resources or mineral resource recovery sites are within the Planning Area. Similar to the Project, this alternative would have no impact on mineral resources.
- m. Noise. The Project would result in a significant unavoidable noise impact. Implementation of this alternative would result in a reduced amount of development compared to the Project. Under this alternative, measures would still be required to ensure that construction noise is mitigated for projects located near sensitive receptors. While development would be reduced under this alternative, and the traffic noise impact reduced compared to the Project, this impact would still likely be significant and unavoidable.
- n. Population and Housing. This alternative would result in less residential development and population growth, and would be more in-line with population forecast prepared by SCAG. This alternative would result in a reduced less-than-significant impact related to population and housing compared to the Project.
- o. Public Services. This alternative would result in a reduced amount of residential development and population growth, which would result in less demand for public services when compared to the Project. As with the Project, this alternative would result in a less-than-significant public services impact.

- p. Recreation. This alternative would result in a reduced amount of residential development and population growth, which would result in less demand for recreational facilities when compared to the Project. Given the reduction in residential growth, this alternative would result in a reduced less-than-significant recreation impact.
- q. Transportation. The Project would result in a significant unavoidable transportation impact. This alternative would result in a reduction in development compared to the Project. Given the reduction, it is possible that some of the intersections that were impacted by the Project would not be impacted under this alternative. The transportation impacts associated with this alternative would be reduced when compared to the Project, but significant unavoidable impacts are expected to remain.
- r. Tribal Cultural Resources. As with the Project, development under the Market Demand Alternative could uncover previously unknown Tribal Cultural Resources. Compliance with existing regulations regarding burial grounds and consultation with Native American tribes would ensure that potential impacts would be reduced. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with adherence to existing regulations.
- s. Utilities and Service Systems. This alternative would result in a reduced amount of residential development and population growth, which would result in less demand for utilities services when compared to the Project. While this alternative assumes a population and housing increase that would be less than the Project, the mitigation measure regarding water supply would still be required under this alternative. The Market Demand Alternative would have a reduced less-than-significant utilities and service system impact compared to the Project.
- t. Wildfire. As with the Project and under the Market Demand Alternative, the Planning Area is not identified as within a very high fire hazard severity zone. The existing Safety and Community Services Element policies regarding brush clearance and weed abatement would continue to be applicable, and in accordance with City policies, the City would review all potential development proposals to determine the possible impacts of each development on emergency services and potential fire risk. Similar to the Project, this alternative would result in a less-than-significant wildfire impact.

Attainment of Project Objectives

Given the reduction in development associated with this alternative, the Market Demand Alternative would attain the following objective, but not to the same degree as the Project would:

1. Encourage economic investment and revitalization within the City's Focus Areas.
2. Create new housing opportunities for a full range of housing types and to increase housing affordability.
3. Encourage infill development within underutilized areas of the City.
4. Accommodate job-generating land uses in order to increase employment in the City.
5. Accommodate commercial/retail uses in order to expand the City's tax base.

5.5 – ALTERNATIVE 3: REDUCED DENSITY/INTENSITY

5.5.1 – Principal Characteristics

The Reduced Density/Intensity Alternative assumes that overall development associated with the Project would be reduced by one third (33 percent). While the amount of development would be reduced, this alternative assumes that policies, goals, and development standards associated with the Focused General Plan Update would be applicable to development under this alternative. Development assumptions for this alternative are shown in Table 5.1.

5.5.2 – Analysis of Reduced Density/Intensity Alternative

- a. **Aesthetics.** While the total amount of development under the Reduced/Density Intensity Alternative would be less than the Project, this alternative assumes new development would occur under the proposed development standards, which would result in denser and taller structures than currently allowed. As with the Project, aesthetic impacts are anticipated to be less-than-significant under this alternative; no protected scenic views are identified by the General Plan, and there are no scenic highways within or adjacent to the Planning Area. Any new development under this alternative would be required to undergo design review, which would ensure compliance with regulations and review potential for light and glare. Given the reduction in the total amount of development, this alternative would result in a reduced less-than-significant impact on aesthetics.
- b. **Agriculture and Forestry Resources.** No agriculture or forestry resources are within the Planning Area. Similar to the Project, this alternative would have no impact on agriculture and forestry resources.
- c. **Air Quality.** The Project would result in a significant unavoidable air quality impact. The Reduced Density/Intensity Alternative would not be consistent with SCAG forecasts for Monterey Park; as such, this alternative would likely not be considered consistent with the SCAQMD 2016 Air Quality Management Plan (2016 AQMP). Because this alternative has a reduced level of development when compared to the Project, the overall air emissions generated by this alternative would be reduced; however, it is likely that air quality mitigation measures needed for the Project would also be required for this alternative. This alternative would likely result in reduced, but still significant and unavoidable, impacts compared to the Project.
- d. **Biological Resources.** As with the Project, development under this alternative would occur within urban areas that currently have existing development. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including site-specific pre-construction surveys when development projects are proposed. Similar to the Project, this alternative would have less-than-significant impact on biological resources with the implementation of identified mitigation measures.
- e. **Cultural Resources.** As with the Project, development under this alternative could uncover previously unknown cultural resources or destroy/change structures that could be considered historic. Mitigation measures required under this alternative would likely be similar to those identified for the Project, including evaluation of structures over 45 years old to determine historic significance. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with implementation of the identified mitigation and adherence to existing regulations.

- f. Energy. As with the Project, development associated with this alternative would require the consumption of electricity, natural gas, and vehicle fuel resources to accommodate growth. This alternative supports redevelopment of existing land uses with newer, more efficient development that would reduce energy consumption compared to existing conditions. Given the reduction in development, this alternative would have a reduced less-than-significant energy impact compared to the Project.
- g. Geology and Soils. The same policies and regulations regarding geology and soils would be applicable to this alternative as to the Project. In addition, both the alternative and the Project would be exposed to the same existing geologic conditions within Monterey Park. The Reduced Density/Intensity Alternative would have a less-than-significant geology impact, and would be considered similar to the Project.
- h. Greenhouse Gas Emissions. The Project would result in a significant unavoidable greenhouse gas (GHG) emissions impact. This alternative has reduced residential and commercial/office/industrial development compared to the Project. While overall GHG emissions associated with the alternative would be reduced due to the decrease in development, it is likely that mitigation measures identified for the Project would also be required for this alternative. Given the reduction in development associated with this alternative, GHG emissions associated with this alternative would be reduced compared to the Project but would still likely result in significant and unavoidable impacts.
- i. Hazards and Hazardous Materials. Hazardous material would be present during construction and operation of development associated with the Reduced Density/Intensity Alternative. The amount and use of these chemicals present during construction would be limited, would be in compliance with existing government regulations, and would not be considered a significant hazard. As with the Project, any future development under this alternative would be subject to the City's standard environmental review, which would include identification of any contaminated sites possibly not already identified and implementation of appropriate cleanup and disposal procedures. The Reduced Density/Intensity Alternative would have a less-than-significant hazards and hazardous materials impact, and would be considered similar to the Project.
- j. Hydrology and Water Quality. Development under this alternative would be subject to all existing water quality regulations and programs. This alternative assumes a population and housing increase that would be less than the Project; however, the mitigation measure regarding water supply would still be required under this alternative. This alternative would have a less-than-significant hydrology and water quality impact, and would be considered similar to the Project.
- k. Land Use Planning. As with the Project, this alternative would not physically divide an established community. All goals and policies associated with the Project would be applicable to this alternative as well. Similar to the Project, this alternative would have a less-than-significant land use impact.
- l. Mineral Resources. No regionally valuable mineral resources or mineral resource recovery sites are within the Planning Area. Similar to the Project, this alternative would have no impact on mineral resources.
- m. Noise. The Project would result in a significant unavoidable noise impact. Implementation of this alternative would result in less development than the Project. Under this alternative, measures would still be required to ensure that construction noise is mitigated for projects located near sensitive receptors. While development would be reduced under this

alternative, and the traffic noise impact reduced compared to the Project, this impact would still likely be significant and unavoidable.

- n. Population and Housing. This alternative would result in less residential development and population growth. Compared to the Project, this alternative would result in a reduced less-than-significant impact related to population and housing.
- o. Public Services. This alternative would result in a reduced amount of development and population growth, which would result in less demand for public services when compared to the Project. This alternative would result in a reduced less-than-significant public services impact compared to the Project.
- p. Recreation. This alternative would result in a reduced amount of residential development and population growth, which would result in less demand for recreational facilities. This alternative would result in a reduced less-than-significant recreation impact.
- q. Transportation. The Project would result in a significant unavoidable transportation impact. This alternative would result in significantly less development than would occur under the Project. Given the significant reduction in development associated with this alternative, it is likely that several of the intersections that were impacted by the Project would not be impacted under this alternative. The transportation impacts associated with this alternative would be reduced compared to the Project, but significant unavoidable impacts are expected to remain.
- r. Tribal Cultural Resources. As with the Project, development under this alternative could uncover previously unknown Tribal Cultural Resources. Compliance with existing regulations regarding burial grounds and consultation with Native American tribes would ensure that potential impact would be reduced. Similar to the Project, this alternative would have a less-than-significant impact on cultural resources with adherence to existing regulations.
- s. Utilities and Service Systems. This alternative would result in a reduced amount of residential development and population and employment growth, which would result in less demand for utility services when compared to the Project. While this alternative assumes a population and housing increase that would be less than the Project, the mitigation measure regarding water supply would still be required under this alternative. This alternative would have a reduced less-than-significant utilities and service system impact, and would be considered similar to the Project.
- t. Wildfire. As with the Project, under this alternative the Planning Area is not identified as within a very high fire hazard severity zone. The existing Safety and Community Services Element policies regarding brush clearance and weed abatement would continue to be applicable, and in accordance with City polices, the City would review all potential development proposals to determine the possible impacts of each development on emergency services and potential fire risk. Similar to the Project, this alternative would result less-than-significant wildfire impact.

Attainment of Project Objectives

Given the reduction in development associated with this alternative, the Reduced Density/Intensity Alternative would attain the following objectives, but not to the same degree as the Project would:

1. Encourage economic investment and revitalization within the City's Focus Areas.

2. Create new housing opportunities for a full range of housing types and to increase housing affordability.
3. Encourage infill development within underutilized areas of the City.
4. Accommodate job-generating land uses in order to increase employment in the City.
5. Accommodate commercial/retail uses in order to expand the City's tax base.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines Section 15126.2(e)(2) state: *"If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."* Other than the No Project Alternative, Alternative 3: Reduced Density/Intensity would result in the least adverse environmental impacts and would therefore be the "environmentally superior alternative." This conclusion is based on the comparative impact conclusions in Table 5-2 and the analysis within this chapter. However, this alternative would not fully meet the objectives at the same level as the Project.

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6 – CEQA Conclusions

As required by CEQA, this chapter discusses the following types of impacts that could result from implementation of the Focused General Plan Update: growth-inducing effects, significant unavoidable adverse impacts, cumulative impacts, significant irreversible environmental changes, and effects found not to be significant.

6.1 – GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(e) states that an EIR shall: “*Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly, in the surrounding environment....It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*” Implementation of the Focused General Plan Update would foster economic growth, resulting in population growth and the construction of additional housing units and non-residential development within the Planning Area.

As shown in Table 3-4, included in Chapter 3, Project Description, implementation of the Focused General Plan allows for the following net new development: 3,816 dwelling units; 619,932 square feet of new commercial uses; 883,902 square feet of new office space; and 607 hotel rooms.

New development could result in an estimated 11,693 new residents and 2,730 new employees within the Planning Area, resulting in a 17 percent population increase over the next 20 years. This population increase is more growth than the 2016-2040 RTP/SCS anticipates for the City of Monterey Park between 2020 and 2040 (2,400 residents); however, the City’s estimated current population also exceeds the 2016-2040 RTP/SCS 2035 population forecast for the City. The 2016-2040 RTP/SCS does anticipate significant population and housing growth within the Los Angeles County region – an increase of approximately 1,188,600 residents and 452,900 households by 2040. Implementation of the Focused General Plan Update could result in the addition of planned housing units, which would help to meet the anticipated regional housing demand.

Growth within the Planning Area would generate jobs and City revenue. Anticipated population and employment growth under the Project would be concentrated in the identified Focus Areas, which currently include urban development.

6.2 – SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

CEQA Guidelines Section 15126.2(c) requires that the EIR discuss “*significant environmental effects which cannot be avoided if the proposed project is implemented.*” Significant unavoidable impacts are those that could not be reduced to less-than-significant levels by feasible mitigation measures. The Focused General Plan Update could result in the following significant unavoidable impacts:

- Impact AIR-1: Conflict with or obstruct implementation of applicable air quality plan (Chapter 4.3)
- Impact AIR-2 (Operational): 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 (Chapter 4.3)

- Impact GHG-1 (Operational): Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment (Chapter 4.8)
- Impact GHG-2 (Plan Consistency): Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (Chapter 4.8)
- Impact NOISE-2 (Operational): Result in the generation of a substantial permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Chapter 4.13)
- Impact TRANS-1 (Plan Consistency): Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (Chapter 4.17)

6.3 – CUMULATIVE IMPACTS

The Focused General Plan Update could result in a cumulatively considerable contribution and thus a significant impact related to the following:

- Impact AIR-1: Conflict with or obstruct implementation of applicable air quality plan (Chapter 4.3)
- Impact AIR-2 (Operational): 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 (Chapter 4.3)
- Impact GHG-1 (Operational): Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment (Chapter 4.8)
- Impact GHG-2 (Plan Consistency): Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (Chapter 4.8)
- Impact NOISE-2 (Operational): Result in the generation of a substantial permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Chapter 4.13)
- Impact TRANS-1 (Plan Consistency): Conflict with program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (Chapter 4.17)

6.4 - IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(d) requires that an EIR also discuss *"significant irreversible environmental changes which would be caused by the proposed project should it be implemented."*

The Focused General Plan Update could commit future generations to an increase in development intensity within the Focus Areas. Given the significant private investments associated with these changes, and the anticipated lifetime of these improvements, these changes would not likely be reversed or significantly changed for many years. Implementation of the Focused General Plan Update would not be expected to involve significant quantities of

hazardous materials, nor substantial potential for environmental accidents. While development allowed by the implementation of the Project would involve the use, transport, storage, and disposal of hazardous materials, such activities would comply with existing federal, State, and County regulations and standards, and the routine practices of regulatory and oversight agencies, which would reduce the likelihood and severity of environmental accidents that could result in irreversible environmental damage.

Development allowed by the Project implementation would irreversibly commit construction materials and non-renewable energy resources. These energy resource demands would be used for demolition, construction, transportation of people and goods, heating, ventilation and air conditioning, lighting, and other associated energy needs (see EIR Chapter 4.6, Energy).

Non-renewable and slowly renewable resources consumed by Project implementation would include, but not be limited to, lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel; copper; other metals; water; etc. The impacts of the Focused General Plan Update related to consumption of non-renewable and slowly renewable resources are considered to be less than significant because these projects would not use unusual amounts of energy or construction materials.

The Project supports redevelopment of existing land uses with newer, more efficient development that would reduce energy consumption compared to existing conditions. In addition, the Project could facilitate higher density, mixed use development that could reduce vehicle miles traveled (VMT) and fuel consumption as compared to other, more suburban types of development. The use of energy resources in the Planning Area could become substantially more efficient over time with the changes in land uses envisioned by the Project and the application of more stringent regulations that mandate energy efficiency.

6.5 – EFFECTS FOUND NOT TO BE SIGNIFICANT

The Draft EIR covers all 20 of the CEQA Appendix G checklist environmental topics. No topics suggested for consideration in the CEQA Statute or Guidelines have been eliminated from detailed analysis (see Chapters 4.1 through 4.20).

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7.0 PREPARATION TEAM

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South Coast Air Quality Management District

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SENT VIA USPS AND E-MAIL:

May 1, 2019

stewasart@montereypark.ca.gov

Samantha Tewasart, Senior Planner

City of Monterey Park, Community and Economic Development Department

310 W. Newmark Avenue

Monterey Park, CA 91754

Notice of Preparation of a Draft Environmental Impact Report for the Proposed Monterey Park Focused General Plan Update and Title 21 Amendments

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the Draft EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files¹. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on South Coast AQMD's website at: [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). South Coast AQMD 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.

On March 3, 2017, the South Coast AQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on

¹ Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NO_x) emissions in 2023 and an additional 55 percent NO_x reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on South Coast AQMD's website at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. South Coast AQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. This Guidance Document is available on South Coast AQMD's website at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. Guidance² on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

South Coast AQMD has also developed both regional and localized air quality significance thresholds. South Coast AQMD staff requests that the Lead Agency compare the emissions 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, South Coast AQMD 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 South Coast AQMD 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>.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions 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

² In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

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, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operation, the emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If 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.

Mitigation Measures

If the Proposed 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 Section 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 Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD's *CEQA Air Quality Handbook*
- South Coast AQMD's CEQA web pages available here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>
- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- California Air Pollution Control Officers Association's (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* available here: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Alternatives

If the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. For more information on permits, please visit South Coast AQMD's webpage at:

<http://www.aqmd.gov/home/permits>. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling the South Coast AQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the South Coast AQMD's webpage (<http://www.aqmd.gov>).

South Coast AQMD staff is available to work with the Lead Agency to ensure that project air quality impacts are accurately evaluated and mitigated where feasible. Please contact me at lsun@aqmd.gov, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS

LAC190416-04

Control Number



May 2, 2019

VIA EMAIL

Samantha Tewasart, Senior Planner
Community and Economic Development Department
320 W. Newmark Avenue
Monterey Park, CA 91754
Email: stewasart@montereypark.ca.gov

Dear Ms. Tewasart:

**NOTICE OF PREPARATION
DRAFT ENVIRONMENTAL IMPACT REPORT
CITY OF MONTEREY PARK
FOCUSED GENERAL PLAN UPDATE AND
TITLE 21 AMENDMENT
SCH: NO. 2001011074**

The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) has reviewed the above-referenced project for impacts with Division jurisdictional authority. The Division supervises the drilling, maintenance, and plugging and abandonment of oil, gas, and geothermal wells in California. The Division offers the following comments for your consideration.

The project area is in Los Angeles County and mostly lies outside any administrative oil field boundary. A small area of the southeast portion of the project area lies within the northernmost portion of the Montebello oil field. Division records indicate the presence of no active oil and gas (O&G) wells, four idle (buried) O&G wells, and approximately 25 plugged O&G wells. Division information can be found at:

www.conservation.ca.gov. Individual well records are also available on the Division's web site, or by emailing dogdist1@conservation.ca.gov.

The scope and content of information that is germane to the Division's responsibility are contained in Section 3000 et seq. of the Public Resources Code, and administrative regulations under Title 14, Division 2, Chapters 2, 3 and 4 of the California Code of Regulations.

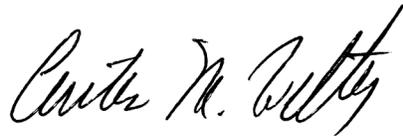
If any wells, including any plugged, abandoned or unrecorded wells, are damaged or uncovered during excavation or grading, remedial plugging operations may be required. If such damage or discovery occurs, the Division's district office must be

contacted to obtain information on the requirements and approval to perform remedial operations.

The possibility for future problems from oil and gas wells that have been plugged and abandoned, or reabandoned, to the Division's current specifications are remote. However, the Division recommends that a diligent effort be made to avoid building over any plugged and abandoned well.

To ensure proper review of this project, please contact our Construction Well Site Review Program for a well consultation. Questions regarding the Division's Construction Site Well Review Program can be addressed to the local Division's office in Long Beach by emailing DOGDIST1@conservation.ca.gov or by calling (714) 816-6847.

Sincerely,



Curtis M. Welty, PG
Associate Oil and Gas Engineer

cc: The State Clearinghouse in the Office of Planning and Research
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Environmental CEQA File

**Native American Heritage Commission
Tribal Consultation List
May 2, 2019**

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Gabrielino /Tonava Nation
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Gabrielino Tongva Indians of California Tribal Council
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lcandelaria1@gabrielinotribe.or Gabrielino

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Sections 65352.3 and 65362.4 et seq for the proposed
:
General Plan Update, City of Monterey Park, Los Angeles County.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission. The request form can be found at <http://nahc.ca.gov/wp-content/uploads/2015/08/LocalGovernment-Tribal-Consultation-List-Request-Form-update.pdf>.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive. A negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions or need additional information, please contact me at my email address: katy.sanchez@nahc.ca.gov.

Sincerely,



KATY SANCHEZ
Associate Environmental Planner

Attachment

Monterey Park General Plan EIR Scoping Meeting Notes

On May 7, 2019, the City of Monterey Park conducted an EIR scoping meeting for the General Plan Land Use Element. The meeting was conducted at City Hall in the Council chambers as started at 6:00 PM. Approximately 10 people attended the meeting. The following issues were identified by attendees as issues of concern needed to be addressed in the EIR:

- Traffic impacts from new development. Examine future conditions both without adoption of the proposed land use plan and build-out of the plan.
- Factor the presence of Lyft and Uber into the traffic analysis.
- Report traffic impacts in terms of Vehicle Miles Traveled (VMT).
- Noise issues where new residential development will interface with office and industrial uses.
- Parking impacts
- Impacts of new development on water infrastructure and water resources



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County Transportation Authority**

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Bill Jahn, Big Bear Lake

Community, Economic &
Human Development
**Peggy Huang, Transportation
Corridor Agencies**

Energy & Environment
Linda Parks, Ventura County

Transportation
Cheryl Viegas-Walker, El Centro

May 13, 2019

Ms. Samantha Tewasart, Senior Planner
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E-mail: stewasart@montereypark.ca.gov

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Monterey Park Focused General Plan Update and Title 21 Amendment [SCAG NO. IGR9882]

Dear Ms. Tewasart,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Monterey Park Focused General Plan Update and Title 21 Amendment ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.¹ SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Monterey Park Focused General Plan Update and Title 21 Amendment in Los Angeles County. The proposed project includes amending Title 21 to delete Chapter 21.42 in Monterey Park's Zoning Code, and updating the city's General Plan to promote economic growth across the approximately 4,270 acre planning area.

When available, please send environmental documentation to SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) or by email to au@scag.ca.gov providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang
Manager, Compliance and Performance Monitoring

¹ Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

**COMMENTS ON THE NOTICE OF PREPARATION OF A
DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE
MONTEREY PARK FOCUSED GENERAL PLAN UPDATE & TITLE 21 AMENDMENT
[SCAG NO. IGR9882]**

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	<i>Align the plan investments and policies with improving regional economic development and competitiveness</i>
RTP/SCS G2:	<i>Maximize mobility and accessibility for all people and goods in the region</i>
RTP/SCS G3:	<i>Ensure travel safety and reliability for all people and goods in the region</i>
RTP/SCS G4:	<i>Preserve and ensure a sustainable regional transportation system</i>
RTP/SCS G5:	<i>Maximize the productivity of our transportation system</i>
RTP/SCS G6:	<i>Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)</i>
RTP/SCS G7:	<i>Actively encourage and create incentives for energy efficiency, where possible</i>
RTP/SCS G8:	<i>Encourage land use and growth patterns that facilitate transit and active transportation</i>
RTP/SCS G9:	<i>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*</i>

*SCAG does not yet have an agreed-upon security performance measure.

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS	
Goal	Analysis
RTP/SCS G1: <i>Align the plan investments and policies with improving regional economic development and competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
RTP/SCS G2: <i>Maximize mobility and accessibility for all people and goods in the region</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit <http://www.scaq.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf>. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted City of Monterey Park Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	62,600	64,100	65,000
Households	6,458,000	7,325,000	7,412,300	20,800	21,300	21,500
Employment	8,414,000	9,441,000	9,871,500	34,300	35,700	36,500

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: <http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx>). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

May 15, 2019

Ms. Samantha Tewasart
City of Monterey Park
320 W. Newmark Avenue
Monterey Park, CA 91754

RE: Monterey Park Focused General Plan
Update and Title 21 Amendment– Notice of
Preparation (NOP)
SCH # 2001011074
GTS # 07-LA-2019-02423
Vic. LA-710/PM: 26.113 –
LA-60/PM: R 7.119

Dear Ms. Samantha Tewasart:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this project's NOP. Monterey Park proposes a focused update to the General Plan consisting of revisions to the Land Use Element, last comprehensively updated in 2001. The purpose of updating the Land Use Element is ensure land use policies allow the City to attract investment and development consistent with its vision, and to facilitate economic growth and creation of new housing opportunities. The Land Use Element update is a community-driven process designed to reflect local values and needs, with desired the outcome being meaningful results and actions. The project also proposes deletion of Per 21.42 (Voter Approval of Changes) of the Zoning Code (Title 21 of the Monterey Park Municipal Code.)

After reviewing the NOP, Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

Further information included for your consideration

Caltrans is moving towards replacing Level of Service (LOS) with Vehicle Miles Traveled (VMT) when evaluating traffic impact. For any future project we encourage the Lead Agency to integrate transportation and land use in a way that reduces VMT and Greenhouse Gas (GHG) emissions by facilitating the provision of more proximate goods and services to shorten trip lengths and achieve a high level of non-motorized travel and transit use.

Caltrans recommends the Lead Agency develop a verifiable performance-based Vehicle Miles Travelled (VMT) criteria as this is required by SB 743.

Caltrans seeks to promote safe, accessible multimodal transportation. Methods to reduce pedestrian and bicyclist exposure to vehicles improve safety by lessening the time that the user is in the likely path of a motor vehicle. These methods include the construction of physically separated facilities such as sidewalks, raised medians, refuge islands, and off-road paths and trails, or a reduction in crossing distances through roadway narrowing.

Caltrans recommends the project to consider the use of methods such as, but not limited to, pedestrian

Ms. Samantha Tewart
May 15, 2019
Page 2 of 2

and bicyclist warning signage, flashing beacons, crosswalks, signage and striping, be used to indicate to motorists that they should expect to see and yield to pedestrians and bicyclists. Visual indication from signage can be reinforced by road design features such as lane widths, landscaping, street furniture, and other design elements.

If you have any questions, please contact Reece Allen, the project coordinator, at reece.allen@dot.ca.gov, and refer to GTS # 07-LA-2019-02423

Sincerely,



MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



May 17, 2019

Samantha Tewasart
City of Monterey Park
320 W. Newmark Avenue
Monterey Park, CA 91754

RE: SCH# 2001011074 Monterey Park Focused General Plan Update and Title 21 Amendment, Los Angeles County

Dear Ms. Tewasart:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a 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 §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, § 5064 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 within the area of potential 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, a notice of negative declaration, or a 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 §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 §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 §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 §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 §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 non-federally 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 §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §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 §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

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 §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 §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 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, §15064.5(f) (CEQA Guidelines §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 §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §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.

If you have any questions or need additional information, please contact me at my email address: Steven.Quinn@nahc.ca.gov.

Sincerely,



for Steven Quinn
Associate Governmental Program Analyst

cc: State Clearinghouse

Appendix B Air Quality and Climate Change Modeling Data

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Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

Monterey Park Focused GPU
Los Angeles-South Coast County, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,252.16	1000sqft	195.00	5,252,164.00	0
Elementary School	6,264.00	Student	74.00	523,691.51	0
Junior College (2Yr)	36,790.00	Student	77.00	1,605,965.81	0
General Light Industry	2,025.80	1000sqft	46.51	2,025,800.00	0
Hotel	727.00	Room	9.00	803,246.00	0
Apartments Low Rise	8,994.00	Dwelling Unit	592.00	8,994,000.00	25723
Single Family Housing	13,488.00	Dwelling Unit	2,078.00	24,278,400.00	38576
Regional Shopping Center	5,741.49	1000sqft	174.00	5,741,492.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	530.76	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect SCE 2019 energy mix.

Land Use - EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Grading - Existing Condition model run - no construction emissions modeled.

Trips and VMT - Existing Condition model run - no construction emissions modeled.

Architectural Coating - Existing Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value. Weekend rates for all land uses reflect default values.

Energy Use - T24 standards adjusted upwards to reflect decreased efficiency between 2013/2016 standards. See CalEEMod Appendix E5, Tables 1, 3, and 4.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,976,180.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,928,539.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,458,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,376,610.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	155,000.00	0.00
tblConstructionPhase	NumDays	10,000.00	0.00
tblConstructionPhase	NumDays	15,500.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	6,000.00	0.00
tblConstructionPhase	PhaseEndDate	3/10/2817	1/10/2775
tblConstructionPhase	PhaseEndDate	11/11/2732	9/26/2138
tblConstructionPhase	PhaseEndDate	4/28/2056	12/31/2017
tblConstructionPhase	PhaseEndDate	9/26/2138	4/28/2079

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

tblConstructionPhase	PhaseEndDate	1/10/2775	11/11/2732
tblConstructionPhase	PhaseEndDate	4/28/2079	4/28/2056
tblEnergyUse	LightingElect	2.59	2.63
tblEnergyUse	LightingElect	3.10	3.15
tblEnergyUse	LightingElect	3.77	9.91
tblEnergyUse	LightingElect	2.14	2.17
tblEnergyUse	LightingElect	3.39	3.44
tblEnergyUse	LightingElect	6.26	6.36
tblEnergyUse	T24E	257.27	291.36
tblEnergyUse	T24E	1.74	1.82
tblEnergyUse	T24E	2.25	2.36
tblEnergyUse	T24E	4.60	4.82
tblEnergyUse	T24E	2.55	2.67
tblEnergyUse	T24E	3.04	3.19
tblEnergyUse	T24E	4.01	4.20
tblEnergyUse	T24E	443.48	502.24
tblEnergyUse	T24NG	9,955.77	12,602.24
tblEnergyUse	T24NG	9.32	9.37
tblEnergyUse	T24NG	13.65	13.72
tblEnergyUse	T24NG	10.02	93.86
tblEnergyUse	T24NG	19.92	20.02
tblEnergyUse	T24NG	26.49	26.62
tblEnergyUse	T24NG	1.15	1.16
tblEnergyUse	T24NG	21,090.59	26,696.95
tblGrading	AcresOfGrading	38,750.00	0.00
tblLandUse	LandUseSquareFeet	5,252,160.00	5,252,164.00
tblLandUse	LandUseSquareFeet	1,055,604.00	803,246.00

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

tblLandUse	LandUseSquareFeet	5,741,490.00	5,741,492.00
tblLandUse	LotAcreage	120.57	195.00
tblLandUse	LotAcreage	12.02	74.00
tblLandUse	LotAcreage	36.87	77.00
tblLandUse	LotAcreage	24.23	9.00
tblLandUse	LotAcreage	562.13	592.00
tblLandUse	LotAcreage	4,379.22	2,078.00
tblLandUse	LotAcreage	131.81	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	530.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	VendorTripNumber	5,018.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	16,932.00	0.00

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3,386.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	8.17	8.32
tblVehicleTrips	WD_TR	1.23	1.15
tblVehicleTrips	WD_TR	42.70	37.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Energy	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
Mobile	1,267.9742	5,666.3437	16,057.7045	47.9775	3,573.7718	54.1457	3,627.9175	956.5792	50.8870	1,007.4663		4,869,974.4384	4,869,974.4384	283.7532		4,877,068.2676
Total	8,325.1312	6,474.0199	29,564.6770	79.2202	3,573.7718	1,806.7853	5,380.5571	956.5792	1,803.5266	2,760.1058	210,587.0595	5,673,415.9544	5,884,003.0138	922.6551	21.5424	5,913,489.0269

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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Energy	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
Mobile	1,267.9742	5,666.3437	16,057.7045	47.9775	3,573.7718	54.1457	3,627.9175	956.5792	50.8870	1,007.4663		4,869,974.4384	4,869,974.4384	283.7532		4,877,068.2676
Total	8,325.1312	6,474.0199	29,564.6770	79.2202	3,573.7718	1,806.7853	5,380.5571	956.5792	1,803.5266	2,760.1058	210,587.0595	5,673,415.9544	5,884,003.0138	922.6551	21.5424	5,913,489.0269

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

	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
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	Demolition	Demolition	1/1/2018	12/31/2017	5	0	
2	Site Preparation	Site Preparation	4/29/2056	4/28/2056	5	0	
3	Grading	Grading	4/29/2079	4/28/2079	5	0	
4	Building Construction	Building Construction	9/27/2138	9/26/2138	5	0	
5	Paving	Paving	11/12/2732	11/11/2732	5	0	
6	Architectural Coating	Architectural Coating	1/11/2775	1/10/2775	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2775

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	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	0.0000	0.0000
Worker	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	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

	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	1,267.974 2	5,666.343 7	16,057.70 45	47.9775	3,573.771 8	54.1457	3,627.917 5	956.5792	50.8870	1,007.4663		4,869,974. 4384	4,869,974. 4384	283.7532		4,877,068. 2676
Unmitigated	1,267.974 2	5,666.343 7	16,057.70 45	47.9775	3,573.771 8	54.1457	3,627.917 5	956.5792	50.8870	1,007.4663		4,869,974. 4384	4,869,974. 4384	283.7532		4,877,068. 2676

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	65,836.08	64,397.04	54593.58	218,417,186	218,417,186
Elementary School	8,080.56	0.00	0.00	19,891,937	19,891,937
General Light Industry	10,047.97	2,674.06	1377.54	34,345,366	34,345,366
General Office Building	51,156.08	12,920.32	5514.77	126,196,353	126,196,353
Hotel	6,048.64	5,954.13	4325.65	13,813,537	13,813,537
Junior College (2Yr)	42,308.50	15,451.80	1471.60	98,578,409	98,578,409
Regional Shopping Center	216,741.32	286,902.36	144915.26	468,263,202	468,263,202
Single Family Housing	127,326.72	133,666.08	116266.56	432,070,114	432,070,114
Total	527,545.87	521,965.78	328,464.96	1,411,576,106	1,411,576,106

4.3 Trip Type Information

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Elementary School	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Light Industry	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Hotel	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Junior College (2Yr)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Regional Shopping Center	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Single Family Housing	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

	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					
NaturalGas Mitigated	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
NaturalGas Unmitigated	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	467842	5.0454	43.1148	18.3467	0.2752		3.4859	3.4859		3.4859	3.4859		55,040.2071	55,040.2071	1.0549	1.0091	55,367.2835
Elementary School	14993.4	0.1617	1.4699	1.2348	8.8200e-003		0.1117	0.1117		0.1117	0.1117		1,763.9247	1,763.9247	0.0338	0.0323	1,774.4068
General Light Industry	100846	1.0876	9.8869	8.3050	0.0593		0.7514	0.7514		0.7514	0.7514		11,864.2340	11,864.2340	0.2274	0.2175	11,934.7372
General Office Building	1.35621e+006	14.6258	132.9617	111.6878	0.7978		10.1051	10.1051		10.1051	10.1051		159,554.0554	159,554.0554	3.0581	2.9252	160,502.2054
Hotel	52992.2	0.5715	5.1953	4.3641	0.0312		0.3948	0.3948		0.3948	0.3948		6,234.3799	6,234.3799	0.1195	0.1143	6,271.4277
Junior College (2Yr)	119721	1.2911	11.7374	9.8594	0.0704		0.8920	0.8920		0.8920	0.8920		14,084.8766	14,084.8766	0.2700	0.2582	14,168.5760
Regional Shopping Center	25954.7	0.2799	2.5446	2.1375	0.0153		0.1934	0.1934		0.1934	0.1934		3,053.4929	3,053.4929	0.0585	0.0560	3,071.6383
Single Family Housing	1.22245e+006	13.1833	112.6576	47.9394	0.7191		9.1085	9.1085		9.1085	9.1085		143,818.1613	143,818.1613	2.7565	2.6367	144,672.8008
Total		36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2493	397,763.0757

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	467.842	5.0454	43.1148	18.3467	0.2752		3.4859	3.4859		3.4859	3.4859		55,040.2071	55,040.2071	1.0549	1.0091	55,367.2835
Elementary School	14.9934	0.1617	1.4699	1.2348	8.8200e-003		0.1117	0.1117		0.1117	0.1117		1,763.9247	1,763.9247	0.0338	0.0323	1,774.4068
General Light Industry	100.846	1.0876	9.8869	8.3050	0.0593		0.7514	0.7514		0.7514	0.7514		11,864.2340	11,864.2340	0.2274	0.2175	11,934.7372
General Office Building	1356.21	14.6258	132.9617	111.6878	0.7978		10.1051	10.1051		10.1051	10.1051		159,554.0554	159,554.0554	3.0581	2.9252	160,502.2054
Hotel	52.9922	0.5715	5.1953	4.3641	0.0312		0.3948	0.3948		0.3948	0.3948		6,234.3799	6,234.3799	0.1195	0.1143	6,271.4277
Junior College (2Yr)	119.721	1.2911	11.7374	9.8594	0.0704		0.8920	0.8920		0.8920	0.8920		14,084.8766	14,084.8766	0.2700	0.2582	14,168.5760
Regional Shopping Center	25.9547	0.2799	2.5446	2.1375	0.0153		0.1934	0.1934		0.1934	0.1934		3,053.4929	3,053.4929	0.0585	0.0560	3,071.6383
Single Family Housing	1222.45	13.1833	112.6576	47.9394	0.7191		9.1085	9.1085		9.1085	9.1085		143,818.1613	143,818.1613	2.7565	2.6367	144,672.8008
Total		36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2493	397,763.0757

6.0 Area Detail

6.1 Mitigation Measures Area

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

	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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Unmitigated	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

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	97.5540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	974.6502					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	57.6133	21.6443	1,869.8355	0.0984		10.2345	10.2345		10.2345	10.2345		3,352.1840	3,352.1840	3.3119		3,434.9814
Total	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

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	97.5540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	974.6502					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	57.6133	21.6443	1,869.8355	0.0984		10.2345	10.2345		10.2345	10.2345		3,352.1840	3,352.1840	3.3119		3,434.9814
Total	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Monterey Park Focused GPU - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

Monterey Park Focused GPU
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,252.16	1000sqft	195.00	5,252,164.00	0
Elementary School	6,264.00	Student	74.00	523,691.51	0
Junior College (2Yr)	36,790.00	Student	77.00	1,605,965.81	0
General Light Industry	2,025.80	1000sqft	46.51	2,025,800.00	0
Hotel	727.00	Room	9.00	803,246.00	0
Apartments Low Rise	8,994.00	Dwelling Unit	592.00	8,994,000.00	25723
Single Family Housing	13,488.00	Dwelling Unit	2,078.00	24,278,400.00	38576
Regional Shopping Center	5,741.49	1000sqft	174.00	5,741,492.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	530.76	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect SCE 2019 energy mix.

Land Use - EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Grading - Existing Condition model run - no construction emissions modeled.

Trips and VMT - Existing Condition model run - no construction emissions modeled.

Architectural Coating - Existing Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value. Weekend rates for all land uses reflect default values.

Energy Use - T24 standards adjusted upwards to reflect decreased efficiency between 2013/2016 standards. See CalEEMod Appendix E5, Tables 1, 3, and 4.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,976,180.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,928,539.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,458,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,376,610.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	155,000.00	0.00
tblConstructionPhase	NumDays	10,000.00	0.00
tblConstructionPhase	NumDays	15,500.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	6,000.00	0.00
tblConstructionPhase	PhaseEndDate	3/10/2817	1/10/2775
tblConstructionPhase	PhaseEndDate	11/11/2732	9/26/2138
tblConstructionPhase	PhaseEndDate	4/28/2056	12/31/2017
tblConstructionPhase	PhaseEndDate	9/26/2138	4/28/2079

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

tblConstructionPhase	PhaseEndDate	1/10/2775	11/11/2732
tblConstructionPhase	PhaseEndDate	4/28/2079	4/28/2056
tblEnergyUse	LightingElect	2.59	2.63
tblEnergyUse	LightingElect	3.10	3.15
tblEnergyUse	LightingElect	3.77	9.91
tblEnergyUse	LightingElect	2.14	2.17
tblEnergyUse	LightingElect	3.39	3.44
tblEnergyUse	LightingElect	6.26	6.36
tblEnergyUse	T24E	257.27	291.36
tblEnergyUse	T24E	1.74	1.82
tblEnergyUse	T24E	2.25	2.36
tblEnergyUse	T24E	4.60	4.82
tblEnergyUse	T24E	2.55	2.67
tblEnergyUse	T24E	3.04	3.19
tblEnergyUse	T24E	4.01	4.20
tblEnergyUse	T24E	443.48	502.24
tblEnergyUse	T24NG	9,955.77	12,602.24
tblEnergyUse	T24NG	9.32	9.37
tblEnergyUse	T24NG	13.65	13.72
tblEnergyUse	T24NG	10.02	93.86
tblEnergyUse	T24NG	19.92	20.02
tblEnergyUse	T24NG	26.49	26.62
tblEnergyUse	T24NG	1.15	1.16
tblEnergyUse	T24NG	21,090.59	26,696.95
tblGrading	AcresOfGrading	38,750.00	0.00
tblLandUse	LandUseSquareFeet	5,252,160.00	5,252,164.00
tblLandUse	LandUseSquareFeet	1,055,604.00	803,246.00

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

tblLandUse	LandUseSquareFeet	5,741,490.00	5,741,492.00
tblLandUse	LotAcreage	120.57	195.00
tblLandUse	LotAcreage	12.02	74.00
tblLandUse	LotAcreage	36.87	77.00
tblLandUse	LotAcreage	24.23	9.00
tblLandUse	LotAcreage	562.13	592.00
tblLandUse	LotAcreage	4,379.22	2,078.00
tblLandUse	LotAcreage	131.81	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	530.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	VendorTripNumber	5,018.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	16,932.00	0.00

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3,386.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	8.17	8.32
tblVehicleTrips	WD_TR	1.23	1.15
tblVehicleTrips	WD_TR	42.70	37.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Energy	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
Mobile	1,236.1654	5,815.3569	15,401.7508	45.5899	3,573.7718	54.5483	3,628.3201	956.5792	51.2722	1,007.8514		4,629,937.3602	4,629,937.3602	283.1329		4,637,015.6838
Total	8,293.3225	6,623.0332	28,908.7233	76.8326	3,573.7718	1,807.1878	5,380.9596	956.5792	1,803.9117	2,760.4909	210,587.0595	5,433,378.8762	5,643,965.9357	922.0349	21.5424	5,673,436.4431

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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Energy	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
Mobile	1,236.1654	5,815.3569	15,401.7508	45.5899	3,573.7718	54.5483	3,628.3201	956.5792	51.2722	1,007.8514		4,629,937.3602	4,629,937.3602	283.1329		4,637,015.6838
Total	8,293.3225	6,623.0332	28,908.7233	76.8326	3,573.7718	1,807.1878	5,380.9596	956.5792	1,803.9117	2,760.4909	210,587.0595	5,433,378.8762	5,643,965.9357	922.0349	21.5424	5,673,436.4431

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

	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
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	Demolition	Demolition	1/1/2018	12/31/2017	5	0	
2	Site Preparation	Site Preparation	4/29/2056	4/28/2056	5	0	
3	Grading	Grading	4/29/2079	4/28/2079	5	0	
4	Building Construction	Building Construction	9/27/2138	9/26/2138	5	0	
5	Paving	Paving	11/12/2732	11/11/2732	5	0	
6	Architectural Coating	Architectural Coating	1/11/2775	1/10/2775	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2775

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	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	0.0000	0.0000
Worker	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	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

	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	1,236.1654	5,815.3569	15,401.7508	45.5899	3,573.7718	54.5483	3,628.3201	956.5792	51.2722	1,007.8514		4,629,937.3602	4,629,937.3602	283.1329		4,637,015.6838
Unmitigated	1,236.1654	5,815.3569	15,401.7508	45.5899	3,573.7718	54.5483	3,628.3201	956.5792	51.2722	1,007.8514		4,629,937.3602	4,629,937.3602	283.1329		4,637,015.6838

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	65,836.08	64,397.04	54,593.58	218,417,186	218,417,186
Elementary School	8,080.56	0.00	0.00	19,891,937	19,891,937
General Light Industry	10,047.97	2,674.06	1,377.54	34,345,366	34,345,366
General Office Building	51,156.08	12,920.32	5,514.77	126,196,353	126,196,353
Hotel	6,048.64	5,954.13	4,325.65	13,813,537	13,813,537
Junior College (2Yr)	42,308.50	15,451.80	1,471.60	98,578,409	98,578,409
Regional Shopping Center	216,741.32	286,902.36	144,915.26	468,263,202	468,263,202
Single Family Housing	127,326.72	133,666.08	116,266.56	432,070,114	432,070,114
Total	527,545.87	521,965.78	328,464.96	1,411,576,106	1,411,576,106

4.3 Trip Type Information

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Elementary School	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Light Industry	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Hotel	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Junior College (2Yr)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Regional Shopping Center	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Single Family Housing	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

	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					
NaturalGas Mitigated	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757
NaturalGas Unmitigated	36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2492	397,763.0757

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	467842	5.0454	43.1148	18.3467	0.2752		3.4859	3.4859		3.4859	3.4859		55,040.2071	55,040.2071	1.0549	1.0091	55,367.2835
Elementary School	14993.4	0.1617	1.4699	1.2348	8.8200e-003		0.1117	0.1117		0.1117	0.1117		1,763.9247	1,763.9247	0.0338	0.0323	1,774.4068
General Light Industry	100846	1.0876	9.8869	8.3050	0.0593		0.7514	0.7514		0.7514	0.7514		11,864.2340	11,864.2340	0.2274	0.2175	11,934.7372
General Office Building	1.35621e+006	14.6258	132.9617	111.6878	0.7978		10.1051	10.1051		10.1051	10.1051		159,554.0554	159,554.0554	3.0581	2.9252	160,502.2054
Hotel	52992.2	0.5715	5.1953	4.3641	0.0312		0.3948	0.3948		0.3948	0.3948		6,234.3799	6,234.3799	0.1195	0.1143	6,271.4277
Junior College (2Yr)	119721	1.2911	11.7374	9.8594	0.0704		0.8920	0.8920		0.8920	0.8920		14,084.8766	14,084.8766	0.2700	0.2582	14,168.5760
Regional Shopping Center	25954.7	0.2799	2.5446	2.1375	0.0153		0.1934	0.1934		0.1934	0.1934		3,053.4929	3,053.4929	0.0585	0.0560	3,071.6383
Single Family Housing	1.22245e+006	13.1833	112.6576	47.9394	0.7191		9.1085	9.1085		9.1085	9.1085		143,818.1613	143,818.1613	2.7565	2.6367	144,672.8008
Total		36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2493	397,763.0757

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	467.842	5.0454	43.1148	18.3467	0.2752		3.4859	3.4859		3.4859	3.4859		55,040.2071	55,040.2071	1.0549	1.0091	55,367.2835
Elementary School	14.9934	0.1617	1.4699	1.2348	8.8200e-003		0.1117	0.1117		0.1117	0.1117		1,763.9247	1,763.9247	0.0338	0.0323	1,774.4068
General Light Industry	100.846	1.0876	9.8869	8.3050	0.0593		0.7514	0.7514		0.7514	0.7514		11,864.2340	11,864.2340	0.2274	0.2175	11,934.7372
General Office Building	1356.21	14.6258	132.9617	111.6878	0.7978		10.1051	10.1051		10.1051	10.1051		159,554.0554	159,554.0554	3.0581	2.9252	160,502.2054
Hotel	52.9922	0.5715	5.1953	4.3641	0.0312		0.3948	0.3948		0.3948	0.3948		6,234.3799	6,234.3799	0.1195	0.1143	6,271.4277
Junior College (2Yr)	119.721	1.2911	11.7374	9.8594	0.0704		0.8920	0.8920		0.8920	0.8920		14,084.8766	14,084.8766	0.2700	0.2582	14,168.5760
Regional Shopping Center	25.9547	0.2799	2.5446	2.1375	0.0153		0.1934	0.1934		0.1934	0.1934		3,053.4929	3,053.4929	0.0585	0.0560	3,071.6383
Single Family Housing	1222.45	13.1833	112.6576	47.9394	0.7191		9.1085	9.1085		9.1085	9.1085		143,818.1613	143,818.1613	2.7565	2.6367	144,672.8008
Total		36.2462	319.5682	203.8746	1.9771		25.0428	25.0428		25.0428	25.0428		395,413.3320	395,413.3320	7.5788	7.2493	397,763.0757

6.0 Area Detail

6.1 Mitigation Measures Area

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

	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	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836
Unmitigated	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

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	97.5540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	974.6502					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	57.6133	21.6443	1,869.8355	0.0984		10.2345	10.2345		10.2345	10.2345		3,352.1840	3,352.1840	3.3119		3,434.9814
Total	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

Monterey Park Focused GPU - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

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	97.5540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	974.6502					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	57.6133	21.6443	1,869.8355	0.0984		10.2345	10.2345		10.2345	10.2345		3,352.1840	3,352.1840	3.3119		3,434.9814
Total	7,020.9108	488.1081	13,303.0979	29.2656		1,727.5967	1,727.5967		1,727.5967	1,727.5967	210,587.0595	408,028.1840	618,615.2435	631.3232	14.2932	638,657.6836

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

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Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,252.16	1000sqft	195.00	5,252,164.00	0
Elementary School	6,264.00	Student	74.00	523,691.51	0
Junior College (2Yr)	36,790.00	Student	77.00	1,605,965.81	0
General Light Industry	2,025.80	1000sqft	46.51	2,025,800.00	0
Hotel	727.00	Room	9.00	803,246.00	0
Apartments Low Rise	8,994.00	Dwelling Unit	592.00	8,994,000.00	25723
Single Family Housing	13,488.00	Dwelling Unit	2,078.00	24,278,400.00	38576
Regional Shopping Center	5,741.49	1000sqft	174.00	5,741,492.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	530.76	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect SCE 2019 energy mix.

Land Use - EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Off-road Equipment - Existing Condition model run - no construction emissions modeled.

Grading - Existing Condition model run - no construction emissions modeled.

Trips and VMT - Existing Condition model run - no construction emissions modeled.

Architectural Coating - Existing Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value. Weekend rates for all land uses reflect default values.

Energy Use - T24 standards adjusted upwards to reflect decreased efficiency between 2013/2016 standards. See CalEEMod Appendix E5, Tables 1, 3, and 4.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,976,180.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,928,539.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,458,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,376,610.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	155,000.00	0.00
tblConstructionPhase	NumDays	10,000.00	0.00
tblConstructionPhase	NumDays	15,500.00	0.00
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	NumDays	6,000.00	0.00
tblConstructionPhase	PhaseEndDate	3/10/2817	1/10/2775
tblConstructionPhase	PhaseEndDate	11/11/2732	9/26/2138
tblConstructionPhase	PhaseEndDate	4/28/2056	12/31/2017
tblConstructionPhase	PhaseEndDate	9/26/2138	4/28/2079

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tblConstructionPhase	PhaseEndDate	1/10/2775	11/11/2732
tblConstructionPhase	PhaseEndDate	4/28/2079	4/28/2056
tblEnergyUse	LightingElect	2.59	2.63
tblEnergyUse	LightingElect	3.10	3.15
tblEnergyUse	LightingElect	3.77	9.91
tblEnergyUse	LightingElect	2.14	2.17
tblEnergyUse	LightingElect	3.39	3.44
tblEnergyUse	LightingElect	6.26	6.36
tblEnergyUse	T24E	257.27	291.36
tblEnergyUse	T24E	1.74	1.82
tblEnergyUse	T24E	2.25	2.36
tblEnergyUse	T24E	4.60	4.82
tblEnergyUse	T24E	2.55	2.67
tblEnergyUse	T24E	3.04	3.19
tblEnergyUse	T24E	4.01	4.20
tblEnergyUse	T24E	443.48	502.24
tblEnergyUse	T24NG	9,955.77	12,602.24
tblEnergyUse	T24NG	9.32	9.37
tblEnergyUse	T24NG	13.65	13.72
tblEnergyUse	T24NG	10.02	93.86
tblEnergyUse	T24NG	19.92	20.02
tblEnergyUse	T24NG	26.49	26.62
tblEnergyUse	T24NG	1.15	1.16
tblEnergyUse	T24NG	21,090.59	26,696.95
tblGrading	AcresOfGrading	38,750.00	0.00
tblLandUse	LandUseSquareFeet	5,252,160.00	5,252,164.00
tblLandUse	LandUseSquareFeet	1,055,604.00	803,246.00

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tblLandUse	LandUseSquareFeet	5,741,490.00	5,741,492.00
tblLandUse	LotAcreage	120.57	195.00
tblLandUse	LotAcreage	12.02	74.00
tblLandUse	LotAcreage	36.87	77.00
tblLandUse	LotAcreage	24.23	9.00
tblLandUse	LotAcreage	562.13	592.00
tblLandUse	LotAcreage	4,379.22	2,078.00
tblLandUse	LotAcreage	131.81	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	530.76
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	VendorTripNumber	5,018.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	16,932.00	0.00

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tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	3,386.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74
tblVehicleTrips	WD_TR	8.17	8.32
tblVehicleTrips	WD_TR	1.23	1.15
tblVehicleTrips	WD_TR	42.70	37.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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2.1 Overall Construction

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					
2056	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	0.0000	0.0000
2079	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	0.0000	0.0000
2138	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	0.0000	0.0000
2732	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	0.0000	0.0000
2775	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	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

	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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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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	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246
Energy	6.6149	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	156,793.3380	156,793.3380	6.9331	1.8885	157,529.4310
Mobile	182.1335	899.7119	2,374.2028	7.0635	535.8018	8.2815	544.0832	143.6505	7.7836	151.4341	0.0000	650,685.1838	650,685.1838	38.9791	0.0000	651,659.6618
Waste						0.0000	0.0000		0.0000	0.0000	8,451.2953	0.0000	8,451.2953	499.4572	0.0000	20,937.7264
Water						0.0000	0.0000		0.0000	0.0000	1,080.0686	15,809.1135	16,889.1821	111.9163	2.7385	20,503.1696
Total	465.2661	966.5695	2,788.0551	7.8012	535.8018	35.5981	571.3999	143.6505	35.1003	178.7507	11,919.3809	828,256.7152	840,176.0961	664.7829	4.7891	858,222.8133

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2.2 Overall Operational

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	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246
Energy	6.6149	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	156,793.3380	156,793.3380	6.9331	1.8885	157,529.4310
Mobile	182.1335	899.7119	2,374.2028	7.0635	535.8018	8.2815	544.0832	143.6505	7.7836	151.4341	0.0000	650,685.1838	650,685.1838	38.9791	0.0000	651,659.6618
Waste						0.0000	0.0000		0.0000	0.0000	8,451.2953	0.0000	8,451.2953	499.4572	0.0000	20,937.7264
Water						0.0000	0.0000		0.0000	0.0000	1,080.0686	15,809.1135	16,889.1821	111.9163	2.7385	20,503.1696
Total	465.2661	966.5695	2,788.0551	7.8012	535.8018	35.5981	571.3999	143.6505	35.1003	178.7507	11,919.3809	828,256.7152	840,176.0961	664.7829	4.7891	858,222.8133

	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
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

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	12/31/2017	5	0	
2	Site Preparation	Site Preparation	4/29/2056	4/28/2056	5	0	
3	Grading	Grading	4/29/2079	4/28/2079	5	0	
4	Building Construction	Building Construction	9/27/2138	9/26/2138	5	0	
5	Paving	Paving	11/12/2732	11/11/2732	5	0	
6	Architectural Coating	Architectural Coating	1/11/2775	1/10/2775	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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3.7 Architectural Coating - 2775

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	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	0.0000	0.0000
Worker	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	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	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	182.1335	899.7119	2,374.2028	7.0635	535.8018	8.2815	544.0832	143.6505	7.7836	151.4341	0.0000	650,685.1838	650,685.1838	38.9791	0.0000	651,659.6618
Unmitigated	182.1335	899.7119	2,374.2028	7.0635	535.8018	8.2815	544.0832	143.6505	7.7836	151.4341	0.0000	650,685.1838	650,685.1838	38.9791	0.0000	651,659.6618

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	65,836.08	64,397.04	54593.58	218,417,186	218,417,186
Elementary School	8,080.56	0.00	0.00	19,891,937	19,891,937
General Light Industry	10,047.97	2,674.06	1377.54	34,345,366	34,345,366
General Office Building	51,156.08	12,920.32	5514.77	126,196,353	126,196,353
Hotel	6,048.64	5,954.13	4325.65	13,813,537	13,813,537
Junior College (2Yr)	42,308.50	15,451.80	1471.60	98,578,409	98,578,409
Regional Shopping Center	216,741.32	286,902.36	144915.26	468,263,202	468,263,202
Single Family Housing	127,326.72	133,666.08	116266.56	432,070,114	432,070,114
Total	527,545.87	521,965.78	328,464.96	1,411,576,106	1,411,576,106

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Elementary School	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Light Industry	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
General Office Building	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Hotel	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Junior College (2Yr)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Regional Shopping Center	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Single Family Housing	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	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					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	91,328.2263	91,328.2263	5.6783	0.6883	91,675.2928
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	91,328.2263	91,328.2263	5.6783	0.6883	91,675.2928
NaturalGas Mitigated	6.6149	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	65,465.1117	65,465.1117	1.2548	1.2002	65,854.1381
NaturalGas Unmitigated	6.6149	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	65,465.1117	65,465.1117	1.2548	1.2002	65,854.1381

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.70762e+008	0.9208	7.8685	3.3483	0.0502		0.6362	0.6362		0.6362	0.6362	0.0000	9,112.5236	9,112.5236	0.1747	0.1671	9,166.6747
Elementary School	5.47258e+006	0.0295	0.2683	0.2253	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.0375	292.0375	5.6000e-003	5.3500e-003	293.7729
General Light Industry	3.68088e+007	0.1985	1.8044	1.5157	0.0108		0.1371	0.1371		0.1371	0.1371	0.0000	1,964.2570	1,964.2570	0.0377	0.0360	1,975.9296
General Office Building	4.95016e+008	2.6692	24.2655	20.3830	0.1456		1.8442	1.8442		1.8442	1.8442	0.0000	26,415.9633	26,415.9633	0.5063	0.4843	26,572.9402
Hotel	1.93422e+007	0.1043	0.9482	0.7964	5.6900e-003		0.0721	0.0721		0.0721	0.0721	0.0000	1,032.1715	1,032.1715	0.0198	0.0189	1,038.3052
Junior College (2Yr)	4.36983e+007	0.2356	2.1421	1.7993	0.0129		0.1628	0.1628		0.1628	0.1628	0.0000	2,331.9093	2,331.9093	0.0447	0.0428	2,345.7667
Regional Shopping Center	9.47346e+006	0.0511	0.4644	0.3901	2.7900e-003		0.0353	0.0353		0.0353	0.0353	0.0000	505.5400	505.5400	9.6900e-003	9.2700e-003	508.5442
Single Family Housing	4.46196e+008	2.4060	20.5600	8.7489	0.1312		1.6623	1.6623		1.6623	1.6623	0.0000	23,810.7095	23,810.7095	0.4564	0.4365	23,952.2047
Total		6.6150	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	65,465.1117	65,465.1117	1.2548	1.2002	65,854.1381

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.70762e+008	0.9208	7.8685	3.3483	0.0502		0.6362	0.6362		0.6362	0.6362	0.0000	9,112.5236	9,112.5236	0.1747	0.1671	9,166.6747
Elementary School	5.47258e+006	0.0295	0.2683	0.2253	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.0375	292.0375	5.6000e-003	5.3500e-003	293.7729
General Light Industry	3.68088e+007	0.1985	1.8044	1.5157	0.0108		0.1371	0.1371		0.1371	0.1371	0.0000	1,964.2570	1,964.2570	0.0377	0.0360	1,975.9296
General Office Building	4.95016e+008	2.6692	24.2655	20.3830	0.1456		1.8442	1.8442		1.8442	1.8442	0.0000	26,415.9633	26,415.9633	0.5063	0.4843	26,572.9402
Hotel	1.93422e+007	0.1043	0.9482	0.7964	5.6900e-003		0.0721	0.0721		0.0721	0.0721	0.0000	1,032.1715	1,032.1715	0.0198	0.0189	1,038.3052
Junior College (2Yr)	4.36983e+007	0.2356	2.1421	1.7993	0.0129		0.1628	0.1628		0.1628	0.1628	0.0000	2,331.9093	2,331.9093	0.0447	0.0428	2,345.7667
Regional Shopping Center	9.47346e+006	0.0511	0.4644	0.3901	2.7900e-003		0.0353	0.0353		0.0353	0.0353	0.0000	505.5400	505.5400	9.6900e-003	9.2700e-003	508.5442
Single Family Housing	4.46196e+008	2.4060	20.5600	8.7489	0.1312		1.6623	1.6623		1.6623	1.6623	0.0000	23,810.7095	23,810.7095	0.4564	0.4365	23,952.2047
Total		6.6150	58.3212	37.2071	0.3608		4.5703	4.5703		4.5703	4.5703	0.0000	65,465.1117	65,465.1117	1.2548	1.2002	65,854.1381

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.84447e+007	9,255.5024	0.5755	0.0698	9,290.6753
Elementary School	3.1631e+006	761.5114	0.0474	5.7400e-003	764.4053
General Light Industry	2.28105e+007	5,491.5998	0.3414	0.0414	5,512.4691
General Office Building	1.01629e+008	24,467.1381	1.5212	0.1844	24,560.1184
Hotel	6.20909e+006	1,494.8306	0.0929	0.0113	1,500.5113
Junior College (2Yr)	1.6413e+007	3,951.4011	0.2457	0.0298	3,966.4173
Regional Shopping Center	7.91752e+007	19,061.3193	1.1851	0.1437	19,133.7563
Single Family Housing	1.11506e+008	26,844.9235	1.6691	0.2023	26,946.9399
Total		91,328.2263	5.6783	0.6883	91,675.2928

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.84447e+007	9,255.5024	0.5755	0.0698	9,290.6753
Elementary School	3.1631e+006	761.5114	0.0474	5.7400e-003	764.4053
General Light Industry	2.28105e+007	5,491.5998	0.3414	0.0414	5,512.4691
General Office Building	1.01629e+008	24,467.1381	1.5212	0.1844	24,560.1184
Hotel	6.20909e+006	1,494.8306	0.0929	0.0113	1,500.5113
Junior College (2Yr)	1.6413e+007	3,951.4011	0.2457	0.0298	3,966.4173
Regional Shopping Center	7.91752e+007	19,061.3193	1.1851	0.1437	19,133.7563
Single Family Housing	1.11506e+008	26,844.9235	1.6691	0.2023	26,946.9399
Total		91,328.2263	5.6783	0.6883	91,675.2928

6.0 Area Detail

6.1 Mitigation Measures Area

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	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	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246
Unmitigated	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246

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	17.8036					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	177.8737					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	73.6387	5.8308	142.9158	0.3646		21.4670	21.4670		21.4670	21.4670	2,388.0171	4,588.9487	6,976.9657	7.1215	0.1621	7,203.3043
Landscaping	7.2017	2.7055	233.7294	0.0123		1.2793	1.2793		1.2793	1.2793	0.0000	380.1313	380.1313	0.3756	0.0000	389.5203
Total	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246

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6.2 Area by SubCategory

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	17.8036					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	177.8737					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	73.6387	5.8308	142.9158	0.3646		21.4670	21.4670		21.4670	21.4670	2,388.0171	4,588.9487	6,976.9657	7.1215	0.1621	7,203.3043
Landscaping	7.2017	2.7055	233.7294	0.0123		1.2793	1.2793		1.2793	1.2793	0.0000	380.1313	380.1313	0.3756	0.0000	389.5203
Total	276.5176	8.5363	376.6452	0.3769		22.7463	22.7463		22.7463	22.7463	2,388.0171	4,969.0799	7,357.0970	7.4971	0.1621	7,592.8246

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16,889.18 21	111.9163	2.7385	20,503.16 96
Unmitigated	16,889.18 21	111.9163	2.7385	20,503.16 96

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	585.995 / 369.432	3,011.0066	19.2703	0.4722	3,633.4674
Elementary School	15.1854 / 39.0483	156.8639	0.5043	0.0128	173.2939
General Light Industry	468.466 / 0	1,617.1654	15.3563	0.3715	2,111.7816
General Office Building	933.486 / 572.137	4,752.7377	30.6948	0.7518	5,744.1467
Hotel	18.4416 / 2.04907	69.1420	0.6049	0.0147	88.6339
Junior College (2Yr)	78.7711 / 123.206	601.4625	2.6026	0.0650	685.8829
Regional Shopping Center	425.287 / 260.66	2,165.2983	13.9842	0.3425	2,616.9741
Single Family Housing	878.797 / 554.025	4,515.5056	28.8991	0.7081	5,448.9892
Total		16,889.1821	111.9164	2.7385	20,503.1696

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	585.995 / 369.432	3,011.0066	19.2703	0.4722	3,633.4674
Elementary School	15.1854 / 39.0483	156.8639	0.5043	0.0128	173.2939
General Light Industry	468.466 / 0	1,617.1654	15.3563	0.3715	2,111.7816
General Office Building	933.486 / 572.137	4,752.7377	30.6948	0.7518	5,744.1467
Hotel	18.4416 / 2.04907	69.1420	0.6049	0.0147	88.6339
Junior College (2Yr)	78.7711 / 123.206	601.4625	2.6026	0.0650	685.8829
Regional Shopping Center	425.287 / 260.66	2,165.2983	13.9842	0.3425	2,616.9741
Single Family Housing	878.797 / 554.025	4,515.5056	28.8991	0.7081	5,448.9892
Total		16,889.1821	111.9164	2.7385	20,503.1696

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8,451.295 3	499.4572	0.0000	20,937.72 64
Unmitigated	8,451.295 3	499.4572	0.0000	20,937.72 64

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4137.24	839.8223	49.6321	0.0000	2,080.6243
Elementary School	1143.18	232.0552	13.7141	0.0000	574.9070
General Light Industry	2511.99	509.9113	30.1349	0.0000	1,263.2836
General Office Building	4884.51	991.5114	58.5966	0.0000	2,456.4275
Hotel	398.03	80.7965	4.7749	0.0000	200.1699
Junior College (2Yr)	6714.18	1,362.9179	80.5461	0.0000	3,376.5713
Regional Shopping Center	6028.56	1,223.7432	72.3212	0.0000	3,031.7720
Single Family Housing	15816.2	3,210.5376	189.7373	0.0000	7,953.9709
Total		8,451.2953	499.4572	0.0000	20,937.7264

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4137.24	839.8223	49.6321	0.0000	2,080.6243
Elementary School	1143.18	232.0552	13.7141	0.0000	574.9070
General Light Industry	2511.99	509.9113	30.1349	0.0000	1,263.2836
General Office Building	4884.51	991.5114	58.5966	0.0000	2,456.4275
Hotel	398.03	80.7965	4.7749	0.0000	200.1699
Junior College (2Yr)	6714.18	1,362.9179	80.5461	0.0000	3,376.5713
Regional Shopping Center	6028.56	1,223.7432	72.3212	0.0000	3,031.7720
Single Family Housing	15816.2	3,210.5376	189.7373	0.0000	7,953.9709
Total		8,451.2953	499.4572	0.0000	20,937.7264

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Monterey Park Focused GPU - Los Angeles-South Coast County, Annual

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

MontPark_Focused_GPU_2040FutBase
Los Angeles-South Coast County, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,252.16	1000sqft	195.00	5,252,160.00	0
Elementary School	6,264.00	Student	74.00	589,400.00	0
Junior College (2Yr)	36,970.00	Student	77.00	1,613,823.21	0
General Light Industry	2,025.80	1000sqft	143.00	2,025,800.00	0
Hotel	727.00	Room	9.00	803,246.00	0
Apartments Low Rise	8,994.00	Dwelling Unit	592.00	8,994,000.00	0
Single Family Housing	13,488.00	Dwelling Unit	2,078.00	24,278,400.00	0
Regional Shopping Center	5,741.49	1000sqft	174.00	5,741,490.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.58	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source: EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Grading - Operational emissions run only. No construction emissions estimates needed.

Trips and VMT - Operational emissions run only. No construction emissions estimates needed.

Architectural Coating - Operational emissions run only. No construction emissions estimates needed.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value. Future baseline rates reflects TIA growth rate of 1.06.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,012,960.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	24,038,879.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,458,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,376,610.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	155,000.00	2.00
tblConstructionPhase	NumDays	10,000.00	3.00
tblConstructionPhase	NumDays	15,500.00	1.00
tblConstructionPhase	NumDays	11,000.00	2.00
tblConstructionPhase	NumDays	6,000.00	2.00
tblConstructionPhase	PhaseEndDate	3/12/2838	1/17/2039

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

tblConstructionPhase	PhaseEndDate	11/13/2753	1/12/2039
tblConstructionPhase	PhaseEndDate	4/30/2077	1/5/2039
tblConstructionPhase	PhaseEndDate	9/28/2159	1/10/2039
tblConstructionPhase	PhaseEndDate	1/12/2796	1/14/2039
tblConstructionPhase	PhaseEndDate	4/30/2100	1/7/2039
tblConstructionPhase	PhaseStartDate	1/13/2796	1/15/2039
tblConstructionPhase	PhaseStartDate	9/29/2159	1/11/2039
tblConstructionPhase	PhaseStartDate	5/1/2100	1/8/2039
tblConstructionPhase	PhaseStartDate	11/14/2753	1/13/2039
tblConstructionPhase	PhaseStartDate	5/1/2077	1/6/2039
tblLandUse	LandUseSquareFeet	523,691.51	589,400.00
tblLandUse	LandUseSquareFeet	1,055,604.00	803,246.00
tblLandUse	LotAcreage	120.57	195.00
tblLandUse	LotAcreage	12.02	74.00
tblLandUse	LotAcreage	37.05	77.00
tblLandUse	LotAcreage	46.51	143.00
tblLandUse	LotAcreage	24.23	9.00
tblLandUse	LotAcreage	562.13	592.00
tblLandUse	LotAcreage	4,379.22	2,078.00
tblLandUse	LotAcreage	131.81	174.00
tblLandUse	Population	25,723.00	0.00
tblLandUse	Population	38,576.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.58
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	5,030.00	0.00
tblTripsAndVMT	WorkerTripNumber	16,963.00	0.00
tblTripsAndVMT	WorkerTripNumber	3,393.00	0.00
tblVehicleTrips	ST_TR	7.16	7.60
tblVehicleTrips	ST_TR	1.32	1.40
tblVehicleTrips	ST_TR	2.46	2.61
tblVehicleTrips	ST_TR	8.19	8.70
tblVehicleTrips	ST_TR	0.42	0.45
tblVehicleTrips	ST_TR	49.97	53.05
tblVehicleTrips	ST_TR	9.91	10.52

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

tblVehicleTrips	SU_TR	6.07	6.44
tblVehicleTrips	SU_TR	0.68	0.72
tblVehicleTrips	SU_TR	1.05	1.11
tblVehicleTrips	SU_TR	5.95	6.32
tblVehicleTrips	SU_TR	25.24	26.80
tblVehicleTrips	SU_TR	8.62	9.15
tblVehicleTrips	WD_TR	6.59	7.77
tblVehicleTrips	WD_TR	1.29	1.37
tblVehicleTrips	WD_TR	6.97	5.27
tblVehicleTrips	WD_TR	11.03	10.34
tblVehicleTrips	WD_TR	8.17	8.88
tblVehicleTrips	WD_TR	1.23	1.22
tblVehicleTrips	WD_TR	42.70	40.08
tblVehicleTrips	WD_TR	9.52	10.02

2.0 Emissions Summary

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

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	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011
Energy	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616
Mobile	517.3837	3,351.3181	6,470.1095	36.2392	3,799.0504	15.0154	3,814.0658	1,016.4525	13.9748	1,030.4274		3,729,227.0076	3,729,227.0076	138.9733		3,732,701.3390
Total	7,558.3948	4,015.4414	19,849.7250	66.6127	3,799.0504	1,756.7161	5,555.7665	1,016.4525	1,755.6755	2,772.1280	210,587.0595	4,358,814.9736	4,569,402.0330	774.4421	18.3551	4,594,232.9017

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	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011
Energy	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616
Mobile	517.3837	3,351.3181	6,470.1095	36.2392	3,799.0504	15.0154	3,814.0658	1,016.4525	13.9748	1,030.4274		3,729,227.0076	3,729,227.0076	138.9733		3,732,701.3390
Total	7,558.3948	4,015.4414	19,849.7250	66.6127	3,799.0504	1,756.7161	5,555.7665	1,016.4525	1,755.6755	2,772.1280	210,587.0595	4,358,814.9736	4,569,402.0330	774.4421	18.3551	4,594,232.9017

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

	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
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	Demolition	Demolition	1/3/2039	1/5/2039	5	3	
2	Site Preparation	Site Preparation	1/6/2039	1/7/2039	5	2	
3	Grading	Grading	1/8/2039	1/10/2039	5	1	
4	Building Construction	Building Construction	1/11/2039	1/12/2039	5	2	
5	Paving	Paving	1/13/2039	1/14/2039	5	2	
6	Architectural Coating	Architectural Coating	1/15/2039	1/17/2039	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	158	0.38
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Paving Equipment	0	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

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
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.3 Site Preparation - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.4 Grading - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.4 Grading - 2039

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			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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000							

3.5 Building Construction - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.6 Paving - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.7 Architectural Coating - 2039

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

	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	517.3837	3,351.318 1	6,470.109 5	36.2392	3,799.050 4	15.0154	3,814.065 8	1,016.452 5	13.9748	1,030.4274		3,729,227. 0076	3,729,227. 0076	138.9733		3,732,701. 3390
Unmitigated	517.3837	3,351.318 1	6,470.109 5	36.2392	3,799.050 4	15.0154	3,814.065 8	1,016.452 5	13.9748	1,030.4274		3,729,227. 0076	3,729,227. 0076	138.9733		3,732,701. 3390

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	69,883.38	68,354.40	57921.36	232,216,298	232,216,298
Elementary School	8,581.68	0.00	0.00	21,125,545	21,125,545
General Light Industry	10,675.97	2,836.12	1458.58	36,485,544	36,485,544
General Office Building	54,307.33	13,708.14	5829.90	133,955,116	133,955,116
Hotel	6,455.76	6,324.90	4594.64	14,725,518	14,725,518
Junior College (2Yr)	45,103.40	16,636.50	1478.80	105,122,404	105,122,404
Regional Shopping Center	230,118.92	304,586.04	153871.93	497,161,376	497,161,376
Single Family Housing	135,149.76	141,893.76	123415.20	459,391,047	459,391,047
Total	560,276.20	554,339.86	348,570.41	1,500,182,848	1,500,182,848

4.3 Trip Type Information

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Elementary School	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Hotel	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Junior College (2Yr)	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Regional Shopping Center	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

	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					
NaturalGas Mitigated	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616
NaturalGas Unmitigated	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	402630	4.3421	37.1051	15.7894	0.2368		3.0000	3.0000		3.0000	3.0000		47,368.2164	47,368.2164	0.9079	0.8684	47,649.7020
Elementary School	16793.9	0.1811	1.6465	1.3830	9.8800e-003		0.1251	0.1251		0.1251	0.1251		1,975.7486	1,975.7486	0.0379	0.0362	1,987.4895
General Light Industry	100457	1.0834	9.8488	8.2730	0.0591		0.7485	0.7485		0.7485	0.7485		11,818.5270	11,818.5270	0.2265	0.2167	11,888.7586
General Office Building	149794	1.6154	14.6857	12.3360	0.0881		1.1161	1.1161		1.1161	1.1161		17,622.8801	17,622.8801	0.3378	0.3231	17,727.6041
Hotel	52772.2	0.5691	5.1737	4.3459	0.0310		0.3932	0.3932		0.3932	0.3932		6,208.4896	6,208.4896	0.1190	0.1138	6,245.3836
Junior College (2Yr)	119732	1.2912	11.7385	9.8603	0.0704		0.8921	0.8921		0.8921	0.8921		14,086.1668	14,086.1668	0.2700	0.2583	14,169.8739
Regional Shopping Center	25797.4	0.2782	2.5292	2.1245	0.0152		0.1922	0.1922		0.1922	0.1922		3,034.9859	3,034.9859	0.0582	0.0556	3,053.0213
Single Family Housing	1.01528e+006	10.9491	93.5650	39.8149	0.5972		7.5648	7.5648		7.5648	7.5648		119,444.7284	119,444.7284	2.2894	2.1898	120,154.5287
Total		20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	402.63	4.3421	37.1051	15.7894	0.2368		3.0000	3.0000		3.0000	3.0000		47,368.2164	47,368.2164	0.9079	0.8684	47,649.7020
Elementary School	16.7939	0.1811	1.6465	1.3830	9.8800e-003		0.1251	0.1251		0.1251	0.1251		1,975.7486	1,975.7486	0.0379	0.0362	1,987.4895
General Light Industry	100.457	1.0834	9.8488	8.2730	0.0591		0.7485	0.7485		0.7485	0.7485		11,818.5270	11,818.5270	0.2265	0.2167	11,888.7586
General Office Building	149.794	1.6154	14.6857	12.3360	0.0881		1.1161	1.1161		1.1161	1.1161		17,622.8801	17,622.8801	0.3378	0.3231	17,727.6041
Hotel	52.7722	0.5691	5.1737	4.3459	0.0310		0.3932	0.3932		0.3932	0.3932		6,208.4896	6,208.4896	0.1190	0.1138	6,245.3836
Junior College (2Yr)	119.732	1.2912	11.7385	9.8603	0.0704		0.8921	0.8921		0.8921	0.8921		14,086.1668	14,086.1668	0.2700	0.2583	14,169.8739
Regional Shopping Center	25.7974	0.2782	2.5292	2.1245	0.0152		0.1922	0.1922		0.1922	0.1922		3,034.9859	3,034.9859	0.0582	0.0556	3,053.0213
Single Family Housing	1015.28	10.9491	93.5650	39.8149	0.5972		7.5648	7.5648		7.5648	7.5648		119,444.7284	119,444.7284	2.2894	2.1898	120,154.5287
Total		20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

6.0 Area Detail

6.1 Mitigation Measures Area

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

	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	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011
Unmitigated	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

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	97.7408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	976.1067					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	55.7606	21.3670	1,852.4260	0.0984		10.3063	10.3063		10.3063	10.3063		3,352.2231	3,352.2231	3.2110		3,432.4988
Total	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

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	97.7408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	976.1067					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	55.7606	21.3670	1,852.4260	0.0984		10.3063	10.3063		10.3063	10.3063		3,352.2231	3,352.2231	3.2110		3,432.4988
Total	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

MontPark_Focused_GPU_2040FutBase
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5,252.16	1000sqft	195.00	5,252,160.00	0
Elementary School	6,264.00	Student	74.00	589,400.00	0
Junior College (2Yr)	36,970.00	Student	77.00	1,613,823.21	0
General Light Industry	2,025.80	1000sqft	143.00	2,025,800.00	0
Hotel	727.00	Room	9.00	803,246.00	0
Apartments Low Rise	8,994.00	Dwelling Unit	592.00	8,994,000.00	0
Single Family Housing	13,488.00	Dwelling Unit	2,078.00	24,278,400.00	0
Regional Shopping Center	5,741.49	1000sqft	174.00	5,741,490.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.58	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source: EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions run only. No construction emissions estimates needed.

Grading - Operational emissions run only. No construction emissions estimates needed.

Trips and VMT - Operational emissions run only. No construction emissions estimates needed.

Architectural Coating - Operational emissions run only. No construction emissions estimates needed.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value. Future baseline rates reflects TIA growth rate of 1.06.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,012,960.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	24,038,879.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,458,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,376,610.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	155,000.00	2.00
tblConstructionPhase	NumDays	10,000.00	3.00
tblConstructionPhase	NumDays	15,500.00	1.00
tblConstructionPhase	NumDays	11,000.00	2.00
tblConstructionPhase	NumDays	6,000.00	2.00
tblConstructionPhase	PhaseEndDate	3/12/2838	1/17/2039

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

tblConstructionPhase	PhaseEndDate	11/13/2753	1/12/2039
tblConstructionPhase	PhaseEndDate	4/30/2077	1/5/2039
tblConstructionPhase	PhaseEndDate	9/28/2159	1/10/2039
tblConstructionPhase	PhaseEndDate	1/12/2796	1/14/2039
tblConstructionPhase	PhaseEndDate	4/30/2100	1/7/2039
tblConstructionPhase	PhaseStartDate	1/13/2796	1/15/2039
tblConstructionPhase	PhaseStartDate	9/29/2159	1/11/2039
tblConstructionPhase	PhaseStartDate	5/1/2100	1/8/2039
tblConstructionPhase	PhaseStartDate	11/14/2753	1/13/2039
tblConstructionPhase	PhaseStartDate	5/1/2077	1/6/2039
tblLandUse	LandUseSquareFeet	523,691.51	589,400.00
tblLandUse	LandUseSquareFeet	1,055,604.00	803,246.00
tblLandUse	LotAcreage	120.57	195.00
tblLandUse	LotAcreage	12.02	74.00
tblLandUse	LotAcreage	37.05	77.00
tblLandUse	LotAcreage	46.51	143.00
tblLandUse	LotAcreage	24.23	9.00
tblLandUse	LotAcreage	562.13	592.00
tblLandUse	LotAcreage	4,379.22	2,078.00
tblLandUse	LotAcreage	131.81	174.00
tblLandUse	Population	25,723.00	0.00
tblLandUse	Population	38,576.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.58
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	5,030.00	0.00
tblTripsAndVMT	WorkerTripNumber	16,963.00	0.00
tblTripsAndVMT	WorkerTripNumber	3,393.00	0.00
tblVehicleTrips	ST_TR	7.16	7.60
tblVehicleTrips	ST_TR	1.32	1.40
tblVehicleTrips	ST_TR	2.46	2.61
tblVehicleTrips	ST_TR	8.19	8.70
tblVehicleTrips	ST_TR	0.42	0.45
tblVehicleTrips	ST_TR	49.97	53.05
tblVehicleTrips	ST_TR	9.91	10.52

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	6.07	6.44
tblVehicleTrips	SU_TR	0.68	0.72
tblVehicleTrips	SU_TR	1.05	1.11
tblVehicleTrips	SU_TR	5.95	6.32
tblVehicleTrips	SU_TR	25.24	26.80
tblVehicleTrips	SU_TR	8.62	9.15
tblVehicleTrips	WD_TR	6.59	7.77
tblVehicleTrips	WD_TR	1.29	1.37
tblVehicleTrips	WD_TR	6.97	5.27
tblVehicleTrips	WD_TR	11.03	10.34
tblVehicleTrips	WD_TR	8.17	8.88
tblVehicleTrips	WD_TR	1.23	1.22
tblVehicleTrips	WD_TR	42.70	40.08
tblVehicleTrips	WD_TR	9.52	10.02

2.0 Emissions Summary

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

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	7,020.701 5	487.8308	13,285.68 85	29.2656		1,727.668 5	1,727.668 5		1,727.668 5	1,727.6685	210,587.0 595	408,028.2 231	618,615.2 826	631.2223	14.2932	638,655.2 011
Energy	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7 428	221,559.7 428	4.2466	4.0619	222,876.3 616
Mobile	504.3292	3,367.817 7	6,200.707 9	34.5659	3,799.050 4	15.0540	3,814.104 4	1,016.452 5	14.0117	1,030.4642		3,558,850. 2738	3,558,850. 2738	141.0202		3,562,375. 7785
Total	7,545.340 4	4,031.940 9	19,580.32 34	64.9394	3,799.050 4	1,756.754 6	5,555.805 0	1,016.452 5	1,755.712 3	2,772.1649	210,587.0 595	4,188,438. 2398	4,399,025. 2993	776.4891	18.3551	4,423,907. 3411

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	7,020.701 5	487.8308	13,285.68 85	29.2656		1,727.668 5	1,727.668 5		1,727.668 5	1,727.6685	210,587.0 595	408,028.2 231	618,615.2 826	631.2223	14.2932	638,655.2 011
Energy	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7 428	221,559.7 428	4.2466	4.0619	222,876.3 616
Mobile	504.3292	3,367.817 7	6,200.707 9	34.5659	3,799.050 4	15.0540	3,814.104 4	1,016.452 5	14.0117	1,030.4642		3,558,850. 2738	3,558,850. 2738	141.0202		3,562,375. 7785
Total	7,545.340 4	4,031.940 9	19,580.32 34	64.9394	3,799.050 4	1,756.754 6	5,555.805 0	1,016.452 5	1,755.712 3	2,772.1649	210,587.0 595	4,188,438. 2398	4,399,025. 2993	776.4891	18.3551	4,423,907. 3411

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

	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
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	Demolition	Demolition	1/3/2039	1/5/2039	5	3	
2	Site Preparation	Site Preparation	1/6/2039	1/7/2039	5	2	
3	Grading	Grading	1/8/2039	1/10/2039	5	1	
4	Building Construction	Building Construction	1/11/2039	1/12/2039	5	2	
5	Paving	Paving	1/13/2039	1/14/2039	5	2	
6	Architectural Coating	Architectural Coating	1/15/2039	1/17/2039	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Demolition	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	158	0.38
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Paving Equipment	0	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

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
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.2 Demolition - 2039

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			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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.3 Site Preparation - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.4 Grading - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.5 Building Construction - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.6 Paving - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.6 Paving - 2039

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			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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000							

3.7 Architectural Coating - 2039

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	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

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

	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	504.3292	3,367.817 7	6,200.707 9	34.5659	3,799.050 4	15.0540	3,814.104 4	1,016.452 5	14.0117	1,030.4642		3,558,850. 2738	3,558,850. 2738	141.0202		3,562,375. 7785
Unmitigated	504.3292	3,367.817 7	6,200.707 9	34.5659	3,799.050 4	15.0540	3,814.104 4	1,016.452 5	14.0117	1,030.4642		3,558,850. 2738	3,558,850. 2738	141.0202		3,562,375. 7785

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	69,883.38	68,354.40	57921.36	232,216,298	232,216,298
Elementary School	8,581.68	0.00	0.00	21,125,545	21,125,545
General Light Industry	10,675.97	2,836.12	1458.58	36,485,544	36,485,544
General Office Building	54,307.33	13,708.14	5829.90	133,955,116	133,955,116
Hotel	6,455.76	6,324.90	4594.64	14,725,518	14,725,518
Junior College (2Yr)	45,103.40	16,636.50	1478.80	105,122,404	105,122,404
Regional Shopping Center	230,118.92	304,586.04	153871.93	497,161,376	497,161,376
Single Family Housing	135,149.76	141,893.76	123415.20	459,391,047	459,391,047
Total	560,276.20	554,339.86	348,570.41	1,500,182,848	1,500,182,848

4.3 Trip Type Information

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Elementary School	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Hotel	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Junior College (2Yr)	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Regional Shopping Center	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

	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					
NaturalGas Mitigated	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616
NaturalGas Unmitigated	20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	402630	4.3421	37.1051	15.7894	0.2368		3.0000	3.0000		3.0000	3.0000		47,368.2164	47,368.2164	0.9079	0.8684	47,649.7020
Elementary School	16793.9	0.1811	1.6465	1.3830	9.8800e-003		0.1251	0.1251		0.1251	0.1251		1,975.7486	1,975.7486	0.0379	0.0362	1,987.4895
General Light Industry	100457	1.0834	9.8488	8.2730	0.0591		0.7485	0.7485		0.7485	0.7485		11,818.5270	11,818.5270	0.2265	0.2167	11,888.7586
General Office Building	149794	1.6154	14.6857	12.3360	0.0881		1.1161	1.1161		1.1161	1.1161		17,622.8801	17,622.8801	0.3378	0.3231	17,727.6041
Hotel	52772.2	0.5691	5.1737	4.3459	0.0310		0.3932	0.3932		0.3932	0.3932		6,208.4896	6,208.4896	0.1190	0.1138	6,245.3836
Junior College (2Yr)	119732	1.2912	11.7385	9.8603	0.0704		0.8921	0.8921		0.8921	0.8921		14,086.1668	14,086.1668	0.2700	0.2583	14,169.8739
Regional Shopping Center	25797.4	0.2782	2.5292	2.1245	0.0152		0.1922	0.1922		0.1922	0.1922		3,034.9859	3,034.9859	0.0582	0.0556	3,053.0213
Single Family Housing	1.01528e+006	10.9491	93.5650	39.8149	0.5972		7.5648	7.5648		7.5648	7.5648		119,444.7284	119,444.7284	2.2894	2.1898	120,154.5287
Total		20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	402.63	4.3421	37.1051	15.7894	0.2368		3.0000	3.0000		3.0000	3.0000		47,368.2164	47,368.2164	0.9079	0.8684	47,649.7020
Elementary School	16.7939	0.1811	1.6465	1.3830	9.8800e-003		0.1251	0.1251		0.1251	0.1251		1,975.7486	1,975.7486	0.0379	0.0362	1,987.4895
General Light Industry	100.457	1.0834	9.8488	8.2730	0.0591		0.7485	0.7485		0.7485	0.7485		11,818.5270	11,818.5270	0.2265	0.2167	11,888.7586
General Office Building	149.794	1.6154	14.6857	12.3360	0.0881		1.1161	1.1161		1.1161	1.1161		17,622.8801	17,622.8801	0.3378	0.3231	17,727.6041
Hotel	52.7722	0.5691	5.1737	4.3459	0.0310		0.3932	0.3932		0.3932	0.3932		6,208.4896	6,208.4896	0.1190	0.1138	6,245.3836
Junior College (2Yr)	119.732	1.2912	11.7385	9.8603	0.0704		0.8921	0.8921		0.8921	0.8921		14,086.1668	14,086.1668	0.2700	0.2583	14,169.8739
Regional Shopping Center	25.7974	0.2782	2.5292	2.1245	0.0152		0.1922	0.1922		0.1922	0.1922		3,034.9859	3,034.9859	0.0582	0.0556	3,053.0213
Single Family Housing	1015.28	10.9491	93.5650	39.8149	0.5972		7.5648	7.5648		7.5648	7.5648		119,444.7284	119,444.7284	2.2894	2.1898	120,154.5287
Total		20.3096	176.2925	93.9271	1.1078		14.0321	14.0321		14.0321	14.0321		221,559.7428	221,559.7428	4.2466	4.0619	222,876.3616

6.0 Area Detail

6.1 Mitigation Measures Area

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

	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	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011
Unmitigated	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

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	97.7408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	976.1067					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	55.7606	21.3670	1,852.4260	0.0984		10.3063	10.3063		10.3063	10.3063		3,352.2231	3,352.2231	3.2110		3,432.4988
Total	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

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	97.7408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	976.1067					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,891.0934	466.4637	11,433.2625	29.1673		1,717.3622	1,717.3622		1,717.3622	1,717.3622	210,587.0595	404,676.0000	615,263.0595	628.0113	14.2932	635,222.7023
Landscaping	55.7606	21.3670	1,852.4260	0.0984		10.3063	10.3063		10.3063	10.3063		3,352.2231	3,352.2231	3.2110		3,432.4988
Total	7,020.7015	487.8308	13,285.6885	29.2656		1,727.6685	1,727.6685		1,727.6685	1,727.6685	210,587.0595	408,028.2231	618,615.2826	631.2223	14.2932	638,655.2011

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

MontPark_Focused_GPU_2040FutBase - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Monterey Park Focused GPU Construction
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	88.39	1000sqft	2.03	88,390.20	0
Elementary School	10.98	1000sqft	0.25	10,980.00	0
Junior College (2Yr)	369.70	Student	0.00	16,138.23	0
Hotel	60.70	Room	2.02	88,136.40	0
Apartments Low Rise	365.33	Dwelling Unit	22.83	365,333.30	1045
Regional Shopping Center	61.99	1000sqft	0.00	61,993.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	474.88	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Project Characteristics - MIG Modeler: Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Construction lengths altered to represent one year of construction

Demolition -

Construction Off-road Equipment Mitigation -

Area Mitigation - 'Super Compliant' SCAQMD Rule 1113

Architectural Coating - SCAQMD Rule 1113 Super Compliant

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	10
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	10
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	10
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	10
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	10
tblConstructionPhase	NumDays	440.00	167.00
tblConstructionPhase	PhaseEndDate	4/26/2022	4/24/2020
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	3/8/2022	3/6/2020
tblConstructionPhase	PhaseStartDate	3/9/2022	3/9/2020
tblConstructionPhase	PhaseStartDate	1/19/2022	1/19/2020
tblLandUse	LandUseSquareFeet	365,333.00	365,333.30
tblLandUse	LotAcreage	0.37	0.00
tblLandUse	LotAcreage	1.42	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	474.88
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

2.0 Emissions Summary

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

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	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Energy	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
Mobile	13.9169	63.6427	176.0700	0.5959	46.6174	0.4938	47.1112	12.4761	0.4610	12.9370		60,600.0418	60,600.0418	3.2063		60,680.1983
Total	124.6651	74.0698	393.6341	1.0872	46.6174	28.7698	75.3872	12.4761	28.7370	41.2131	3,422.6720	70,342.7003	73,765.3723	13.5259	0.2893	74,189.7438

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	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Energy	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
Mobile	13.9169	63.6427	176.0700	0.5959	46.6174	0.4938	47.1112	12.4761	0.4610	12.9370		60,600.0418	60,600.0418	3.2063		60,680.1983
Total	123.5568	74.0698	393.6341	1.0872	46.6174	28.7698	75.3872	12.4761	28.7370	41.2131	3,422.6720	70,342.7003	73,765.3723	13.5259	0.2893	74,189.7438

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

	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
Percent Reduction	0.89	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	Demolition	Demolition	1/1/2020	2/11/2020	5	30	
2	Paving	Paving	1/19/2020	3/6/2020	5	35	
3	Site Preparation	Site Preparation	2/12/2020	3/10/2020	5	20	
4	Architectural Coating	Architectural Coating	3/9/2020	4/24/2020	5	35	
5	Grading	Grading	3/11/2020	5/12/2020	5	45	
6	Building Construction	Building Construction	5/13/2020	12/31/2020	5	167	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 739,800; Residential Outdoor: 246,600; Non-Residential Indoor: 398,457; Non-Residential Outdoor: 132,819; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

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
Architectural Coating	1	72.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	360.00	83.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	245.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

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					1.7669	0.0000	1.7669	0.2675	0.0000	0.2675			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	1.7669	1.6587	3.4256	0.2675	1.5419	1.8094		3,747.7049	3,747.7049	1.0580		3,774.1536

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.2 Demolition - 2020

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	0.0713	2.3483	0.5204	6.4500e-003	0.1428	7.4900e-003	0.1503	0.0391	7.1700e-003	0.0463		698.9293	698.9293	0.0476		700.1187
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.1404	2.3974	1.1771	8.2200e-003	0.3105	8.8900e-003	0.3194	0.0836	8.4600e-003	0.0921		875.3463	875.3463	0.0531		876.6746

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					0.6891	0.0000	0.6891	0.1043	0.0000	0.1043			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.6891	1.6587	2.3478	0.1043	1.5419	1.6462	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.2 Demolition - 2020

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	0.0713	2.3483	0.5204	6.4500e-003	0.1428	7.4900e-003	0.1503	0.0391	7.1700e-003	0.0463		698.9293	698.9293	0.0476		700.1187
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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.1404	2.3974	1.1771	8.2200e-003	0.3105	8.8900e-003	0.3194	0.0836	8.4600e-003	0.0921		875.3463	875.3463	0.0531		876.6746

3.3 Paving - 2020

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.3 Paving - 2020

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		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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.3 Paving - 2020

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		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	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560

3.4 Site Preparation - 2020

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.4 Site Preparation - 2020

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		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	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.0458	2.1974	9.2433	3.8730	2.0216	5.8946	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.4 Site Preparation - 2020

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		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	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672

3.5 Architectural Coating - 2020

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	20.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	20.3406	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.5 Architectural Coating - 2020

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		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	0.3314	0.2357	3.1525	8.5000e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		846.8013	846.8013	0.0267		847.4687
Total	0.3314	0.2357	3.1525	8.5000e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		846.8013	846.8013	0.0267		847.4687

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	20.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	20.3406	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.5 Architectural Coating - 2020

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		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	0.3314	0.2357	3.1525	8.5000e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		846.8013	846.8013	0.0267		847.4687
Total	0.3314	0.2357	3.1525	8.5000e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		846.8013	846.8013	0.0267		847.4687

3.6 Grading - 2020

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.6 Grading - 2020

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		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	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080

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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.3826	2.1739	5.5565	1.4026	2.0000	3.4026	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.6 Grading - 2020

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		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	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080

3.7 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.7 Building Construction - 2020

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		0.0000
Vendor	0.2952	8.8289	2.3133	0.0215	0.5314	0.0416	0.5729	0.1530	0.0398	0.1927		2,299.3050	2,299.3050	0.1403		2,302.8127
Worker	1.6567	1.1786	15.7624	0.0425	4.0240	0.0336	4.0576	1.0672	0.0310	1.0982		4,234.0063	4,234.0063	0.1335		4,237.3436
Total	1.9519	10.0075	18.0757	0.0641	4.5553	0.0752	4.6305	1.2202	0.0707	1.2909		6,533.3113	6,533.3113	0.2738		6,540.1563

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

3.7 Building Construction - 2020

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		0.0000
Vendor	0.2952	8.8289	2.3133	0.0215	0.5314	0.0416	0.5729	0.1530	0.0398	0.1927		2,299.3050	2,299.3050	0.1403		2,302.8127
Worker	1.6567	1.1786	15.7624	0.0425	4.0240	0.0336	4.0576	1.0672	0.0310	1.0982		4,234.0063	4,234.0063	0.1335		4,237.3436
Total	1.9519	10.0075	18.0757	0.0641	4.5553	0.0752	4.6305	1.2202	0.0707	1.2909		6,533.3113	6,533.3113	0.2738		6,540.1563

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

	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	13.9169	63.6427	176.0700	0.5959	46.6174	0.4938	47.1112	12.4761	0.4610	12.9370		60,600.04 18	60,600.04 18	3.2063		60,680.19 83
Unmitigated	13.9169	63.6427	176.0700	0.5959	46.6174	0.4938	47.1112	12.4761	0.4610	12.9370		60,600.04 18	60,600.04 18	3.2063		60,680.19 83

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,407.55	2,615.79	2217.57	8,235,869	8,235,869
Elementary School	169.42	0.00	0.00	417,065	417,065
General Office Building	974.94	217.44	92.81	2,386,168	2,386,168
Hotel	495.92	497.13	361.17	1,137,826	1,137,826
Junior College (2Yr)	454.73	155.27	14.79	1,054,414	1,054,414
Regional Shopping Center	2,647.11	3,097.80	1564.71	5,530,101	5,530,101
Total	7,149.67	6,583.43	4,251.04	18,761,443	18,761,443

4.3 Trip Type Information

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Elementary School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Hotel	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Junior College (2Yr)	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

	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					
NaturalGas Mitigated	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
NaturalGas Unmitigated	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	16354.7	0.1764	1.5072	0.6414	9.6200e-003		0.1219	0.1219		0.1219	0.1219		1,924.0813	1,924.0813	0.0369	0.0353	1,935.5151
Elementary School	312.855	3.3700e-003	0.0307	0.0258	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.8065	36.8065	7.1000e-004	6.7000e-004	37.0252
General Office Building	2520.94	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.5808	296.5808	5.6800e-003	5.4400e-003	298.3433
Hotel	5790.44	0.0625	0.5677	0.4769	3.4100e-003		0.0431	0.0431		0.0431	0.0431		681.2283	681.2283	0.0131	0.0125	685.2765
Junior College (2Yr)	1197.32	0.0129	0.1174	0.0986	7.0000e-004		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003		140.8617	140.8617	2.7000e-003	2.5800e-003	141.6987
Regional Shopping Center	278.545	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.7700	32.7700	6.3000e-004	6.0000e-004	32.9647
Total		0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	16.3547	0.1764	1.5072	0.6414	9.6200e-003		0.1219	0.1219		0.1219	0.1219		1,924.0813	1,924.0813	0.0369	0.0353	1,935.5151
Elementary School	0.312855	3.3700e-003	0.0307	0.0258	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.8065	36.8065	7.1000e-004	6.7000e-004	37.0252
General Office Building	2.52094	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.5808	296.5808	5.6800e-003	5.4400e-003	298.3433
Hotel	5.79044	0.0625	0.5677	0.4769	3.4100e-003		0.0431	0.0431		0.0431	0.0431		681.2283	681.2283	0.0131	0.0125	685.2765
Junior College (2Yr)	1.19732	0.0129	0.1174	0.0986	7.0000e-004		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003		140.8617	140.8617	2.7000e-003	2.5800e-003	141.6987
Regional Shopping Center	0.278545	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.7700	32.7700	6.3000e-004	6.0000e-004	32.9647
Total		0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

	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	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Unmitigated	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

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	1.3009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.4932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	95.7478	7.5804	185.8244	0.4741		27.9122	27.9122		27.9122	27.9122	3,422.6720	6,575.9294	9,998.6014	10.2070	0.2323	10,322.9980
Landscaping	0.9209	0.3492	30.2666	1.6000e-003		0.1667	0.1667		0.1667	0.1667		54.4006	54.4006	0.0529		55.7240
Total	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

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	0.1927					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.4932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	95.7478	7.5804	185.8244	0.4741		27.9122	27.9122		27.9122	27.9122	3,422.6720	6,575.9294	9,998.6014	10.2070	0.2323	10,322.9980
Landscaping	0.9209	0.3492	30.2666	1.6000e-003		0.1667	0.1667		0.1667	0.1667		54.4006	54.4006	0.0529		55.7240
Total	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Monterey Park Focused GPU Construction
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	88.39	1000sqft	2.03	88,390.20	0
Elementary School	10.98	1000sqft	0.25	10,980.00	0
Junior College (2Yr)	369.70	Student	0.00	16,138.23	0
Hotel	60.70	Room	2.02	88,136.40	0
Apartments Low Rise	365.33	Dwelling Unit	22.83	365,333.30	1045
Regional Shopping Center	61.99	1000sqft	0.00	61,993.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	474.88	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Project Characteristics - MIG Modeler: Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Construction lengths altered to represent one year of construction

Demolition -

Construction Off-road Equipment Mitigation -

Area Mitigation - 'Super Compliant' SCAQMD Rule 1113

Architectural Coating - SCAQMD Rule 1113 Super Compliant

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	10
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	10
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	10
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	10
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	10
tblConstructionPhase	NumDays	440.00	167.00
tblConstructionPhase	PhaseEndDate	4/26/2022	4/24/2020
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	3/8/2022	3/6/2020
tblConstructionPhase	PhaseStartDate	3/9/2022	3/9/2020
tblConstructionPhase	PhaseStartDate	1/19/2022	1/19/2020
tblLandUse	LandUseSquareFeet	365,333.00	365,333.30
tblLandUse	LotAcreage	0.37	0.00
tblLandUse	LotAcreage	1.42	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	474.88
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

2.0 Emissions Summary

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

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	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Energy	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
Mobile	13.5186	65.0718	168.4058	0.5665	46.6174	0.4968	47.1142	12.4761	0.4638	12.9399		57,637.7628	57,637.7628	3.2048		57,717.8827
Total	124.2668	75.4989	385.9700	1.0577	46.6174	28.7728	75.3902	12.4761	28.7399	41.2159	3,422.6720	67,380.4213	70,803.0933	13.5244	0.2893	71,227.4282

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	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Energy	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
Mobile	13.5186	65.0718	168.4058	0.5665	46.6174	0.4968	47.1142	12.4761	0.4638	12.9399		57,637.7628	57,637.7628	3.2048		57,717.8827
Total	123.1586	75.4989	385.9700	1.0577	46.6174	28.7728	75.3902	12.4761	28.7399	41.2159	3,422.6720	67,380.4213	70,803.0933	13.5244	0.2893	71,227.4282

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

	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
Percent Reduction	0.89	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	Demolition	Demolition	1/1/2020	2/11/2020	5	30	
2	Paving	Paving	1/19/2020	3/6/2020	5	35	
3	Site Preparation	Site Preparation	2/12/2020	3/10/2020	5	20	
4	Architectural Coating	Architectural Coating	3/9/2020	4/24/2020	5	35	
5	Grading	Grading	3/11/2020	5/12/2020	5	45	
6	Building Construction	Building Construction	5/13/2020	12/31/2020	5	167	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 739,800; Residential Outdoor: 246,600; Non-Residential Indoor: 398,457; Non-Residential Outdoor: 132,819; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

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
Architectural Coating	1	72.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	360.00	83.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	245.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020

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					1.7669	0.0000	1.7669	0.2675	0.0000	0.2675			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	1.7669	1.6587	3.4256	0.2675	1.5419	1.8094		3,747.7049	3,747.7049	1.0580		3,774.1536

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.2 Demolition - 2020

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	0.0731	2.3786	0.5530	6.3400e-003	0.1428	7.6100e-003	0.1504	0.0391	7.2800e-003	0.0464		686.8935	686.8935	0.0493		688.1261
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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.1497	2.4330	1.1545	8.0100e-003	0.3105	9.0100e-003	0.3195	0.0836	8.5700e-003	0.0922		853.0066	853.0066	0.0545		854.3700

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					0.6891	0.0000	0.6891	0.1043	0.0000	0.1043			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.6891	1.6587	2.3478	0.1043	1.5419	1.6462	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.2 Demolition - 2020

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	0.0731	2.3786	0.5530	6.3400e-003	0.1428	7.6100e-003	0.1504	0.0391	7.2800e-003	0.0464		686.8935	686.8935	0.0493		688.1261
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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.1497	2.4330	1.1545	8.0100e-003	0.3105	9.0100e-003	0.3195	0.0836	8.5700e-003	0.0922		853.0066	853.0066	0.0545		854.3700

3.3 Paving - 2020

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.3 Paving - 2020

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		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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.3 Paving - 2020

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		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	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440

3.4 Site Preparation - 2020

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.4 Site Preparation - 2020

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		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	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	7.0458	2.1974	9.2433	3.8730	2.0216	5.8946	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.4 Site Preparation - 2020

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		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	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927

3.5 Architectural Coating - 2020

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	20.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	20.3406	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.5 Architectural Coating - 2020

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		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	0.3679	0.2610	2.8873	8.0100e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		797.3427	797.3427	0.0251		797.9710
Total	0.3679	0.2610	2.8873	8.0100e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		797.3427	797.3427	0.0251		797.9710

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	20.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	20.3406	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.5 Architectural Coating - 2020

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		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	0.3679	0.2610	2.8873	8.0100e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		797.3427	797.3427	0.0251		797.9710
Total	0.3679	0.2610	2.8873	8.0100e-003	0.8048	6.7300e-003	0.8115	0.2134	6.2000e-003	0.2196		797.3427	797.3427	0.0251		797.9710

3.6 Grading - 2020

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	8.6733	2.1739	10.8472	3.5965	2.0000	5.5965		6,005.8653	6,005.8653	1.9424		6,054.4257

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.6 Grading - 2020

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		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	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586

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					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	3.3826	2.1739	5.5565	1.4026	2.0000	3.4026	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.6 Grading - 2020

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		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	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586

3.7 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.7 Building Construction - 2020

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		0.0000
Vendor	0.3086	8.8271	2.5513	0.0210	0.5314	0.0422	0.5736	0.1530	0.0404	0.1934		2,236.427 2	2,236.427 2	0.1496		2,240.165 9
Worker	1.8397	1.3049	14.4364	0.0400	4.0240	0.0336	4.0576	1.0672	0.0310	1.0982		3,986.713 4	3,986.713 4	0.1257		3,989.854 8
Total	2.1483	10.1320	16.9877	0.0610	4.5553	0.0759	4.6312	1.2202	0.0714	1.2915		6,223.140 6	6,223.140 6	0.2752		6,230.020 8

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

3.7 Building Construction - 2020

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		0.0000
Vendor	0.3086	8.8271	2.5513	0.0210	0.5314	0.0422	0.5736	0.1530	0.0404	0.1934		2,236.427 2	2,236.427 2	0.1496		2,240.165 9
Worker	1.8397	1.3049	14.4364	0.0400	4.0240	0.0336	4.0576	1.0672	0.0310	1.0982		3,986.713 4	3,986.713 4	0.1257		3,989.854 8
Total	2.1483	10.1320	16.9877	0.0610	4.5553	0.0759	4.6312	1.2202	0.0714	1.2915		6,223.140 6	6,223.140 6	0.2752		6,230.020 8

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

	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	13.5186	65.0718	168.4058	0.5665	46.6174	0.4968	47.1142	12.4761	0.4638	12.9399		57,637.76 28	57,637.76 28	3.2048		57,717.88 27
Unmitigated	13.5186	65.0718	168.4058	0.5665	46.6174	0.4968	47.1142	12.4761	0.4638	12.9399		57,637.76 28	57,637.76 28	3.2048		57,717.88 27

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,407.55	2,615.79	2217.57	8,235,869	8,235,869
Elementary School	169.42	0.00	0.00	417,065	417,065
General Office Building	974.94	217.44	92.81	2,386,168	2,386,168
Hotel	495.92	497.13	361.17	1,137,826	1,137,826
Junior College (2Yr)	454.73	155.27	14.79	1,054,414	1,054,414
Regional Shopping Center	2,647.11	3,097.80	1564.71	5,530,101	5,530,101
Total	7,149.67	6,583.43	4,251.04	18,761,443	18,761,443

4.3 Trip Type Information

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Elementary School	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
General Office Building	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Hotel	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Junior College (2Yr)	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Regional Shopping Center	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

	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					
NaturalGas Mitigated	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235
NaturalGas Unmitigated	0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	16354.7	0.1764	1.5072	0.6414	9.6200e-003		0.1219	0.1219		0.1219	0.1219		1,924.0813	1,924.0813	0.0369	0.0353	1,935.5151
Elementary School	312.855	3.3700e-003	0.0307	0.0258	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.8065	36.8065	7.1000e-004	6.7000e-004	37.0252
General Office Building	2520.94	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.5808	296.5808	5.6800e-003	5.4400e-003	298.3433
Hotel	5790.44	0.0625	0.5677	0.4769	3.4100e-003		0.0431	0.0431		0.0431	0.0431		681.2283	681.2283	0.0131	0.0125	685.2765
Junior College (2Yr)	1197.32	0.0129	0.1174	0.0986	7.0000e-004		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003		140.8617	140.8617	2.7000e-003	2.5800e-003	141.6987
Regional Shopping Center	278.545	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.7700	32.7700	6.3000e-004	6.0000e-004	32.9647
Total		0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	16.3547	0.1764	1.5072	0.6414	9.6200e-003		0.1219	0.1219		0.1219	0.1219		1,924.0813	1,924.0813	0.0369	0.0353	1,935.5151
Elementary School	0.312855	3.3700e-003	0.0307	0.0258	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.8065	36.8065	7.1000e-004	6.7000e-004	37.0252
General Office Building	2.52094	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.5808	296.5808	5.6800e-003	5.4400e-003	298.3433
Hotel	5.79044	0.0625	0.5677	0.4769	3.4100e-003		0.0431	0.0431		0.0431	0.0431		681.2283	681.2283	0.0131	0.0125	685.2765
Junior College (2Yr)	1.19732	0.0129	0.1174	0.0986	7.0000e-004		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003		140.8617	140.8617	2.7000e-003	2.5800e-003	141.6987
Regional Shopping Center	0.278545	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.7700	32.7700	6.3000e-004	6.0000e-004	32.9647
Total		0.2853	2.4974	1.4731	0.0156		0.1971	0.1971		0.1971	0.1971		3,112.3285	3,112.3285	0.0597	0.0571	3,130.8235

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

	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	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220
Unmitigated	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

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	1.3009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.4932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	95.7478	7.5804	185.8244	0.4741		27.9122	27.9122		27.9122	27.9122	3,422.6720	6,575.9294	9,998.6014	10.2070	0.2323	10,322.9980
Landscaping	0.9209	0.3492	30.2666	1.6000e-003		0.1667	0.1667		0.1667	0.1667		54.4006	54.4006	0.0529		55.7240
Total	110.4629	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

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	0.1927					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	12.4932					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	95.7478	7.5804	185.8244	0.4741		27.9122	27.9122		27.9122	27.9122	3,422.6720	6,575.9294	9,998.6014	10.2070	0.2323	10,322.9980
Landscaping	0.9209	0.3492	30.2666	1.6000e-003		0.1667	0.1667		0.1667	0.1667		54.4006	54.4006	0.0529		55.7240
Total	109.3547	7.9297	216.0910	0.4757		28.0789	28.0789		28.0789	28.0789	3,422.6720	6,630.3300	10,053.0020	10.2600	0.2323	10,378.7220

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Monterey Park Focused GPU Construction - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

Monterey Park Focused GPU Project
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6,136.07	1000sqft	140.86	6,136,066.00	0
Elementary School	7,544.00	Student	74.00	699,200.00	0
Junior College (2Yr)	40,667.00	Student	77.00	1,775,205.53	0
General Light Industry	1,786.06	1000sqft	41.00	1,786,058.00	0
Hotel	1,334.00	Room	44.47	1,936,968.00	0
Apartments Low Rise	12,830.00	Dwelling Unit	801.88	12,830,000.00	36694
Single Family Housing	13,468.00	Dwelling Unit	2,078.00	24,242,400.00	38518
Regional Shopping Center	6,361.42	1000sqft	174.00	6,361,424.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.53	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source: EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Future Baseline Condition model run - no construction emissions modeled.

Off-road Equipment - Future Baseline Condition model run - no construction emissions modeled.

Trips and VMT - Future Baseline Condition model run - no construction emissions modeled.

Grading - Operational emissions only. No construction emissions estimates needed.

Architectural Coating - Future Baseline Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value.

Woodstoves - Wood burning devices excluded from new development pursuant to SCAQMD Rule 445. Modeling assumes existing development that remains has stoves/hearts per default values.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017).

Water Mitigation - Energy efficient appliances in compliance with City's CAP Measure E3

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	9,347,461.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	28,042,382.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	25,023,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	75,071,610.00	0.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	2.00
tblConstructionPhase	NumDays	15,500.00	2.00
tblConstructionPhase	NumDays	155,000.00	2.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

tblConstructionPhase	NumDays	11,000.00	2.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblEnergyUse	LightingElect	2.59	1.81
tblEnergyUse	LightingElect	3.10	2.17
tblEnergyUse	LightingElect	3.77	2.64
tblEnergyUse	LightingElect	2.14	1.50
tblEnergyUse	LightingElect	3.39	2.37
tblEnergyUse	LightingElect	6.26	4.38
tblEnergyUse	T24E	257.27	128.63
tblEnergyUse	T24E	443.48	221.74
tblFireplaces	FireplaceWoodMass	1,019.20	989.60
tblFireplaces	NumberNoFireplace	1,283.00	1,475.00
tblFireplaces	NumberNoFireplace	1,346.80	1,366.00
tblFireplaces	NumberWood	641.50	449.70
tblFireplaces	NumberWood	673.40	654.40
tblLandUse	LandUseSquareFeet	6,136,070.00	6,136,066.00
tblLandUse	LandUseSquareFeet	630,703.82	699,200.00
tblLandUse	LandUseSquareFeet	1,786,060.00	1,786,058.00
tblLandUse	LandUseSquareFeet	6,361,420.00	6,361,424.00
tblLandUse	LotAcreage	14.48	74.00
tblLandUse	LotAcreage	40.75	77.00
tblLandUse	LotAcreage	4,372.73	2,078.00
tblLandUse	LotAcreage	146.04	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	5,875.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,688.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,138.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	7.16	7.07
tblVehicleTrips	ST_TR	1.32	1.24
tblVehicleTrips	ST_TR	2.46	2.30
tblVehicleTrips	ST_TR	0.42	0.36
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	9.91	9.79
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	0.68	0.64
tblVehicleTrips	SU_TR	1.05	0.98
tblVehicleTrips	SU_TR	0.04	0.03
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	8.62	8.52
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.65
tblVehicleTrips	WD_TR	11.03	9.12
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	1.23	0.98
tblVehicleTrips	WD_TR	42.70	35.36
tblVehicleTrips	WD_TR	9.52	9.33
tblWoodstoves	NumberCatalytic	641.50	449.70
tblWoodstoves	NumberCatalytic	673.40	654.40
tblWoodstoves	NumberNoncatalytic	641.50	449.70
tblWoodstoves	NumberNoncatalytic	673.40	654.40
tblWoodstoves	WoodstoveWoodMass	999.60	969.90

2.0 Emissions Summary

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Energy	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8 543	254,019.8 543	4.8687	4.6570	255,529.3 672
Mobile	523.9803	3,392.336 2	6,560.661 2	36.7553	3,854.234 0	15.2279	3,869.461 9	1,031.217 2	14.1727	1,045.3898		3,782,294. 4771	3,782,294. 4771	140.9024		3,785,817. 0367
Total	7,521.715 5	4,134.716 6	19,898.49 68	66.7023	3,854.234 0	1,706.030 9	5,560.264 9	1,031.217 2	1,704.975 6	2,736.1928	203,228.1 507	4,513,598. 9288	4,716,827. 0795	757.0893	19.9709	4,741,705. 6523

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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Energy	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8 543	254,019.8 543	4.8687	4.6570	255,529.3 672
Mobile	523.9803	3,392.336 2	6,560.661 2	36.7553	3,854.234 0	15.2279	3,869.461 9	1,031.217 2	14.1727	1,045.3898		3,782,294. 4771	3,782,294. 4771	140.9024		3,785,817. 0367
Total	7,521.715 5	4,134.716 6	19,898.49 68	66.7023	3,854.234 0	1,706.030 9	5,560.264 9	1,031.217 2	1,704.975 6	2,736.1928	203,228.1 507	4,513,598. 9288	4,716,827. 0795	757.0893	19.9709	4,741,705. 6523

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

	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
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	Demolition	Demolition	1/1/2039	1/3/2039	5	1	
2	Site Preparation	Site Preparation	1/4/2039	1/5/2039	5	2	
3	Grading	Grading	1/6/2039	1/7/2039	5	2	
4	Building Construction	Building Construction	1/8/2039	1/11/2039	5	2	
5	Paving	Paving	1/12/2039	1/13/2039	5	2	
6	Architectural Coating	Architectural Coating	1/14/2039	1/14/2039	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

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
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.3 Site Preparation - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.4 Grading - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.5 Building Construction - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.6 Paving - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.7 Architectural Coating - 2039

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

	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	523.9803	3,392.336 2	6,560.661 2	36.7553	3,854.234 0	15.2279	3,869.461 9	1,031.217 2	14.1727	1,045.3898		3,782,294. 4771	3,782,294. 4771	140.9024		3,785,817. 0367
Unmitigated	523.9803	3,392.336 2	6,560.661 2	36.7553	3,854.234 0	15.2279	3,869.461 9	1,031.217 2	14.1727	1,045.3898		3,782,294. 4771	3,782,294. 4771	140.9024		3,785,817. 0367

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	93,915.60	90,708.10	76980.00	310,573,112	310,573,112
Elementary School	9,731.76	0.00	0.00	23,956,700	23,956,700
General Light Industry	8,305.18	2,214.71	1143.08	28,393,918	28,393,918
General Office Building	55,960.96	14,112.96	6013.35	138,030,905	138,030,905
Hotel	11,152.24	10,925.46	7937.30	25,437,933	25,437,933
Junior College (2Yr)	39,853.66	14,640.12	1220.01	92,823,561	92,823,561
Regional Shopping Center	224,939.81	297,778.07	150383.97	485,979,016	485,979,016
Single Family Housing	125,656.44	131,851.72	114747.36	426,375,422	426,375,422
Total	569,515.65	562,231.15	358,425.07	1,531,570,568	1,531,570,568

4.3 Trip Type Information

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Elementary School	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Hotel	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Junior College (2Yr)	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Regional Shopping Center	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

	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					
NaturalGas Mitigated	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672
NaturalGas Unmitigated	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	574354	6.1940	52.9307	22.5237	0.3379		4.2795	4.2795		4.2795	4.2795		67,571.0714	67,571.0714	1.2951	1.2388	67,972.6125
Elementary School	19922.4	0.2149	1.9532	1.6407	0.0117		0.1484	0.1484		0.1484	0.1484		2,343.8131	2,343.8131	0.0449	0.0430	2,357.7412
General Light Industry	88568.9	0.9552	8.6832	7.2939	0.0521		0.6599	0.6599		0.6599	0.6599		10,419.8710	10,419.8710	0.1997	0.1910	10,481.7911
General Office Building	175004	1.8873	17.1573	14.4121	0.1029		1.3040	1.3040		1.3040	1.3040		20,588.7017	20,588.7017	0.3946	0.3775	20,711.0501
Hotel	127256	1.3724	12.4761	10.4799	0.0749		0.9482	0.9482		0.9482	0.9482		14,971.3111	14,971.3111	0.2870	0.2745	15,060.2781
Junior College (2Yr)	131706	1.4204	12.9123	10.8464	0.0775		0.9813	0.9813		0.9813	0.9813		15,494.7835	15,494.7835	0.2970	0.2841	15,586.8612
Regional Shopping Center	28582.8	0.3083	2.8022	2.3539	0.0168		0.2130	0.2130		0.2130	0.2130		3,362.6867	3,362.6867	0.0645	0.0617	3,382.6694
Single Family Housing	1.01377e+006	10.9329	93.4263	39.7559	0.5963		7.5536	7.5536		7.5536	7.5536		119,267.6158	119,267.6158	2.2860	2.1866	119,976.3636
Total		23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	574.354	6.1940	52.9307	22.5237	0.3379		4.2795	4.2795		4.2795	4.2795		67,571.0714	67,571.0714	1.2951	1.2388	67,972.6125
Elementary School	19.9224	0.2149	1.9532	1.6407	0.0117		0.1484	0.1484		0.1484	0.1484		2,343.8131	2,343.8131	0.0449	0.0430	2,357.7412
General Light Industry	88.5689	0.9552	8.6832	7.2939	0.0521		0.6599	0.6599		0.6599	0.6599		10,419.8710	10,419.8710	0.1997	0.1910	10,481.7911
General Office Building	175.004	1.8873	17.1573	14.4121	0.1029		1.3040	1.3040		1.3040	1.3040		20,588.7017	20,588.7017	0.3946	0.3775	20,711.0501
Hotel	127.256	1.3724	12.4761	10.4799	0.0749		0.9482	0.9482		0.9482	0.9482		14,971.3111	14,971.3111	0.2870	0.2745	15,060.2781
Junior College (2Yr)	131.706	1.4204	12.9123	10.8464	0.0775		0.9813	0.9813		0.9813	0.9813		15,494.7835	15,494.7835	0.2970	0.2841	15,586.8612
Regional Shopping Center	28.5828	0.3083	2.8022	2.3539	0.0168		0.2130	0.2130		0.2130	0.2130		3,362.6867	3,362.6867	0.0645	0.0617	3,382.6694
Single Family Housing	1013.77	10.9329	93.4263	39.7559	0.5963		7.5536	7.5536		7.5536	7.5536		119,267.6158	119,267.6158	2.2860	2.1866	119,976.3636
Total		23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

6.0 Area Detail

6.1 Mitigation Measures Area

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

	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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Unmitigated	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483

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	111.0338					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,104.193 0					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,694.024 4	515.0479	11,061.96 67	28.5618		1,662.660 4	1,662.660 4		1,662.660 4	1,662.6604	203,228.1 507	473,364.0 000	676,592.1 507	607.5637	15.3139	696,344.7 894
Landscaping	65.1989	24.9912	2,166.562 5	0.1151		12.0547	12.0547		12.0547	12.0547		3,920.597 4	3,920.597 4	3.7545		4,014.459 0
Total	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

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	111.0338					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,104.1930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,694.0244	515.0479	11,061.9667	28.5618		1,662.6604	1,662.6604		1,662.6604	1,662.6604	203,228.1507	473,364.0000	676,592.1507	607.5637	15.3139	696,344.7894
Landscaping	65.1989	24.9912	2,166.5625	0.1151		12.0547	12.0547		12.0547	12.0547		3,920.5974	3,920.5974	3.7545		4,014.4590
Total	6,974.4501	540.0391	13,228.5292	28.6769		1,674.7150	1,674.7150		1,674.7150	1,674.7150	203,228.1507	477,284.5974	680,512.7481	611.3182	15.3139	700,359.2483

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Summer

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

Monterey Park Focused GPU Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6,136.07	1000sqft	140.86	6,136,066.00	0
Elementary School	7,544.00	Student	74.00	699,200.00	0
Junior College (2Yr)	40,667.00	Student	77.00	1,775,205.53	0
General Light Industry	1,786.06	1000sqft	41.00	1,786,058.00	0
Hotel	1,334.00	Room	44.47	1,936,968.00	0
Apartments Low Rise	12,830.00	Dwelling Unit	801.88	12,830,000.00	36694
Single Family Housing	13,468.00	Dwelling Unit	2,078.00	24,242,400.00	38518
Regional Shopping Center	6,361.42	1000sqft	174.00	6,361,424.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.53	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source: EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Future Baseline Condition model run - no construction emissions modeled.

Off-road Equipment - Future Baseline Condition model run - no construction emissions modeled.

Trips and VMT - Future Baseline Condition model run - no construction emissions modeled.

Grading - Operational emissions only. No construction emissions estimates needed.

Architectural Coating - Future Baseline Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value.

Woodstoves - Wood burning devices excluded from new development pursuant to SCAQMD Rule 445. Modeling assumes existing development that remains has stoves/hearts per default values.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017).

Water Mitigation - Energy efficient appliances in compliance with City's CAP Measure E3

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	9,347,461.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	28,042,382.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	25,023,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	75,071,610.00	0.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	2.00
tblConstructionPhase	NumDays	15,500.00	2.00
tblConstructionPhase	NumDays	155,000.00	2.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

tblConstructionPhase	NumDays	11,000.00	2.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblEnergyUse	LightingElect	2.59	1.81
tblEnergyUse	LightingElect	3.10	2.17
tblEnergyUse	LightingElect	3.77	2.64
tblEnergyUse	LightingElect	2.14	1.50
tblEnergyUse	LightingElect	3.39	2.37
tblEnergyUse	LightingElect	6.26	4.38
tblEnergyUse	T24E	257.27	128.63
tblEnergyUse	T24E	443.48	221.74
tblFireplaces	FireplaceWoodMass	1,019.20	989.60
tblFireplaces	NumberNoFireplace	1,283.00	1,475.00
tblFireplaces	NumberNoFireplace	1,346.80	1,366.00
tblFireplaces	NumberWood	641.50	449.70
tblFireplaces	NumberWood	673.40	654.40
tblLandUse	LandUseSquareFeet	6,136,070.00	6,136,066.00
tblLandUse	LandUseSquareFeet	630,703.82	699,200.00
tblLandUse	LandUseSquareFeet	1,786,060.00	1,786,058.00
tblLandUse	LandUseSquareFeet	6,361,420.00	6,361,424.00
tblLandUse	LotAcreage	14.48	74.00
tblLandUse	LotAcreage	40.75	77.00
tblLandUse	LotAcreage	4,372.73	2,078.00
tblLandUse	LotAcreage	146.04	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	5,875.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,688.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,138.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	7.16	7.07
tblVehicleTrips	ST_TR	1.32	1.24
tblVehicleTrips	ST_TR	2.46	2.30
tblVehicleTrips	ST_TR	0.42	0.36
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	9.91	9.79
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	0.68	0.64
tblVehicleTrips	SU_TR	1.05	0.98
tblVehicleTrips	SU_TR	0.04	0.03
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	8.62	8.52
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.65
tblVehicleTrips	WD_TR	11.03	9.12
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	1.23	0.98
tblVehicleTrips	WD_TR	42.70	35.36
tblVehicleTrips	WD_TR	9.52	9.33
tblWoodstoves	NumberCatalytic	641.50	449.70
tblWoodstoves	NumberCatalytic	673.40	654.40
tblWoodstoves	NumberNoncatalytic	641.50	449.70
tblWoodstoves	NumberNoncatalytic	673.40	654.40
tblWoodstoves	WoodstoveWoodMass	999.60	969.90

2.0 Emissions Summary

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Energy	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8 543	254,019.8 543	4.8687	4.6570	255,529.3 672
Mobile	510.7776	3,409.243 7	6,286.735 0	35.0588	3,854.234 0	15.2669	3,869.501 0	1,031.217 2	14.2099	1,045.4271		3,609,561. 1721	3,609,561. 1721	142.9679		3,613,135. 3698
Total	7,508.512 8	4,151.624 1	19,624.57 06	65.0058	3,854.234 0	1,706.069 9	5,560.303 9	1,031.217 2	1,705.012 9	2,736.2300	203,228.1 507	4,340,865. 6238	4,544,093. 7745	759.1548	19.9709	4,569,023. 9854

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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Energy	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8 543	254,019.8 543	4.8687	4.6570	255,529.3 672
Mobile	510.7776	3,409.243 7	6,286.735 0	35.0588	3,854.234 0	15.2669	3,869.501 0	1,031.217 2	14.2099	1,045.4271		3,609,561. 1721	3,609,561. 1721	142.9679		3,613,135. 3698
Total	7,508.512 8	4,151.624 1	19,624.57 06	65.0058	3,854.234 0	1,706.069 9	5,560.303 9	1,031.217 2	1,705.012 9	2,736.2300	203,228.1 507	4,340,865. 6238	4,544,093. 7745	759.1548	19.9709	4,569,023. 9854

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

	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
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	Demolition	Demolition	1/1/2039	1/3/2039	5	1	
2	Site Preparation	Site Preparation	1/4/2039	1/5/2039	5	2	
3	Grading	Grading	1/6/2039	1/7/2039	5	2	
4	Building Construction	Building Construction	1/8/2039	1/11/2039	5	2	
5	Paving	Paving	1/12/2039	1/13/2039	5	2	
6	Architectural Coating	Architectural Coating	1/14/2039	1/14/2039	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

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
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.3 Site Preparation - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.4 Grading - 2039

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000							

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.5 Building Construction - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.6 Paving - 2039

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

3.7 Architectural Coating - 2039

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	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

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2039

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		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	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
Total	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

	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	510.7776	3,409,243.7	6,286,735.0	35.0588	3,854,234.0	15.2669	3,869,501.0	1,031,217.2	14.2099	1,045,427.1		3,609,561.1721	3,609,561.1721	142.9679		3,613,135.3698
Unmitigated	510.7776	3,409,243.7	6,286,735.0	35.0588	3,854,234.0	15.2669	3,869,501.0	1,031,217.2	14.2099	1,045,427.1		3,609,561.1721	3,609,561.1721	142.9679		3,613,135.3698

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	93,915.60	90,708.10	76980.00	310,573,112	310,573,112
Elementary School	9,731.76	0.00	0.00	23,956,700	23,956,700
General Light Industry	8,305.18	2,214.71	1143.08	28,393,918	28,393,918
General Office Building	55,960.96	14,112.96	6013.35	138,030,905	138,030,905
Hotel	11,152.24	10,925.46	7937.30	25,437,933	25,437,933
Junior College (2Yr)	39,853.66	14,640.12	1220.01	92,823,561	92,823,561
Regional Shopping Center	224,939.81	297,778.07	150383.97	485,979,016	485,979,016
Single Family Housing	125,656.44	131,851.72	114747.36	426,375,422	426,375,422
Total	569,515.65	562,231.15	358,425.07	1,531,570,568	1,531,570,568

4.3 Trip Type Information

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Elementary School	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Hotel	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Junior College (2Yr)	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Regional Shopping Center	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

	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					
NaturalGas Mitigated	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672
NaturalGas Unmitigated	23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	574354	6.1940	52.9307	22.5237	0.3379		4.2795	4.2795		4.2795	4.2795		67,571.0714	67,571.0714	1.2951	1.2388	67,972.6125
Elementary School	19922.4	0.2149	1.9532	1.6407	0.0117		0.1484	0.1484		0.1484	0.1484		2,343.8131	2,343.8131	0.0449	0.0430	2,357.7412
General Light Industry	88568.9	0.9552	8.6832	7.2939	0.0521		0.6599	0.6599		0.6599	0.6599		10,419.8710	10,419.8710	0.1997	0.1910	10,481.7911
General Office Building	175004	1.8873	17.1573	14.4121	0.1029		1.3040	1.3040		1.3040	1.3040		20,588.7017	20,588.7017	0.3946	0.3775	20,711.0501
Hotel	127256	1.3724	12.4761	10.4799	0.0749		0.9482	0.9482		0.9482	0.9482		14,971.3111	14,971.3111	0.2870	0.2745	15,060.2781
Junior College (2Yr)	131706	1.4204	12.9123	10.8464	0.0775		0.9813	0.9813		0.9813	0.9813		15,494.7835	15,494.7835	0.2970	0.2841	15,586.8612
Regional Shopping Center	28582.8	0.3083	2.8022	2.3539	0.0168		0.2130	0.2130		0.2130	0.2130		3,362.6867	3,362.6867	0.0645	0.0617	3,382.6694
Single Family Housing	1.01377e+006	10.9329	93.4263	39.7559	0.5963		7.5536	7.5536		7.5536	7.5536		119,267.6158	119,267.6158	2.2860	2.1866	119,976.3636
Total		23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	574.354	6.1940	52.9307	22.5237	0.3379		4.2795	4.2795		4.2795	4.2795		67,571.0714	67,571.0714	1.2951	1.2388	67,972.6125
Elementary School	19.9224	0.2149	1.9532	1.6407	0.0117		0.1484	0.1484		0.1484	0.1484		2,343.8131	2,343.8131	0.0449	0.0430	2,357.7412
General Light Industry	88.5689	0.9552	8.6832	7.2939	0.0521		0.6599	0.6599		0.6599	0.6599		10,419.8710	10,419.8710	0.1997	0.1910	10,481.7911
General Office Building	175.004	1.8873	17.1573	14.4121	0.1029		1.3040	1.3040		1.3040	1.3040		20,588.7017	20,588.7017	0.3946	0.3775	20,711.0501
Hotel	127.256	1.3724	12.4761	10.4799	0.0749		0.9482	0.9482		0.9482	0.9482		14,971.3111	14,971.3111	0.2870	0.2745	15,060.2781
Junior College (2Yr)	131.706	1.4204	12.9123	10.8464	0.0775		0.9813	0.9813		0.9813	0.9813		15,494.7835	15,494.7835	0.2970	0.2841	15,586.8612
Regional Shopping Center	28.5828	0.3083	2.8022	2.3539	0.0168		0.2130	0.2130		0.2130	0.2130		3,362.6867	3,362.6867	0.0645	0.0617	3,382.6694
Single Family Housing	1013.77	10.9329	93.4263	39.7559	0.5963		7.5536	7.5536		7.5536	7.5536		119,267.6158	119,267.6158	2.2860	2.1866	119,976.3636
Total		23.2852	202.3413	109.3064	1.2701		16.0879	16.0879		16.0879	16.0879		254,019.8543	254,019.8543	4.8687	4.6570	255,529.3672

6.0 Area Detail

6.1 Mitigation Measures Area

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

	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	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483
Unmitigated	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483

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	111.0338					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,104.193 0					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,694.024 4	515.0479	11,061.966 7	28.5618		1,662.660 4	1,662.660 4		1,662.660 4	1,662.6604	203,228.1 507	473,364.0 000	676,592.1 507	607.5637	15.3139	696,344.7 894
Landscaping	65.1989	24.9912	2,166.562 5	0.1151		12.0547	12.0547		12.0547	12.0547		3,920.597 4	3,920.597 4	3.7545		4,014.459 0
Total	6,974.450 1	540.0391	13,228.52 92	28.6769		1,674.715 0	1,674.715 0		1,674.715 0	1,674.7150	203,228.1 507	477,284.5 974	680,512.7 481	611.3182	15.3139	700,359.2 483

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

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	111.0338					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,104.1930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5,694.0244	515.0479	11,061.9667	28.5618		1,662.6604	1,662.6604		1,662.6604	1,662.6604	203,228.1507	473,364.0000	676,592.1507	607.5637	15.3139	696,344.7894
Landscaping	65.1989	24.9912	2,166.5625	0.1151		12.0547	12.0547		12.0547	12.0547		3,920.5974	3,920.5974	3.7545		4,014.4590
Total	6,974.4501	540.0391	13,228.5292	28.6769		1,674.7150	1,674.7150		1,674.7150	1,674.7150	203,228.1507	477,284.5974	680,512.7481	611.3182	15.3139	700,359.2483

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Winter

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

Monterey Park Focused GPU Project
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6,136.07	1000sqft	140.86	6,136,066.00	0
Elementary School	7,544.00	Student	74.00	699,200.00	0
Junior College (2Yr)	40,667.00	Student	77.00	1,775,205.53	0
General Light Industry	1,786.06	1000sqft	41.00	1,786,058.00	0
Hotel	1,334.00	Room	44.47	1,936,968.00	0
Apartments Low Rise	12,830.00	Dwelling Unit	801.88	12,830,000.00	36694
Single Family Housing	13,468.00	Dwelling Unit	2,078.00	24,242,400.00	38518
Regional Shopping Center	6,361.42	1000sqft	174.00	6,361,424.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	53.53	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

Project Characteristics - Rachel Moeller and Chris Dugan. GHG intensity factors adjusted to reflect estimated SCE 2030 RPS energy mix.

Land Use - Source: EIR Table 3.1 Maximum Development Potential; inputs do not include park, utility, vacant land/building, hospital, closed landfill, and public facility/government land use types.

Construction Phase - Future Baseline Condition model run - no construction emissions modeled.

Off-road Equipment - Future Baseline Condition model run - no construction emissions modeled.

Trips and VMT - Future Baseline Condition model run - no construction emissions modeled.

Grading - Operational emissions only. No construction emissions estimates needed.

Architectural Coating - Future Baseline Condition model run - no construction emissions modeled.

Vehicle Trips - Weekday trip rates provided by TIA preparer KOA (2019) with exception of elementary school which is based on default value.

Woodstoves - Wood burning devices excluded from new development pursuant to SCAQMD Rule 445. Modeling assumes existing development that remains has stoves/heartes per default values.

Energy Use - T24 standards adjusted downwards to reflect increased efficiency between 2016-2019 standards (CEC, 2017).

Water Mitigation - Energy efficient appliances in compliance with City's CAP Measure E3

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Off-road Equipment - Operational emissions only. No construction emissions estimates needed.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	9,347,461.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	28,042,382.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	25,023,870.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	75,071,610.00	0.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	2.00
tblConstructionPhase	NumDays	15,500.00	2.00
tblConstructionPhase	NumDays	155,000.00	2.00

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tblConstructionPhase	NumDays	11,000.00	2.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblEnergyUse	LightingElect	2.59	1.81
tblEnergyUse	LightingElect	3.10	2.17
tblEnergyUse	LightingElect	3.77	2.64
tblEnergyUse	LightingElect	2.14	1.50
tblEnergyUse	LightingElect	3.39	2.37
tblEnergyUse	LightingElect	6.26	4.38
tblEnergyUse	T24E	257.27	128.63
tblEnergyUse	T24E	443.48	221.74
tblFireplaces	FireplaceWoodMass	1,019.20	989.60
tblFireplaces	NumberNoFireplace	1,283.00	1,475.00
tblFireplaces	NumberNoFireplace	1,346.80	1,366.00
tblFireplaces	NumberWood	641.50	449.70
tblFireplaces	NumberWood	673.40	654.40
tblLandUse	LandUseSquareFeet	6,136,070.00	6,136,066.00
tblLandUse	LandUseSquareFeet	630,703.82	699,200.00
tblLandUse	LandUseSquareFeet	1,786,060.00	1,786,058.00
tblLandUse	LandUseSquareFeet	6,361,420.00	6,361,424.00
tblLandUse	LotAcreage	14.48	74.00
tblLandUse	LotAcreage	40.75	77.00
tblLandUse	LotAcreage	4,372.73	2,078.00
tblLandUse	LotAcreage	146.04	174.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.033
tblProjectCharacteristics	CO2IntensityFactor	702.44	53.53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	5,875.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,688.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	4,138.00	0.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00

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tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	7.16	7.07
tblVehicleTrips	ST_TR	1.32	1.24
tblVehicleTrips	ST_TR	2.46	2.30
tblVehicleTrips	ST_TR	0.42	0.36
tblVehicleTrips	ST_TR	49.97	46.81
tblVehicleTrips	ST_TR	9.91	9.79
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	0.68	0.64
tblVehicleTrips	SU_TR	1.05	0.98
tblVehicleTrips	SU_TR	0.04	0.03
tblVehicleTrips	SU_TR	25.24	23.64
tblVehicleTrips	SU_TR	8.62	8.52
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	6.97	4.65
tblVehicleTrips	WD_TR	11.03	9.12
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	1.23	0.98
tblVehicleTrips	WD_TR	42.70	35.36
tblVehicleTrips	WD_TR	9.52	9.33
tblWoodstoves	NumberCatalytic	641.50	449.70
tblWoodstoves	NumberCatalytic	673.40	654.40
tblWoodstoves	NumberNoncatalytic	641.50	449.70
tblWoodstoves	NumberNoncatalytic	673.40	654.40
tblWoodstoves	WoodstoveWoodMass	999.60	969.90

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491
Energy	4.2495	36.9273	19.9484	0.2318		2.9361	2.9361		2.9361	2.9361	0.0000	50,752.9171	50,752.9171	6.1676	1.4209	51,330.5383
Mobile	76.1108	526.4455	973.6492	5.4646	581.5256	2.3380	583.8636	155.8426	2.1761	158.0187	0.0000	510,358.8620	510,358.8620	19.6776	0.0000	510,850.8016
Waste						0.0000	0.0000		0.0000	0.0000	9,301.8193	0.0000	9,301.8193	549.7218	0.0000	23,044.8636
Water						0.0000	0.0000		0.0000	0.0000	1,214.2701	1,810.1393	3,024.4095	125.8331	3.0801	7,088.1080
Total	381.4643	572.9348	1,402.6925	6.0678	581.5256	27.5641	609.0897	155.8426	27.4022	183.2448	12,820.6579	568,734.3642	581,555.0221	708.7155	4.6747	600,665.9606

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2.2 Overall Operational

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	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491
Energy	4.2495	36.9273	19.9484	0.2318		2.9361	2.9361		2.9361	2.9361	0.0000	50,752.9171	50,752.9171	6.1676	1.4209	51,330.5383
Mobile	76.1108	526.4455	973.6492	5.4646	581.5256	2.3380	583.8636	155.8426	2.1761	158.0187	0.0000	510,358.8620	510,358.8620	19.6776	0.0000	510,850.8016
Waste						0.0000	0.0000		0.0000	0.0000	9,301.8193	0.0000	9,301.8193	549.7218	0.0000	23,044.8636
Water						0.0000	0.0000		0.0000	0.0000	971.4161	1,568.1224	2,539.5385	100.7405	2.4731	5,795.0193
Total	381.4643	572.9348	1,402.6925	6.0678	581.5256	27.5641	609.0897	155.8426	27.4022	183.2448	12,577.8039	568,492.3473	581,070.1511	683.6229	4.0676	599,372.8719

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.04	0.08	3.54	12.99	0.22

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2039	1/3/2039	5	1	
2	Site Preparation	Site Preparation	1/4/2039	1/5/2039	5	2	
3	Grading	Grading	1/6/2039	1/7/2039	5	2	
4	Building Construction	Building Construction	1/8/2039	1/11/2039	5	2	
5	Paving	Paving	1/12/2039	1/13/2039	5	2	
6	Architectural Coating	Architectural Coating	1/14/2039	1/14/2039	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

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3.7 Architectural Coating - 2039

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	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	0.0000	0.0000
Worker	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	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	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	76.1108	526.4455	973.6492	5.4646	581.5256	2.3380	583.8636	155.8426	2.1761	158.0187	0.0000	510,358.8620	510,358.8620	19.6776	0.0000	510,850.8016
Unmitigated	76.1108	526.4455	973.6492	5.4646	581.5256	2.3380	583.8636	155.8426	2.1761	158.0187	0.0000	510,358.8620	510,358.8620	19.6776	0.0000	510,850.8016

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	93,915.60	90,708.10	76980.00	310,573,112	310,573,112
Elementary School	9,731.76	0.00	0.00	23,956,700	23,956,700
General Light Industry	8,305.18	2,214.71	1143.08	28,393,918	28,393,918
General Office Building	55,960.96	14,112.96	6013.35	138,030,905	138,030,905
Hotel	11,152.24	10,925.46	7937.30	25,437,933	25,437,933
Junior College (2Yr)	39,853.66	14,640.12	1220.01	92,823,561	92,823,561
Regional Shopping Center	224,939.81	297,778.07	150383.97	485,979,016	485,979,016
Single Family Housing	125,656.44	131,851.72	114747.36	426,375,422	426,375,422
Total	569,515.65	562,231.15	358,425.07	1,531,570,568	1,531,570,568

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	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
Apartments Low Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Elementary School	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Hotel	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Junior College (2Yr)	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Regional Shopping Center	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	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					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	8,697.0814	8,697.0814	5.3616	0.6499	9,024.7857
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	8,697.0814	8,697.0814	5.3616	0.6499	9,024.7857
NaturalGas Mitigated	4.2495	36.9273	19.9484	0.2318		2.9361	2.9361		2.9361	2.9361	0.0000	42,055.8357	42,055.8357	0.8061	0.7710	42,305.7525
NaturalGas Unmitigated	4.2495	36.9273	19.9484	0.2318		2.9361	2.9361		2.9361	2.9361	0.0000	42,055.8357	42,055.8357	0.8061	0.7710	42,305.7525

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.09639e+008	1.1304	9.6599	4.1106	0.0617		0.7810	0.7810		0.7810	0.7810	0.0000	11,187.1487	11,187.1487	0.2144	0.2051	11,253.6283
Elementary School	7.27168e+006	0.0392	0.3565	0.2994	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0445	388.0445	7.4400e-003	7.1100e-003	390.3505
General Light Industry	3.23276e+007	0.1743	1.5847	1.3311	9.5100e-003		0.1204	0.1204		0.1204	0.1204	0.0000	1,725.1265	1,725.1265	0.0331	0.0316	1,735.3781
General Office Building	6.38764e+007	0.3444	3.1312	2.6302	0.0188		0.2380	0.2380		0.2380	0.2380	0.0000	3,408.6905	3,408.6905	0.0653	0.0625	3,428.9466
Hotel	4.64485e+007	0.2505	2.2769	1.9126	0.0137		0.1730	0.1730		0.1730	0.1730	0.0000	2,478.6685	2,478.6685	0.0475	0.0454	2,493.3979
Junior College (2Yr)	4.80726e+007	0.2592	2.3565	1.9795	0.0141		0.1791	0.1791		0.1791	0.1791	0.0000	2,565.3352	2,565.3352	0.0492	0.0470	2,580.5797
Regional Shopping Center	1.04327e+007	0.0563	0.5114	0.4296	3.0700e-003		0.0389	0.0389		0.0389	0.0389	0.0000	556.7305	556.7305	0.0107	0.0102	560.0389
Single Family Housing	3.70028e+008	1.9953	17.0503	7.2555	0.1088		1.3785	1.3785		1.3785	1.3785	0.0000	19,746.0914	19,746.0914	0.3785	0.3620	19,863.4325
Total		4.2495	36.9273	19.9484	0.2318		2.9360	2.9360		2.9360	2.9360	0.0000	42,055.8357	42,055.8357	0.8061	0.7710	42,305.7525

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.09639e+008	1.1304	9.6599	4.1106	0.0617		0.7810	0.7810		0.7810	0.7810	0.0000	11,187.1487	11,187.1487	0.2144	0.2051	11,253.6283
Elementary School	7.27168e+006	0.0392	0.3565	0.2994	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.0445	388.0445	7.4400e-003	7.1100e-003	390.3505
General Light Industry	3.23276e+007	0.1743	1.5847	1.3311	9.5100e-003		0.1204	0.1204		0.1204	0.1204	0.0000	1,725.1265	1,725.1265	0.0331	0.0316	1,735.3781
General Office Building	6.38764e+007	0.3444	3.1312	2.6302	0.0188		0.2380	0.2380		0.2380	0.2380	0.0000	3,408.6905	3,408.6905	0.0653	0.0625	3,428.9466
Hotel	4.64485e+007	0.2505	2.2769	1.9126	0.0137		0.1730	0.1730		0.1730	0.1730	0.0000	2,478.6685	2,478.6685	0.0475	0.0454	2,493.3979
Junior College (2Yr)	4.80726e+007	0.2592	2.3565	1.9795	0.0141		0.1791	0.1791		0.1791	0.1791	0.0000	2,565.3352	2,565.3352	0.0492	0.0470	2,580.5797
Regional Shopping Center	1.04327e+007	0.0563	0.5114	0.4296	3.0700e-003		0.0389	0.0389		0.0389	0.0389	0.0000	556.7305	556.7305	0.0107	0.0102	560.0389
Single Family Housing	3.70028e+008	1.9953	17.0503	7.2555	0.1088		1.3785	1.3785		1.3785	1.3785	0.0000	19,746.0914	19,746.0914	0.3785	0.3620	19,863.4325
Total		4.2495	36.9273	19.9484	0.2318		2.9360	2.9360		2.9360	2.9360	0.0000	42,055.8357	42,055.8357	0.8061	0.7710	42,305.7525

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	5.27538e+007	1,280.9033	0.7897	0.0957	1,329.1675
Elementary School	3.59389e+006	87.2625	0.0538	6.5200e-003	90.5505
General Light Industry	1.81642e+007	441.0415	0.2719	0.0330	457.6599
General Office Building	7.27737e+007	1,767.0047	1.0893	0.1320	1,833.5851
Hotel	1.34426e+007	326.3961	0.2012	0.0244	338.6946
Junior College (2Yr)	1.59768e+007	387.9307	0.2392	0.0290	402.5478
Regional Shopping Center	7.39197e+007	1,794.8306	1.1065	0.1341	1,862.4594
Single Family Housing	1.07563e+008	2,611.7121	1.6101	0.1952	2,710.1209
Total		8,697.0814	5.3616	0.6499	9,024.7857

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	5.27538e+007	1,280.9033	0.7897	0.0957	1,329.1675
Elementary School	3.59389e+006	87.2625	0.0538	6.5200e-003	90.5505
General Light Industry	1.81642e+007	441.0415	0.2719	0.0330	457.6599
General Office Building	7.27737e+007	1,767.0047	1.0893	0.1320	1,833.5851
Hotel	1.34426e+007	326.3961	0.2012	0.0244	338.6946
Junior College (2Yr)	1.59768e+007	387.9307	0.2392	0.0290	402.5478
Regional Shopping Center	7.39197e+007	1,794.8306	1.1065	0.1341	1,862.4594
Single Family Housing	1.07563e+008	2,611.7121	1.6101	0.1952	2,710.1209
Total		8,697.0814	5.3616	0.6499	9,024.7857

6.0 Area Detail

6.1 Mitigation Measures Area

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	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	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491
Unmitigated	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491

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	20.2637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	201.5152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	71.1753	6.4381	138.2746	0.3570		20.7833	20.7833		20.7833	20.7833	2,304.5685	5,367.8575	7,672.4259	6.8897	0.1737	7,896.4171
Landscaping	8.1499	3.1239	270.8203	0.0144		1.5068	1.5068		1.5068	1.5068	0.0000	444.5883	444.5883	0.4258	0.0000	455.2320
Total	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491

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6.2 Area by SubCategory

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	20.2637					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	201.5152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	71.1753	6.4381	138.2746	0.3570		20.7833	20.7833		20.7833	20.7833	2,304.5685	5,367.8575	7,672.4259	6.8897	0.1737	7,896.4171
Landscaping	8.1499	3.1239	270.8203	0.0144		1.5068	1.5068		1.5068	1.5068	0.0000	444.5883	444.5883	0.4258	0.0000	455.2320
Total	301.1041	9.5620	409.0949	0.3714		22.2901	22.2901		22.2901	22.2901	2,304.5685	5,812.4457	8,117.0142	7.3154	0.1737	8,351.6491

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,539.538 5	100.7405	2.4731	5,795.019 3
Unmitigated	3,024.409 5	125.8331	3.0801	7,088.108 0

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	835.926 / 526.997	671.6500	27.4892	0.6735	1,559.5944
Elementary School	18.2885 / 47.0275	24.2703	0.6073	0.0155	44.0576
General Light Industry	413.026 / 0	261.6168	13.5390	0.3275	697.6984
General Office Building	1090.59 / 668.424	871.1069	35.8605	0.8783	2,029.3647
Hotel	33.8393 / 3.75992	22.4486	1.1099	0.0269	58.2150
Junior College (2Yr)	87.0721 / 136.19	91.8912	2.8769	0.0718	185.2080
Regional Shopping Center	471.206 / 288.804	376.3765	15.4941	0.3795	876.8213
Single Family Housing	877.494 / 553.203	705.0493	28.8562	0.7070	1,637.1487
Total		3,024.4094	125.8331	3.0801	7,088.1080

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	668.741 / 526.997	565.7525	22.0089	0.5410	1,277.1794
Elementary School	14.6308 / 47.0275	21.9535	0.4874	0.0126	37.8789
General Light Industry	330.421 / 0	209.2934	10.8312	0.2620	558.1587
General Office Building	872.469 / 668.424	732.9483	28.7106	0.7054	1,660.9134
Hotel	27.0714 / 3.75992	18.1617	0.8880	0.0215	46.7825
Junior College (2Yr)	69.6577 / 136.19	80.8607	2.3060	0.0580	155.7910
Regional Shopping Center	376.965 / 288.804	316.6827	12.4049	0.3048	717.6257
Single Family Housing	701.996 / 553.203	593.8858	23.1034	0.5679	1,340.6899
Total		2,539.5385	100.7405	2.4731	5,795.0193

8.0 Waste Detail

8.1 Mitigation Measures Waste

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9,301.819 3	549.7218	0.0000	23,044.86 36
Unmitigated	9,301.819 3	549.7218	0.0000	23,044.86 36

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5901.8	1,198.012 1	70.8005	0.0000	2,968.024 2
Elementary School	1376.78	279.4739	16.5164	0.0000	692.3848
General Light Industry	2214.71	449.5661	26.5686	0.0000	1,113.7810
General Office Building	5706.55	1,158.378 1	68.4582	0.0000	2,869.832 7
Hotel	730.37	148.2585	8.7618	0.0000	367.3042
Junior College (2Yr)	7421.73	1,506.544 1	89.0342	0.0000	3,732.399 3
Regional Shopping Center	6679.49	1,355.876 1	80.1300	0.0000	3,359.125 7
Single Family Housing	15792.4	3,205.710 4	189.4521	0.0000	7,942.0119
Total		9,301.819 3	549.7218	0.0000	23,044.86 36

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5901.8	1,198.012 1	70.8005	0.0000	2,968.024 2
Elementary School	1376.78	279.4739	16.5164	0.0000	692.3848
General Light Industry	2214.71	449.5661	26.5686	0.0000	1,113.7810
General Office Building	5706.55	1,158.378 1	68.4582	0.0000	2,869.832 7
Hotel	730.37	148.2585	8.7618	0.0000	367.3042
Junior College (2Yr)	7421.73	1,506.544 1	89.0342	0.0000	3,732.399 3
Regional Shopping Center	6679.49	1,355.876 1	80.1300	0.0000	3,359.125 7
Single Family Housing	15792.4	3,205.710 4	189.4521	0.0000	7,942.0119
Total		9,301.819 3	549.7218	0.0000	23,044.86 36

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Monterey Park Focused GPU Project - Los Angeles-South Coast County, Annual

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Energy Appendix
 Electricity and Natural Gas Calculations
 Monterey Park General Plan EIR
 Monterey Park, CA
 Prepared by MIG, May 2019

Land Use	kWh		
	2019	2040	Change
Apt (Low-Rise)	38,444,700	52,753,800	14,309,100
Elem Sch	3,163,100	3,592,890	429,790
Gen Lt Ind	22,810,500	18,164,200	(4,646,300)
Gen Office	101,629,000	72,773,700	(28,855,300)
Hotel	6,209,090	13,442,600	7,233,510
Jr College	16,413,000	15,976,800	(436,200)
Regional Shop	79,175,200	73,919,700	(5,255,500)
Single Fam	111,506,000	101,563,000	(9,943,000)
Total	379,350,590	352,186,690	(27,163,900)

Service Pop	100,478	114,901	14,423
Elect. Efficiency	3,775	3,065	(710)

Land Use	kBtu		
	2019	2040	Change
Apt (Low-Rise)	170,762,000	209,639,000	38,877,000
Elem Sch	5,472,580	7,271,680	1,799,100
Gen Lt Ind	36,808,800	32,327,600	(4,481,200)
Gen Office	495,016,000	63,876,400	(431,139,600)
Hotel	19,342,200	46,448,500	27,106,300
Jr College	43,698,300	48,072,600	4,374,300
Regional Shop	9,473,460	10,432,700	959,240
Single Fam	446,196,000	370,028,000	(76,168,000)
Total	1,226,769,340	788,096,480	(438,672,860)

Service Pop	100,478	114,901	14,423
NG Efficiency	12,209	6,859	(5,350)

Energy Appendix
 Diesel and Gasoline Calculations
 Monterey Park General Plan EIR
 Monterey Park, CA
 Prepared by MIG, May 2019

Population and MPG Data: 2019		
Metric	Gasoline	Diesel
Population (%)	95.6%	3.5%
Miles per Gallon (MPG) ¹	23.62	9.28

¹ MPG derived from EMFAC2017 data for the 2019 calendar year in Los Angeles County

Existing VMT 1,411,579,106.00

Fuel Consumption Calculations: 2019		
Metric	Gasoline	Diesel
Vehicle Miles Traveled (VMT)	1,350,006,234.85	48,950,563.40
Gallons Consumed	57,160,447	5,272,868.24

Population and MPG Data: 2040		
Metric	Gasoline	Diesel
Population (%)	90.2%	5.0%
Miles per Gallon (MPG) ¹	34.68	14.18

¹ MPG derived from EMFAC2017 data for the 2019 calendar year in Los Angeles County

Project VMT 1,531,570,568.00

Fuel Consumption Calculations: 2040		
Metric	Gasoline	Diesel
VMT	1,381,866,046.39	77,226,493.12
Gallons Consumed	39,845,181	5,445,729.94

Fuel Consumption Change: 2019-2040		
Metric	Gasoline	Diesel
VMT	31,859,811.54	28,275,929.71
Gallons Consumed	(17,315,265.70)	172,861.70

Appendix C Noise Measurement and Modeling Data

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Summary

Filename	LxT_Data.021
Serial Number	5065
Model	SoundTrack LxT®
Firmware Version	2.301
User	pgleason
Location	Monterey Park GPU EIR LT 1
Job Description	Long Term 1
Note	
Measurement Description	Noise meter 2 - LT - Monterey Park EIR
Start	2019/05/06 13:00:00
Stop	2019/05/07 13:00:00
Duration	1 Day 00:00:00.0
Run Time	1 Day 00:00:00.0
Pause	0:00:00.0

Pre Calibration	2019/05/06 11:53:20
Post Calibration	None

Results

LASeq	52.9
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Community Noise

Ldn	Lden
57.5	57.7

Statistics

LAS1.67	61.5
LAS8.33	56.4
LAS25.00	51.1
LAS50.00	49.0
LAS75.00	47.3
LAS90.00	45.8

Monterey Park Focused General Plan Update

Monterey Park, California

Appendix: Ambient Noise Monitoring Data

Prepared by MIG, May 2019

Table: Summary of Site LT1 Noise Monitoring Data

Site LT1												
Date	Time	Duration	Leq	CNEL	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/7/2019	7:00 AM	1-hour	54.2	54.2	45	70.5	63.6	58.7	52.8	49.6	48.4	47.7
5/7/2019	8:00 AM	1-hour	52.4	52.4	45	65.4	60.1	56.1	52.3	50	48.6	47.6
5/7/2019	9:00 AM	1-hour	57.4	57.4	45	75.7	66.7	61	57.5	53.8	50.7	49.1
5/7/2019	10:00 AM	1-hour	53.2	53.2	43.3	67.8	62.5	56.9	52.4	49.6	48.3	47.6
5/7/2019	11:00 AM	1-hour	56.1	56.1	46.5	71.9	65.6	59.6	55.5	52.4	50.7	49.7
5/7/2019	12:00 PM	1-hour	56.9	56.9	47.5	75.1	64.2	60.8	57.3	53.9	51.9	50.7
5/6/2019	1:00 PM	1-hour	55.3	55.3	46.0	78.2	63.3	57.5	53.9	51.5	50.2	49.4
5/6/2019	2:00 PM	1-hour	54.1	54.1	46.3	73.2	63.3	56.9	53.1	51.0	49.7	48.6
5/6/2019	3:00 PM	1-hour	54.2	54.2	47.0	68.3	61.2	58.0	54.7	51.6	49.9	49.2
5/6/2019	4:00 PM	1-hour	52.5	52.5	45.3	71.4	61.4	53.8	51.0	49.9	49.1	48.5
5/6/2019	5:00 PM	1-hour	49.9	49.9	44.5	64.2	56.8	51.6	49.5	48.6	47.9	47.3
5/6/2019	6:00 PM	1-hour	49.5	49.5	44.6	60.7	55.2	51.8	49.6	48.4	47.7	47
5/6/2019	7:00 PM	1-hour	51.3	56.3	46.4	66.7	59.8	52.9	50.6	49.8	48.9	48.3
5/6/2019	8:00 PM	1-hour	50.9	55.9	45.1	70.3	59.8	53.7	49.8	48.6	47.8	47.2
5/6/2019	9:00 PM	1-hour	49.5	54.5	44.2	66.9	57.1	51	49.2	48.3	47.5	46.9
5/6/2019	10:00 PM	1-hour	48.8	58.8	43.8	60.1	53.8	50.5	48.9	48.1	47.4	46.8
5/6/2019	11:00 PM	1-hour	48.2	58.2	42.4	62.7	54.3	51.7	48	46.8	45.9	45.2
5/7/2019	12:00 AM	1-hour	45.4	55.4	41.3	52.5	48.5	47.2	46.1	45	44.1	43.5
5/7/2019	1:00 AM	1-hour	46.3	56.3	41.9	51.8	49.3	48	46.9	46.1	45.1	44.4
5/7/2019	2:00 AM	1-hour	50.8	60.8	41.9	70.8	62	53.6	47.1	46.2	45.3	44.5
5/7/2019	3:00 AM	1-hour	47.3	57.3	42.2	58.8	50.7	49.2	47.9	46.9	45.8	45.1
5/7/2019	4:00 AM	1-hour	50	60	45.4	55.3	52.5	51.6	50.6	49.7	48.9	48.3
5/7/2019	5:00 AM	1-hour	53.4	63.4	42.8	66.5	60	57.8	54.7	50.6	47.1	46.3
5/7/2019	6:00 AM	1-hour	54.2	64.2	42.9	70.1	62.6	58.2	54.6	51.3	47.9	45.5
<i>Daytime (7 AM to 10 PM)</i>			53.9	--	43.3	78.2	62.4	57.2	53.5	50.9	49.3	48.5
<i>Nighttime (10 PM to 7 AM)</i>			50.3	--	41.3	70.8	57.8	53.7	50.6	48.4	46.6	45.7
<i>24-hour CNEL</i>			--	57.7	41.3	78.2	61.2	56.1	52.6	50.1	48.5	47.6

Monterey Park Focused General Plan Update
 Monterey Park, CA
 Appendix: Ambient Noise Monitoring Data
 Prepared by MIG, May 2019

Table: Summary of Site ST-1 Noise Monitoring Data

Site ST-1 (Northeast corner of E Emerson Avenue and N Baltimore Avenue)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/6/2019	2:30 PM	10 mins	62.2	48.3	80.0	70.7	64.6	60.7	57.8	54.7	52.5
5/6/2019	2:40 PM	10 mins	59.6	46.5	70.8	66.5	63.1	60.5	58.0	55.4	51.9
5/6/2019	2:50 PM	10 mins	60.0	47.1	72.8	67.2	63.9	60.7	57.4	54.4	50.9
<i>Average:</i>			60.7	46.5	80.0	68.5	63.9	60.6	57.7	54.9	51.8

Table: Summary of Site ST-2 Noise Monitoring Data

Site ST-2 (At Approximately 201 New Avenue)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/6/2019	1:30 PM	10 mins	67.6	46.5	76.7	74.1	71.9	69.1	65.6	60.1	54.2
5/6/2019	1:40 PM	10 mins	68.1	44.2	79.6	74.9	72.6	69.6	65.5	57.6	50.4
5/6/2019	1:50 PM	10 mins	67.8	50.1	85.3	74.1	72.2	68.8	64.5	57.2	53.2
<i>Average:</i>			67.8	44.2	85.3	74.4	72.2	69.2	65.2	58.5	52.9

Table: Summary of Site ST-3 Noise Monitoring Data

Site ST-3 (On Arland Avenue between Celito Drive and Alpaca Street)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/7/2019	9:10 AM	10 mins	49.5	40.0	69.3	59.9	50.3	45.3	43.4	42.1	41.4
5/7/2019	9:20 AM	10 mins	53.3	40.7	69.8	65.8	53.8	46.3	43.9	42.8	42.0
5/7/2019	9:30 AM	10 mins	57.3	38.8	73.7	70.2	59.2	48.9	42.9	41.5	40.3
<i>Average:</i>			54.5	38.8	73.7	67.1	55.9	47.1	43.4	42.2	41.3

Table: Summary of Site ST-4 Noise Monitoring Data

Site ST-4 (Northeast corner of Potrero Grade Drive and Atlas Avenue)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/7/2019	10:00 AM	10 mins	73.5	57.6	83.4	80.9	78.3	74.7	69.7	66.0	63.3
5/7/2019	10:10 AM	10 mins	74.2	59.6	85.3	80.8	78.9	75.7	71.1	66.2	62.3
5/7/2019	10:20 AM	10 mins	74.0	61.8	82.5	80.7	78.4	75.5	71.4	67.0	64.2
<i>Average:</i>			73.9	57.6	85.3	80.8	78.5	75.3	70.8	66.4	63.3

Table: Summary of Site ST-5 Noise Monitoring Data

Site ST-5 (On W 1st Street between Collegian Avenue and S Atlantic Blvd)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/7/2019	11:30 AM	10 mins	66.6	59.4	80.0	74.5	69.9	66.3	63.8	62.4	61.3
5/7/2019	11:40 AM	10 mins	68.6	57.1	86.9	75.5	69.6	66.6	64.1	62.0	60.9
5/7/2019	11:50 AM	10 mins	67.3	60.1	79.3	74.4	70.3	67.5	65.7	63.7	62.1
<i>Average:</i>			67.6	57.1	86.9	74.8	69.9	66.8	64.6	62.8	61.5

Table: Summary of Site ST-6 Noise Monitoring Data

Site ST-6 (Southeast corner of Repetto Drive and S McPherrin Avenue)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/7/2019	10:50 AM	10 mins	54.9	39.1	69.4	65.5	60.2	52.3	47.2	44.7	43.1
5/7/2019	11:00 AM	10 mins	57.4	39.7	72.9	67.3	62.7	52.1	47.4	45.5	43.6
5/7/2019	11:10 AM	10 mins	58.2	37.2	70.2	67.1	64.3	57.7	48.7	43.0	41.0
<i>Average:</i>			57.1	37.2	72.9	66.7	62.7	54.9	47.8	44.5	42.7

Table: Summary of Site ST-7 Noise Monitoring Data

Site ST-7 (In the grass area of Cascades Park, near the alley that parallel to De La Fuente St and S Atlantic Blvd)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/6/2019	4:00 PM	10 mins	57.8	49.2	70.1	64.6	60.5	58.6	56.5	53.1	51.4
5/6/2019	4:10 PM	10 mins	58.1	49.1	71.2	66.2	60.6	58.3	56.2	53.0	51.1
5/6/2019	4:20 PM	10 mins	56.9	49.1	67.1	62.4	60.2	58.2	56.1	52.3	51.0
<i>Average:</i>			57.6	49.1	71.2	64.7	60.4	58.4	56.3	52.8	51.2

Table: Summary of Site ST-8 Noise Monitoring Data

Site ST-8 (Southwest corner of W Emerson Avenue and N Chandler Avenue)											
Date	Time Start	Duration	Leq	Lmin	Lmax	L(1.67)	L(8.33)	L(25)	L(50)	L(75)	L(90)
5/6/2019	3:20 PM	10 mins	62.5	48.1	77.8	70.9	65.0	62.1	59.8	56.7	52.4
5/6/2019	3:30 PM	10 mins	65.3	51.3	82.2	75.0	68.3	63.1	60.5	57.7	54.9
5/6/2019	3:40 PM	10 mins	64.1	51.2	79.3	74.2	66.4	63.0	60.3	58.4	55.9
<i>Average:</i>			64.1	48.1	82.2	73.7	66.8	62.8	60.2	57.7	54.6

Monterey Park Focused General Plan Update					
Monterey Park, CA					
Appendix: Traffic Noise Model Inputs - Vehicle Fleet Mix					
Prepared by MIG, May 2019					
TNM2.5/EMFAC2017 VEHICLE POPULATION INFORMATION					
TNM Vehicle Type	Vehicle Class (EMFAC2007)	2015 Vehicle Population	2015 Vehicle Population %	2040 Vehicle Population	2040 Vehicle Population %
Auto	LDA	3,900,941	55.3%	4,847,998	51.4%
Auto	LDT1	415,551	5.9%	672,788	7.1%
Auto	LDT2	1,311,490	18.6%	1,855,345	19.7%
Auto	LHDT1	156,330	2.2%	246,917	2.6%
Auto	MDV	903,623	12.8%	1,220,625	13.0%
Subtotal		6,687,936	94.8%	8,843,673	93.8%
Medium Truck	LHDT2	37,342	0.5%	74,194	0.8%
Medium Truck	MHDT	76,085	1.1%	112,455	1.2%
Medium Truck	OBUS	6,962	0.1%	8,832	0.1%
Medium Truck	SBUS	4,432	0.1%	7,111	0.1%
Subtotal		124,821	1.8%	202,592	2.1%
Heavy Truck	HHDT	55,641	0.8%	69,785	0.7%
Heavy Truck	MH	23,808	0.3%	32,642	0.3%
Heavy Truck	UBUS	4,527	0.1%	5,103	0.1%
Subtotal		83,977	1.2%	107,530	1.1%
Motorcycle	MC	155,071	2.2%	271,850	2.9%
Subtotal		155,071	2.2%	271,850	2.9%
TOTAL		7,051,805	100.0%	9,425,645	100.0%

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Monterey Park Focused General Plan Update									
Monterey Park, CA									
Appendix: Existing 2019 Traffic Noise Model Inputs									
Prepared by MIG, May 2019									
ID	Road	Segment	Length (Miles)	Length (Feet)	Average Lanes	Average Width (Feet)	Average Speed (MPH)	Posted Speed (MPH)	ADT
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	0.50	2,640	4	71	37	30	33,571
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	1.19	6,283	4	71	41	40	27,550
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	0.54	2,851	4	71	42	40	31,414
1D	Atlantic Blvd	Floral Dr to South City Limit	0.33	1,742	6	81	38	35	31,137
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	1.37	7,234	4	56	40	35	17,683
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	0.30	1,584	4	65	41	40	5,640
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	0.90	4,752	4	64	43	40	7,879
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	0.78	4,118	2	40	32	25	1,706
5A	Garfield Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	65	36	30	26,150
5B	Garfield Ave	Garvey Ave to El Repetto Dr	1.15	6,072	4	70	46	40	26,436
5C	Garfield Ave	El Repetto Dr to Riggins St	0.75	3,960	4	71	40	35	25,161
5D	Garfield Ave	Riggins St to South City Limit	0.21	1,109	4	79	44	40	24,207
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	0.50	2,640	4	74	44	40	11,257
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	0.70	3,696	4	74	45	40	22,067
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	0.65	3,432	4	78	33	30	20,473
6D	Garvey Ave	Garfield Ave to New Ave	0.85	4,488	4	81	36	30	24,765
7A	Graves Ave	Garfield Ave to East City Limit	1.00	5,280	2	40	30	30	5,554
8A	Hellman Ave	West City Limit to Garfield Ave	1.40	7,392	2	38	32	30	9,003
8B	Hellman Ave	Garfield Ave to East City Limit	0.84	4,435	2	40	34	35	9,867
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	0.83	4,382	4	71	46	40	17,882
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	1.00	5,280	4	71	44	40	16,829
10A	New Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	60	40	35	18,495
10B	New Ave	Garvey Ave to Graves Ave	0.50	2,640	2	56	38	35	10,294
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	0.80	4,224	3	44	44	40	8,073
11B	Pomona Blvd	Garfield Ave to Markland Ave	0.70	3,696	3	44	42	40	20,477
12A	Potrero Grande Dr	Markland Dr and Saturn St	0.65	3,432	4	81	51	45	21,057
12B	Portero Grande Dr	Saturn St and East City Limit	0.60	3,168	4	65	51	45	14,030
13A	Riggins St	Atlantic Blvd to Findlay Ave	0.51	2,693	2	56	35	35	10,095
13B	Riggins St	Findlay Ave to Garfield Ave	0.43	2,270	2	56	36	35	10,925
13C	Riggins St	Garfield Ave to Fulton St	0.64	3,379	4	60	22	35	4,396
14	I10	Adjacent to City Limits	3.50	18,480	12	180	60	60	212,000
15A	I710 with Barrier	Within / Adjacent to City Limits	1.75	9,240	7	150	60	60	127,000
15B	I710 No Barrier	Within / Adjacent to City Limits	1.75	9,240	7	150	60	60	127,000
16A	SR60	Within / Adjacent to City Limits	4.40	23,232	8	135	60	60	246,500

Monterey Park Focused General Plan Update									
Monterey Park, CA									
Appendix: Future Baseline 2040 Traffic Noise Model Inputs									
Prepared by MIG, May 2019									
ID	Road	Segment	Length (Miles)	Length (Feet)	Average Lanes	Average Width (Feet)	Average Speed (MPH)	Posted Speed (MPH)	ADT
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	0.50	2,640	4	71	37	30	35,642
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	1.19	6,283	4	71	41	40	29,250
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	0.54	2,851	4	71	42	40	33,352
1D	Atlantic Blvd	Floral Dr to South City Limit	0.33	1,742	6	81	38	35	33,058
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	1.37	7,234	4	56	40	35	18,774
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	0.30	1,584	4	65	41	40	5,988
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	0.90	4,752	4	64	43	40	8,365
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	0.78	4,118	2	40	32	25	1,811
5A	Garfield Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	65	36	30	27,763
5B	Garfield Ave	Garvey Ave to El Repetto Dr	1.15	6,072	4	70	46	40	28,067
5C	Garfield Ave	El Repetto Dr to Riggins St	0.75	3,960	4	71	40	35	26,713
5D	Garfield Ave	Riggins St to South City Limit	0.21	1,109	4	79	44	40	25,701
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	0.50	2,640	4	74	44	40	11,952
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	0.70	3,696	4	74	45	40	23,431
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	0.65	3,432	4	78	33	30	21,736
6D	Garvey Ave	Garfield Ave to New Ave	0.85	4,488	4	81	36	30	26,293
7A	Graves Ave	Garfield Ave to East City Limit	1.00	5,280	2	40	30	30	5,897
8A	Hellman Ave	West City Limit to Garfield Ave	1.40	7,392	2	38	32	30	9,558
8B	Hellman Ave	Garfield Ave to East City Limit	0.84	4,435	2	40	34	35	10,476
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	0.83	4,382	4	71	46	40	18,985
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	1.00	5,280	4	71	44	40	17,867
10A	New Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	60	40	35	19,636
10B	New Ave	Garvey Ave to Graves Ave	0.50	2,640	2	56	38	35	10,929
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	0.80	4,224	3	44	44	40	8,571
11B	Pomona Blvd	Garfield Ave to Markland Ave	0.70	3,696	3	44	42	40	21,740
12A	Potrero Grande Dr	Markland Dr and Saturn St	0.65	3,432	4	81	51	45	22,356
12B	Portero Grande Dr	Saturn St and East City Limit	0.60	3,168	4	65	51	45	14,896
13A	Riggins St	Atlantic Blvd to Findlay Ave	0.51	2,693	2	56	35	35	10,718
13B	Riggins St	Findlay Ave to Garfield Ave	0.43	2,270	2	56	36	35	11,599
13C	Riggins St	Garfield Ave to Fulton St	0.64	3,379	4	60	22	35	4,667
14	I10	Adjacent to City Limits	3.50	18,480	12	180	60	60	225,080
15A	I710	Within / Adjacent to City Limits	1.75	9,240	7	150	60	60	134,836
15B	I710 No Barrier	Within / Adjacent to City Limits	1.75	9,240	2,310	4,620	6,930	7	134,836
16	SR60	Within / Adjacent to City Limits	4.40	23,232	8	135	60	60	261,709

Monterey Park Focused General Plan Update									
Monterey Park, CA									
Appendix: Project 2040 Traffic Noise Model Inputs									
Prepared by MIG, May 2019									
ID	Road	Segment	Length (Miles)	Length (Feet)	Average Lanes	Average Width (Feet)	Average Speed (MPH)	Posted Speed (MPH)	ADT
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	0.50	2,640	4	71	37	30	52,974
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	1.19	6,283	4	71	41	40	40,196
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	0.54	2,851	4	71	42	40	40,196
1D	Atlantic Blvd	Floral Dr to South City Limit	0.33	1,742	6	81	38	35	41,324
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	1.37	7,234	4	56	40	35	21,432
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	0.30	1,584	4	65	41	40	7,768
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	0.90	4,752	4	64	43	40	12,032
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	0.78	4,118	2	40	32	25	2,264
5A	Garfield Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	65	36	30	55,245
5B	Garfield Ave	Garvey Ave to El Repetto Dr	1.15	6,072	4	70	46	40	36,011
5C	Garfield Ave	El Repetto Dr to Riggins St	0.75	3,960	4	71	40	35	31,496
5D	Garfield Ave	Riggins St to South City Limit	0.21	1,109	4	79	44	40	33,387
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	0.50	2,640	4	74	44	40	12,768
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	0.70	3,696	4	74	45	40	27,875
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	0.65	3,432	4	78	33	30	25,311
6D	Garvey Ave	Garfield Ave to New Ave	0.85	4,488	4	81	36	30	32,866
7A	Graves Ave	Garfield Ave to East City Limit	1.00	5,280	2	40	30	30	7,371
8A	Hellman Ave	West City Limit to Garfield Ave	1.40	7,392	2	38	32	30	11,948
8B	Hellman Ave	Garfield Ave to East City Limit	0.84	4,435	2	40	34	35	13,095
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	0.83	4,382	4	71	46	40	23,192
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	1.00	5,280	4	71	44	40	21,532
10A	New Ave	Hellman Ave to Garvey Ave	0.50	2,640	4	60	40	35	22,574
10B	New Ave	Garvey Ave to Graves Ave	0.50	2,640	2	56	38	35	11,558
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	0.80	4,224	3	44	44	40	9,261
11B	Pomona Blvd	Garfield Ave to Markland Ave	0.70	3,696	3	44	42	40	28,120
12A	Potrero Grande Dr	Markland Dr to Saturn St	0.65	3,432	4	81	51	45	24,963
12B	Portero Grande Dr	Saturn St to East City Limit	0.60	3,168	4	65	51	45	15,764
13A	Riggins St	Atlantic Blvd to Findlay Ave	0.51	2,693	2	56	35	35	13,397
13B	Riggins St	Findlay Ave to Garfield Ave	0.43	2,270	2	56	36	35	14,499
13C	Riggins St	Garfield Ave to Fulton St	0.64	3,379	4	60	22	35	5,834
14	I10	Adjacent to City Limits	3.50	18,480	12	180	60	60	228,680
15A	I710	Within / Adjacent to City Limits	1.75	9,240	7	150	60	60	138,436
15B	I710 No Barrier	Within / Adjacent to City Limits	1.75	9,240	2,310	4,620	6,930	7	138,436
16	SR60	Within / Adjacent to City Limits	4.40	23,232	8	135	60	60	265,309

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Monterey Park Focused General Plan Update								
Monterey Park, CA								
Appendix: Existing 2019 Traffic Noise Contour Distances								
Prepared by MIG, May 2019								
ID	Road	Road Segment	2019 CNEL 100 Feet from Road Center	Estimated Distance to Noise Contour				
				75 CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	74	79	251	794	2,512	7,943
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	73.6	72	229	724	2,291	7,244
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	74.3	85	269	851	2,692	8,511
1D	Atlantic Blvd	Floral Dr to South City Limit	73.7	74	234	741	2,344	7,413
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	71.5	45	141	447	1,413	4,467
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	66.5	14	45	141	447	1,413
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	68.4	22	69	219	692	2,188
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	60.7	4	12	37	117	372
5A	Garfield Ave	Hellman Ave to Garvey Ave	69.7	30	93	295	933	2,951
5B	Garfield Ave	Garvey Ave to El Repetto Dr	72.5	56	178	562	1,778	5,623
5C	Garfield Ave	El Repetto Dr to Riggins St	70.8	38	120	380	1,202	3,802
5D	Garfield Ave	Riggins St to South City Limit	71.5	45	141	447	1,413	4,467
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	68.4	22	69	219	692	2,188
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	71.7	47	148	468	1,479	4,677
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	67.7	19	59	186	589	1,862
6D	Garvey Ave	Garfield Ave to New Ave	69.5	28	89	282	891	2,818
7A	Graves Ave	Garfield Ave to East City Limit	61.9	5	15	49	155	490
8A	Hellman Ave	West City Limit to Garfield Ave	63.8	8	24	76	240	759
8B	Hellman Ave	Garfield Ave to East City Limit	64.9	10	31	98	309	977
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	71.1	41	129	407	1,288	4,074
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	70.2	33	105	331	1,047	3,311
10A	New Ave	Hellman Ave to Garvey Ave	69.4	28	87	275	871	2,754
10B	New Ave	Garvey Ave to Graves Ave	66.4	14	44	138	437	1,380
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67	16	50	158	501	1,585
11B	Pomona Blvd	Garfield Ave to Markland Ave	70.5	35	112	355	1,122	3,548
12A	Potrero Grande Dr	Markland Dr and Saturn St	73.1	65	204	646	2,042	6,457
12B	Portero Grande Dr	Saturn St and East City Limit	71.3	43	135	427	1,349	4,266
13A	Riggins St	Atlantic Blvd to Findlay Ave	65.3	11	34	107	339	1,072
13B	Riggins St	Findlay Ave to Garfield Ave	65.9	12	39	123	389	1,230
13C	Riggins St	Garfield Ave to Fulton St	57.6	2	6	18	58	182
14	I10	Adjacent to City Limits	71.1	41	129	407	1,288	4,074
15A	I710 with Barrier	Within / Adjacent to City Limits	65.2	10	33	105	331	1,047
15B	I710 No Barrier	Within / Adjacent to City Limits	83.4	692	2,188	6,918	21,878	69,183
16A	SR60	Within / Adjacent to City Limits	68.8	24	76	240	759	2,399

Monterey Park Focused General Plan Update								
Monterey Park, CA								
Appendix: Future Baseline 2040 Traffic Noise Contour Distances								
Prepared by MIG, May 2019								
ID	Road	Road Segment	2019 CNEL 100 Feet from Road Center	Estimated Distance to Noise Contour				
				75 CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	74.3	85	269	851	2,692	8,511
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	74	79	251	794	2,512	7,943
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	74.6	91	288	912	2,884	9,120
1D	Atlantic Blvd	Floral Dr to South City Limit	74	79	251	794	2,512	7,943
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	71.9	49	155	490	1,549	4,898
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	66.9	15	49	155	490	1,549
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	68.8	24	76	240	759	2,399
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	61.1	4	13	41	129	407
5A	Garfield Ave	Hellman Ave to Garvey Ave	70.2	33	105	331	1,047	3,311
5B	Garfield Ave	Garvey Ave to El Repetto Dr	73.2	66	209	661	2,089	6,607
5C	Garfield Ave	El Repetto Dr to Rigglin St	71.3	43	135	427	1,349	4,266
5D	Garfield Ave	Rigglin St to South City Limit	72	50	158	501	1,585	5,012
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	68.9	25	78	245	776	2,455
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	72.1	51	162	513	1,622	5,129
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	68.2	21	66	209	661	2,089
6D	Garvey Ave	Garfield Ave to New Ave	70	32	100	316	1,000	3,162
7A	Graves Ave	Garfield Ave to East City Limit	61.5	4	14	45	141	447
8A	Hellman Ave	West City Limit to Garfield Ave	64.3	9	27	85	269	851
8B	Hellman Ave	Garfield Ave to East City Limit	65.3	11	34	107	339	1,072
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	71.5	45	141	447	1,413	4,467
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	70.7	37	117	372	1,175	3,715
10A	New Ave	Hellman Ave to Garvey Ave	69.9	31	98	309	977	3,090
10B	New Ave	Garvey Ave to Graves Ave	66.8	15	48	151	479	1,514
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67.5	18	56	178	562	1,778
11B	Pomona Blvd	Garfield Ave to Markland Ave	71	40	126	398	1,259	3,981
12A	Potrero Grande Dr	Markland Dr and Saturn St	73.5	71	224	708	2,239	7,079
12B	Portero Grande Dr	Saturn St and East City Limit	71.8	48	151	479	1,514	4,786
13A	Rigglin St	Atlantic Blvd to Findlay Ave	65.7	12	37	117	372	1,175
13B	Rigglin St	Findlay Ave to Garfield Ave	66.3	13	43	135	427	1,349
13C	Rigglin St	Garfield Ave to Fulton St	58	2	6	20	63	200
14	I10	Adjacent to City Limits	71.7	47	148	468	1,479	4,677
15A	I710 with Barrier	Within / Adjacent to City Limits	65.8	12	38	120	380	1,202
15B	I710 No Barrier	Within / Adjacent to City Limits	83.9	776	2,455	7,762	24,547	77,625
16A	SR60	Within / Adjacent to City Limits	69.4	28	87	275	871	2,754

Monterey Park Focused General Plan Update								
Monterey Park, CA								
Appendix: Project 2040 Traffic Noise Contour Distances								
Prepared by MIG, May 2019								
ID	Road	Road Segment	2040 CNEL 100 Feet From Road Center	Estimated Distance to Noise Contour				
				75 CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
1A	Atlantic Blvd	Hellman Ave to Garvey Ave	76	126	398	1,259	3,981	12,589
1B	Atlantic Blvd	Garvey Ave to El Repetto Dr	75.4	110	347	1,096	3,467	10,965
1C	Atlantic Blvd	El Repetto Dr to Floral Dr	75.4	110	347	1,096	3,467	10,965
1D	Atlantic Blvd	Floral Dr to South City Limit	75	100	316	1,000	3,162	10,000
2A	Cesar Chavez Ave	West City Limit to Atlantic Blvd	72.5	56	178	562	1,778	5,623
3A	Corporate Center Dr	Ramona Blvd to Casuda Canyno Dr	68	20	63	200	631	1,995
3B	Corporate Center Dr	Casuda Canyon Dr to Floral Drive	70.4	35	110	347	1,096	3,467
4	El Repetto Drive	Atlantic Blvd to Garfield Ave	62	5	16	50	158	501
5A	Garfield Ave	Hellman Ave to Garvey Ave	73.1	65	204	646	2,042	6,457
5B	Garfield Ave	Garvey Ave to El Repetto Dr	74.3	85	269	851	2,692	8,511
5C	Garfield Ave	El Repetto Dr to Rigglin St	72	50	158	501	1,585	5,012
5D	Garfield Ave	Rigglin St to South City Limit	73.1	65	204	646	2,042	6,457
6A	Garvey Ave	Casuda Canyon Dr to Fremont Ave	69.2	26	83	263	832	2,630
6B	Garvey Ave	Fremont Ave to Atlantic Blvd	72.9	62	195	617	1,950	6,166
6C	Garvey Ave	Atlantic Blvd to Garfield Ave	68.8	24	76	240	759	2,399
6D	Garvey Ave	Garfield Ave to New Ave	70.9	39	123	389	1,230	3,890
7A	Graves Ave	Garfield Ave to East City Limit	62.5	6	18	56	178	562
8A	Hellman Ave	West City Limit to Garfield Ave	65.2	10	33	105	331	1,047
8B	Hellman Ave	Garfield Ave to East City Limit	66.3	13	43	135	427	1,349
9A	Monterey Pass Rd	Garvey Ave to Vagabond Dr	72.4	55	174	550	1,738	5,495
9B	Monterey Pass Rd	Vagabond Dr to Floral Dr	71.5	45	141	447	1,413	4,467
10A	New Ave	Hellman Ave to Garvey Ave	70.5	35	112	355	1,122	3,548
10B	New Ave	Garvey Ave to Graves Ave	67.1	16	51	162	513	1,622
11A	Pomona Blvd	Gerhart Ave to Garfield Ave	67.8	19	60	191	603	1,905
11B	Pomona Blvd	Garfield Ave to Markland Ave	72.1	51	162	513	1,622	5,129
12A	Potrero Grande Dr	Markland Dr and Saturn St	74	79	251	794	2,512	7,943
12B	Portero Grande Dr	Saturn St and East City Limit	72	50	158	501	1,585	5,012
13A	Rigglin St	Atlantic Blvd to Findlay Ave	66.7	15	47	148	468	1,479
13B	Rigglin St	Findlay Ave to Garfield Ave	67.3	17	54	170	537	1,698
13C	Rigglin St	Garfield Ave to Fulton St	59	3	8	25	79	251
14	I10	Adjacent to City Limits	71.7	47	148	468	1,479	4,677
15A	I710 with Barrier	Within / Adjacent to City Limits	65.9	12	39	123	389	1,230
15B	I710 No Barrier	Within / Adjacent to City Limits	84	794	2,512	7,943	25,119	79,433
16A	SR60	Within / Adjacent to City Limits	69.5	28	89	282	891	2,818

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RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01A_Atlantic: Hellman to Garvey E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	76.9	66	76.9	10	Snd Lvl	76.9	0.0	8	-8.0
Receiver4	4	1	0.0	74.0	66	74.0	10	Snd Lvl	74.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01B_Atlantic: Garvey to El Repetto E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	76.5	66	76.5	10	Snd Lvl	76.5	0.0	8	-8.0
Receiver 2 (100 Feet)	4	1	0.0	73.6	66	73.6	10	Snd Lvl	73.6	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
17 May 2019													
TNM 2.5													
Calculated with TNM 2.5													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 01C_Atlantic: El Repetto to Floral E19													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
								Calculated Lden	Noise Reduction		Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	77.2	0	77.2	0	Snd Lvl	77.2	0.0	0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	74.3	0	74.3	0	Snd Lvl	74.3	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01D_Atlantic: Floral to South City Lim E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	76.6	0	76.6	0	Snd Lvl	76.6	0.0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	73.7	0	73.7	0	Snd Lvl	73.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							17 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		02A_CsrChavez: WestCity to Atlantic E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.4	0	74.4	0	Snd Lvl	74.4	0.0	0	0.0
Receiver4	4	1	0.0	71.5	0	71.5	0	Snd Lvl	71.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03A_CrpCenter: Ramona to Casuda E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.5	0	69.5	0	Snd Lvl	69.5	0.0	0	0.0
Receiver4	4	1	0.0	66.5	0	66.5	0	Snd Lvl	66.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03B_CrpCenter: Casuda to Floral E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.3	0	71.3	0	Snd Lvl	71.3	0.0	0	0.0
Receiver4	4	1	0.0	68.4	0	68.4	0	Snd Lvl	68.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		04A_EIRepetto: Atlantic to Garfield E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	63.6	0	63.6	0	Snd Lvl	63.6	0.0	0	0.0
Receiver4	4	1	0.0	60.7	0	60.7	0	Snd Lvl	60.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05A_Garfield: Hellman to Garvey E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	72.6	0	72.6	0	Snd Lvl	72.6	0.0	0	0.0
Receiver4	4	1	0.0	69.7	0	69.7	0	Snd Lvl	69.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													24 May 2019
C. Dugan													TNM 2.5
													Calculated with TNM 2.5
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													MontPrk Focused GPU
RUN:													05B_Garfield: Garvey to El Repetto E19
BARRIER DESIGN:													INPUT HEIGHTS
													Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:													68 deg F, 50% RH
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction		Calculated minus Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver3	3	1	0.0	75.4	0	75.4	0	Snd Lvl	75.4	0.0	0	0.0	
Receiver4	4	1	0.0	72.5	0	72.5	0	Snd Lvl	72.5	0.0	0	0.0	
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
24 May 2019													
TNM 2.5													
Calculated with TNM 2.5													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 05CB_Garfield: El Repetto to Riggini													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver3	3	1	0.0	73.7	0	73.7	0	Snd Lvl	73.7	0.0	0	0	0.0
Receiver4	4	1	0.0	70.8	0	70.8	0	Snd Lvl	70.8	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05D_Garfield: Riggin to South City Lim										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.6	0	74.6	0	Snd Lvl	74.6	0.0	0	0.0
Receiver4	4	1	0.0	71.5	0	71.5	0	Snd Lvl	71.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			06A_Garvey: Casuda to Fremont E19									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.4	0	71.4	0	Snd Lvl	71.4	0.0	0	0.0
Receiver4	4	1	0.0	68.4	0	68.4	0	Snd Lvl	68.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			06B_Garvey: Fremont to Atlantic E19									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.6	0	74.6	0	Snd Lvl	74.6	0.0	0	0.0
Receiver4	4	1	0.0	71.7	0	71.7	0	Snd Lvl	71.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06C_Garvey: Atlantic to Garfield E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	70.6	0	70.6	0	Snd Lvl	70.6	0.0	0	0.0
Receiver4	4	1	0.0	67.7	0	67.7	0	Snd Lvl	67.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06D_Garvey: Garfield to New Ave E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	72.4	0	72.4	0	Snd Lvl	72.4	0.0	0	0.0
Receiver4	4	1	0.0	69.5	0	69.5	0	Snd Lvl	69.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			07A_Graves: Garfield to EastCityLim E19									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBa	dBa	dBa	dB	dB		dBa	dB	dB	dB
Receiver3	3	1	0.0	64.7	0	64.7	0	Snd Lvl	64.7	0.0	0	0.0
Receiver4	4	1	0.0	61.9	0	61.9	0	Snd Lvl	61.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		08A_Hellman: West Limit to Garfield E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	66.7	0	66.7	0	Snd Lvl	66.7	0.0	0	0.0
Receiver4	4	1	0.0	63.8	0	63.8	0	Snd Lvl	63.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		09B_MontPass: Vagabond to Floral E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0
Receiver4	4	1	0.0	70.2	0	70.2	0	Snd Lvl	70.2	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		10A_New: Hellman to Garvey E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	72.4	0	72.4	0	Snd Lvl	72.4	0.0	0	0.0
Receiver4	4	1	0.0	69.4	0	69.4	0	Snd Lvl	69.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		10B_New: Garvey to Graves E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.3	0	69.3	0	Snd Lvl	69.3	0.0	0	0.0
Receiver4	4	1	0.0	66.4	0	66.4	0	Snd Lvl	66.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			11A_Pomona: Gerhart to Garfield E19									
BARRIER DESIGN:			INPUT HEIGHTS							Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.		
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	70.0	0	70.0	0	Snd Lvl	70.0	0.0	0	0.0
Receiver4	4	1	0.0	67.0	0	67.0	0	Snd Lvl	67.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			12A_Portrero: Markland to Saturn E19									
BARRIER DESIGN:			INPUT HEIGHTS				Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	76.0	0	76.0	0	Snd Lvl	76.0	0.0	0	0.0
Receiver4	4	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		12B_Portrero: Saturn to East Limit E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.3	0	74.3	0	Snd Lvl	74.3	0.0	0	0.0
Receiver4	4	1	0.0	71.3	0	71.3	0	Snd Lvl	71.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13A_Riggin: Atlantic to Findlay E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.2	0	68.2	0	Snd Lvl	68.2	0.0	0	0.0
Receiver4	4	1	0.0	65.3	0	65.3	0	Snd Lvl	65.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13B_Riggin: Findlay to Garfield E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.8	0	68.8	0	Snd Lvl	68.8	0.0	0	0.0
Receiver4	4	1	0.0	65.9	0	65.9	0	Snd Lvl	65.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13B_Riggin: Garfield to Fulton E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	60.4	0	60.4	0	Snd Lvl	60.4	0.0	0	0.0
Receiver4	4	1	0.0	57.6	0	57.6	0	Snd Lvl	57.6	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		14A_I10: Adjacent to City E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		Calculated minus Goal
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
Receiver4	4	1	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		15A_I710: Adjacent to City w/ Barrier E19										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
Receiver4	4	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG												
C. Dugan												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: MontPrk Focused GPU												
RUN: 15B_I710: Adjacent to City no Barrier E19												
BARRIER DESIGN: INPUT HEIGHTS												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	83.4	66	83.4	10	Snd Lvl	83.4	0.0	8	-8.0
Receiver4	4	1	0.0	80.3	66	80.3	10	Snd Lvl	80.3	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		16A_SR60: Adjacent to City E19										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.8	66	68.8	10	Snd Lvl	68.8	0.0	8	-8.0
Receiver4	4	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01A_Atlantic: Hellman to Garvey F40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	77.2	66	77.2	10	Snd Lvl	77.2	0.0	8	-8.0
Receiver4	4	1	0.0	74.3	66	74.3	10	Snd Lvl	74.3	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01B_Atlantic: Garvey to El Repetto FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	76.9	66	76.9	10	Snd Lvl	76.9	0.0	8	-8.0
Receiver 2 (100 Feet)	4	1	0.0	74.0	66	74.0	10	Snd Lvl	74.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01C_Atlantic: EI Repetto to Floral FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	77.6	0	77.6	0	Snd Lvl	77.6	0.0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	74.6	0	74.6	0	Snd Lvl	74.6	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
17 May 2019													
TNM 2.5													
Calculated with TNM 2.5													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 01D_Atlantic: Floral to South CityLim FB40													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	77.0	0	77.0	0	Snd Lvl	77.0	0.0	0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	74.0	0	74.0	0	Snd Lvl	74.0	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03A_CrpCenter: Ramona to Casuda FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.9	0	69.9	0	Snd Lvl	69.9	0.0	0	0.0
Receiver4	4	1	0.0	66.9	0	66.9	0	Snd Lvl	66.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03B_CrpCenter: Casuda to Floral FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.7	0	71.7	0	Snd Lvl	71.7	0.0	0	0.0
Receiver4	4	1	0.0	68.8	0	68.8	0	Snd Lvl	68.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		04A_EIRepetto: Atlantic to Garfield FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3 (50 Feet)	3	1	0.0	63.9	0	63.9	0	Snd Lvl	63.9	0.0	0	0.0
Receiver4 (100 Feet)	4	1	0.0	61.1	0	61.1	0	Snd Lvl	61.1	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05A_Garfield: Hellman to Garvey FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0
Receiver4	4	1	0.0	70.2	0	70.2	0	Snd Lvl	70.2	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05B_Garfield: Garvey to El Repetto FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	76.1	0	76.1	0	Snd Lvl	76.1	0.0	0	0.0
Receiver4	4	1	0.0	73.2	0	73.2	0	Snd Lvl	73.2	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05C_Garfield: EI Repetto to Riggin FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.2	0	74.2	0	Snd Lvl	74.2	0.0	0	0.0
Receiver4	4	1	0.0	71.3	0	71.3	0	Snd Lvl	71.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06A_Garvey: Casuda to Fremont FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.8	0	71.8	0	Snd Lvl	71.8	0.0	0	0.0
Receiver4	4	1	0.0	68.9	0	68.9	0	Snd Lvl	68.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
24 May 2019													
TNM 2.5													
Calculated with TNM 2.5													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 06B_Garvey: Fremont to Atlantic FB40													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver3	3	1	0.0	75.1	0	75.1	0	Snd Lvl	75.1	0.0	0	0	0.0
Receiver4	4	1	0.0	72.1	0	72.1	0	Snd Lvl	72.1	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06C_Garvey: Atlantic to Garfield FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.0	0	71.0	0	Snd Lvl	71.0	0.0	0	0.0
Receiver4	4	1	0.0	68.2	0	68.2	0	Snd Lvl	68.2	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			06D_Garvey: Garfield to New Ave FB40									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	72.8	0	72.8	0	Snd Lvl	72.8	0.0	0	0.0
Receiver4	4	1	0.0	70.0	0	70.0	0	Snd Lvl	70.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		07A_Graves: Garfield to EastCtyLm FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	64.3	0	64.3	0	Snd Lvl	64.3	0.0	0	0.0
Receiver4	4	1	0.0	61.5	0	61.5	0	Snd Lvl	61.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		08A_Helmman: WestLim to Garfield FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	67.1	0	67.1	0	Snd Lvl	67.1	0.0	0	0.0
Receiver4	4	1	0.0	64.3	0	64.3	0	Snd Lvl	64.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		08B_Helmman: Garfield to East Limit FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.2	0	68.2	0	Snd Lvl	68.2	0.0	0	0.0
Receiver4	4	1	0.0	65.3	0	65.3	0	Snd Lvl	65.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		09A_MontPass: Garvey to Vagabd FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.4	0	74.4	0	Snd Lvl	74.4	0.0	0	0.0
Receiver4	4	1	0.0	71.5	0	71.5	0	Snd Lvl	71.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		09B_MontPass: Vagabond to Floral FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	73.6	0	73.6	0	Snd Lvl	73.6	0.0	0	0.0
Receiver4	4	1	0.0	70.7	0	70.7	0	Snd Lvl	70.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		10A_New: Hellman to Garvey FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	72.8	0	72.8	0	Snd Lvl	72.8	0.0	0	0.0
Receiver4	4	1	0.0	69.9	0	69.9	0	Snd Lvl	69.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		10B_New: Garvey to Graves FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	69.7	0	69.7	0	Snd Lvl	69.7	0.0	0	0.0
Receiver4	4	1	0.0	66.8	0	66.8	0	Snd Lvl	66.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		11A_Pomona: Gerhart to Garfield FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	70.4	0	70.4	0	Snd Lvl	70.4	0.0	0	0.0
Receiver4	4	1	0.0	67.5	0	67.5	0	Snd Lvl	67.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		11B_Pomona: Garfield to Markland FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction		
										Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	73.9	0	73.9	0	Snd Lvl	73.9	0.0	0	0.0
Receiver4	4	1	0.0	71.0	0	71.0	0	Snd Lvl	71.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		12A_Portrero: Markland to Saturn FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	76.5	0	76.5	0	Snd Lvl	76.5	0.0	0	0.0
Receiver4	4	1	0.0	73.5	0	73.5	0	Snd Lvl	73.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		12B_Portrero: Saturn to East Limit FB40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.7	0	74.7	0	Snd Lvl	74.7	0.0	0	0.0
Receiver4	4	1	0.0	71.8	0	71.8	0	Snd Lvl	71.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13A_Riggin: Atlantic to Findlay FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.6	0	68.6	0	Snd Lvl	68.6	0.0	0	0.0
Receiver4	4	1	0.0	65.7	0	65.7	0	Snd Lvl	65.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG												
C. Dugan												
24 May 2019												
TNM 2.5												
Calculated with TNM 2.5												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: MontPrk Focused GPU												
RUN: 13B_Riggin: Findlay to Garfield FB40												
BARRIER DESIGN: INPUT HEIGHTS												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.3	0	69.3	0	Snd Lvl	69.3	0.0	0	0.0
Receiver4	4	1	0.0	66.3	0	66.3	0	Snd Lvl	66.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13B_Riggin: Garfield to Fulton FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	60.8	0	60.8	0	Snd Lvl	60.8	0.0	0	0.0
Receiver4	4	1	0.0	58.0	0	58.0	0	Snd Lvl	58.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 14A_I10: Adjacent to City FB40													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver3	3	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0	
Receiver4	4	1	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0	
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		15A_I710: Adj to City w/ Barrier FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
Receiver4	4	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			15B_I710: Adj. to City no Barrier FB40									
BARRIER DESIGN:			INPUT HEIGHTS							Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.		
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	83.9	66	83.9	10	Snd Lvl	83.9	0.0	8	-8.0
Receiver4	4	1	0.0	80.7	66	80.7	10	Snd Lvl	80.7	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		16A_SR60: Adjacent to City FB40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
Receiver4	4	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01A_Atlantic: Hellman to Garvey P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	79.0	66	79.0	10	Snd Lvl	79.0	0.0	8	-8.0
Receiver4	4	1	0.0	76.0	66	76.0	10	Snd Lvl	76.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						16 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01B_Atlantic: Garvey to El Repetto P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	78.2	66	78.2	10	Snd Lvl	78.2	0.0	8	-8.0
Receiver 2 (100 Feet)	4	1	0.0	75.4	66	75.4	10	Snd Lvl	75.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			01C_Atlantic: EI Repetto to Floral P40									
BARRIER DESIGN:			INPUT HEIGHTS				Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	78.4	0	78.4	0	Snd Lvl	78.4	0.0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	75.4	0	75.4	0	Snd Lvl	75.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		01D_Atlantic: Floral to South City Lim P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1 (50 feet)	3	1	0.0	77.9	0	77.9	0	Snd Lvl	77.9	0.0	0	0.0
Receiver 2 (100 Feet)	4	1	0.0	75.0	0	75.0	0	Snd Lvl	75.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG												
C. Dugan												
17 May 2019												
TNM 2.5												
Calculated with TNM 2.5												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: MontPrk Focused GPU												
RUN: 02A_CsrChavez: WestCity to Atlantic P40												
BARRIER DESIGN: INPUT HEIGHTS												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	75.4	0	75.4	0	Snd Lvl	75.4	0.0	0	0.0
Receiver4	4	1	0.0	72.5	0	72.5	0	Snd Lvl	72.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03A_CrpCenter: Ramona to Casuda P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.0	0	71.0	0	Snd Lvl	71.0	0.0	0	0.0
Receiver4	4	1	0.0	68.0	0	68.0	0	Snd Lvl	68.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						17 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		03B_CrpCenter: Casuda to Floral P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	73.3	0	73.3	0	Snd Lvl	73.3	0.0	0	0.0
Receiver4	4	1	0.0	70.4	0	70.4	0	Snd Lvl	70.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							17 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		04A_EIRepetto: Atlantic to Garfield P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
Receiver3 (50 Feet)	3	1	0.0	64.9	0	64.9	0	Snd Lvl	64.9	0.0	0	0.0
Receiver4 (100 Feet)	4	1	0.0	62.0	0	62.0	0	Snd Lvl	62.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05A_Garfield: Hellman to Garvey P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	76.0	0	76.0	0	Snd Lvl	76.0	0.0	0	0.0
Receiver4	4	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05B_Garfield: Garvey to El Repetto P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	77.2	0	77.2	0	Snd Lvl	77.2	0.0	0	0.0
Receiver4	4	1	0.0	74.3	0	74.3	0	Snd Lvl	74.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		05C_Garfield: EI Repetto to Riggin P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.9	0	74.9	0	Snd Lvl	74.9	0.0	0	0.0
Receiver4	4	1	0.0	72.0	0	72.0	0	Snd Lvl	72.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						27 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			05D_Garfield: Riggin to SoCityyLim P40									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver3	3	1	0.0	76.2	0	76.2	0	Snd Lvl	76.2	0.0	0	0.0
Receiver4	4	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06B_Garvey: Fremont to Atlantic P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	75.8	0	75.8	0	Snd Lvl	75.8	0.0	0	0.0
Receiver4	4	1	0.0	72.9	0	72.9	0	Snd Lvl	72.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		06C_Garvey: Atlantic to Garfield P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated Goal Calculated minus Goal		
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.7	0	71.7	0	Snd Lvl	71.7	0.0	0	0.0
Receiver4	4	1	0.0	68.8	0	68.8	0	Snd Lvl	68.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			06D_Garvey: Garfield to New Ave P40									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	73.8	0	73.8	0	Snd Lvl	73.8	0.0	0	0.0
Receiver4	4	1	0.0	70.9	0	70.9	0	Snd Lvl	70.9	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		07A_Graves: Garfield to EastCtyLm P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	65.3	0	65.3	0	Snd Lvl	65.3	0.0	0	0.0
Receiver4	4	1	0.0	62.5	0	62.5	0	Snd Lvl	62.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		08A_Hellman: WestLimit to Garfield P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	68.1	0	68.1	0	Snd Lvl	68.1	0.0	0	0.0
Receiver4	4	1	0.0	65.2	0	65.2	0	Snd Lvl	65.2	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG												
C. Dugan												
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT: MontPrk Focused GPU												
RUN: 08B_Hellman: Garfield to East Limit P40												
BARRIER DESIGN: INPUT HEIGHTS												
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.												
ATMOSPHERICS: 68 deg F, 50% RH												
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.1	0	69.1	0	Snd Lvl	69.1	0.0	0	0.0
Receiver4	4	1	0.0	66.3	0	66.3	0	Snd Lvl	66.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		09A_MontPass: Garvey to Vagabd P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	75.3	0	75.3	0	Snd Lvl	75.3	0.0	0	0.0
Receiver4	4	1	0.0	72.4	0	72.4	0	Snd Lvl	72.4	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		09B_MontPass: Vagabond to Floral P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	74.4	0	74.4	0	Snd Lvl	74.4	0.0	0	0.0
Receiver4	4	1	0.0	71.5	0	71.5	0	Snd Lvl	71.5	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													
C. Dugan													
24 May 2019													
TNM 2.5													
Calculated with TNM 2.5													
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT: MontPrk Focused GPU													
RUN: 10A_New: Hellman to Garvey P40													
BARRIER DESIGN: INPUT HEIGHTS													
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.													
ATMOSPHERICS: 68 deg F, 50% RH													
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver3	3	1	0.0	73.4	0	73.4	0	Snd Lvl	73.4	0.0	0	0	0.0
Receiver4	4	1	0.0	70.5	0	70.5	0	Snd Lvl	70.5	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		11A_Pomona: Gerhart to Garfield P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	70.7	0	70.7	0	Snd Lvl	70.7	0.0	0	0.0
Receiver4	4	1	0.0	67.8	0	67.8	0	Snd Lvl	67.8	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG													24 May 2019
C. Dugan													TNM 2.5
													Calculated with TNM 2.5
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													MontPrk Focused GPU
RUN:													11B_Pomona: Garfield to Markland P40
BARRIER DESIGN:													INPUT HEIGHTS
													Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:													68 deg F, 50% RH
Receiver													
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier				
									Calculated Lden	Noise Reduction Calculated		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB	dB
Receiver3	3	1	0.0	75.0	0	75.0	0	Snd Lvl	75.0	0.0	0	0	0.0
Receiver4	4	1	0.0	72.1	0	72.1	0	Snd Lvl	72.1	0.0	0	0	0.0
Dwelling Units		# DUs	Noise Reduction										
			Min dB	Avg dB	Max dB								
All Selected		2	0.0	0.0	0.0								
All Impacted		2	0.0	0.0	0.0								
All that meet NR Goal		2	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			MontPrk Focused GPU									
RUN:			12A_Portrero: Markland to Saturn P40									
BARRIER DESIGN:			INPUT HEIGHTS							Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.		
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		Calculated minus Goal
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	77.0	0	77.0	0	Snd Lvl	77.0	0.0	0	0.0
Receiver4	4	1	0.0	74.0	0	74.0	0	Snd Lvl	74.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		12B_Portrero: Saturn to East Limit P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	75.0	0	75.0	0	Snd Lvl	75.0	0.0	0	0.0
Receiver4	4	1	0.0	72.0	0	72.0	0	Snd Lvl	72.0	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG							24 May 2019					
C. Dugan							TNM 2.5					
							Calculated with TNM 2.5					
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13A_Riggin: Atlantic to Findlay P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
								Calculated Lden	Noise Reduction		Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.6	0	69.6	0	Snd Lvl	69.6	0.0	0	0.0
Receiver4	4	1	0.0	66.7	0	66.7	0	Snd Lvl	66.7	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		13B_Riggin: Findlay to Garfield P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	70.2	0	70.2	0	Snd Lvl	70.2	0.0	0	0.0
Receiver4	4	1	0.0	67.3	0	67.3	0	Snd Lvl	67.3	0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		2	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		14A_I10: Adjacent to City P40										
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
Receiver4	4	1	0.0	72.5	66	72.5	10	Snd Lvl	72.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		15A_I710: Adj to City w/ Barrier P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		Calculated minus Goal
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Receiver4	4	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		15B_I710: Adj. to City no Barrier P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier			
									Calculated Lden	Noise Reduction		Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	84.0	66	84.0	10	Snd Lvl	84.0	0.0	8	-8.0
Receiver4	4	1	0.0	80.8	66	80.8	10	Snd Lvl	80.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min dB	Avg dB	Max dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

MontPrk Focused GPU

MIG						24 May 2019						
C. Dugan						TNM 2.5						
						Calculated with TNM 2.5						
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		MontPrk Focused GPU										
RUN:		16A_SR60: Adjacent to City P40										
BARRIER DESIGN:		INPUT HEIGHTS					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing		With Barrier				
						Calculated	Crit'n	Type Impact	Calculated Lden	Noise Reduction		
							Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
Receiver3	3	1	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
Receiver4	4	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		2	0.0	0.0	0.0							
All Impacted		2	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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TRAFFIC IMPACT STUDY
City of Monterey Park General
Plan Update EIR

May 2019

Prepared For:

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Rev. 2

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1. INTRODUCTION

The traffic analysis presented in this report was conducted for the City of Monterey Park General Plan Update and the associated environmental documentation. KOA Corporation created this report for the City of Monterey Park, while under a subcontract with MIG, Inc. The word "Project" within this document refers to the proposed General Plan permitted land use changes.

This traffic analysis documents the analysis methods and results of existing, future baseline, and future with-General Plan circulation conditions within the General Plan Project study area.

1.1 TRAFFIC STUDY SCOPE

The scope of the traffic impact study conducted for the City of Monterey Park General Plan Update was developed during coordination efforts with MIG, Inc. and the City of Monterey Park. Based on the study area, a total of 30 intersections and 15 roadway segments were analyzed.

The project study area includes the following thirty (30) study intersections:

1. Atlantic Boulevard & Hellman Avenue
2. Garfield Avenue & Hellman Avenue
3. New Avenue & Hellman Avenue
4. Atlantic Boulevard & Emerson Avenue
5. Garfield Avenue & Emerson Avenue
6. Atlantic Boulevard & Garvey Avenue
7. Garfield Avenue & Garvey Avenue
8. New Avenue & Garvey Avenue
9. Corporate Center Drive & Ramona Boulevard
10. I-10 Eastbound Off-Ramp & Ramona Boulevard
11. Corporate Center Drive & I-710 Northbound Off-Ramp
12. Fremont Avenue & Monterey Pass Road
13. Garfield Avenue & Newmark Avenue
14. Atlantic Boulevard & Brightwood Street
15. I-710 Northbound On-Ramp/Ford Boulevard & Floral Drive
16. Corporate Center Drive/McDonnell Avenue & Floral Drive
17. Monterey Pass Road/Mednik Avenue & Floral Drive
18. Atlantic Boulevard & Floral Drive
19. Bleakwood Avenue & Avenida Cesar Chavez
20. Collegian Avenue & Avenida Cesar Chavez
21. Atlantic Boulevard & Avenida Cesar Chavez
22. Atlantic Boulevard & 1st Street-SR-60 Westbound Off-Ramp
23. Atlantic Boulevard & SR-60 Eastbound Off-Ramp
24. Garfield Avenue & Riggan Street
25. Garfield Avenue & Pomona Boulevard
26. Garfield Avenue & Via Campo
27. Wilcox Avenue & Pomona Boulevard
28. Markland Drive & Potrero Grande Drive-SR-60 Westbound Off-Ramp
29. Atlas Avenue & Potrero Grande Drive*
30. Saturn Street-Market Place Drive & Potrero Grande Drive

* *Unsignalized intersection*

The following list defines the 15 analyzed roadway segments:

- A. Atlantic Boulevard, between Hellman Avenue and Garvey Avenue
- B. Garfield Avenue, between Hellman Avenue and Garvey Avenue
- C. New Avenue, between Hellman Avenue and Garvey Avenue
- D. Garvey Avenue, between Fremont Avenue and Atlantic Boulevard
- E. Garvey Avenue, between Atlantic Boulevard and Garfield Avenue
- F. Monterey Pass Road, between Garvey Avenue and Vagabond Drive
- G. Corporate Center Drive, between Floral Drive and Casuda Canyon Drive
- H. Atlantic Boulevard, between Garvey Avenue and Floral Drive
- I. Garfield Avenue, between Garvey Avenue and El Repetto Drive
- J. Garfield Avenue, between El Repetto Drive and Riggin Street
- K. Cesar Chavez Avenue, between Vancouver Avenue and Atlantic Boulevard
- L. Atlantic Boulevard, between Floral Drive and 1st Street
- M. Garfield Avenue, between Riggin Street and Pomona Boulevard
- N. Pomona Boulevard, between Garfield Avenue and Gerhart Avenue
- O. Potrero Grande Drive, between Markland Drive and Saturn Street/Market Place Drive

Figure 1 shows the General Plan study area and locations of analyzed study intersections and roadway segments.

1.2 ANALYZED SCENARIOS

Traffic impacts associated with operations of the proposed Plan were analyzed at the study intersections for a weekday a.m. and p.m. peak-hour. These periods were analyzed due to typical commuting patterns in the area. The study included the analysis of the following traffic scenarios:

- Existing Conditions
- Future (2040) without-General Plan Conditions
- Future (2040) with-General Plan Conditions

The proposed project being analyzed by this document is the program-level concept of the General Plan land use map update. The land use authorized by adoption of the proposed land use plan would be implemented through new private development and revitalization of older uses.

Project impacts were analyzed based on the incremental but cumulative traffic impacts of all General Plan land use intensity/use changes. Growth rates and the cumulative development assumptions for future without-Project conditions are discussed within the Analysis section of this report.

1.3 ANALYSIS METHODOLOGY

This section documents the level-of-service methodologies used to evaluate traffic circulation on the intersections and roadways within the general plan study area. A finite study area was chosen that focuses on the key intersections and roadway locations within the City of Monterey Park.

Key tasks undertaken for this traffic analysis included the following: 1) definition of study approach, 2) determination of existing traffic conditions, 3) trip generation forecasts of the General Plan land uses, 4) assignment of Project-generated trips to the study area roadway system and, 5) evaluation of the impact of cumulative traffic at the study intersections.

The impact analysis was based on the City of Monterey Park Traffic Impact Study Guidelines (2006). The traffic study guidelines provide information on traffic analysis format, analysis methodology, and thresholds of significance.

The following text describes the methodology applied to the traffic analysis. The year 2040 was chosen as the year for the future conditions analysis, as this year is defined as the buildout year for the general plan.

Existing Conditions

New traffic counts for the 30 study intersections were conducted on a typical weekday from 7:00 a.m. to 9:00 a.m., and from 4:00 p.m. to 6:00 p.m. on April 11, 2019.

Daily roadway segment traffic counts were collected for 24-hours also on April 11, 2019.

The traffic counts were used to determine existing traffic conditions. Fieldwork within the study area was undertaken to identify the condition of key study area roadways including traffic control and approach lane configurations at each study intersection, and on-street parking restrictions.

The existing level of service (LOS) at each of the study intersections is discussed in Section 2 of this report.

[Project Trip Generation and Distribution](#)

Project trip generation was based on land use intensities and trip rates defined by *Trip Generation, 10th Edition*, published by the Institute of Transportation Engineers (ITE).

The residential land use growth will be focused in areas designated by the current City Housing Element update, and new commercial and medical-office development will be focused in areas designated by the proposed land use plan. Land use was analyzed by traffic analysis zone (TAZ), based on the location of these areas, with land use intensity reductions with the proposed land use plan applied throughout other areas of the City.

A traffic analysis zone (TAZ) is constituted by one or more census blocks from the United States Census. TAZs were defined as part of the Southern California Association of Government (SCAG) 2012-2035 Regional Transportation Plan (RTP). The study area analysis zones are based on these TAZs, but customized to analyze smaller segments of the study area.

The trip generation and distribution calculations are discussed in Section 3 of this report.

[Future without-General Plan Conditions](#)

In order to account for traffic growth in the study area, an ambient/background traffic growth rate of 0.29% per year, which results in an overall 21-year growth of approximately six (6) percent, was reviewed and approved by City engineering staff. The growth rate was based on the Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program's anticipated growth for the Regional Statistical Area (RSA) that encompasses Monterey Park. The levels of service at the study intersections for future without-Project conditions are discussed in Section 4 of this report.

[Future with-General Plan Conditions](#)

Based on the future without-Project volumes plus traffic from the proposed General Plan land uses, the future with-Project traffic volume conditions were determined and analyzed. The levels of service for this scenario are discussed in Section 5 of this report.

[Level of Service Methodology](#)

The City of Monterey Park has designated the Intersection Capacity Utilization (ICU) methodology as the desired analysis tool. The concept of roadway level of service under the ICU is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A 10% adjustment to the clearance and loss time factor based on the critical phases of the signalized control were included in the traffic analysis. A facility is "at capacity" (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes, signal phasing, and approach lane configurations on each leg of the intersection.

For the stop-controlled study intersection, LOS values were calculated using the unsignalized intersection analysis methodology defined by the Highway Capacity Manual (HCM). For this methodology, conditions are based upon intersection delay, defined as the worst-case approach delay experienced by users of the intersection who must stop or yield to free-flow through traffic. This method uses a "gap acceptance" technique to predict driver delay. This methodology is applicable to unsignalized and partially-controlled intersections on major streets where there is potential for crossing difficulty from the minor approaches due to heavy traffic volumes on the major approaches.

Level of service (LOS) values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway. Table 1 defines the level of service criteria applied to the study intersections.

Table 1 – Level of Service Definitions

LEVEL OF SERVICE	DEFINITION	SIGNALIZED Volume to Capacity Ratio	UNSIGNALIZED Delay per Vehicle (seconds)
A	Excellent operation. Free-flow speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.	0.00-0.600	<10
B	Very good operation. Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.	0.601-0.700	>10 and <15
C	Good operation. Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.	0.701-0.800	>15 and <25
D	Fair operation. Speeds begin to decline slightly with increasing flows. In this range, density begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.	0.801-0.900	>25 and <35
E	Poor operation. Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.	0.901-1.000	>35 and <50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000	>50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 2012, 1982

Significant General Plan Traffic Impacts

Traffic impacts are identified if a proposed project will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below acceptable level of service values and project traffic will cause a further decline below a threshold.

As defined by the City of Monterey Park’s traffic study guidelines, significant impacts of a proposed project on a facility must be mitigated to a level of insignificance, where feasible. Determination of potential significant traffic impacts due to the proposed Project is discussed in Section 6 of this report.

2. EXISTING CONDITIONS

This section describes the existing conditions within the study area in terms of roadway facilities, transit service and traffic operating conditions.

2.1 EXISTING ROADWAY SYSTEM

The characteristics of the key roadways within the study area are provided in Table 2 . The table summary is limited to specific roadways that traverse the study intersections and border the Project site. Figure 2 shows the City's existing roadway classifications. Figure 3 illustrates the existing traffic controls and approach lane configurations at the study intersections.

Table 2 – Existing Roadway Description

Segment	Classification	# Lanes		Median Type	General Land Use	Posted Speed Limit
		NB / EB	SB / WB			
NORTH-SOUTH ROADWAYS						
Corporate Center Drive						
Ramona Drive - Monterey Park Golf Club driveway	Secondary	2	2	DY	Commercial/Industrial	40
Monterey Park Golf Club driveway - Casuda Canyon Dr	Secondary	2	2	RM	Commercial	40
Casuda Canyon Dr - Floral Dr	Secondary	2	2	2WLTL	Office	35
Monterey Pass Road						
Garvey Ave - Newmark Ave	Minor	2	-	-	Residential	40
Newmark Ave - Vagabond Dr	Minor	2	2	2WLTL	Industrial	40
Vagabond Dr - Floral Dr	Secondary	2	2	2WLTL	Commercial/Industrial	40
Atlantic Boulevard						
Hellman Ave - Emerson Ave	Primary	2	2	DY	Commercial	30
Emerson Ave - Sevilla St	Primary	2	2	2WLTL	Commercial	30
Sevilla St - Floral Dr	Primary	2	2	2WLTL	Commercial/Residential	40
Floral Dr - CA-60 EB Off-Ramp	Primary	3	3	RM	Commercial	35
Garfield Avenue						
Hellman Ave - Newmark Ave	Primary	2	2	DY	Commercial	30
Newmark Ave - Riggins St	Primary	2	2	2WLTL	Residential	40
Riggins St - Pomona Blvd	Primary	2	2	RM	Commercial	35
New Avenue						
I-10 - Hellman Ave	Secondary	2	2	RM	-	35
Hellman Ave - Garvey Ave	Secondary	2	2	DY	Residential	35
Garvey Ave - Graves Ave	Secondary	1	1	SBY	Residential	25*
EAST - WEST ROADWAYS						
Hellman Avenue						
Hathaway Ave - Atlantic Blvd	Secondary	1	1	SBY	Residential	25*
Atlantic Blvd - New Ave	Secondary	1	1	DY	Residential	35
Ramona Boulevard						
Ameron Wy - Monterey Park Golf Club driveway	Secondary	2	2	DY	Commercial/Office	35
Garvey Avenue						
Casuda Canyon Dr - Monterey Pass Rd	Secondary	2	2	RM	Residential	40
Monterey Pass Rd - Dequine Ave	Primary	2	2	RM	Commercial	35
Graves Avenue						
Garfield Ave - Russell Ave	Secondary	1	1	DY	Residential	30
Russell Ave - New Ave	Secondary	1	1	SBY	Residential	25*
Floral Drive						
I-710 - Ford Blvd	Secondary	1	1	DY	-	35
Ford Blvd - Corporate Center Dr	Secondary	2	1	DY	Office/Residential	35
Corporate Center Dr - Ridgecrest St	Secondary	2	2	DY	Commercial	35
Ridgecrest St - Atlantic Blvd	Secondary	1	1	DY	Residential/School	40
Atlantic Square - Garfield Ave	Minor	1	1	SBY	Residential	25*
Avenida Cesar Chavez/Riggins Street						
Vancouver St - Collegian Ave	Primary	2	2	DY	Commercial/Residential	35
Collegian Ave - Atlantic Blvd	Primary	2	2	RM	Commercial	35
Atlantic Blvd - Gerhart Ave	Primary	2	2	DY	Commercial/Residential	35
Gerhart Ave - Ferdinand Ave	Primary	1	1	2WLTL	Residential	35
Ferdinand Ave - Garfield Ave	Primary	1	1	SBY	Residential	35
Garfield Ave - End of Street	Minor	1	1	SBY	Residential	25*
Pomona Boulevard/Potrero Grande Drive						
CA-60 - Hendricks Ave	Primary	-	2	-	Residential	40
Hendricks Ave - Potrero Grande Dr	Secondary	-	3	-	Commercial/Residential	40
Markland Dr - East City Limit	Primary	2	2	2WLTL	Office/Residential	45

Notes: DY - Double Yellow, SBY - Single Broken Yellow, 2WLTL - 2-Way Left Turn Lane, RM - Raised Median, NPAT - No Parking Anytime, NSAT - No * Speed not posted. Prima facia residential speed of 25mph applies.

2.2 EXISTING TRANSIT SERVICE

The Project study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), City of Monterey Park, and the City of Montebello. Table 3 summarizes the Project Study transit services.

Table 3 – Existing Transit Service

Agency	Line	To	From	Via	Peak Period Frequency (minutes)
Monterey Park	1	Hellman Avenue & Alhambra Avenue	Monterey Park City Hall	Garfield Avenue, 1st Street, Atlantic Boulevard, Emerson Avenue	40
Monterey Park	2	Garfield Avenue & Elmgage	Monterey Park City Hall	Garfield Avenue, Riggan Street, Floral Drive, Brightwood Avenue, Atlantic Boulevard	40
Monterey Park	3	Emerson Avenue & Rural Drive	Monterey Park City Hall	Garvey Avenue, Emerson Avenue, Orange Avenue, Fulton Avenue, Graves Ave	40
Monterey Park	4	Garvey Avenue & Atlantic Boulevard	Monterey Park City Hall	Garvey Avenue, Monterey Pass Road, Corporate Center Drive, Casuda Canyon Drive, Emerson Avenue, Hellman Avenue	40
Monterey Park	5	Potrero Grande Drive & Saturn Street	California State University Los Angeles	Corporate Center Drive, Floral Drive, Riggan Street, Saturn Street, Potrero Grande Drive	30
Monterey Park	Link	900 Corporate Center Drive	California State University Los Angeles	Corporate Center Drive	30
Metro	68	Montebello	Los Angeles	Spring Street, Cesar Chavez Avenue, Riggan Street, Main Street	15
Metro	70	El Monte Station	Los Angeles	Olive Street, Cesar Chavez Avenue, Ramona Boulevard, Garvey Avenue	12
Metro	106	L.A. County + USC Medical Center	East L.A. College Transit Center	1st Street, Indiana Station, Soto Street, Whittier Boulevard, Boyle Avenue, State Street	50
Metro	176	Montebello	Highland Park	Pasadena Avenue, Garfield Avenue, Main Street, Mission Drive, Tyler Avenue, Rush Street, Paramount Boulevard	40
Metro	258	Paramount	Altadena	Lake Avenue, Fremont Avenue, Monterey Pass Road, Eastern Avenue	40
Metro	260	Compton	Altadena	Fair Oaks Avenue, Atlantic Boulevard, Artesia Boulevard	15
Metro	762	Compton	Pasadena	Fair Oaks Avenue, Atlantic Boulevard, Artesia Boulevard	30
Metro	770	El Monte Station	Downtown Los Angeles	Garvey Avenue, Cesar E. Chavez Avenue, Grand Avenue, Olive Avenue	15
Metro	Gold	Azusa	East Los Angeles	Monrovia, Pasadena, Highland Park, Montecito Heights, Union Station, Boyle Heights	7
Montebello	10	East L.A. College	Whittierwood Mall, Whittier	Whittier Boulevard, Atlantic Boulevard	11
Montebello	20	Las Tunas, San Gabriel	Telegraph Road, Montebello	Greenwood Avenue, Montebello Boulevard, San Gabriel Boulevard	20
Montebello	30	South Gate	San Marino	Garfield Avenue	40
Montebello	70	The Shops at Montebello	Montebello	Mines Avenue, Wilcox Avenue, Potrero Grande Drive, Hill Drive, Paramount Boulevard	40
Los Angeles County	City Terrace/East L.A. College	East L.A. College	City Terrace	Cesar Chavez Avenue, Gage Avenue, Eastern Avenue, Floral Drive, Atlantic Boulevard	60
MetroLink	San Bernardino	San Bernardino	Downtown Los Angeles	Rialto, Fontana, Rancho Cucamonga, Upland, Montclair, Claremont, Pomona, Covina, Baldwin Park, El Monte, Cal State L.A.	22

Source: City of Monterey Park Spirit Bus; City of Montebello; Los Angeles County; Los Angeles County Metropolitan Transportation Authority (Metro) 2019; MetroLink

The routes of these transit services are illustrated on Figure 4.

2.3 EXISTING BIKEWAYS

Caltrans has developed statewide standards and definitions for the planning, design and implementation of bicycle facilities. The following is a summation of these standards. The class numbering standard is being phased out, to some extent, as the name of the facility type becomes more commonplace.

Class I (Bicycle Path) – A bicycle path is a special facility that is designed exclusively for the use of bicycles. They are physically separated from motor vehicle traffic by a physical barrier or landscaped area. Bicycle paths are more often used for recreation and are generally provided in along river channels and former railroad rights-of-way. Some bicycle lane facilities denote the lane with both striping and with color-shading within the lane, or color-shading at conflict points such as intersections and driveways.

Class II (Bicycle Lane) – A bicycle lane is a facility where a portion of the paved roadway area is marked as a special lane for use by bicycles only. It is identified by signage along the street that denotes “Bike Lane”, pavement markings and lane line markings. Motor vehicles are prohibited from driving in bike lanes except when turning to and from driveways, intersections, or on-street parking.

Class III (Bicycle Route) – A bicycle route is defined as a bicycle way designated within a public right-of-way. The purpose of the bicycle route is to encourage a sharing of the roadway between vehicles and bicycles. They are identified by signage along the street that denotes “Bike Route.” No other pavement markings are employed with these facilities.

A bicycle boulevard is an enhanced Class III facility. The purpose of the bicycle boulevard is to more visibly denote the sharing of a roadway by vehicles and bicycles. They are typically identified by signage along the street that depicts a bicycle with text that denotes “Share the Road”, and also by roadway striping that shows a bicycle with chevrons/arrows denoting a shared lane. Some bicycle boulevards denote the lane sharing with a color-shaded lane, or color-shading at conflict points such as intersections and driveways. Traffic calming measures along the corridor, and enhanced directional signage, are often a part of the implementation of such facilities.

Class IV (Separated Bicycle Lane) – This is a newer facility designation. These are often called cycle tracks. With this treatment, a facility is provided where the bicycle lane is located between the sidewalk and either on-street parking or a travel lane and separated by a curb or median or other barrier, is a method for implementing a facility with some similar benefits to a bicycle path. These facilities require special treatments at intersections, depending upon the setback from the travel lane and visibility issues.

The City of Monterey Park has several bicycle facilities within the City. Bicycle lanes are described below:

- [N. Alhambra Avenue](#), between north city limit and Newmark Avenue
- [W. Riggin Street](#), between Gerhart Avenue and Ferdinand Avenue

Sharrows bicycle facilities are provided on the following segments within the City:

- [W. Riggin Street](#), between Atlantic Boulevard and Gerhart Avenue
- [W. Riggin Street](#), between Ferdinand Avenue and Wilcox Avenue
- [Gerhart Avenue](#), between W. Riggin Street and south city limit

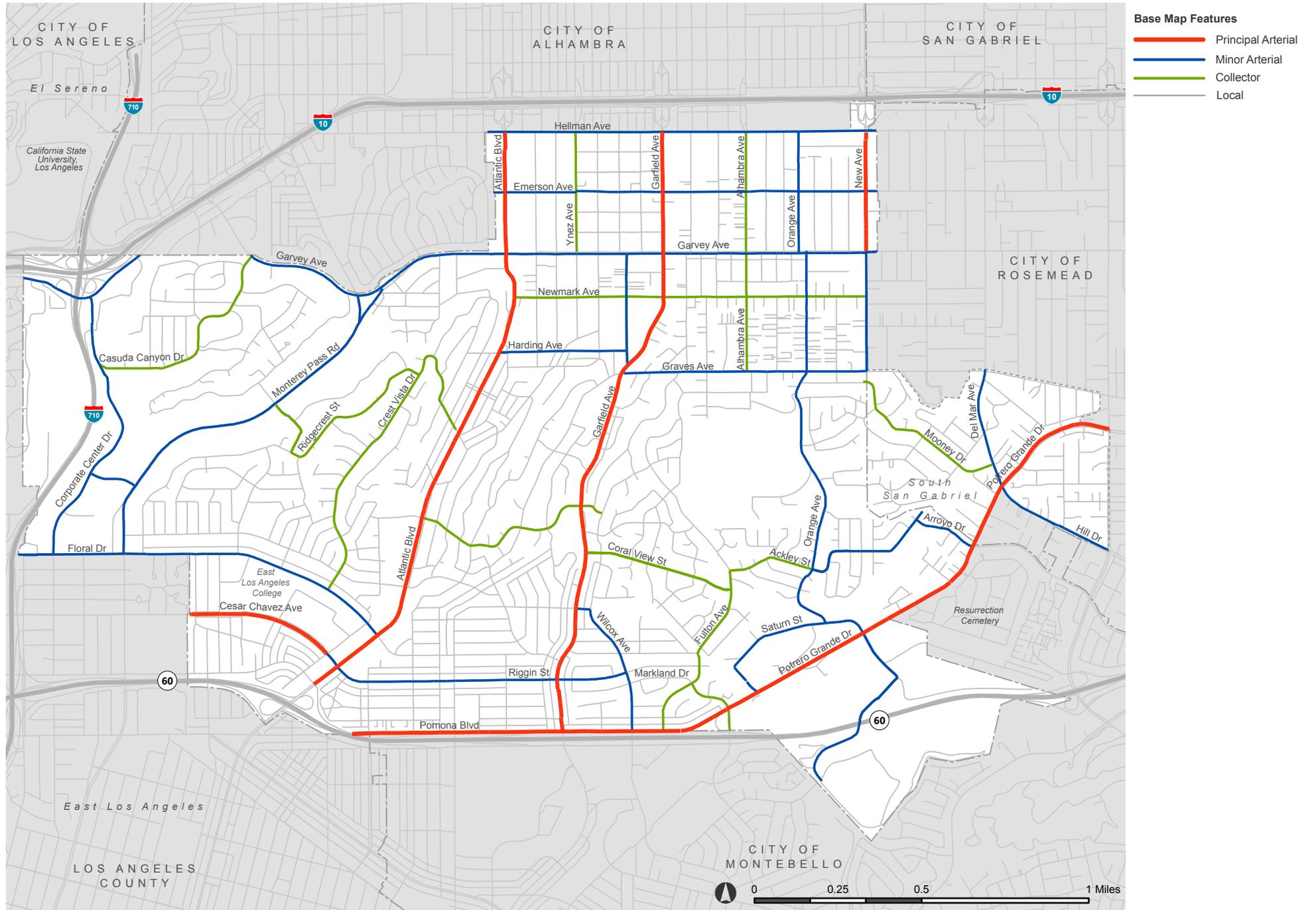
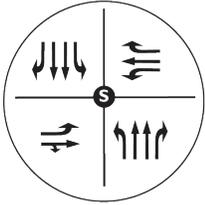
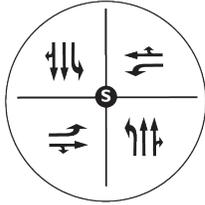


Figure 3 - Existing Intersection Configuration

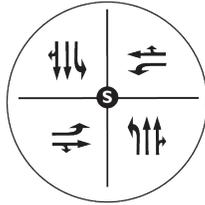
#1 Hellman Ave & Atlantic Blvd



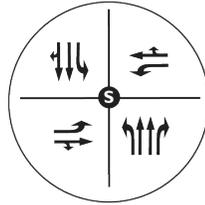
#2 Hellman Ave & Garfield Ave



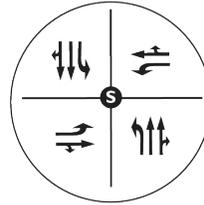
#3 Hellman Ave & New Ave



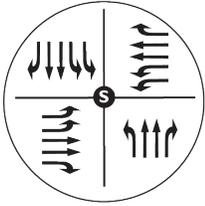
#4 Emerson Ave & Atlantic Blvd



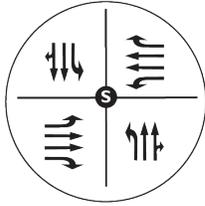
#5 Emerson Ave & Garfield Ave



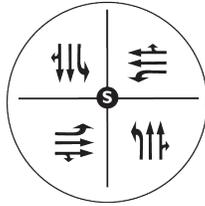
#6 Garvey Ave & Atlantic Ave



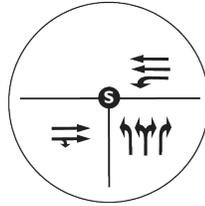
#7 Garvey Ave & Garfield Ave



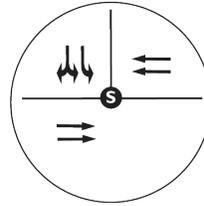
#8 Garvey Ave & New Ave



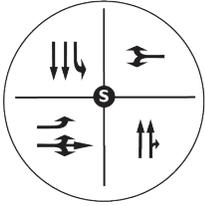
#9 Ramona Blvd & Corporate Center Dr



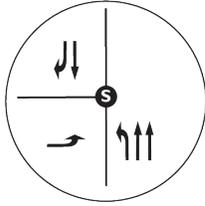
#10 Ramona Blvd & I-10 EB Off-Ramp



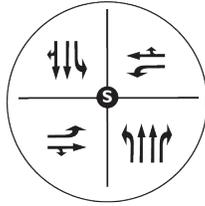
#11 I-710 NB Off-Ramp & Corporate Center Dr



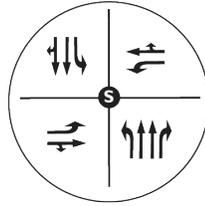
#12 Fremont Ave & Monterey Pass Rd



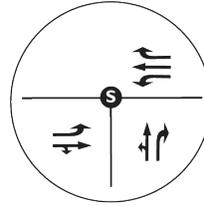
#13 Newmark Ave & Garfield Ave



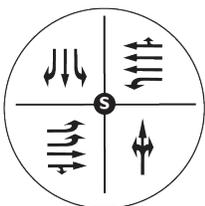
#14 Brightwood St & Atlantic Blvd



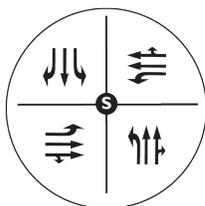
#15 Floral Dr & Ford Blvd/I-710 NB On-Ramp



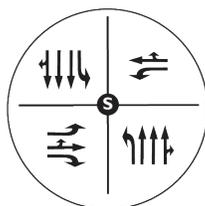
#16 Floral Dr & Corp. Center Dr/ McDonnell Ave



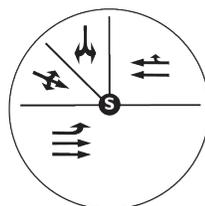
#17 Floral Dr & Monterey Pass Rd/ Mednik Ave



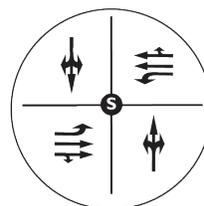
#18 Atlantic Blvd & Floral Dr



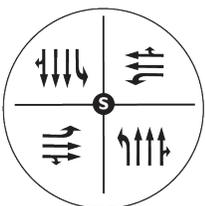
#19 Avenida Cesar Chavez & Bleakwood Ave



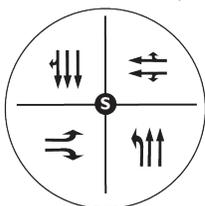
#20 Avenida Cesar Chavez & Collegian Ave



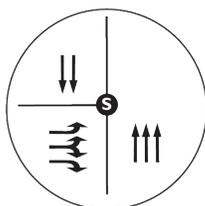
#21 Avenida Cesar Chavez/Riggin St & Atlantic Blvd



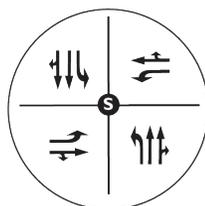
#22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp



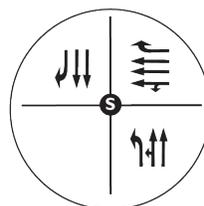
#23 Atlantic Blvd & SR-60 EB Ramp



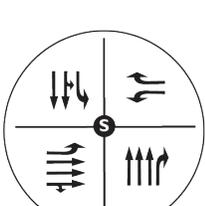
#24 Riggin St & Garfield Ave



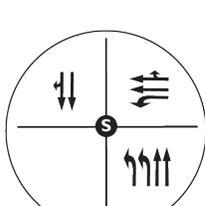
#25 Pomona Blvd & Garfield Ave



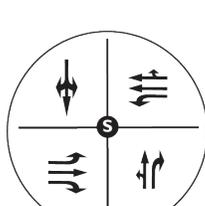
#26 Via Camps & Garfield Ave



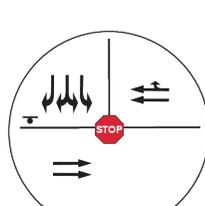
#27 Pomona Blvd & Wilcox Ave



#28 Potero Grande Dr & Markland Dr

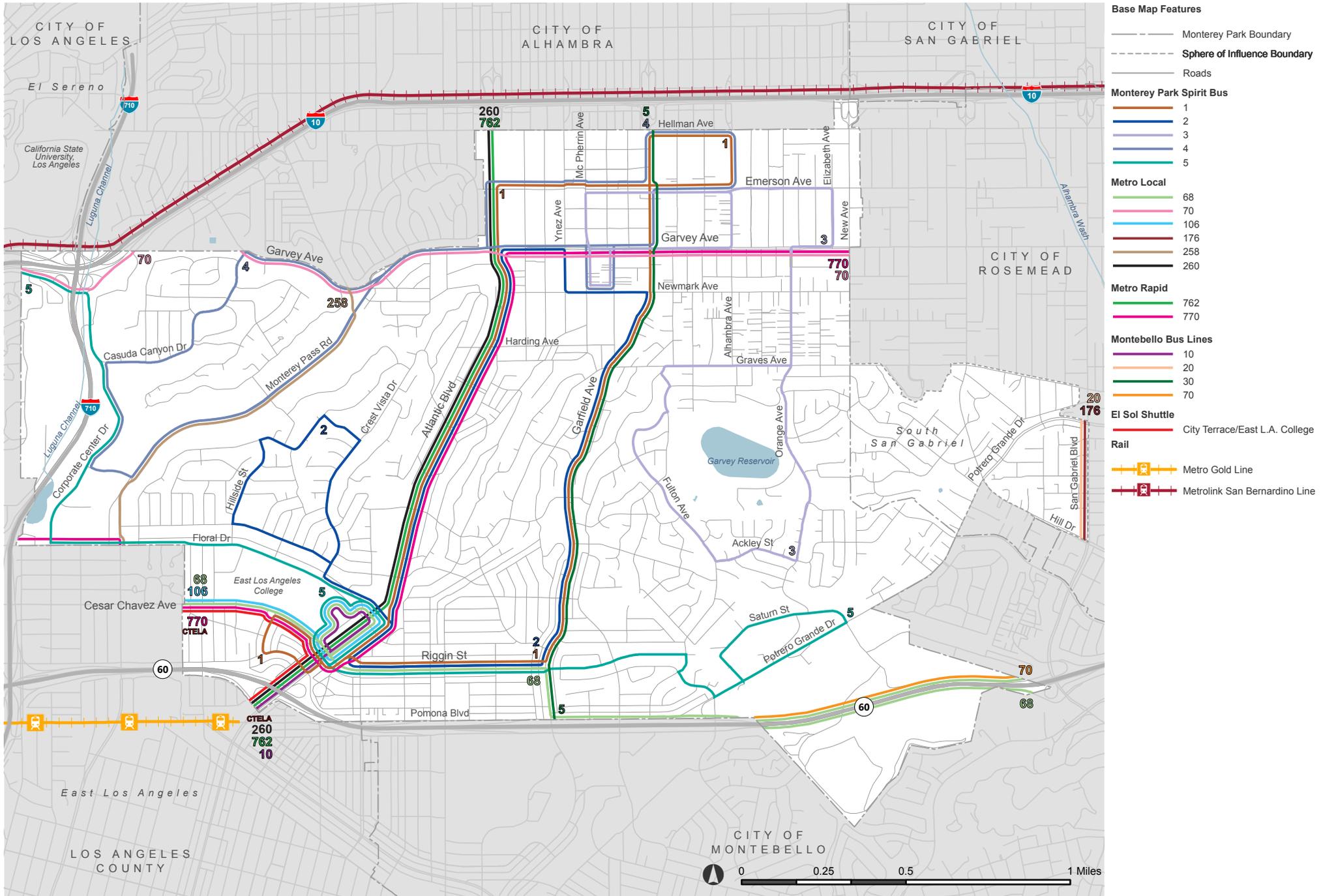


#29 Potero Grande Dr & Atlas Ave



#30 Potero Grande Dr & Saturn St/ Market Place Dr





2.4 EXISTING TRAFFIC VOLUMES

New traffic counts for the 30 study intersections were conducted on a typical weekday from 7:00 a.m. to 9:00 a.m., and from 4:00 p.m. to 6:00 p.m. on April 11, 2019.

Daily roadway segment traffic counts were collected for 24-hours also on April 11, 2019.

The traffic counts were used to determine existing traffic conditions. Fieldwork within the study area was undertaken to identify the condition of key study area roadways including traffic control and approach lane configurations at each study intersection, and on-street parking restrictions.

The count data worksheets are provided in Appendix B.

2.5 EXISTING INTERSECTION LEVEL OF SERVICE

Volume-to-capacity ratios and corresponding levels of service (LOS) were determined for each of the study intersections during the weekday a.m. and p.m. peak hour. These calculations are based on the intersection lane configurations and the existing traffic volumes,

Table 4 summarizes the intersection capacity utilization and LOS values for existing traffic conditions.

Table 4 – Intersection Performance – Existing Conditions

Study Intersections		AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
1	Atlantic Boulevard & Hellman Avenue	0.769	C	0.827	D
2	Garfield Avenue & Hellman Avenue	0.875	D	0.847	D
3	New Avenue & Hellman Avenue	0.852	D	0.765	C
4	Atlantic Boulevard & Emerson Avenue	0.555	A	0.586	A
5	Garfield Avenue & Emerson Avenue	0.620	B	0.628	B
6	Atlantic Boulevard & Garvey Avenue	0.670	B	0.722	C
7	Garfield Avenue & Garvey Avenue	0.704	C	0.760	C
8	New Avenue & Garvey Avenue	0.639	B	0.682	B
9	Corporate Center Drive & Ramona Boulevard	0.642	B	0.561	A
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.436	A	0.884	D
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.466	A	0.399	A
12	Fremont Avenue & Monterey Pass Road	0.699	B	0.739	C
13	Garfield Avenue & Newmark Avenue	0.635	B	0.725	C
14	Atlantic Boulevard & Brightwood Street	0.577	A	0.721	C
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.655	B	0.752	C
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.586	A	0.669	B
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.630	B	0.709	C
18	Atlantic Boulevard & Floral Drive/Driveway	0.567	A	0.638	B
19	Bleakwood Avenue & Avenida Cesar Chavez	0.405	A	0.394	A
20	Collegian Avenue & Avenida Cesar Chavez	0.538	A	0.549	A
21	Atlantic Boulevard & Avenida Cesar Chavez	0.627	B	0.746	C
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.751	C	0.709	C
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.666	B	0.633	B
24	Garfield Avenue & Riggins Street	0.817	D	0.800	C
25	Garfield Avenue & Pomona Boulevard	0.775	C	0.688	B
26	Garfield Avenue & Via Campo	0.688	B	0.760	C
27	Wilcox Avenue & Pomona Boulevard	0.568	A	0.608	B
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.608	B	0.793	C
29	Atlas Avenue & Potrero Grande Drive *	11.6	B	14.3	B
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.423	A	0.627	B

* Unsignalized intersection analyzed based on HCM methodology.

As shown in Table 4, 25 out of thirty study intersections are currently operating at acceptable LOS C or better during the weekday a.m. and p.m. peak hour. The following intersections are operating at LOS D or worse during either the a.m. or p.m. peak hours:

- Atlantic Boulevard & Hellman Avenue (p.m. peak hour)
- Garfield Avenue & Hellman Avenue (a.m. and p.m. peak hours)
- New Avenue & Hellman Avenue (a.m. peak hour)

- I-10 Eastbound Off-Ramp & Ramona Boulevard (p.m. peak hour)
- Garfield Avenue & Riggin Street (a.m. peak hour)

2.6 EXISTING ROADWAY SEGMENT LEVEL OF SERVICE

Daily traffic counts were collected at the analyzed roadway segments. The level of service (LOS) values for each segment was calculated to determined daily traffic operations. Existing conditions analysis is based on year 2019 conditions. Table 5 provides the weekday LOS values for the study roadway segments, based on the defined capacity for the daily total volumes.

Table 5 –Roadway Segment Daily Operations – Existing Conditions

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	33,571	0.839	D
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	26,150	0.654	B
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	18,495	0.617	B
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	22,069	0.552	A
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	20,473	0.512	A
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	17,882	0.596	A
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	7,879	0.263	A
H	Atlantic Boulevard	Garvey Avenue	Flora Drive	4	40,000	27,550	0.689	B
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	26,436	0.661	B
J	Garfield Avenue	El Repetto Drive	Riggin Street	4	40,000	25,161	0.629	B
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	17,683	0.442	A
L	Atlantic Boulevard	Floral Drive	1st Street	6	60,000	31,137	0.519	A
M	Garfield Avenue	Riggin Street	Pomona Boulevard	4	40,000	24,207	0.605	B
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	8,073	0.359	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Driv	4	40,000	21,057	0.526	A

The following roadway segments are operating at LOS D or worse:

- Atlantic Boulevard, between Hellman Avenue and Garvey Avenue (LOS D)

The existing weekday a.m. and p.m. peak-hour turning movement volumes are illustrated on Figure 6; Figure 7 shows the existing daily traffic volumes on the study roadways. The existing traffic analysis scenario worksheets are provided in Appendix C.



Figure 6 - Existing AM/PM Peak Hour Intersection Volumes (1 - 20)

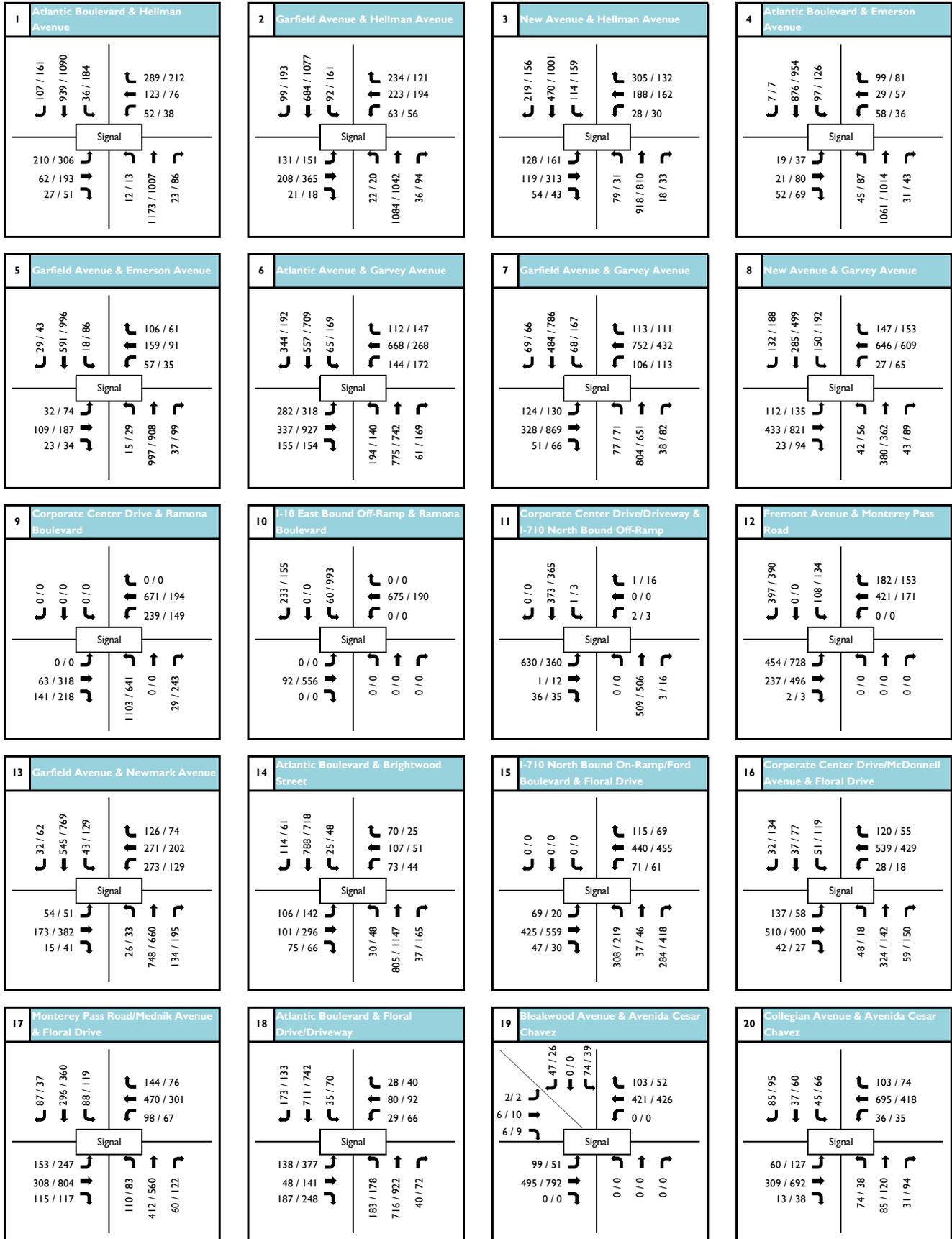
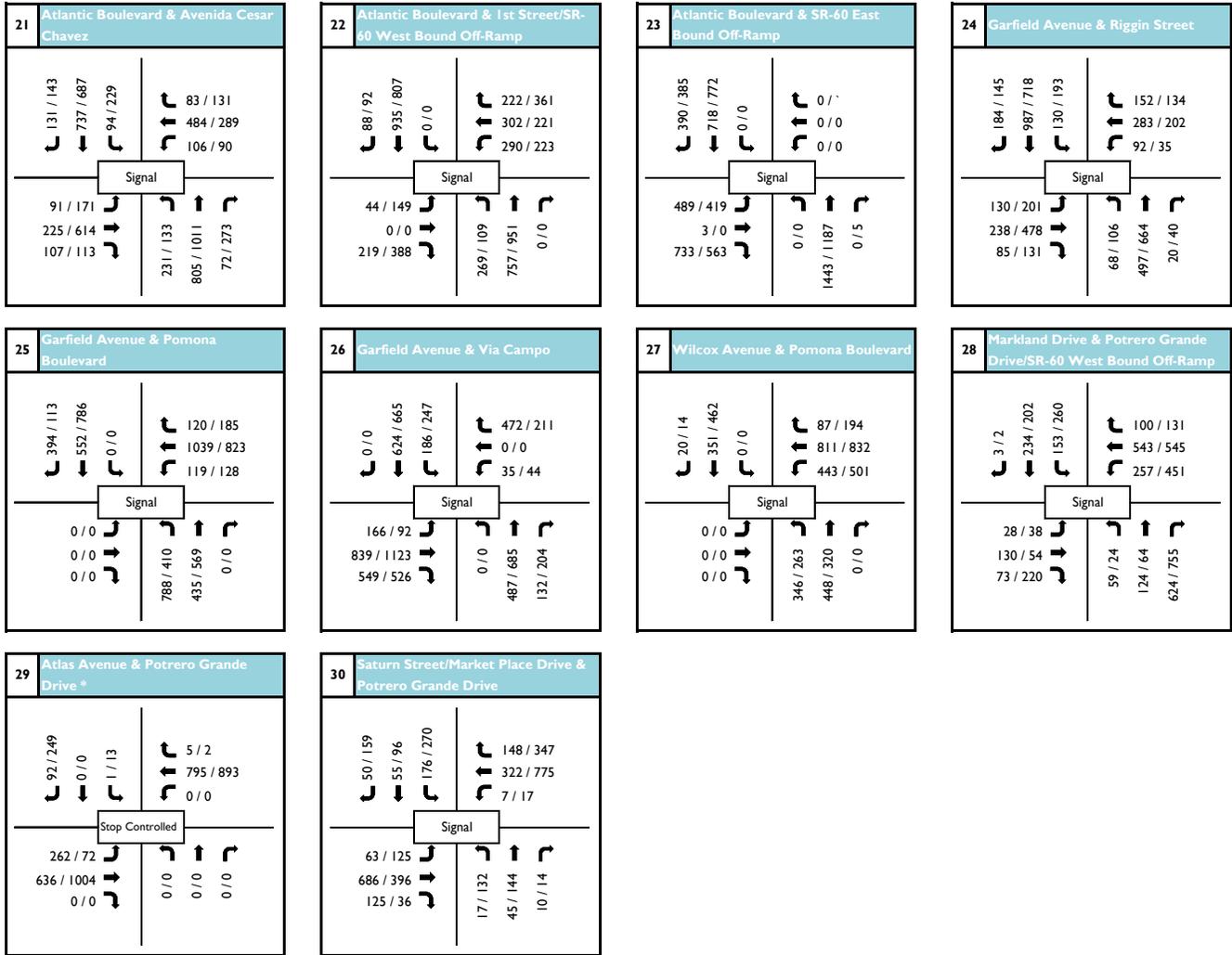
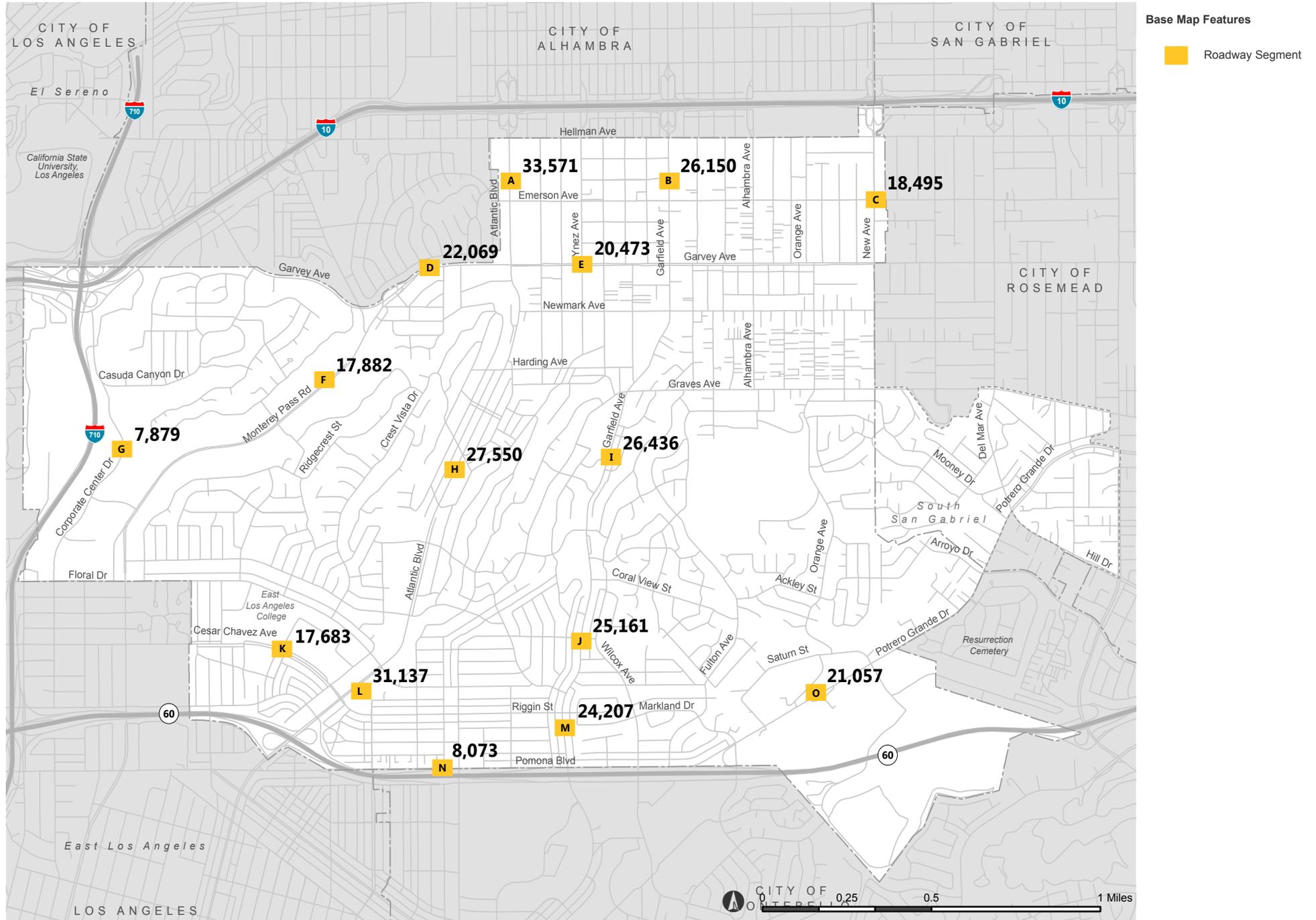


Figure 6 - Existing AM/PM Peak Hour Intersection Volumes (21 - 30)





3. PROJECT TRAFFIC

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution and trip assignment.

3.1 GENERAL PLAN LAND USE

KOA was provided details from the proposed General Plan land use map. Trip generation for these land uses was analyzed and impacts were examined.

The development of a traffic forecast for a General plan takes into account the type and density of future land uses within the analyzed area, and the location and potential interaction of various land use types, as well as the characteristics and capacity of each of the major roadways and intersections.

The land use plan assumes no new net City-wide growth in development, due to the proposed Plan, compared to the City's current General Plan. Residential land use growth will be focused in areas designated by the current City Housing Element update, and new commercial and medical-office development will be focused in areas designated by the proposed land use plan.

Traffic potentially generated in the future under the proposed land use plan was shifted from areas of the City where development would be less intense under the proposed plan, and shifted to the focus areas.

The incremental (net) development increase/decrease by traffic analysis zone (TAZ) was derived by calculating net new trips based on new development intensities and trip generation rates. Shifts in potential future generated traffic were shifted from other areas of the City where development would be less intense under the proposed land use plan.

The following summarizes the input units from the General Plan land use plan update:

- Multi-Family Residential Units: +3,835 units
- General Commercial: +619,933 square-feet
- General Office: +883,902 square-feet
- Hotel Rooms: +607 rooms
- College Students: +3,697 students

The General Plan anticipates that there will be a reduction in single-family residential units and light industrial facilities throughout the City.

Figure 8 shows the TAZs and anticipated General Plan land use profile.

3.2 PROJECT TRIP GENERATION

The trip generation of the project was calculated using nationally-accepted rates defined by *Trip Generation (10th edition)*, published by the Institute of Transportation Engineers (ITE), and is provided in Table 6.

Trip generation was defined with the inputs received from MIG's land use group. The land uses were separated into 16 distinct zones, which were defined through the City's TAZs. No internal trip capture credits were taken to adjust the proposed trip generation. Pass-by trip credits were taken for three TAZs that had exclusively commercial uses. Transit credits were also taken for sections of the TAZs adjacent to high quality transit lines, such as Metro Rapid lines or transit centers, such as the one near East Los Angeles Community College (ELAC).

Table 6 summarizes the trip generation rates used for calculation General Plan-generated trips.

Table 6 – Trip Generation Rates

Land Use	ITE Code	Units	Daily Total	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
Employment/Technology (Industrial)	110	KSF	4.96	88%	12%	0.7	13%	87%	0.63
Low Density Residential (Single-Family)	210	DU	9.44	25%	75%	0.74	63%	37%	0.99
Medium Density Residential (Multi-Family)	220	DU	7.32	23%	77%	0.46	63%	37%	0.56
Hotel/Motel	310	ROOMS	8.36	59%	41%	0.47	51%	49%	0.6
Office	710	KSF	9.74	83%	17%	0.37	20%	80%	0.4
Commercial	820	KSF	37.75	62%	38%	0.94	48%	52%	3.81
Public Facilities and Utilities (College)	540	Students	1.15	81%	19%	0.11	56%	44%	0.11

DU: Dwelling Units; KSF: 1,000 square-feet of floor area

Table 77 below shows the net total of vehicle trips generated by the proposed General Plan land uses.

Table 7 – Project Trip Generation, by Traffic Analysis Zone

TAZ	TOTAL RESIDENTIAL USES							TOTAL NON-RESIDENTIAL USES						
	DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR			DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR		
	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
22129000	4,779	69	231	300	230	135	365	33,446	516	316	832	1,620	1,756	3,376
22141000	3,303	47	160	207	159	94	253	10,896	168	104	272	528	571	1,099
22152000	4,063	58	198	256	196	115	311	0	0	0	0	0	0	0
22128000	3,882	56	188	244	187	110	297	686	23	16	39	25	24	49
22092000	81	1	4	5	4	2	6	14,876	598	166	764	236	607	843
22118000	1,228	18	59	77	59	35	94	1,534	24	14	38	75	79	154
22138000	7,322	106	354	460	353	207	560	1,045	35	24	59	38	37	75
22148000	3,224	46	156	202	155	92	247	0	0	0	0	0	0	0
22103000	0	0	0	0	0	0	0	1,504	48	9	57	13	49	62
22125000	0	0	0	0	0	0	0	10,651	164	101	265	516	558	1,074
22145000	403	6	19	25	19	12	31	1,135	18	10	28	55	60	115
99999999	1,510	30	88	118	100	58	158	376	6	3	9	18	20	38
22126000	7	0	0	0	0	1	1	0	0	0	0	0	0	0
22150000	0	0	0	0	0	0	0	8,673	134	82	216	420	455	875
21729000	114	2	5	7	6	3	9	3,614	280	66	346	774	609	1,383
22110000	385	6	18	24	19	10	29	6,834	106	64	170	331	359	690
Total	30,301	445	1,480	1,925	1,487	874	2,361	95,270	2,120	975	3,095	4,649	5,184	9,833

The General Plan land use profile is anticipated to generate 125,571 weekday daily trips, including 5,020 vehicle trips during the weekday a.m. peak hour (2,565 inbound trips and 2,455 outbound trips), and 12,194 vehicle trips during the weekday p.m. peak-hour (6,136 inbound trips and 6,058 outbound trips).

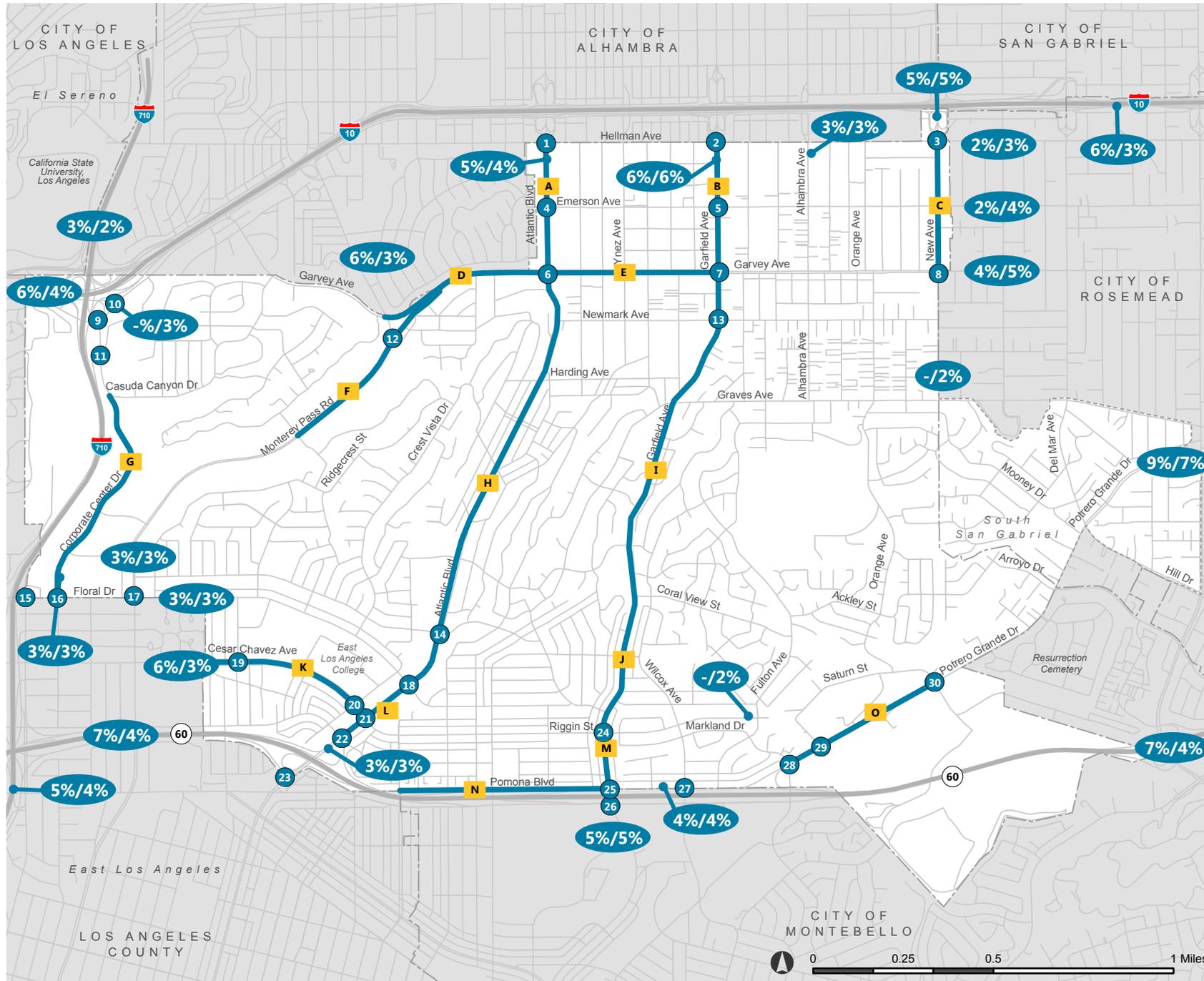
3.3 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of assigning the directions from which traffic will travel through city roadways and intersections. Trip distribution is dependent upon land use characteristics, the local roadway network, and the general locations of other land uses to which anticipated traffic would originate or terminate. Trips were distributed to the study area based on directional distribution percentages from the local RSA, defined by the Metro regional planning model for the CMP. The local area roadway network and routes to and from area freeway interchanges were also considered.

Figure 9 illustrates the trip distribution percentages that were utilized for the general plan land use traffic.

3.4 PROJECT TRIP ASSIGNMENT

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system. The weekday a.m. and p.m. peak hour Project trip assignments are illustrated on Figure 10. Figure 11 illustrates the proposed General Plan daily traffic volumes along the study roadway segments.



- Base Map Features**
- Residential Trip Distribution / Non-Residential Trip Distribution
 - Study Intersection
 - Roadway Segment





Figure 10 - General Plan AM/PM Peak Hour Intersection Volumes (1 - 20)

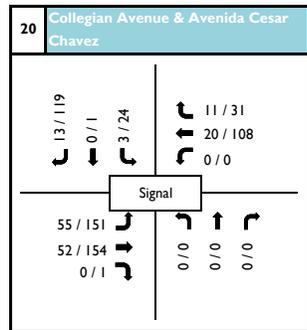
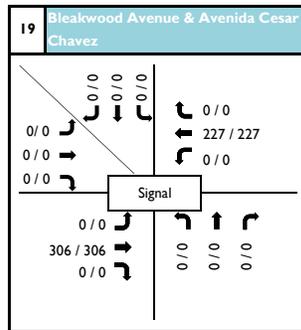
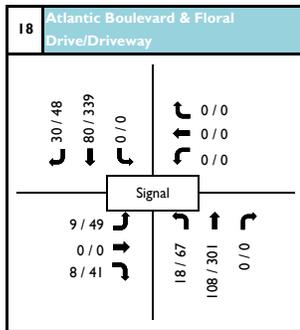
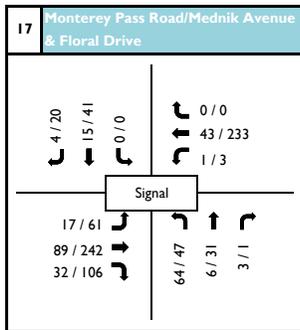
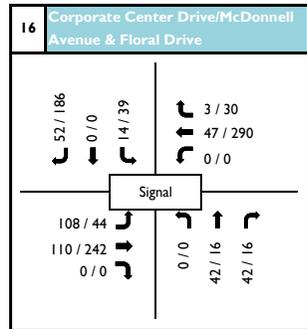
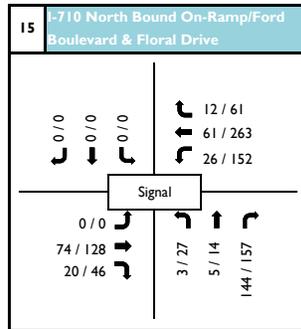
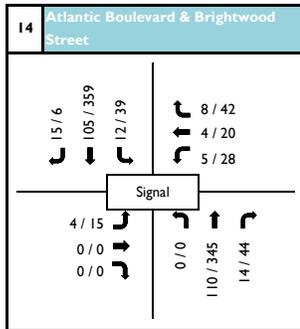
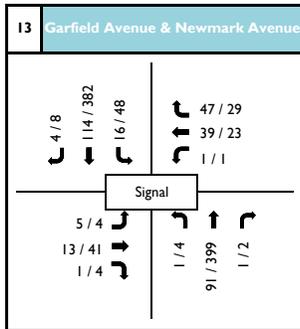
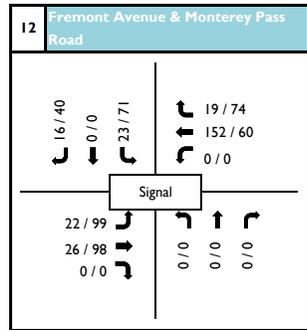
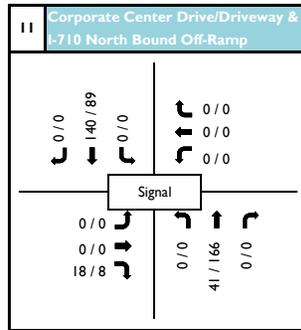
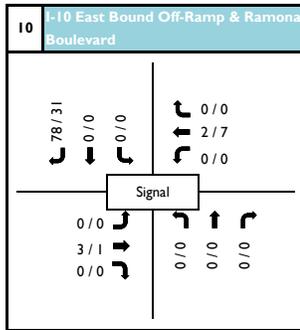
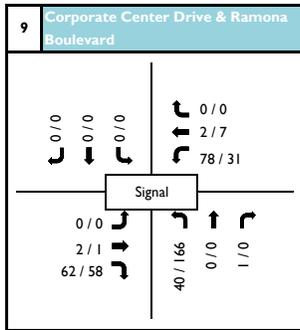
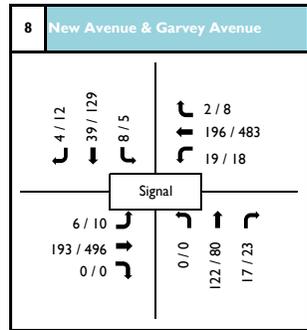
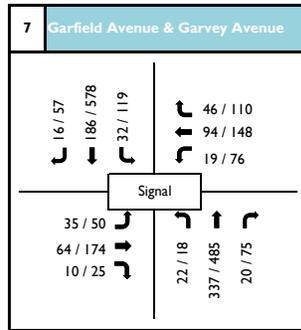
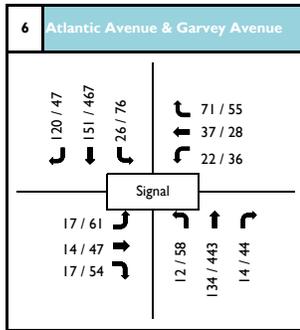
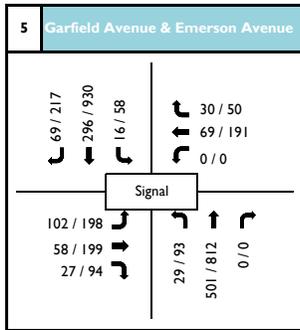
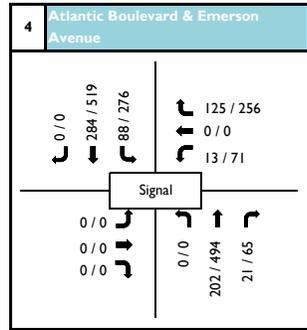
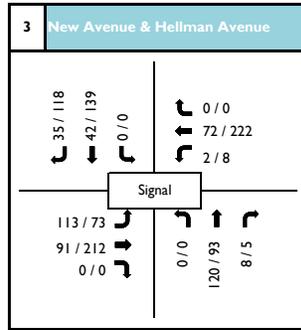
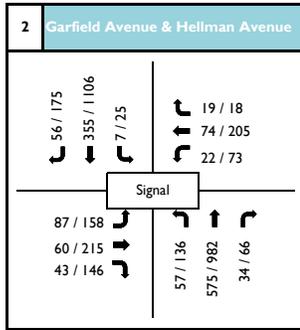
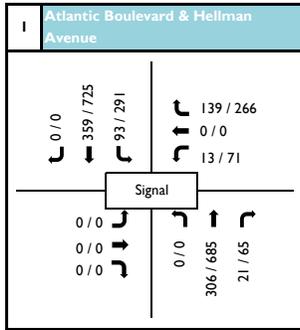


Figure 10 - General Plan AM/PM Peak Hour Intersection Volumes (21 - 30)

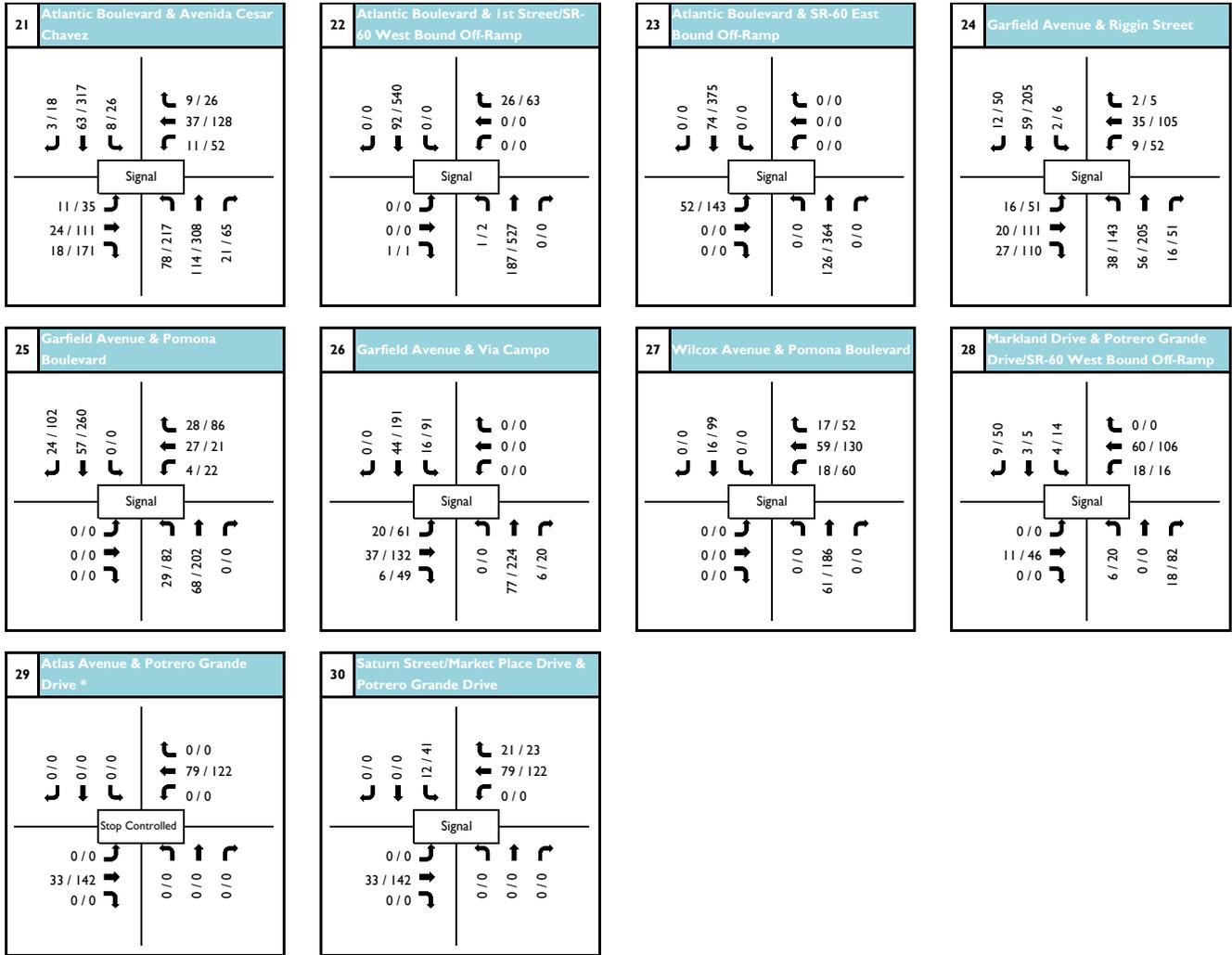
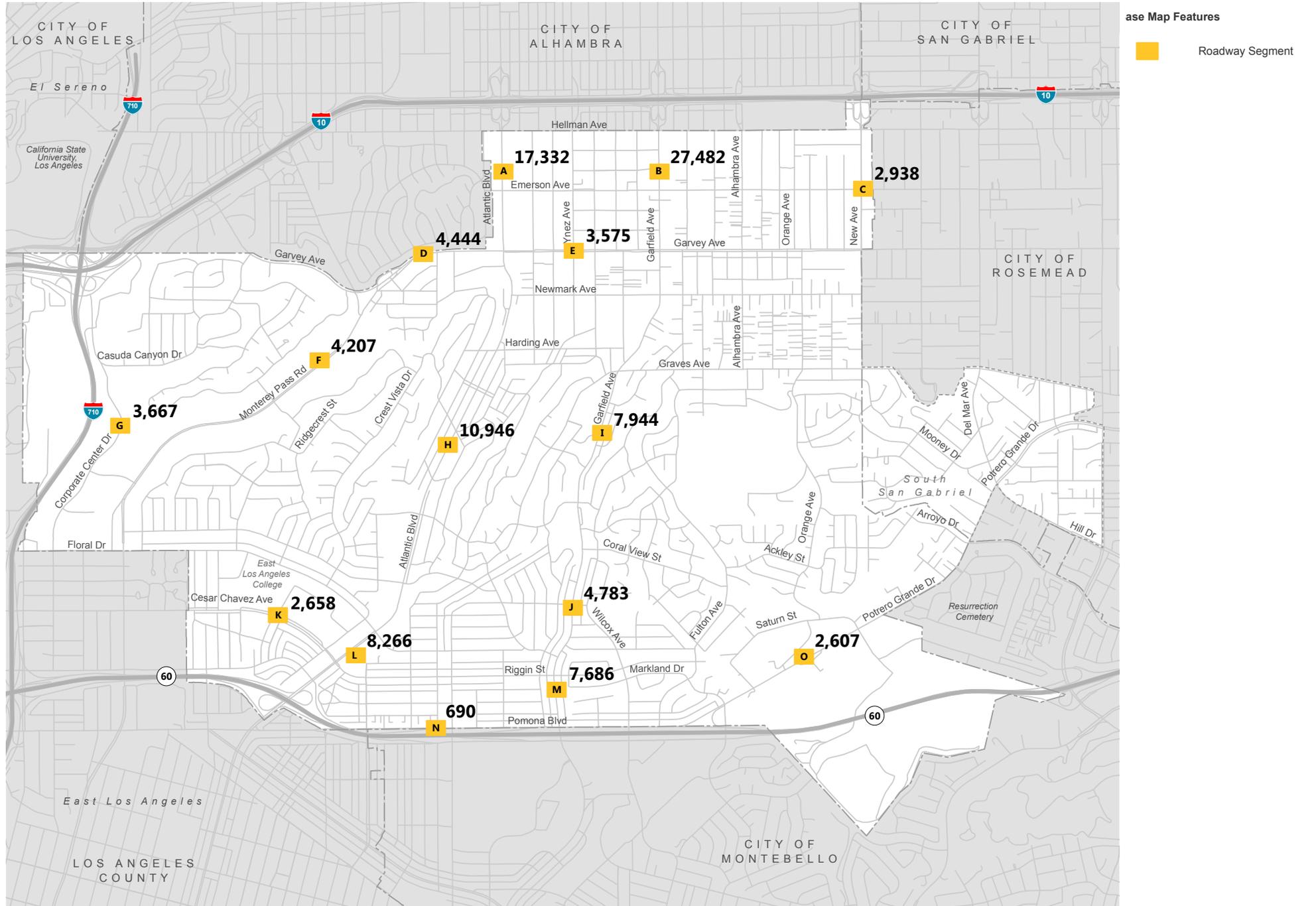


Figure 11 - General Plan Daily Roadway Traffic Volumes



4. FUTURE WITHOUT PLAN CONDITIONS

This section provides an analysis of future traffic conditions in the study area with background growth added, but without Plan traffic. The General Plan update buildout year is 2040, and defines the future analysis year.

4.1 AMBIENT GROWTH

In order to account for traffic growth in the study area, an ambient/background traffic growth rate of 0.29% per year, which results in an overall 21-year growth of approximately six (6) percent, was reviewed and approved by City engineering staff. The growth rate was based on the Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program's anticipated growth for the Regional Statistical Area (RSA) that encompasses Monterey Park (RSA #25).

4.2 FUTURE WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

Table 8 summarizes the resulting operational data at the study intersections under this scenario. The future without-Project traffic analysis worksheets are provided in Appendix D of this report.

Table 8 – Intersection Performance – Future Without General-Plan Conditions

Study Intersections	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
1 Atlantic Boulevard & Hellman Avenue	0.810	D	0.872	D
2 Garfield Avenue & Hellman Avenue	0.923	E	0.893	D
3 New Avenue & Hellman Avenue	0.898	D	0.806	D
4 Atlantic Boulevard & Emerson Avenue	0.583	A	0.623	B
5 Garfield Avenue & Emerson Avenue	0.652	B	0.661	B
6 Atlantic Boulevard & Garvey Avenue	0.705	C	0.761	C
7 Garfield Avenue & Garvey Avenue	0.742	C	0.800	C
8 New Avenue & Garvey Avenue	0.673	B	0.719	C
9 Corporate Center Drive & Ramona Boulevard	0.675	B	0.589	A
10 I-10 East Bound Off-Ramp & Ramona Boulevard	0.456	A	0.933	E
11 Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.494	A	0.417	A
12 Fremont Avenue & Monterey Pass Road	0.736	C	0.779	C
13 Garfield Avenue & Newmark Avenue	0.668	B	0.764	C
14 Atlantic Boulevard & Brightwood Street	0.607	B	0.759	C
15 I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.689	B	0.792	C
16 Corporate Center Drive/McDonnell Avenue & Floral Drive	0.611	B	0.704	C
17 Monterey Pass Road/Mednik Avenue & Floral Drive	0.655	B	0.755	C
18 Atlantic Boulevard & Floral Drive/Driveway	0.605	B	0.671	B
19 Bleakwood Avenue & Avenida Cesar Chavez	0.423	A	0.412	A
20 Collegian Avenue & Avenida Cesar Chavez	0.555	A	0.576	A
21 Atlantic Boulevard & Avenida Cesar Chavez	0.660	B	0.794	C
22 Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.791	C	0.747	C
23 Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.701	C	0.666	B
24 Garfield Avenue & Riggins Street	0.861	D	0.838	D
25 Garfield Avenue & Pomona Boulevard	0.817	D	0.724	C
26 Garfield Avenue & Via Campo	0.724	C	0.800	C
27 Wilcox Avenue & Pomona Boulevard	0.601	B	0.652	B
28 Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.639	B	0.836	D
29 Atlas Avenue & Potrero Grande Drive *	12.0	B	15.3	C
30 Saturn Street/Market Place Drive & Potrero Grande Drive	0.443	A	0.660	B

* Unsignalized intersection analyzed based on HCM methodology.

Under Future without Plan conditions, 23 out of the 30 study intersections would continue to operate at a LOS C or better during the weekday a.m. & p.m. peak hours. The operation of the following intersections would worsen to or within LOS D or LOS E:

- Atlantic Boulevard & Hellman Avenue intersection operation would worsen to LOS D during the

weekday a.m. peak period and within LOS D during the p.m. peak hour.

- **Garfield Avenue & Hellman Avenue** intersection operation would worsen to LOS E during the a.m. peak hour and within LOS D during the p.m. peak hour.
- **New Avenue & Hellman Avenue** intersection operation would worsen within LOS D during weekday a.m. and to LOS D during the p.m. peak hour.
- **I-10 Eastbound Off-Ramp & Ramona Boulevard** intersection operation would worsen to LOS E during the weekday p.m. peak hour.
- **Garfield Avenue & Riggan Street** intersection operation would worsen within LOS D during the weekday a.m. peak hour and to LOS D during the p.m. peak hour.
- **Garfield Avenue & Pomona Boulevard** intersection operation would worsen to LOS D during the weekday a.m. peak hour and to LOS C during the p.m. peak hour.
- **Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp** intersection operation would worsen to LOS D during the weekday p.m. peak hour.

4.3 FUTURE WITHOUT GENERAL PLAN ROADWAY SEGMENT LEVEL OF SERVICE

Regional growth for year 2040 applied to the 15 study roadway segments were based on the same growth rate used for the study intersections. Table 9 provides the weekday LOS values for the study roadway segments, based on the defined capacity for the daily total volumes.

Table 9 – Roadway Segment Performance – Future Without General Plan Roadway Segments

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	35,642	0.891	D
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	27,763	0.694	B
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	19,636	0.655	B
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	23,431	0.586	A
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	21,736	0.543	A
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	18,985	0.633	B
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	8,365	0.279	A
H	Atlantic Boulevard	Garvey Avenue	Flora Drive	4	40,000	29,250	0.731	C
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	28,067	0.702	C
J	Garfield Avenue	El Repetto Drive	Riggan Street	4	40,000	26,713	0.668	B
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	18,774	0.469	A
L	Atlantic Boulevard	Floral Drive	1st Street	6	60,000	33,058	0.551	A
M	Garfield Avenue	Riggan Street	Pomona Boulevard	4	40,000	25,701	0.643	B
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	8,571	0.381	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Drive	4	40,000	22,356	0.559	A

The operation of the following roadway segments would worsen to or within LOS D or LOS E:

- **Atlantic Boulevard, between Hellman Avenue and Garvey Avenue** segment operation would worsen within LOS D

The future without-Plan traffic volumes for the weekday a.m./p.m. daily conditions are illustrated on Figure 12 . Figure 13 shows the daily roadway segment volumes.



Monterey Park General Plan Update

Figure 12 - Future (2040) Without General Plan - AM/PM Peak Hour Intersection Volumes (1 - 20)

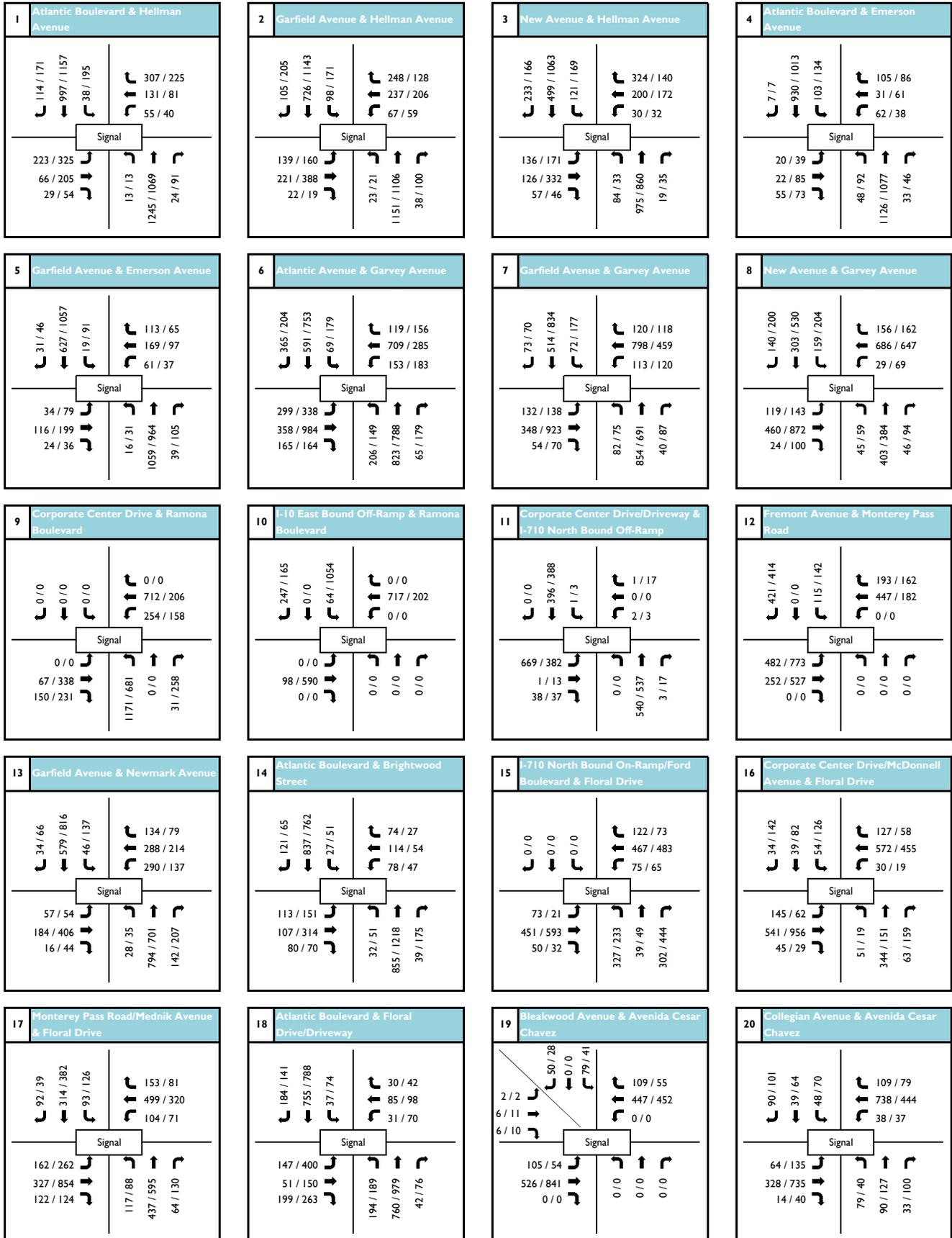




Figure 12 - Future (2040) Without General Plan - AM/PM Peak Hour Intersection Volumes (21 - 30)

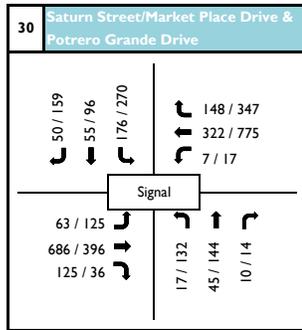
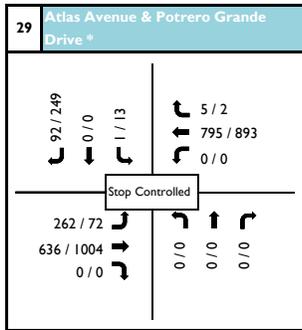
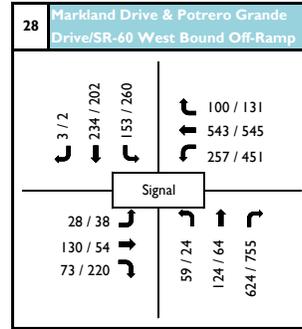
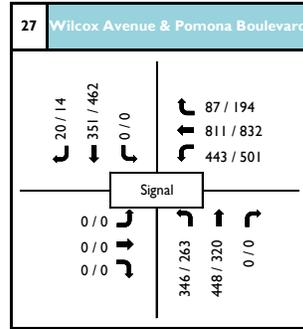
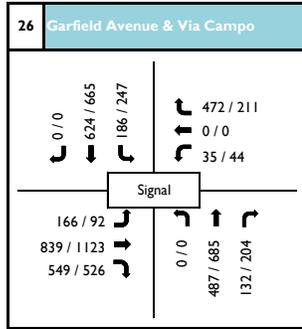
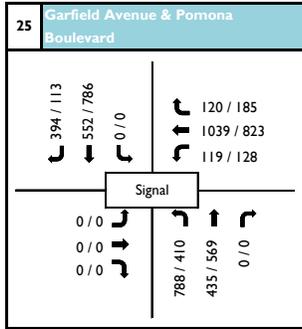
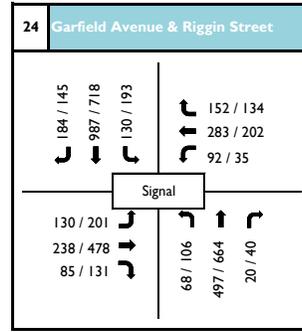
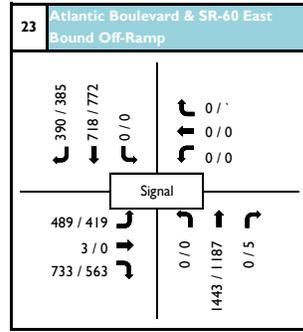
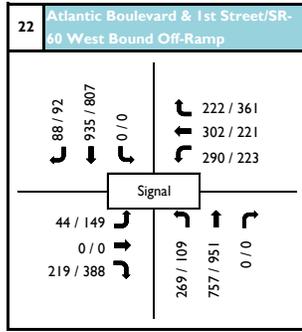
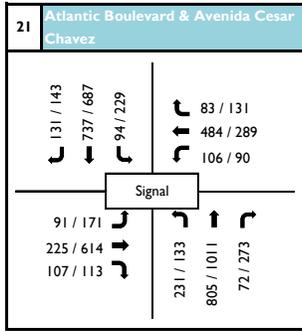
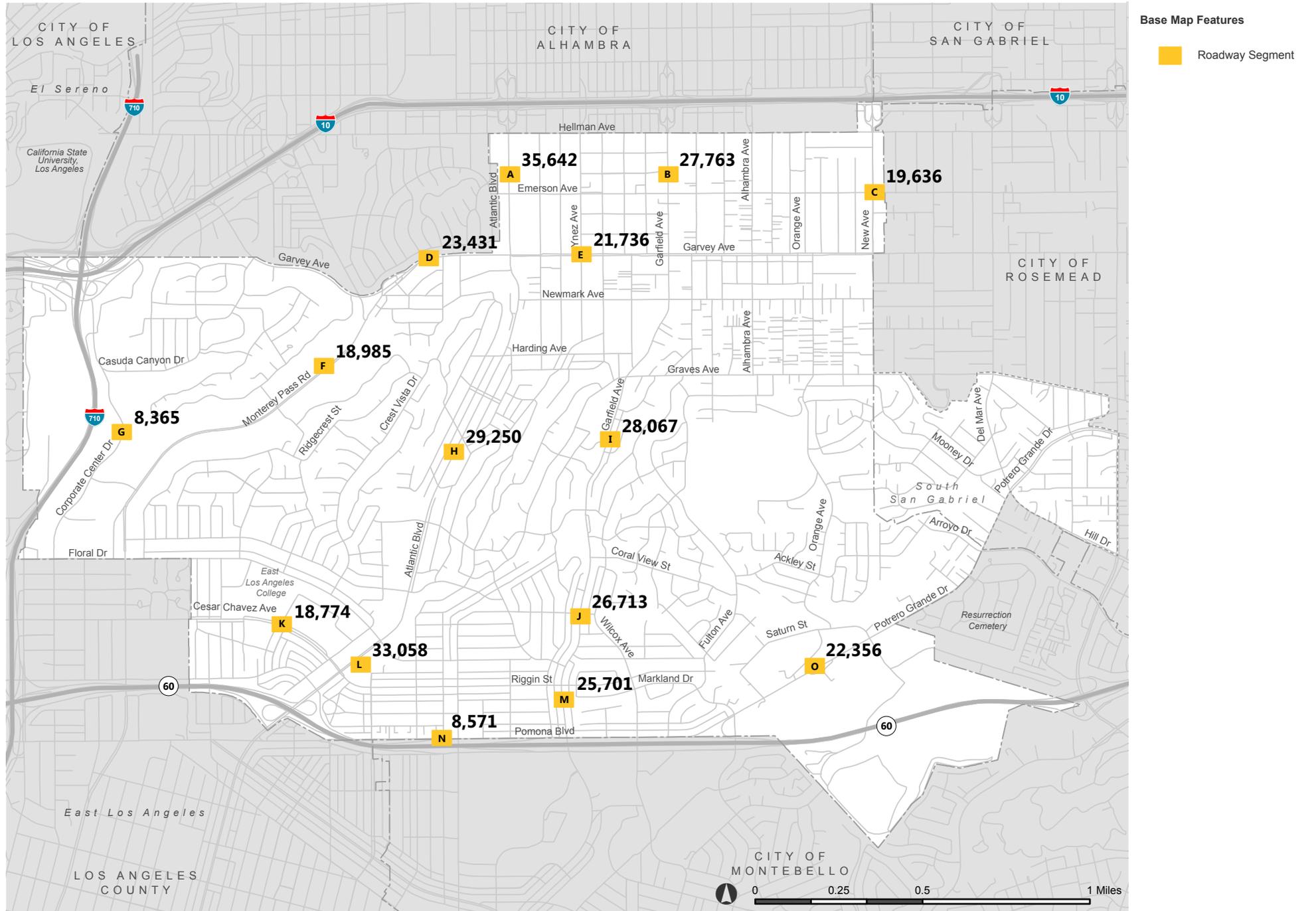


Figure 13 - Future (2040) Without General Plan Daily Roadway Traffic Volumes



5. FUTURE WITH GENERAL PLAN CONDITIONS

5.1 FUTURE WITH GENERAL PLAN INTERSECTION LEVEL OF SERVICE

This section documents future traffic conditions at the study intersections with the addition of Plan-generated traffic. Traffic volumes for these conditions were derived by adding anticipated Plan land use trips to the future without-Plan scenario volumes.

Table 10 summarizes the resulting operational data at the study intersections for future with-General Plan traffic conditions. The analysis worksheets are provided in Appendix E of this report.

Table 10 – Intersection Performance – Future with General Plan

Study Intersections		AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
1	Atlantic Boulevard & Hellman Avenue	1.040	F	1.412	F
2	Garfield Avenue & Hellman Avenue	1.230	F	1.582	F
3	New Avenue & Hellman Avenue	1.054	F	1.071	F
4	Atlantic Boulevard & Emerson Avenue	0.786	C	1.094	F
5	Garfield Avenue & Emerson Avenue	0.944	E	1.305	F
6	Atlantic Boulevard & Garvey Avenue	0.778	C	0.990	E
7	Garfield Avenue & Garvey Avenue	0.923	E	1.148	F
8	New Avenue & Garvey Avenue	0.785	C	0.914	E
9	Corporate Center Drive & Ramona Boulevard	0.810	D	0.679	B
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.503	A	0.933	E
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.507	A	0.477	A
12	Fremont Avenue & Monterey Pass Road	0.853	D	0.920	E
13	Garfield Avenue & Newmark Avenue	0.755	C	0.934	E
14	Atlantic Boulevard & Brightwood Street	0.673	B	0.927	E
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.797	C	1.088	F
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.716	C	0.824	D
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.736	C	0.894	D
18	Atlantic Boulevard & Floral Drive/Driveway	0.669	B	0.875	D
19	Bleakwood Avenue & Avenida Cesar Chavez	0.433	A	0.414	A
20	Collegian Avenue & Avenida Cesar Chavez	0.619	B	0.747	C
21	Atlantic Boulevard & Avenida Cesar Chavez	0.760	C	1.039	F
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.832	D	0.903	E
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.735	C	0.813	D
24	Garfield Avenue & Rigglin Street	0.941	E	1.178	F
25	Garfield Avenue & Pomona Boulevard	0.858	D	0.868	D
26	Garfield Avenue & Via Campo	0.756	C	0.938	E
27	Wilcox Avenue & Pomona Boulevard	0.630	B	0.740	C
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.659	B	0.893	D
29	Atlas Avenue & Potrero Grande Drive *	12.5	B	17.3	C
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.460	A	0.721	C

* Unsignalized intersection analyzed based on HCM methodology.

Under Future with Plan conditions, seven of the 30 study intersections would continue to operate at LOS C or better during the weekday a.m. & p.m. peak hour. The operation of the following intersections would worsen to or within LOS D, E or F with General Plan generated traffic:

- Atlantic Boulevard & Hellman Avenue intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.
- Garfield Avenue & Hellman Avenue intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.

- [New Avenue & Hellman Avenue](#) intersection operation would worsen to LOS F during the weekday a.m. and p.m. peak periods.
- [Atlantic Boulevard & Emerson Avenue](#) intersection operation would worsen to LOS F during the weekday p.m. peak period.
- [Garfield Avenue & Emerson Avenue](#) intersection operation would worsen to LOS E during the weekday a.m. peak period and LOS F during the p.m. peak period.
- [Atlantic Boulevard & Garvey Avenue](#) intersection operation would worsen to LOS E during the weekday p.m. peak period.
- [Garfield Avenue & Garvey Avenue](#) intersection operation would worsen to LOS E during the weekday a.m. and to LOS E during the p.m. peak hour.
- [New Avenue & Garvey Avenue](#) intersection operation would worsen to LOS E during the weekday p.m. peak period.
- [Corporate Center Drive & Ramona Boulevard](#) intersection operation would worsen to LOS D during the weekday a.m. peak period.
- [Fremont Avenue & Monterey Pass Road](#) intersection operation would worsen to LOS D during the a.m. peak hour and within LOS E during the weekday p.m. peak hour.
- [Garfield Avenue & Newmark Avenue](#) intersection operation would worsen within LOS E during the weekday p.m. peak hour.
- [Atlantic Boulevard & Brightwood Street](#) intersection operation would worsen within LOS E during the weekday p.m. peak hour.
- [I-710 Northbound On-Ramp-Ford Boulevard & Floral Drive](#) intersection operation would worsen within LOS F during the weekday p.m. peak hour.
- [Corporate Center Drive-McDonnell Avenue & Floral Drive](#) intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- [Monterey Pass Road-Mednik Avenue & Floral Drive](#) intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- [Atlantic Boulevard & Floral Drive](#) intersection operation would worsen to LOS D during the weekday p.m. peak hour.
- [Atlantic Boulevard & Avenida Cesar Chavez](#) intersection operation would worsen to LOS F during the p.m. peak hour.
- [Atlantic Boulevard & 1st Street/SR-60 Westbound Off-Ramp](#) intersection operation would worsen to LOS D during the a.m. peak hour and LOS E during the p.m. peak hour.
- [Atlantic Boulevard & SR-60 Eastbound Off-Ramp](#) intersection operation would worsen to LOS D during the p.m. peak hour.
- [Garfield Avenue & Riggin Street](#) intersection operation would worsen to LOS E during the weekday a.m. peak hour and to LOS F during the p.m. peak hour.
- [Garfield Avenue & Pomona Boulevard](#) intersection operation would worsen within LOS D during the weekday a.m. peak hour and to LOS D during the p.m. peak hour.
- [Garfield Avenue & Via Campo](#) intersection operation would worsen to LOS E during the p.m. peak hour.
- [Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp](#) intersection operation would worsen within LOS D during the weekday p.m. peak hour.

5.2 FUTURE WITH GENERAL PLAN ROADWAY SEGMENT LEVEL OF SERVICE

The Future with General Plan trip generation was also added to the analyzed roadway segments. Table 11 provides the weekday LOS values for the study roadway segments, based on the defined capacity for the daily total volumes.

Table 11 – Roadway Segment Performance – Future with General Plan

ID	Segment	From	To	# of Lanes	Capacity	Daily Volume	V/C Ratio	LOS
A	Atlantic Boulevard	Hellman Avenue	Garvey Avenue	4	40,000	52,974	1.324	F
B	Garfield Avenue	Hellman Avenue	Garvey Avenue	4	40,000	55,245	1.381	F
C	New Avenue	Hellman Avenue	Garvey Avenue	4	30,000	22,574	0.752	C
D	Garvey Avenue	Fremont Avenue	Atlantic Boulevard	4	40,000	27,875	0.697	B
E	Garvey Avenue	Atlantic Boulevard	Garfield Avenue	4	40,000	25,311	0.633	B
F	Monterey Pass Road	Garvey Avenue	Vagabond Drive	4	30,000	23,192	0.773	C
G	Corporate Center Drive	Floral Drive	Casuda Canyon Drive	4	30,000	12,032	0.401	A
H	Atlantic Boulevard	Garvey Avenue	Floral Drive	4	40,000	40,196	1.005	F
I	Garfield Avenue	Garvey Avenue	El Repetto Drive	4	40,000	36,011	0.900	E
J	Garfield Avenue	El Repetto Drive	Riggin Street	4	40,000	31,496	0.787	C
K	Cesar Chavez Avenue	Vancouver Avenue	Atlantic Boulevard	4	40,000	21,432	0.536	A
L	Atlantic Boulevard	Floral Drive	1st Street	6	60,000	41,324	0.689	B
M	Garfield Avenue	Riggin Street	Pomona Boulevard	4	40,000	33,387	0.835	D
N	Pomona Boulevard	Garfield Avenue	Gerhart Avenue	3	22,500	9,261	0.412	A
O	Potrero Grande Drive	Markland Drive	Saturn Street/Market Place Drive	4	40,000	24,963	0.624	B

The operation of the following roadway segments would worsen to or within LOS D or worse:

- Atlantic Boulevard, between Hellman Avenue and Garvey Avenue segment operation would worsen to LOS F
- Garfield Avenue, between Hellman Avenue and Garvey Avenue segment operation would worsen to LOS F
- Atlantic Boulevard, between Garvey Avenue and Floral Drive segment operation would worsen to LOS F
- Garfield Avenue, between Garvey Avenue and El Repetto Drive segment operation would worsen to LOS E
- Garfield Avenue, between Riggin Street and Pomona Boulevard segment operation would worsen to LOS D

The future with-Project traffic volumes for the weekday a.m. and p.m. peak hour periods are illustrated on Figure 14. Figure 15 illustrates the daily roadway segment volumes under General Plan conditions.



Figure 14 - Future (2040) With General Plan - AM/PM Peak Hour Intersection Volumes (1 - 20)

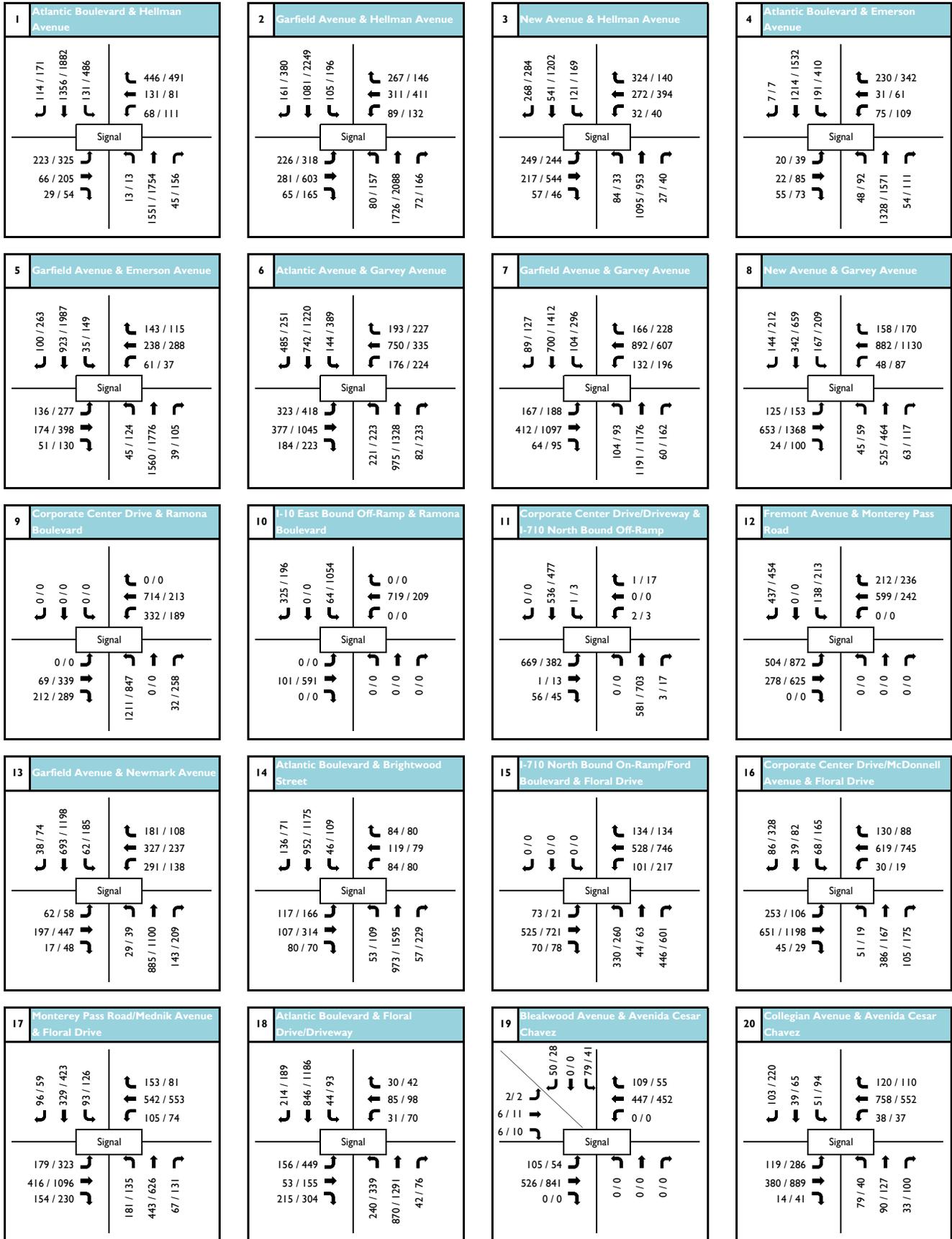


Figure 14 - Future (2040) With General Plan - AM/PM Peak Hour Intersection Volumes (21 - 30)

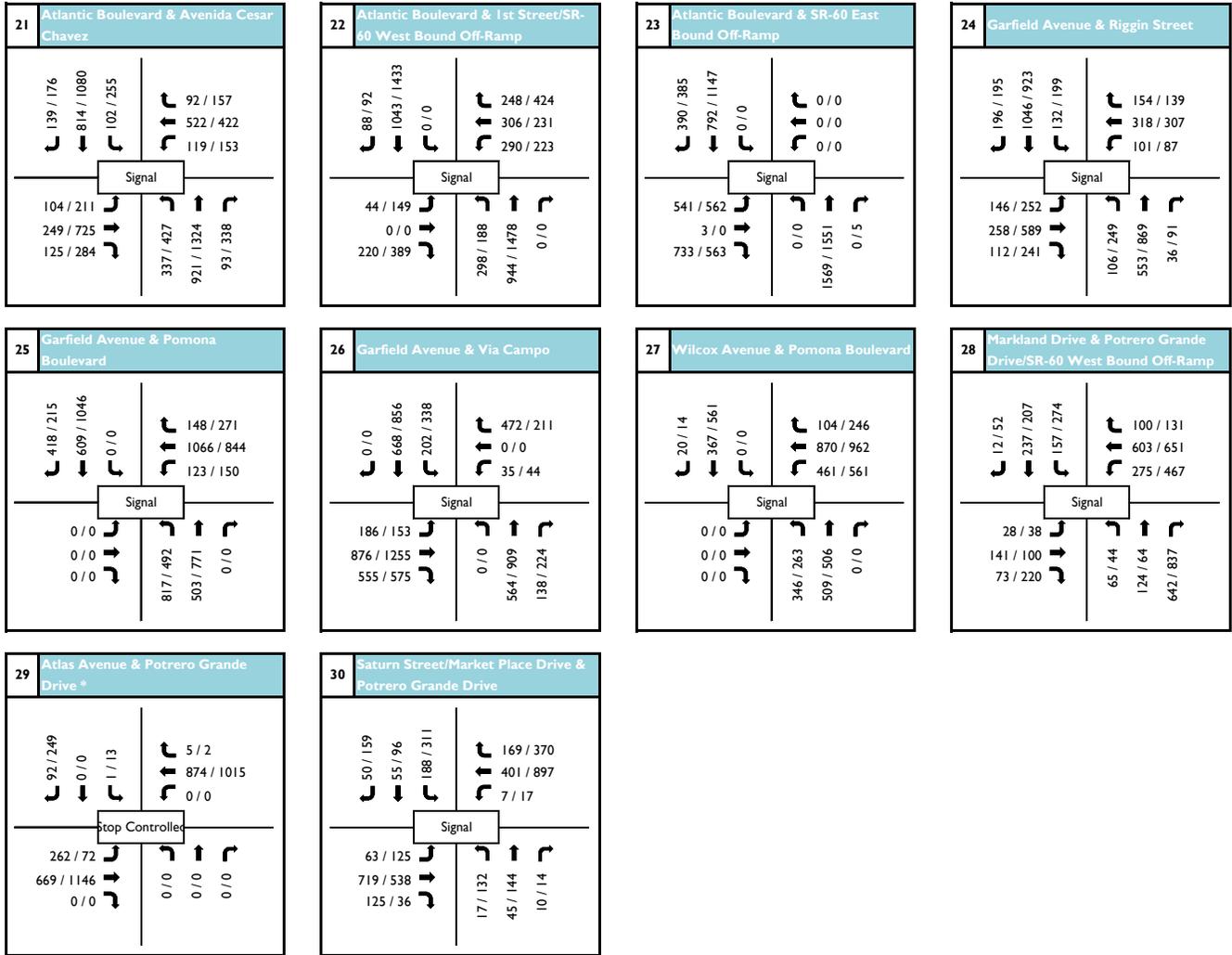
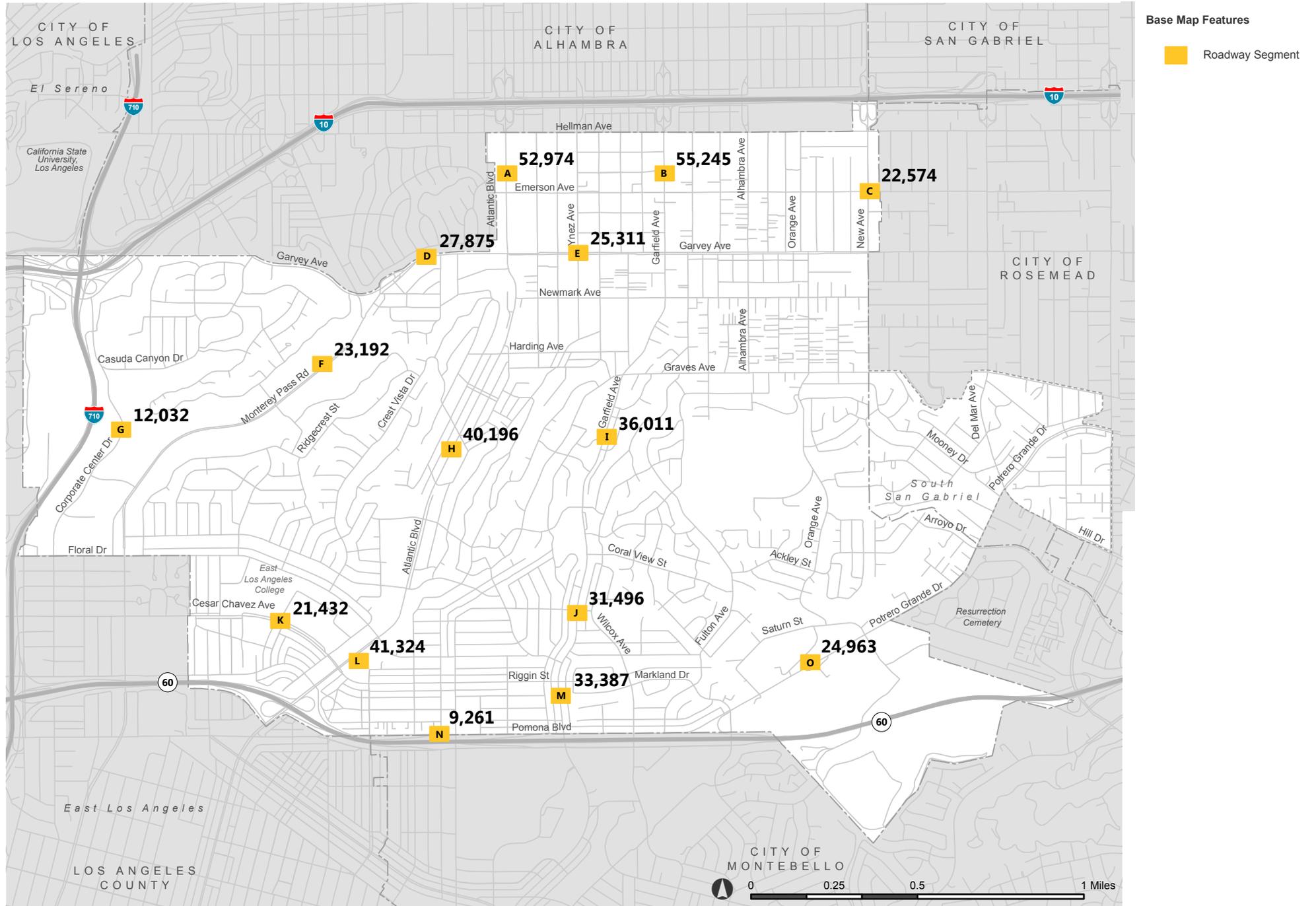


Figure 15 - Future (2040) With General Plan Daily Roadway Traffic Volumes



6. GENERAL PLAN TRAFFIC IMPACTS

6.1 DETERMINATION OF TRAFFIC IMPACTS

This report section provides a discussion of significant impacts of the proposed General Plan. This section evaluates impacts between the following pairs of scenarios:

- Project Impacts: Future without-Project (current Plan) conditions versus Future with-Project (proposed Plan) conditions

Traffic impacts are identified if traffic from a proposed project will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency.

The City of Monterey Park has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. Table 12 shows the increases in peak-hour V/C ratios that are considered significant impacts:

Table 12 – Determination of Significant Impacts

Level of Service	Existing ICU	Project-Related Increase in ICU Value
A and B	0.00 – 0.690	Equal to or greater than 0.060
C	0.700 – 0.790	Equal to or greater than 0.040
D	0.800 – 0.890	Equal to or greater than 0.020
E and F	0.900 or more	Equal to or greater than 0.010

The City of Monterey Park does not have significant impact criteria for unsignalized intersections. For this study, operations at signalized locations were reviewed for LOS values and percentage of volume increase due to Project-generated traffic. One unsignalized intersection was analyzed and the Highway Capacity Manual (HCM) method was used to calculate intersection Level of Service and any increment in intersection delay.

6.2 PROJECT TRAFFIC IMPACTS – FUTURE WITH GENERAL PLAN

Table 13 defines significant impacts of the proposed General Plan land uses at the study intersections, by the future analysis year of 2040.

Table 13 – Determination of Project Impacts – Future 2040 with General Plan

Study Intersections		AM Peak Hour						PM Peak Hour					
		Future without-Plan		Future with-Plan		ICU Change	Sig Impact?	Future without-Plan		Future with-Plan		ICU Change	Sig Impact?
		ICU	LOS	ICU	LOS			ICU	LOS	ICU	LOS		
1	Atlantic Boulevard & Hellman Avenue	0.810	D	1.040	F	0.230	Yes	0.872	D	1.412	F	0.540	Yes
2	Garfield Avenue & Hellman Avenue	0.923	E	1.230	F	0.307	Yes	0.893	D	1.582	F	0.689	Yes
3	New Avenue & Hellman Avenue	0.898	D	1.054	F	0.156	Yes	0.806	D	1.071	F	0.265	Yes
4	Atlantic Boulevard & Emerson Avenue	0.583	A	0.786	C	0.203	Yes	0.623	B	1.094	F	0.471	Yes
5	Garfield Avenue & Emerson Avenue	0.652	B	0.944	E	0.292	Yes	0.661	B	1.305	F	0.644	Yes
6	Atlantic Boulevard & Garvey Avenue	0.705	C	0.778	C	0.073	Yes	0.761	C	0.990	E	0.229	Yes
7	Garfield Avenue & Garvey Avenue	0.742	C	0.923	E	0.181	Yes	0.800	C	1.148	F	0.348	Yes
8	New Avenue & Garvey Avenue	0.673	B	0.785	C	0.112	Yes	0.719	C	0.914	E	0.195	Yes
9	Corporate Center Drive & Ramona Boulevard	0.675	B	0.810	D	0.135	Yes	0.589	A	0.679	B	0.090	Yes
10	I-10 East Bound Off-Ramp & Ramona Boulevard	0.456	A	0.503	A	0.047	No	0.933	E	0.933	E	0.000	No
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	0.494	A	0.507	A	0.013	No	0.417	A	0.477	A	0.060	Yes
12	Fremont Avenue & Monterey Pass Road	0.736	C	0.853	D	0.117	Yes	0.779	C	0.920	E	0.141	Yes
13	Garfield Avenue & Newmark Avenue	0.668	B	0.755	C	0.087	Yes	0.764	C	0.934	E	0.170	Yes
14	Atlantic Boulevard & Brightwood Street	0.607	B	0.673	B	0.066	Yes	0.759	C	0.927	E	0.168	Yes
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	0.689	B	0.797	C	0.108	Yes	0.792	C	1.088	F	0.296	Yes
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	0.611	B	0.716	C	0.105	Yes	0.704	C	0.824	D	0.120	Yes
17	Monterey Pass Road/Mednik Avenue & Floral Drive	0.655	B	0.736	C	0.081	Yes	0.755	C	0.894	D	0.139	Yes
18	Atlantic Boulevard & Floral Drive/Driveway	0.605	B	0.669	B	0.064	Yes	0.671	B	0.875	D	0.204	Yes
19	Bleakwood Avenue & Avenida Cesar Chavez	0.423	A	0.433	A	0.010	No	0.412	A	0.414	A	0.002	No
20	Collegian Avenue & Avenida Cesar Chavez	0.555	A	0.619	B	0.064	Yes	0.576	A	0.747	C	0.171	Yes
21	Atlantic Boulevard & Avenida Cesar Chavez	0.660	B	0.760	C	0.100	Yes	0.794	C	1.039	F	0.245	Yes
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	0.791	C	0.832	D	0.041	Yes	0.747	C	0.903	E	0.156	Yes
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	0.701	C	0.735	C	0.034	No	0.666	B	0.813	D	0.147	Yes
24	Garfield Avenue & Riggins Street	0.861	D	0.941	E	0.080	Yes	0.838	D	1.178	F	0.340	Yes
25	Garfield Avenue & Pomona Boulevard	0.817	D	0.858	D	0.041	Yes	0.724	C	0.868	D	0.144	Yes
26	Garfield Avenue & Via Campo	0.724	C	0.756	C	0.032	No	0.800	C	0.938	E	0.138	Yes
27	Wilcox Avenue & Pomona Boulevard	0.601	B	0.630	B	0.029	No	0.652	B	0.740	C	0.088	Yes
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	0.639	B	0.659	B	0.020	No	0.836	D	0.893	D	0.057	Yes
29	Atlas Avenue & Potrero Grande Drive *	12.0	B	12.5	B	0.5	-	15.3	C	17.3	C	2.0	-
30	Saturn Street/Market Place Drive & Potrero Grande Drive	0.443	A	0.460	A	0.017	No	0.660	B	0.721	C	0.061	Yes

* Unsignalized intersection analyzed based on HCM methodology.

Significant impacts would occur at 27 of the 30 study intersections during one or both of the analyzed peak periods:

- Atlantic Boulevard & Hellman Avenue during the a.m. and p.m. peak periods
- Garfield Avenue & Hellman Avenue during the a.m. and p.m. peak periods
- New Avenue & Hellman Avenue during the a.m. and p.m. peak periods
- Atlantic Boulevard & Emerson Avenue during the a.m. and p.m. peak periods
- Garfield Avenue & Emerson Avenue during the a.m. and p.m. peak periods
- Atlantic Boulevard & Garvey Avenue during the a.m. and p.m. peak periods
- Garfield Avenue & Garvey Avenue during the a.m. and p.m. peak periods
- New Avenue & Garvey Avenue during the a.m. and p.m. peak periods
- Corporate Center Drive & Ramona Boulevard during the a.m. and p.m. peak periods
- Corporate Center Drive & I-710 Northbound Off-Ramp during the p.m. peak period
- Fremont Avenue & Monterey Pass Road during the a.m. and p.m. peak periods
- Garfield Avenue & Newmark Avenue during the a.m. and p.m. peak periods
- Atlantic Boulevard & Brightwood Street during the a.m. and p.m. peak periods
- I-710 Northbound On-Ramp/Ford Boulevard & Floral Drive during the a.m. and p.m. peak periods
- Corporate Center Drive/McDonnell Avenue & Floral Drive during the a.m. and p.m. peak periods
- Monterey Pass Road/Mednik Avenue & Floral Drive during the a.m. and p.m. peak periods
- Atlantic Boulevard & Floral Drive during the a.m. and p.m. peak periods
- Collegian Avenue & Avenida Cesar Chavez during the a.m. and p.m. peak periods
- Atlantic Boulevard & Avenida Cesar Chavez during the a.m. and p.m. peak periods
- Atlantic Boulevard & 1st Street/SR-60 Westbound Off-Ramp during the a.m. and p.m. peak periods
- Atlantic Boulevard & SR-60 Eastbound Off-Ramp during the p.m. peak period
- Garfield Avenue & Riggan Street during the a.m. and p.m. peak periods
- Garfield Avenue & Pomona Boulevard during the a.m. and p.m. peak periods
- Garfield Avenue & Via Campo during the p.m. peak period
- Wilcox Avenue & Pomona Boulevard during the p.m. peak period
- Markland Drive & Potrero Grande Drive/SR-60 Westbound Off-Ramp during the p.m. peak period
- Saturn Street/Marketplace Drive & Potrero Grande Drive during the p.m. peak period

It is recommended that the City work to mitigate future traffic impacts at these locations, targeting transit improvements, pedestrian improvements, bicycle facility improvements, and roadway capacity improvements, in an equitable manner and as feasible. These measures would be implemented over multiple years as projects are developed near these locations, considering the new circulation policies of the General Plan, to mitigate the identified significant traffic impacts.

6.3 MITIGATION FEASIBILITY ANALYSIS

Potential physical mitigation measures were researched at all of the significantly-impacted intersections. Table 14 at the end of this section provides a summary of the mitigation measures and their effectiveness in either partially or fully mitigating significant impacts. Figure 16 provides a summary of the intersections with proposed lane configuration changes, as part of any feasible mitigation measure.

The feasibility of mitigation measures is discussed in more detail below.

Intersection 1: Atlantic Boulevard and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Atlantic Boulevard and is at the northern city limit with City of Alhambra. The signalized intersection has protected-permissive phasing at the southbound and eastbound approaches and permitted phasing for the northbound and westbound approaches.

Level of Service at this location can be improved by restriping the eastbound approach to provide a left-turn lane and a shared left-through-right lane. Similarly, the westbound approach will also need to be restriped to accommodate a left-turn lane, a shared through-right lane, and an exclusive right-turn lane. Split left-turn phasing will be required for the east- and westbound approaches in order to accommodate these changes. These improvements will partially mitigate intersection operations during the peak periods, but the significant impacts will still remain.

To fully mitigate the significant impact, the intersection would need to be widened along the east and westbound approaches. However, widening the roadway at this intersection in any direction would be infeasible as it would require significant land acquisition of residential and commercial properties.

Intersection 2: Garfield Avenue and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at Garfield Avenue and is at the northern city limit with City of Alhambra. The signalized intersection provides protected left-turns at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. The significant impact could be mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection.

Intersection 3: New Avenue and Hellman Avenue

The intersection is located immediately south of the San Bernardino Freeway (I-10) On-and-Off-ramps at New Avenue and is at the eastern city limit with City of Rosemead. The signalized intersection provides protected left-turns on the northbound and southbound approaches and permissive phasing for the eastbound and westbound approaches.

Level of service operations at this location can be improved by providing northbound permitted left-turn phasing and eastbound protected left-turn phasing. However, these measures are not sufficient to fully mitigate the significant impact at the intersection.

The significant impact could be fully mitigated with the addition of thru lanes to Hellman Avenue. However, this is an infeasible measure as it would require significant land acquisition of residential and commercial properties. There are no feasible mitigation measures at this intersection.

Intersection 4: Atlantic Boulevard and Emerson Avenue

The signalized intersection provides protected-permitted phasing at the northbound and southbound approaches and permissive phasing on the eastbound and westbound approaches. Although the significant impact could be mitigated by providing additional lanes to Atlantic Boulevard and Emerson Avenue, neither roadway has the capacity to accommodate another traffic lane. Any additional lanes could only be accommodated through significant property acquisition and elimination of on-street parking. Thus, there are no feasible mitigation measures at this intersection.

Intersection 5: Garfield Avenue and Emerson Avenue

The signalized intersection provides permitted phasing at all approaches. The immediate area around this location is primarily occupied by commercial uses. Intersection operations could be improved by providing southbound and westbound protected/permitted left-turn phasing; however, these measures would be insufficient to fully mitigate the significant impact.

Additional intersection improvements could be made with an additional thru lane on both Emerson Avenue and Garfield Avenue, supplemented with additional left and right turn pockets. However, these measures would still be insufficient in mitigating the significant impact. There are no feasible mitigation measures at this intersection.

Intersection 6: Atlantic Boulevard and Garvey Avenue

The signalized intersection provides protected left-turn phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing right-turn lane on the eastbound and westbound approaches to a thru-right turn lane.

Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

Intersection 7: Garfield Avenue and Garvey Avenue

The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue and an improvement along Garfield Avenue at the northbound approach (as part of a potential redevelopment project at the southeast corner of the intersection), a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide two thru lanes and a shared thru-right-turn lane in each direction. The northbound approach would also add an exclusive northbound right-turn lane, allowing two northbound thru lanes.

Although this would be a physically feasible improvement, it would not fully mitigate the significant impact in either peak period. An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

Intersection 8: New Avenue and Garvey Avenue

The signalized intersection provides protected phasing at all approaches. As part of a potential proposal to provide three thru travel lanes in each direction along Garvey Avenue, a potential mitigation measure for this intersection would be restriping the existing eastbound and westbound approaches to provide

two thru lanes and a shared thru-right-turn lane in each direction. Although this would be a physically feasible improvement and would mitigate the a.m. peak period significant impact, it would not fully mitigate the significant impact during the p.m. peak period.

An option may be available for providing reversible through lanes during the peak periods along Garvey Avenue; however, this also would not fully mitigate the significant impact. Any potential mitigation measure would require a substantial intersection widening which would not be physically feasible. As such, there are no feasible mitigation measures at this intersection.

Intersection 9: Corporate Center Drive and Ramona Boulevard

The signalized intersection is located south of I-710 and I-10 interchange and provides protected left-turn phasing on the northbound and westbound approaches.

The significant impact during the p.m. peak period can be eliminated by restriping the westbound approach to include a left-turn lane, a shared left-through lane, and a through lane; split phasing would be provided for the east and westbound approaches. However, these measures will not eliminate the a.m. significant impact at this location.

The significant impact could be eliminated by providing an additional east-west through lane. However, this would require widening Ramona Boulevard which would not be physically feasible due to freeway right-of-way north of the intersection which would require significant highway interchange reconfiguration

Intersection 11: Corporate Center Drive & I-710 Northbound Off-Ramp

The intersection is signal-controlled and provides protected split phasing at the eastbound and westbound approaches and permitted phasing at the southbound approach. The significant impact at this location during the p.m. peak period would be fully mitigated by providing northbound right-turn overlap phasing.

Intersection 12: Fremont Avenue and Monterey Pass Road

The Fremont Avenue & Monterey Pass Road intersection is signalized and has protected left-turn phasing for the southbound approach (Fremont Avenue SB) and permitted left-turn phasing for the eastbound approach (Monterey Pass Road northeast-bound).

The current lane configuration for the southbound approach on Fremont Avenue consists of a left-turn lane and a channelized free right-turn lane; the eastbound approach (Monterey Pass Road northeast-bound) has a left-turn and two through lanes; while the westbound (Monterey Pass Road southwest-bound) approach includes a through lane and a channelized right-turn.

The significant impacts at this intersection can be eliminated by increasing roadway capacity and restriping all three approaches. Additional roadway capacity can be achieved by removing or resizing existing medians and vegetation. With the additional space, the new southbound approach would have enough space to accommodate dual left-turns with protected phasing and a right-turn lane; the eastbound approach would have dual left-turn lanes with protected phasing and only one through lane; while the westbound approach would include a through lane and a shared through-right lane. All of these measures would take place on public right-of-way.

Intersection 13: Garfield Avenue and Newmark Avenue

The signalized intersection has protected phasing at the northbound and southbound approaches and permitted phasing on the eastbound and westbound approaches. Intersection level of service can be

improved by providing southbound permitted left-turn phasing and eastbound protected/permitted left-turn phasing. However, these measures are not sufficient to eliminate the significant impacts.

Full mitigation to the significant impact would require additional travel lanes along Newmark Avenue, which would require private property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection.

Intersection 14: Atlantic Boulevard and Brightwood Street

The signalized intersection contains permitted left-turn phasing on all approaches. The impact at the study intersection could be eliminated by restriping the northbound approach to provide a left-turn lane, two through lanes and a shared through-right turn lane; the three through lanes would not be continuous and would change back to two northbound lanes north of Brightwood Street. In addition, the southbound approach would need to provide protected left-turn phasing and the eastbound approach protected/permitted phasing.

Intersection 15: I-710 NB On-Ramp/Ford Blvd and Floral Drive

The signalized intersection is signal-controlled and provides permitted phasing at all approaches. Level of service operations at this location can be improved by restriping the northbound approach to provide a shared left-through lane, and a right-turn lane. Similarly, the eastbound approach would need to be restriped to include a shared through-left turn and a shared through-right turn lane. These measures would only mitigate the a.m. peak hour impact, the p.m. peak hour impact would remain.

The significant impact could be mitigated by adding another through lane to Floral Drive. However, any improvements to Floral Drive would require removing on-street parking and widening the I-710 underpass to allow for an additional travel lane. Any improvements would also require coordination with Los Angeles County as south of Floral Drive is unincorporated East Los Angeles. As a result, there are no feasible mitigation measures for the p.m. impact at this intersection.

Intersection 16 - Corporate Center Drive/McDonnell Avenue & Floral Drive

The signalized intersection provides permitted left-turn phasing at the northbound and southbound approaches and protected left-turn phasing at the eastbound and westbound approaches.

Level of service operations can be improved by restriping the southbound approach to provide dual left-turn lanes and a shared-thru right turn lane. These measures would improve intersection operations but not fully mitigate the significant impact.

The a.m. peak hour significant impact could be fully mitigated with the removal of the northbound parking lane on McDonnell Avenue and replacing it with two lanes: one northbound through-left and one northbound through-right lane. However, the McDonnell Avenue, south of Floral Drive is outside the City of Monterey Park jurisdiction and would require coordination with Los Angeles County. Aside from this improvement, there are no other feasible mitigation measures at this intersection.

Intersection 17 - Monterey Pass Road-Mednik Avenue & Floral Drive

The signalized intersection provides permitted left-turn phasing at all approaches.

Level-of-Service operations at this location can be improved by implementing protected/permitted left-turn phasing to the eastbound approach. However, this measure is not sufficient to mitigate significant impacts during both time periods.

The a.m. peak hour significant impacts could be fully mitigated by adding an additional southbound left-

turn lane; however, this would not be physically feasible as it would require property acquisition. As a result, there are no feasible mitigation measures at this intersection.

Intersection 18 - Atlantic Boulevard & Floral Drive/Driveway

The signalized intersection provides protected northbound and southbound left-turn phasing, and eastbound and westbound split phasing. The intersection approaches are fully developed. Widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection.

Intersection 20 - Collegian Avenue & Avenida Cesar Chavez

The signalized intersection provides permitted left-turn phasing at all approaches.

Intersection operations can be improved by implementing protected/permitted left-turn signal phasing to the westbound approach. However, this measure would only mitigate a.m. peak hour impacts.

This intersection is surrounded by areas that are fully built-out and any improvements would require significant private property acquisitions. As such, there are no feasible mitigation measures for p.m. impacts at this intersection.

Intersection 21 - Atlantic Boulevard & Avenida Cesar Chavez

The signalized intersection provides protected left-turn phasing in all directions. The intersection approaches are fully developed and widening is not possible without significant property acquisition and building demolition. As such, there are no feasible mitigation measures at this intersection.

Intersection 22 - Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp

The signalized intersection provides permitted left-turns in all directions.

The a.m. peak hour impact could be fully mitigated by restriping the eastbound approach to provide dual left turns and an exclusive right-turn lane. The eastbound approach is approximately 30 feet, so three approach lanes could be provided.

The p.m. peak hour impact could only be mitigated by providing additional north-south lanes along Atlantic Boulevard. This would require significant private property acquisitions and encroach onto the SR-60 freeway right-of-way, making this an infeasible measure.

Intersection 23 - Atlantic Boulevard & SR-60 Eastbound Off-Ramp

The signalized intersection provides permitted phasing in all directions. The significant impact could be fully mitigated by adding a southbound through lane in currently underutilized pavement area. This will require restriping of the southbound approach and potentially a median reduction to accommodate the new through lane. This measure would also require coordination with Los Angeles County.

Intersection 24 - Garfield Avenue & Riggin Street

The signalized intersection provides permitted left-turn phasing in all directions. Intersection operations could be improved by restriping the southbound approach to include dual left-turn lanes with protected phasing, and incorporating a protected/permitted phasing to the eastbound approach. The dual left turn lanes would need to be accommodated by eliminating on-street parking on the south side of Riggin Street, east of Garfield Avenue. However, these changes would only fully mitigate a.m. peak hour impacts and will not be sufficient to fully mitigate significant impacts during the p.m. peak hour.

Intersection 25 - Garfield Avenue & Pomona Boulevard

The signalized intersection provides north- and southbound split left-turn phasing, and westbound permitted left-turn phasing.

Significant impacts can be mitigated by restriping the north- and southbound approaches. The northbound approach would include dual left-turn lanes with protected phasing and a through lane; while the southbound approach would provide one through lane, one through-right turn lane, and an exclusive right-turn lane. This improvement would require coordination with Caltrans and the City of Montebello.

Intersection 26 - Garfield Avenue & Via Campo

This intersection is entirely outside of the City of Monterey Park. It provides north- and southbound split left-turn phasing, and east- and westbound permitted left-turn phasing.

The level-of-service at this intersection could be improved by restriping the southbound and eastbound approaches and adding protected left-turn phases to the north- and southbound approaches. The southbound approach will include a left-turn lane and two through lanes; while the eastbound will have a through-left turn lane, two through lanes, and a right-turn lane.

However, this measure is not sufficient to eliminate the p.m. peak hour significant impact. In addition, the area is fully developed, and widening is not possible without significant property acquisition and building demolition. There are no feasible mitigation measures at this intersection. Furthermore, the intersection is completely within City of Montebello jurisdiction, so coordination with the City would be required.

Intersection 27 - Wilcox Avenue & Pomona Boulevard

The signalized intersection provides northbound protected left-turn phasing, and south- and westbound permitted left-turn phasing.

Intersection operations could be improved by providing left-turn protected signal phasing; however the p.m. peak hour significant impact would not be fully mitigated. Significant impacts could be mitigated by adding an additional westbound right-turn lane and an additional southbound right-turn lane. However, widening is not possible without significant property acquisition and building demolition. As a result, there are no feasible mitigation measures at this intersection.

Intersection 28 - Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp

The signalized intersection provides north/south permitted left-turn phasing, and east/west protected left-turn phasing. The significant p.m. peak period impact could be mitigated by restriping the eastbound approach to include: one left-turn lane, one through lane, one shared through-right turn lane, and one exclusive right-turn lane. The approach currently has 40 feet, so there is enough roadway width to restripe the approach in this manner. This measure would require extensive coordination with Caltrans.

Intersection 30 - Saturn Street/Market Place Drive & Potrero Grande Drive

The signalized intersection provides eastbound and westbound protected left-turn phasing, and northbound and southbound permitted left-turn phasing.

The significant p.m. peak hour impact could be fully mitigated by restriping the northbound approach to provide: one left turn, one through lane, and one shared through-right turn lane.

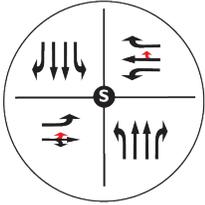
Table 14 – Summary of Mitigation Measures

Impacted Intersections	Recommended Mitigations	Feasible? (Y/N)	AM Peak Hour										PM Peak Hour										
			Future without-Plan		Future with Plan		ICU Change	Sig Impact?	Future with Plan-Mitigation		ICU Change	Sig Impact?	Future without-Plan		Future with Plan		ICU Change	Sig Impact?	Future with Plan-Mitigation		ICU Change	Sig Impact?	
			ICU	LOS	ICU	LOS			ICU	LOS			ICU	LOS	ICU	LOS			ICU	LOS			ICU
1	Atlantic Boulevard & Hellman Avenue	Restripe EB approach to: 1 left-turn lane & 1 left-thru-right lane. Restripe WB approach to 1 left-turn lane, 1 thru-right lane, 1 right-turn lane. EB/WB split phasing.	Y	0.81	D	1.040	F	0.23	Yes	0.918	E	0.108	Yes	0.872	D	1.412	F	0.54	Yes	1.281	F	0.409	Yes
2	Garfield Avenue & Hellman Avenue		-	0.923	E	1.230	F	0.307	Yes	1.230	F	0.307	Yes	0.893	D	1.582	F	0.689	Yes	1.582	F	0.689	Yes
3	New Avenue & Hellman Avenue	NB to permitted left-turn phasing. EB to protected left-turn phasing.	Y	0.898	D	1.054	F	0.156	Yes	1.054	F	0.156	Yes	0.806	D	1.071	F	0.265	Yes	1.033	F	0.227	Yes
4	Atlantic Boulevard & Emerson Avenue		-	0.583	A	0.786	C	0.203	Yes	0.786	C	0.203	Yes	0.623	B	1.094	F	0.471	Yes	1.094	F	0.471	Yes
5	Garfield Avenue & Emerson Avenue	SB & WB Prot+Perm left-turn phasing.	Y	0.652	B	0.944	E	0.292	Yes	0.859	D	0.207	Yes	0.661	B	1.305	F	0.644	Yes	1.132	F	0.471	Yes
6	Atlantic Boulevard & Garvey Avenue	Convert exclusive right-turn lane on east/west approaches to shared thru-right-turn lane (assuming three through lanes in each direction along Garvey Avenue as part of I-710 mitigation).	Y	0.705	C	0.778	C	0.073	Yes	0.754	C	0.049	Yes	0.761	C	0.99	E	0.229	Yes	0.946	E	0.185	Yes
7	Garfield Avenue & Garvey Avenue	Provide two east/west thru lanes in each direction plus allow for shared through-right at east/west approaches; northbound approach, provide additional NB right-turn lane and provide two NB thru lanes.	Y	0.742	C	0.923	E	0.181	Yes	0.84	D	0.098	Yes	0.8	C	1.148	F	0.348	Yes	1.002	F	0.202	Yes
8	New Avenue & Garvey Avenue	Provide two east/west thru lanes in each direction plus allow for shared through-right at east/west approaches.	Y	0.673	B	0.785	C	0.112	Yes	0.677	B	0.004	No	0.719	C	0.914	E	0.195	Yes	0.779	C	0.060	Yes
9	Corporate Center Drive & Ramona Boulevard	Restripe WB approach to: 1 left-turn, 1 shared thru-left, and 1 thru lane. WB and EB split phasing	Y	0.675	B	0.81	D	0.135	Yes	0.813	D	0.138	Yes	0.589	A	0.679	B	0.09	Yes	0.645	B	0.056	No
10	-																						
11	Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp	NB right-turn overlap phasing.	Y	0.494	A	0.507	A	0.013	No	0.507	A	0.013	No	0.417	A	0.477	A	0.06	Yes	0.47	A	0.053	No
12	Fremont Avenue & Monterey Pass Road	Intersection redesign. SB approach (Fremont Ave) to 2 left-turns & 1 right-turn. EB approach to 2 left-turns, 1 thru. Restripe WB approach to 1 thru, 1 shared thru-right turn lane and maintain two-way left-turn. Median removal/resizing will be required.	Y	0.736	C	0.853	D	0.117	Yes	0.482	A	-0.254	No	0.779	C	0.92	E	0.141	Yes	0.534	A	-0.245	No
13	Garfield Avenue & Newmark Avenue	Convert to SB permitted left-turn phasing & EB Prot+Perm left-turn phasing.	Y	0.668	B	0.755	C	0.087	Yes	0.716	C	0.048	Yes	0.764	C	0.934	E	0.17	Yes	0.831	D	0.067	Yes
14	Atlantic Boulevard & Brightwood Street	Restripe NB approach to: 1 left-turn, 2 thru, 1 shared thru-right turn lane. SB protected left-turn phasing. EB prot+perm left-turn phasing.	Y	0.607	B	0.673	B	0.066	Yes	0.628	B	0.021	No	0.759	C	0.927	E	0.168	Yes	0.788	C	0.029	No
15	I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive	Restriping NB approach to 1 shared thru-left & 1 right-turn lane. Restripe EB approach to 1 shared left-thru & 1 shared thru-right	Y	0.689	B	0.797	C	0.108	Yes	0.719	C	0.030	No	0.792	C	1.088	F	0.296	Yes	0.906	E	0.114	Yes
16	Corporate Center Drive/McDonnell Avenue & Floral Drive	Restriping SB to dual left-turn and 1 shared thru-right turn lane.	Y	0.611	B	0.716	C	0.105	Yes	0.695	B	0.084	Yes	0.704	C	0.824	D	0.12	Yes	0.773	C	0.069	Yes
17	Monterey Pass Road/Mednik Avenue & Floral Drive	Provide Prot+Perm EB signal phasing.	Y	0.655	B	0.736	C	0.081	Yes	0.736	C	0.081	Yes	0.755	C	0.894	D	0.139	Yes	0.833	D	0.078	Yes
18	Atlantic Boulevard & Floral Drive/Driveway		-	0.605	B	0.669	B	0.064	Yes	0.669	B	0.064	Yes	0.671	B	0.875	D	0.204	Yes	0.875	D	0.204	Yes
19	-																						
20	Collegian Avenue & Avenida Cesar Chavez	Prot+Per WB signal phasing.	Y	0.555	A	0.619	B	0.064	Yes	0.535	A	-0.020	No	0.576	A	0.747	C	0.171	Yes	0.676	B	0.100	Yes
21	Atlantic Boulevard & Avenida Cesar Chavez		-	0.66	B	0.76	C	0.1	Yes	0.76	C	0.100	Yes	0.794	C	1.039	F	0.245	Yes	1.039	F	0.245	Yes
22	Atlantic Boulevard & 1st Street/SR-60 West Bound Off-Ramp	Add EB left-turn & EB left-turn prot phasing	Y	0.791	C	0.832	D	0.041	Yes	0.799	C	0.008	No	0.747	C	0.903	E	0.156	Yes	0.856	D	0.109	Yes
23	Atlantic Boulevard & SR-60 East Bound Off-Ramp	Add SB thru-lane in currently underutilized pavement area.	Y	0.701	C	0.735	C	0.034	No	0.674	B	-0.027	No	0.666	B	0.813	D	0.147	Yes	0.654	B	-0.012	No
24	Garfield Avenue & Riggan Street	Dual SB left-turn & protected phasing; Prot+Perm EB left-turn phasing.	Y	0.861	D	0.941	E	0.08	Yes	0.86	D	-0.001	No	0.838	D	1.178	F	0.34	Yes	0.981	E	0.143	Yes
25	Garfield Avenue & Pomona Boulevard	Restriping NB approach to dual left-turns & 1 thru lane + NB protected left-turn phasing. Restripe SB approach to 1 thru, 1 shared thru-right, and 1 right turn.	Y	0.817	D	0.858	D	0.041	Yes	0.799	C	-0.018	No	0.724	C	0.868	D	0.144	Yes	0.759	C	0.035	No
26	Garfield Avenue & Via Campo	Restripe SB: 1 left-turn & 2 thru lanes; Restripe EB: 1 left-turn, 2 thru, 1 right-turn lane. NB & SB protected left-turn phasing.	Y	0.724	C	0.756	C	0.032	No	0.685	B	-0.039	No	0.8	C	0.938	E	0.138	Yes	0.855	D	0.055	Yes
27	Wilcox Avenue & Pomona Boulevard	Convert to WB left-turn protected phasing.	Y	0.601	B	0.63	B	0.029	No	0.63	B	0.029	No	0.652	B	0.74	C	0.088	Yes	0.725	C	0.073	Yes
28	Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp	Restripe EB approach to: 1 left-turn lane, 1 thru lane, 1 thru-right lane, and 1 exclusive right-turn lane.	Y	0.639	B	0.659	B	0.02	No	0.659	B	0.020	No	0.836	D	0.893	D	0.057	Yes	0.823	D	-0.013	No
29	-																						
30	Saturn Street/Market Place Drive & Potrero Grande Drive	Restriping NB approach: 1 left-turn, 1 thru, & 1 shared thru-right lane.	Y	0.443	A	0.46	A	0.017	No	0.45	A	0.007	No	0.66	B	0.721	C	0.061	Yes	0.684	B	0.024	No

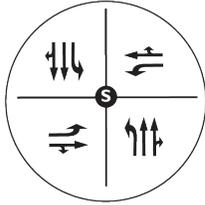
No significant impact.

Figure 16: Proposed Lane Configuration with Mitigation

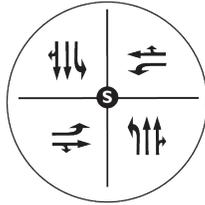
#1 Hellman Ave & Atlantic Blvd



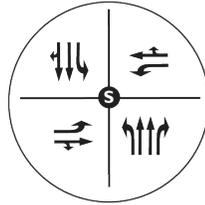
#2 Hellman Ave & Garfield Ave



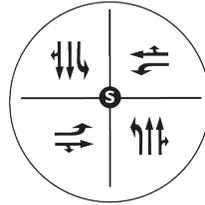
#3 Hellman Ave & New Ave



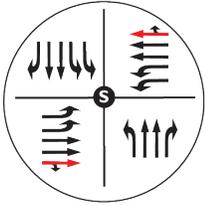
#4 Emerson Ave & Atlantic Blvd



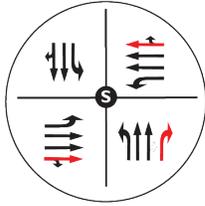
#5 Emerson Ave & Garfield Ave



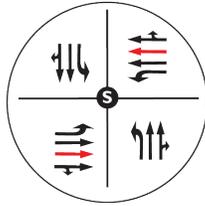
#6 Garvey Ave & Atlantic Ave



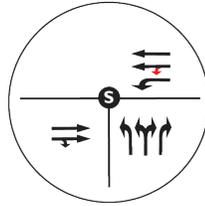
#7 Garvey Ave & Garfield Ave



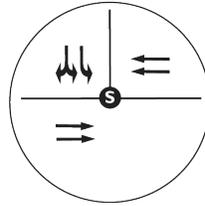
#8 Garvey Ave & New Ave



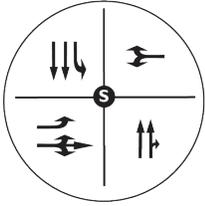
#9 Ramona Blvd & Corporate Center Dr



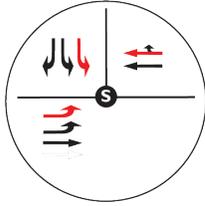
#10 Ramona Blvd & I-10 EB Off-Ramp



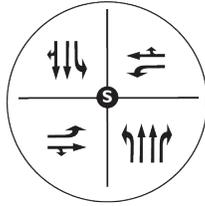
#11 I-710 NB Off-Ramp & Corporate Center Dr



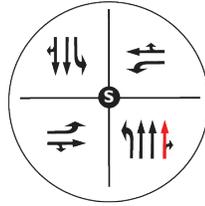
#12 Fremont Ave & Monterey Pass Rd



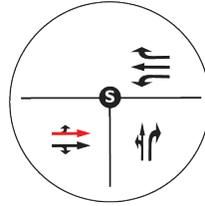
#13 Newmark Ave & Garfield Ave



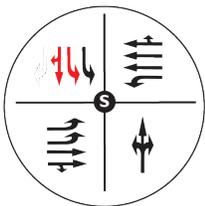
#14 Brightwood St & Atlantic Blvd



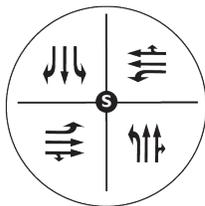
#15 Floral Dr & Ford Blvd/I-710 NB On-Ramp



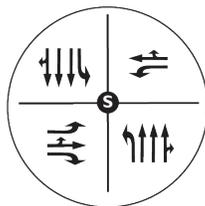
#16 Floral Dr & Corp. Center Dr/McDonnell Ave



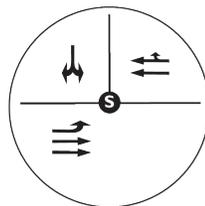
#17 Floral Dr & Monterey Pass Rd/Mednik Ave



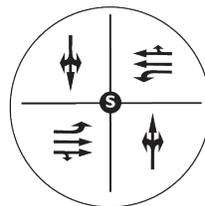
#18 Atlantic Blvd & Floral Dr



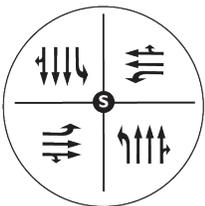
#19 Avenida Cesar Chavez & Bleakwood Ave



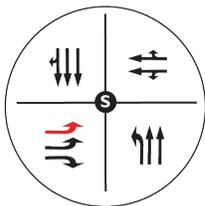
#20 Avenida Cesar Chavez & Collegian Ave



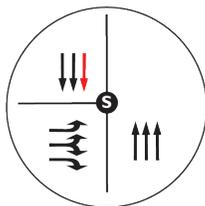
#21 Avenida Cesar Chavez/Riggin St & Atlantic Blvd



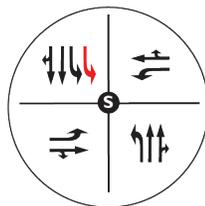
#22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp



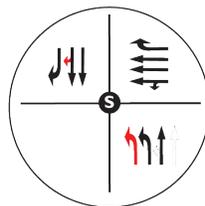
#23 Atlantic Blvd & SR-60 EB Ramp



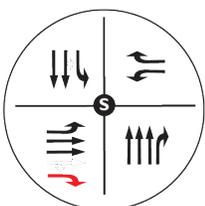
#24 Riggin St & Garfield Ave



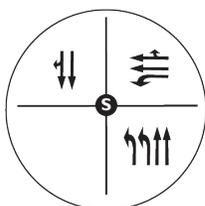
#25 Pomona Blvd & Garfield Ave



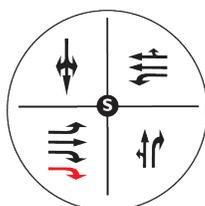
#26 Via Campo & Garfield Ave



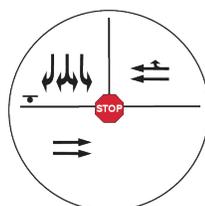
#27 Pomona Blvd & Wilcox Ave



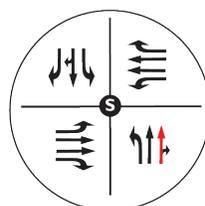
#28 Potero Grande Dr & Markland Dr



#29 Potero Grande Dr & Atlas Ave



#30 Potero Grande Dr & Saturn St/Market Place Dr



7. CONGESTION MANAGEMENT PROGRAM

This section provides study conformance with the regional impact analysis procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed Project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.
- At CMP mainline freeway-monitoring locations, where the Project will add 150 or more trips, in either direction, during the either the a.m. or p.m. weekday peak hours.

7.1 INTERSECTION IMPACT ANALYSIS

Per the 2010 CMP document, there are no CMP arterial monitoring stations with the City of Monterey Park. The nearest CMP location to the City would be in the City of Alhambra:

- CMP ID 1 – Fremont Avenue and Valley Boulevard, approximately 1.5 miles north from City limits.

Based on the trip generation defined in Table 5 and trip distribution defined on Figure 9, it is not expected that 50 or more new Plan trips per hour would be added to the nearest CMP intersection. Therefore, no further analysis of potential CMP impacts is required.

7.2 FREEWAY IMPACT ANALYSIS

The nearest CMP mainline freeway-monitoring location to the Plan sphere of influence is on the Interstate 10 freeway, near Atlantic Boulevard. The General Plan is expected to add more than 150 new trips per hour to this CMP freeway segment. The General Plan is not expected to add more than 150 new trips per hour to any other freeway segment (I-710 and SR-60) in the vicinity of the City.

Freeway mainline impacts would need to be mitigated through fair-share contributions by future developments permitted by the Plan to freeway corridor improvements planned by Caltrans.

8. ANALYSIS SUMMARY AND CONCLUSIONS

The following summarizes the traffic study results, conclusions and recommendations:

- The study area was based on the locations of major intersections and roadway segments within the City that are primary travel routes into and out of the City and between areas of the City.
- The Study Area includes 30 intersections and 15 roadway segments.
- Residential land use growth will be focused in areas designated by the current City Housing Element update, and new commercial and medical-office development will be focused in areas designated by the proposed land use plan.
- Traffic potentially generated in the future under the proposed land use plan was shifted from areas of the City where development would be less intense under the proposed plan, and shifted to the focus areas described above.
- The study area analysis sub-areas are based on geographic divisions within larger traffic analysis zones (TAZs), defined as part of the U.S. Census and SCAG.
- The analysis of operations at the study intersections was conducted for weekday a.m. and p.m. peak-hour conditions. Traffic counts were conducted in April 11, 2019.
- Under existing conditions, five of the study intersections operate at poor LOS values of D or worse
- In order to account for traffic growth in the study area, an ambient/background traffic growth rate of 0.29% per year, which results in an overall 21-year growth of approximately six (6) percent, was reviewed and approved by City engineering staff.
- Under this scenario, 7 of the study intersections would operate at poor LOS values of D or worse.
- Anticipated Land Use Changes under the General Plan are as follows:
 - ✓ Multi-Family Residential Units: +3,835 units
 - ✓ General Commercial: +619,933 square-feet
 - ✓ General Office: +883,902 square-feet
 - ✓ Hotel Rooms: +607 rooms
 - ✓ College Students: +3,697 students
- Under this scenario, 23 out of the 30 intersections are expected to operate at LOS values of D or worse.
- Significant impacts would occur at 27 out of the 30 study intersections.

- Potential physical mitigation measures were researched at all of the significantly-impacted intersections. Lane reconfiguration, signal phasing alterations, and roadway widening measures were explored.
- As discussed in Section 6.3, improvements to signal phasing and lane reconfigurations would result in a reduction of eight significant impacts during both peak hours, resulting in 13 intersections with significant impacts during the a.m. peak hour and 19 intersections during the p.m. peak hour that would require extensive land acquisitions in order to fully mitigate impacts.

As roadway widening could require purchase and partial or full demolition of neighboring properties, or could negatively affect sidewalk widths, or as on-street parking removal could cause other significant impacts, improvements at most locations were deemed infeasible due to physical limitations and/or due to the estimated ineffectiveness of traffic signal configurations changes.

APPENDIX A
Scoping Document

CIRCULATION ELEMENT UPDATE SCOPING DOCUMENT
Traffic Analysis – City of Monterey Park Circulation Element
April 25, 2019

This scoping document acknowledges the City of Monterey Park requirements of traffic impact analysis for the following project:

Study Location: Citywide Study

Study Background: The City of Monterey Park is currently updating its proposed land use mix and intensity as part of its 2040 General Plan Update. KOA has calculated anticipated trip generation for 2040 build-out conditions, which is documented below

KOA also worked with the City to establish 30 study intersections and 15 roadway segments that would be analyzed as part of the study. Those are listed in subsequent sections of this document.

The study area with intersections is shown in Attachment A.

Traffic Counts

Peak Hour (7:00am – 9:00am and 4:00pm – 6:00pm) traffic counts (vehicles, bicycles, and pedestrian) were collected on Thursday, April 11, 2019 at the 30 study intersections. 24-hour average daily traffic counts were collected at 15 study roadway segments on the same day. The study intersections are as follows:

- | | |
|-----------------------------------------------------------------|--------------------------------------------------------------------------|
| 1 Atlantic Boulevard & Hellman Avenue | 17 Monterey Pass Road/Mednik Avenue & Floral Drive |
| 2 Garfield Avenue & Hellman Avenue | 18 Atlantic Boulevard & Floral Drive/Driveway |
| 3 New Avenue & Hellman Avenue | 19 Bleakwood Avenue & Avenida Cesar Chavez |
| 4 Atlantic Boulevard & Emerson Avenue | 20 Collegian Avenue & Avenida Cesar Chavez |
| 5 Garfield Avenue & Emerson Avenue | 21 Atlantic Boulevard & Avenida Cesar Chavez |
| 6 Atlantic Avenue & Garvey Avenue | 22 Atlantic Boulevard & 1 st Street/SR-60 West Bound Off-Ramp |
| 7 Garfield Avenue & Garvey Avenue | 23 Atlantic Boulevard & SR-60 East Bound Off-Ramp |
| 8 New Avenue & Garvey Avenue | 24 Garfield Avenue & Riggin Street |
| 9 Corporate Center Drive & Ramona Boulevard | 25 Garfield Avenue & Pomona Boulevard |
| 10 I-10 East Bound Off-Ramp & Ramona Boulevard | 26 Garfield Avenue & Via Campo |
| 11 Corporate Center Drive/Driveway & I-710 North Bound Off-Ramp | 27 Wilcox Avenue & Pomona Boulevard |
| 12 Fremont Avenue & Monterey Pass Road | 28 Markland Drive & Potrero Grande Drive/SR-60 West Bound Off-Ramp |
| 13 Garfield Avenue & Newmark Avenue | 29 Atlas Avenue & Potrero Grande Drive |
| 14 Atlantic Boulevard & Brightwood Street | 30 Saturn Street/Market Place Drive & Potrero Grande Drive |
| 15 I-710 North Bound On-Ramp/Ford Boulevard & Floral Drive | |
| 16 Corporate Center Drive/McDonnell Avenue & Floral Drive | |

CIRCULATION ELEMENT UPDATE SCOPING DOCUMENT
Traffic Analysis – City of Monterey Park Circulation Element
April 25, 2019

The 15 roadway segments are as follows:

1. Atlantic Boulevard, between Hellman Avenue and Garvey Avenue
2. Garfield Avenue, between Hellman Avenue and Garvey Avenue
3. New Avenue, between Hellman Avenue and Garvey Avenue
4. Garvey Avenue, between Fremont Avenue and Atlantic Boulevard
5. Garvey Avenue, between Atlantic Boulevard and Garfield Avenue
6. Monterey Pass Road, between Garvey Avenue and Vagabond Drive
7. Corporate Center Drive, between Floral Drive and Casuda Canyon Drive
8. Atlantic Boulevard, between Garvey Avenue and Floral Drive
9. Garfield Avenue, between Garvey Avenue and El Repetto Drive
10. Garfield Avenue, between El Repetto Drive and Riggins Street
11. Cesar Chavez Avenue, between Vancouver Avenue and Atlantic Boulevard
12. Atlantic Boulevard, between Floral Drive and 1st Street
13. Garfield Avenue, between Riggins Street and Pomona Boulevard
14. Pomona Boulevard, between Garfield Avenue and Gerhart Avenue
15. Potrero Grande Drive, between Markland Drive and Saturn Street/Market Place Drive

Attachment A provides a map of the study area, including study intersection and segment locations.

LOS Methodology

A level of service and significant impact analysis will be applied to the study intersections and roadway segments, based on current City of Monterey Park's 2006 Traffic Study Guidelines, as applicable. KOA understands that the City uses the Intersection Capacity Utilization (ICU) methodology to analyze intersection operations and impacts. For this analysis, KOA will utilize that methodology for intersections.

KOA will also analyze roadway segment capacity compared to anticipated volumes. For this analysis, KOA will calculate a volume-to-capacity ratio based on lane capacity assumptions laid out in the City's traffic study guidelines.

Trip Generation

Trip generation was defined with the inputs received from MIG's land use group. The land uses were separated into 16 distinct zones, which were defined through the City's Traffic Analysis Zones (TAZs). No internal trip capture credits were taken to adjust the proposed trip generation. Pass-by trip credits were taken for three TAZs that had exclusively commercial uses. Institute of Transportation Engineers (ITE) 10th Edition rates were used.

A trip generation summary is provided in Attachment B.

Total generated trips would be 125,571 on a daily basis, including 5,020 during the a.m. peak hour and 12,194 during the p.m. peak hour. These totals include both inbound and outbound trips.

CIRCULATION ELEMENT UPDATE SCOPING DOCUMENT
Traffic Analysis – City of Monterey Park Circulation Element
April 25, 2019

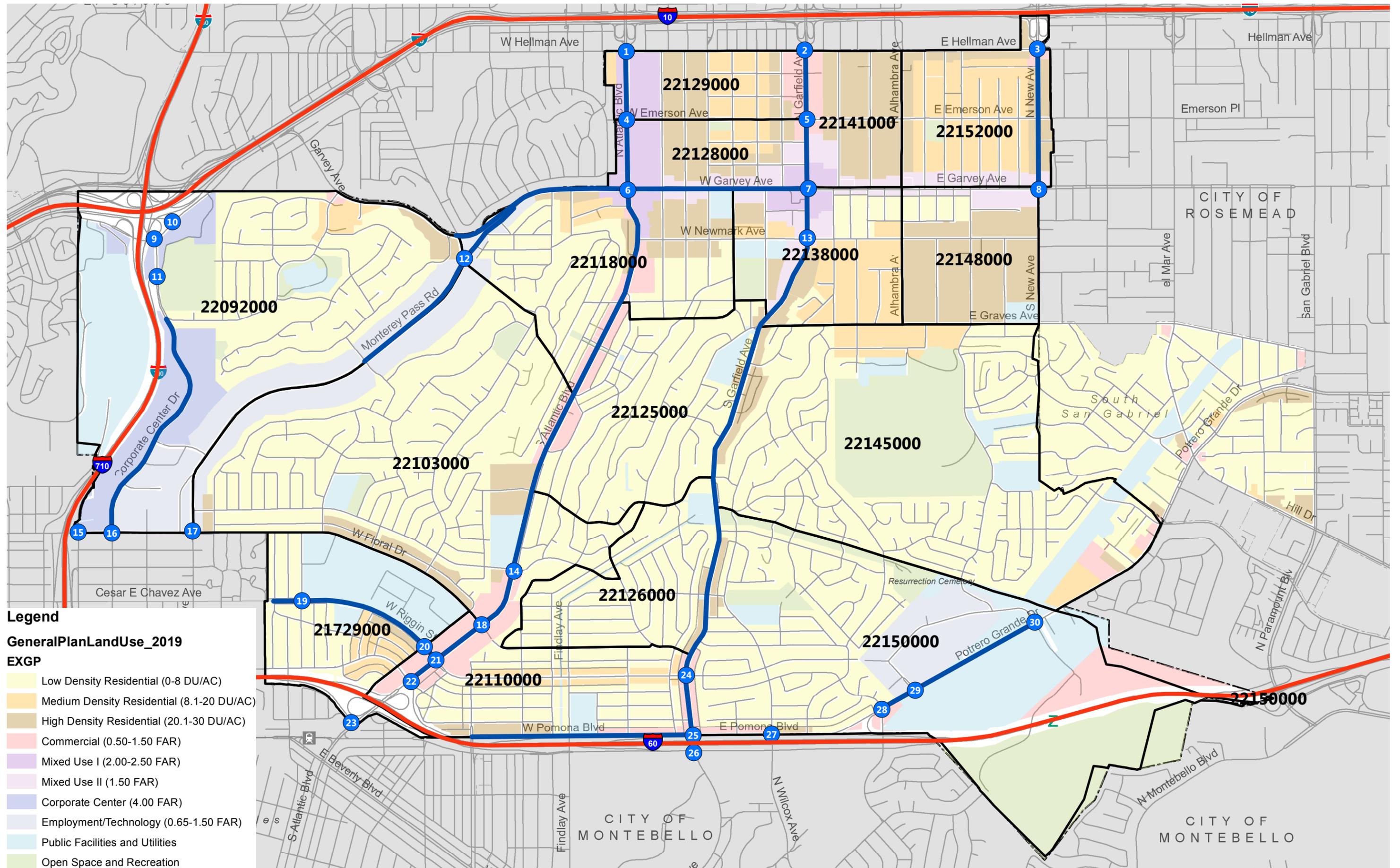
[Future 2040 Conditions Growth Rates](#)

In order to project 2040 conditions, this analysis will utilize a **1.06167** growth rate (2019 to 2040). This assumes an annual growth rate of 1.0029 as derived from the Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program. Monterey Park is located in the Regional Statistical Area (RSA) #25. Attachment C contains RSA map and associated growth rates.

[2040 Trip Distribution](#)

For this analysis, general plan land use trips will be distributed regionally per Metro's 2010 CMP RSA Trip Distribution percentages based on trip type. Attachment D contains the RSA-based trip distribution assumptions.

ATTACHMENT A
STUDY AREA MAP



Legend

GeneralPlanLandUse_2019

EXGP

- Low Density Residential (0-8 DU/AC)
- Medium Density Residential (8.1-20 DU/AC)
- High Density Residential (20.1-30 DU/AC)
- Commercial (0.50-1.50 FAR)
- Mixed Use I (2.00-2.50 FAR)
- Mixed Use II (1.50 FAR)
- Corporate Center (4.00 FAR)
- Employment/Technology (0.65-1.50 FAR)
- Public Facilities and Utilities
- Open Space and Recreation

ATTACHMENT B
TRIP GENERATION

JB90136 Monterey Park General Plan Update 2040

Trip Generation Rates

4/30/2019

TAZ	TOTAL RESIDENTIAL USES							TOTAL NON-RESIDENTIAL USES						
	DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR			DAILY TOTAL	AM PEAK HOUR			PM PEAK HOUR		
	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
22129000	4,779	69	231	300	230	135	365	33,446	516	316	832	1,620	1,756	3,376
22141000	3,303	47	160	207	159	94	253	10,896	168	104	272	528	571	1,099
22152000	4,063	58	198	256	196	115	311	0	0	0	0	0	0	0
22128000	3,882	56	188	244	187	110	297	686	23	16	39	25	24	49
22092000	81	1	4	5	4	2	6	14,876	598	166	764	236	607	843
22118000	1,228	18	59	77	59	35	94	1,534	24	14	38	75	79	154
22138000	7,322	106	354	460	353	207	560	1,045	35	24	59	38	37	75
22148000	3,224	46	156	202	155	92	247	0	0	0	0	0	0	0
22103000	0	0	0	0	0	0	0	1,504	48	9	57	13	49	62
22125000	0	0	0	0	0	0	0	10,651	164	101	265	516	558	1,074
22145000	403	6	19	25	19	12	31	1,135	18	10	28	55	60	115
99999999	1,510	30	88	118	100	58	158	376	6	3	9	18	20	38
22126000	7	0	0	0	0	1	1	0	0	0	0	0	0	0
22150000	0	0	0	0	0	0	0	8,673	134	82	216	420	455	875
21729000	114	2	5	7	6	3	9	3,614	280	66	346	774	609	1,383
22110000	385	6	18	24	19	10	29	6,834	106	64	170	331	359	690
Total	30,301	445	1,480	1,925	1,487	874	2,361	95,270	2,120	975	3,095	4,649	5,184	9,833

ATTACHMENT C
RSA GROWTH RATES

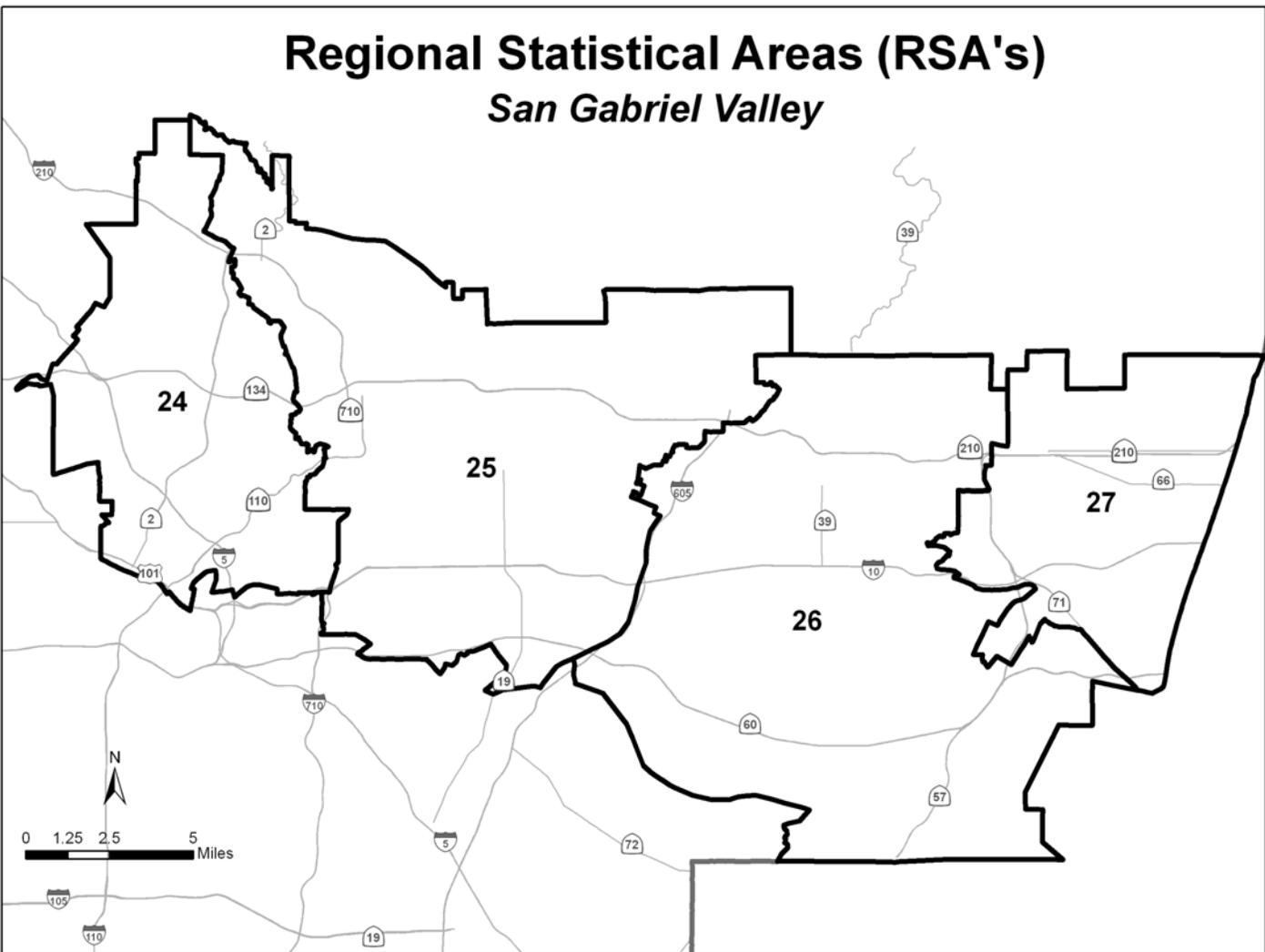


Exhibit D-1
GENERAL TRAFFIC VOLUME GROWTH FACTORS

<u>RSA</u>	<u>Representative City/Place</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
7	Agoura Hills	1.000	1.020	1.041	1.052	1.063	1.075
8	Santa Clarita	1.000	1.145	1.291	1.348	1.405	1.461
9	Lancaster	1.000	1.214	1.427	1.676	1.924	2.172
10	Palmdale	1.000	1.134	1.267	1.363	1.458	1.553
11	Angeles Forest	1.000	1.151	1.301	1.394	1.487	1.580
12	West S.F. Valley	1.000	1.027	1.054	1.068	1.083	1.097
13	Burbank	1.000	1.024	1.049	1.063	1.077	1.092
14	Sylmar	1.000	1.024	1.049	1.071	1.093	1.114
15	Malibu	1.000	1.027	1.054	1.075	1.096	1.117
16	Santa Monica	1.000	1.014	1.028	1.038	1.049	1.059
17	West/Central L.A.	1.000	1.007	1.014	1.024	1.034	1.044
18	South Bay/LAX	1.000	1.013	1.026	1.035	1.044	1.053
19	Palos Verdes	1.000	1.025	1.051	1.061	1.071	1.081
20	Long Beach	1.000	1.076	1.152	1.160	1.168	1.177
21	Vernon	1.000	1.073	1.146	1.158	1.170	1.182
22	Downey	1.000	1.052	1.104	1.116	1.127	1.139
23	Downtown L.A.	1.000	1.009	1.018	1.030	1.042	1.054
24	Glendale	1.000	1.014	1.027	1.041	1.055	1.068
25	Pasadena	1.000	1.041	1.082	1.098	1.115	1.131
26	West Covina	1.000	1.023	1.046	1.066	1.086	1.106
27	Pomona	1.000	1.081	1.161	1.190	1.219	1.248

ATTACHMENT D
TRIP DISTRIBUTION

Project RSA: **25** Area Generally Bounded by: **La Canada Flintridge, Pasadena, Monterey Park, South El Monte, Duarte**

2010 Trip Distribution Percentages

Project Type	Agoura	S.Clarita	Lancstr	PalmDie	AngFrst	W.SFV	Burbank	Sylmar	Malibu	Smonica	WCntLA	BchLAX	Pverdes		
Purpose	7	8	9	10	11	12	13	14	15	16	17	18	19		
Residential															
Work	0.3%	0.3%	0.1%	0.1%	0.0%	2.1%	2.5%	0.8%	0.1%	1.6%	6.0%	2.3%	1.7%		
Non-Work	0.3%	0.2%	0.0%	0.0%	0.0%	0.4%	1.0%	0.4%	0.2%	0.7%	3.1%	2.3%	1.5%		
Non-Residential															
Work	0.2%	1.1%	0.4%	0.7%	0.0%	2.5%	1.9%	1.9%	0.0%	1.1%	4.2%	1.8%	1.2%		
Non-Work	0.0%	0.1%	0.0%	0.1%	0.0%	0.8%	1.2%	1.0%	0.0%	0.5%	3.2%	0.4%	0.3%		
<hr/>															
	LongBch	Vernon	Downey	DntnLA	Glendl	Pasadna	WCovina	Pomona	Ven	Ora	SB	Riv	Ker	TOTAL	
	20	21	22	23	24	25	26	27							
Residential															
Work	1.2%	8.4%	3.1%	6.0%	5.4%	42.1%	8.7%	1.1%	0.3%	3.1%	1.7%	0.7%	0.0%	100.0%	
Non-Work	0.4%	6.5%	1.6%	1.5%	6.1%	63.6%	7.3%	0.8%	0.4%	1.1%	0.5%	0.2%	0.0%	100.0%	
Non-Residential															
Work	1.3%	4.5%	3.4%	0.5%	7.1%	45.0%	11.2%	2.1%	0.6%	2.5%	3.7%	0.9%	0.0%	100.0%	
Non-Work	0.4%	5.5%	2.0%	1.0%	7.7%	64.3%	7.6%	1.1%	0.4%	0.8%	1.3%	0.5%	0.0%	100.0%	

2035 Trip Distribution Percentages

Project Type	Agoura	S.Clarita	Lancstr	PalmDie	AngFrst	W.SFV	Burbank	Sylmar	Malibu	Smonica	WCntLA	BchLAX	Pverdes		
Purpose	7	8	9	10	11	12	13	14	15	16	17	18	19		
Residential															
Work	0.3%	0.3%	0.1%	0.1%	0.1%	2.0%	2.4%	0.7%	0.1%	1.5%	5.7%	2.2%	1.5%		
Non-Work	0.3%	0.2%	0.0%	0.0%	0.1%	0.4%	1.0%	0.4%	0.2%	0.7%	3.0%	2.4%	1.5%		
Non-Residential															
Work	0.2%	1.4%	0.7%	1.3%	0.1%	2.6%	2.0%	1.9%	0.0%	1.1%	4.3%	1.8%	1.2%		
Non-Work	0.0%	0.2%	0.1%	0.1%	0.0%	0.8%	1.2%	1.0%	0.0%	0.5%	3.2%	0.4%	0.3%		
<hr/>															
	LongBch	Vernon	Downey	DntnLA	Glendl	Pasadna	WCovina	Pomona	Ven	Ora	SB	Riv	Ker	TOTAL	
	20	21	22	23	24	25	26	27							
Residential															
Work	1.2%	7.9%	3.0%	5.6%	5.1%	40.9%	8.4%	1.2%	0.4%	3.8%	3.7%	1.7%	0.1%	100.0%	
Non-Work	0.4%	6.4%	1.6%	1.4%	5.9%	63.8%	7.3%	0.8%	0.4%	1.1%	0.5%	0.2%	0.0%	100.0%	
Non-Residential															
Work	1.3%	4.4%	3.2%	0.5%	7.1%	45.0%	10.9%	2.0%	0.5%	2.3%	3.4%	0.8%	0.1%	100.0%	
Non-Work	0.4%	5.4%	1.9%	1.0%	7.6%	64.0%	7.7%	1.1%	0.4%	0.7%	1.4%	0.5%	0.0%	100.0%	

APPENDIX B
Traffic Count Data

Weekday Traffic Counts
24-Hour Machine Counts (ADT)

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Atlantic Blvd & W Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-008
 Date: 4/11/2019

Total

NS/EW Streets:	S Atlantic Blvd				S Atlantic Blvd				W Hellman Ave				W Hellman Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	2	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	3	171	10	0	20	132	12	0	45	8	2	0	12	16	68	0	499
7:15 AM	2	260	15	0	20	152	11	0	59	18	2	0	22	14	73	0	648
7:30 AM	4	328	11	0	18	199	18	0	79	14	3	0	16	21	81	0	792
7:45 AM	2	307	6	0	17	232	38	0	60	13	3	0	23	35	80	0	816
8:00 AM	1	261	4	0	1	252	34	0	31	21	12	0	9	36	78	0	740
8:15 AM	5	277	2	0	0	256	17	0	40	14	9	0	4	31	50	0	705
8:30 AM	4	216	2	0	0	242	13	0	40	15	3	0	2	29	96	0	662
8:45 AM	5	242	1	0	0	269	21	0	60	7	10	0	5	21	49	0	690
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	26	2062	51	0	76	1734	164	0	414	110	44	0	93	203	575	0	5552
	1.22%	96.40%	2.38%	0.00%	3.85%	87.84%	8.31%	0.00%	72.89%	19.37%	7.75%	0.00%	10.68%	23.31%	66.02%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	12	1173	23	0	36	939	107	0	210	62	27	0	52	123	289	0	3053
PEAK HR FACTOR :	0.600	0.894	0.523	0.000	0.500	0.917	0.704	0.000	0.665	0.738	0.563	0.000	0.565	0.854	0.892	0.000	0.935
	0.880				0.943				0.779				0.841				
PM	1	2	1	0	1	2	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	1	245	25	0	38	190	37	0	42	38	6	0	13	14	44	0	693
4:15 PM	2	256	23	0	37	232	20	0	38	43	7	0	11	8	33	0	710
4:30 PM	1	243	19	0	36	216	24	0	47	50	7	0	17	12	39	0	711
4:45 PM	3	232	16	0	38	214	35	0	50	51	14	0	14	10	45	0	722
5:00 PM	3	254	16	0	55	240	41	0	51	47	7	0	6	14	64	0	798
5:15 PM	2	244	18	0	42	295	35	0	74	44	13	0	8	25	41	0	841
5:30 PM	3	250	29	0	43	251	47	0	118	58	14	0	13	21	50	0	897
5:45 PM	4	259	23	0	44	304	38	0	63	44	17	0	11	16	57	0	880
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	19	1983	169	0	333	1942	277	0	483	375	85	0	93	120	373	0	6252
	0.88%	91.34%	7.78%	0.00%	13.05%	76.10%	10.85%	0.00%	51.22%	39.77%	9.01%	0.00%	15.87%	20.48%	63.65%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	12	1007	86	0	184	1090	161	0	306	193	51	0	38	76	212	0	3416
PEAK HR FACTOR :	0.750	0.972	0.741	0.000	0.836	0.896	0.856	0.000	0.648	0.832	0.750	0.000	0.731	0.760	0.828	0.000	0.952
	0.966				0.929				0.724				0.970				

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Atlantic Blvd & W Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-008
 Date: 4/11/2019

Bikes

NS/EW Streets:	S Atlantic Blvd				S Atlantic Blvd				W Hellman Ave				W Hellman Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	0	0	2	3	1	0	0	2	1	0	1	0	0	0	12
	0.00%	100.00%	0.00%	0.00%	33.33%	50.00%	16.67%	0.00%	0.00%	66.67%	33.33%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	1	0	0	1	1	1	0	0	1	1	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.500
				0.250				0.750				0.500					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	3
5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	1	0	0	4	0	0	0	1	1	0	0	2	0	0	11
	0.00%	66.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	4	0	0	0	1	1	0	0	1	0	0	8
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.667
				0.250				0.500				0.500				0.250	

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Atlantic Blvd & W Hellman Ave
City: Monterey Park

Project ID: 19-05183-008
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	S Atlantic Blvd		S Atlantic Blvd		W Hellman Ave		W Hellman Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	2	0	2	1	0	0	5
7:15 AM	0	0	3	0	0	0	0	0	3
7:30 AM	0	0	1	2	0	1	0	1	5
7:45 AM	0	0	0	2	2	3	0	0	7
8:00 AM	0	0	1	3	1	2	0	1	8
8:15 AM	0	0	1	0	0	1	0	0	2
8:30 AM	0	0	2	1	0	1	0	0	4
8:45 AM	0	0	4	1	0	0	1	1	7
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	14	9	5	9	1	3	41
			60.87%	39.13%	35.71%	64.29%	25.00%	75.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	3	7	3	7	0	2	22
PEAK HR FACTOR :			0.750	0.583	0.375	0.583		0.500	0.688
			0.625		0.500		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	1	3	2	0	0	6
4:15 PM	0	0	0	2	1	0	0	0	3
4:30 PM	0	0	0	1	2	4	1	0	8
4:45 PM	0	0	2	0	0	0	0	0	2
5:00 PM	0	0	4	0	1	0	0	2	7
5:15 PM	0	0	3	3	1	0	1	0	8
5:30 PM	0	0	11	4	1	1	1	10	28
5:45 PM	0	0	2	2	0	4	0	0	8
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	22	13	9	11	3	12	70
			62.86%	37.14%	45.00%	55.00%	20.00%	80.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	20	9	3	5	2	12	51
PEAK HR FACTOR :			0.455	0.563	0.750	0.313	0.500	0.300	0.455
			0.483		0.500		0.318		

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & W Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-011
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				W Hellman Ave				W Hellman Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	3	176	13	0	21	101	11	1	29	15	2	0	13	45	51	0	481
7:15 AM	5	233	17	0	29	128	24	0	30	84	4	0	12	52	63	0	681
7:30 AM	4	321	9	0	23	174	22	0	31	58	4	0	18	49	61	0	774
7:45 AM	8	264	6	0	19	201	33	1	31	35	5	0	17	70	56	0	746
8:00 AM	5	266	4	0	21	181	20	0	39	31	8	0	16	52	54	0	697
8:15 AM	4	244	6	0	14	193	14	0	29	24	8	0	17	64	56	0	673
8:30 AM	5	228	6	0	27	198	25	0	34	31	3	0	16	56	44	0	673
8:45 AM	10	222	7	0	29	209	35	1	38	37	4	0	21	60	62	0	735
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	44	1954	68	0	183	1385	184	3	261	315	38	0	130	448	447	0	5460
	2.13%	94.58%	3.29%	0.00%	10.43%	78.92%	10.48%	0.17%	42.51%	51.30%	6.19%	0.00%	12.68%	43.71%	43.61%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	22	1084	36	0	92	684	99	1	131	208	21	0	63	223	234	0	2898
PEAK HR FACTOR :	0.688	0.844	0.529	0.000	0.793	0.851	0.750	0.250	0.840	0.619	0.656	0.000	0.875	0.796	0.929	0.000	0.936
	0.855				0.862				0.763				0.909				
PM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	5	216	18	1	31	241	34	0	31	69	11	0	15	40	27	0	739
4:15 PM	10	239	16	0	31	238	29	0	44	78	4	0	12	32	33	0	766
4:30 PM	1	233	7	0	27	238	32	0	52	72	9	0	16	29	22	0	738
4:45 PM	14	232	20	0	31	276	31	0	31	66	3	0	12	31	32	0	779
5:00 PM	0	237	22	0	41	282	40	0	44	87	4	0	14	47	41	0	859
5:15 PM	9	263	35	0	34	280	47	1	30	77	5	0	15	47	23	0	866
5:30 PM	7	268	17	0	46	265	52	0	42	100	4	0	12	53	30	0	896
5:45 PM	4	274	20	0	40	250	54	0	35	101	5	0	15	47	27	0	872
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	50	1962	155	1	281	2070	319	1	309	650	45	0	111	326	235	0	6515
	2.31%	90.50%	7.15%	0.05%	10.52%	77.50%	11.94%	0.04%	30.78%	64.74%	4.48%	0.00%	16.52%	48.51%	34.97%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	20	1042	94	0	161	1077	193	1	151	365	18	0	56	194	121	0	3493
PEAK HR FACTOR :	0.556	0.951	0.671	0.000	0.875	0.955	0.894	0.250	0.858	0.903	0.900	0.000	0.933	0.915	0.738	0.000	0.975
	0.941				0.986				0.914				0.909				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & W Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-011
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				W Hellman Ave				W Hellman Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	1	0	0	1	3	1	0	0	0	0	0	6
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
8:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	1	0	0	4	0	0	2	5	1	0	0	2	1	0	18
	0.00%	66.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	25.00%	62.50%	12.50%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1	1	0	0	2	0	0	1	4	1	0	0	1	0	0	11
PEAK HR FACTOR :	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.250	0.333	0.250	0.000	0.000	0.250	0.000	0.000	0.458
	0.500				0.500				0.300				0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:15 PM	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	2	0	0	1	3	0	0	1	4	0	0	0	1	1	0	15
	50.00%	50.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	20.00%	80.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	1	1	0	0	1	1	0	0	0	1	1	0	7
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.583
	0.250				0.250				0.500				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & W Hellman Ave
City: Monterey Park

Project ID: 19-05183-011
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		W Hellman Ave		W Hellman Ave			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	0	1	3	0	0	0	0	4	
	7:15 AM	4	1	6	1	2	0	3	0	17
	7:30 AM	5	2	5	0	2	2	2	2	20
	7:45 AM	1	0	2	2	1	0	0	1	7
	8:00 AM	0	0	2	2	3	2	0	0	9
	8:15 AM	0	0	0	0	0	1	0	0	1
	8:30 AM	0	0	3	3	0	0	0	0	6
	8:45 AM	1	1	0	1	1	1	1	1	7
TOTAL VOLUMES :	EB 11	WB 5	EB 21	WB 9	NB 9	SB 6	NB 6	SB 4	TOTAL 71	
APPROACH %'s :	68.75%	31.25%	70.00%	30.00%	60.00%	40.00%	60.00%	40.00%		
PEAK HR :	07:15 AM - 08:15 AM								TOTAL	
PEAK HR VOL :	10	3	15	5	8	4	5	3	53	
PEAK HR FACTOR :	0.500	0.375	0.625	0.625	0.667	0.500	0.417	0.375	0.663	
	0.464		0.714		0.600		0.500			

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	4:00 PM	0	1	1	0	4	0	0	1	7
	4:15 PM	1	1	0	1	1	4	1	0	9
	4:30 PM	0	0	0	2	2	0	0	0	4
	4:45 PM	0	0	3	2	5	3	5	0	18
	5:00 PM	0	0	1	0	1	0	0	1	3
	5:15 PM	0	1	1	1	1	2	0	0	6
	5:30 PM	0	0	0	1	0	4	0	0	5
	5:45 PM	1	3	1	1	0	2	1	1	10
TOTAL VOLUMES :	EB 2	WB 6	EB 7	WB 8	NB 14	SB 15	NB 7	SB 3	TOTAL 62	
APPROACH %'s :	25.00%	75.00%	46.67%	53.33%	48.28%	51.72%	70.00%	30.00%		
PEAK HR :	05:00 PM - 06:00 PM								TOTAL	
PEAK HR VOL :	1	4	3	3	2	8	1	2	24	
PEAK HR FACTOR :	0.250	0.333	0.750	0.750	0.500	0.500	0.250	0.500	0.600	
	0.313		0.750		0.625		0.375			

National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-015
 Date: 4/11/2019

Total

NS/EW Streets:	N New Ave				N New Ave				E Hellman Ave				E Hellman Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	9	158	3	0	18	70	36	0	24	15	2	0	2	19	48	0	404
7:15 AM	40	191	1	0	27	88	74	0	24	20	19	0	9	52	69	0	614
7:30 AM	35	300	10	0	24	121	85	1	32	38	22	0	6	41	101	0	816
7:45 AM	2	255	2	0	34	127	29	0	41	35	6	0	6	50	88	0	675
8:00 AM	2	172	5	0	29	134	31	0	31	26	7	0	7	45	47	0	536
8:15 AM	5	183	6	0	24	131	35	0	31	37	7	0	11	69	29	0	568
8:30 AM	3	210	10	0	26	118	33	0	34	15	3	0	6	66	56	0	580
8:45 AM	9	202	2	0	12	133	45	1	39	36	7	0	7	63	48	0	604
TOTAL VOLUMES :	105	1671	39	0	194	922	368	2	256	222	73	0	54	405	486	0	4797
APPROACH %'s :	5.79%	92.07%	2.15%	0.00%	13.06%	62.05%	24.76%	0.13%	46.46%	40.29%	13.25%	0.00%	5.71%	42.86%	51.43%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	79	918	18	0	114	470	219	1	128	119	54	0	28	188	305	0	2641
PEAK HR FACTOR :	0.494	0.765	0.450	0.000	0.838	0.877	0.644	0.250	0.780	0.783	0.614	0.000	0.778	0.904	0.755	0.000	0.809
	0.736				0.870				0.818				0.880				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	8	145	9	0	35	194	26	0	34	61	8	0	1	36	19	0	576
4:15 PM	4	148	13	0	30	187	36	0	30	74	14	0	7	40	35	0	618
4:30 PM	3	185	10	0	39	220	39	1	30	52	5	0	4	26	28	0	642
4:45 PM	5	164	6	0	36	214	50	0	34	62	9	0	7	45	37	0	669
5:00 PM	4	178	7	0	31	230	32	0	42	85	11	0	5	40	25	0	690
5:15 PM	9	222	8	0	49	262	53	0	34	73	11	0	16	38	37	0	812
5:30 PM	8	210	8	0	35	221	39	1	43	72	11	0	3	32	30	0	713
5:45 PM	10	200	10	0	44	288	32	0	42	83	10	0	6	52	40	0	817
TOTAL VOLUMES :	51	1452	71	0	299	1816	307	2	289	562	79	0	49	309	251	0	5537
APPROACH %'s :	3.24%	92.25%	4.51%	0.00%	12.33%	74.92%	12.67%	0.08%	31.08%	60.43%	8.49%	0.00%	8.05%	50.74%	41.22%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	31	810	33	0	159	1001	156	1	161	313	43	0	30	162	132	0	3032
PEAK HR FACTOR :	0.775	0.912	0.825	0.000	0.811	0.869	0.736	0.250	0.936	0.921	0.977	0.000	0.469	0.779	0.825	0.000	0.928
	0.914				0.905				0.937				0.827				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Hellman Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-015
 Date: 4/11/2019

Bikes

NS/EW Streets:	N New Ave				N New Ave				E Hellman Ave				E Hellman Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
	7:30 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	5
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	4	0	0	0	2	0	0	0	2	0	0	0	3	0	0	11	
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%		
PEAK HR :	07:15 AM - 08:15 AM																TOTAL	
PEAK HR VOL :	0	4	0	0	0	1	0	0	0	2	0	0	0	2	0	0	9	
PEAK HR FACTOR :	0.000	0.333	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.450	
	0.333				0.250				0.500				0.500					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	4:45 PM	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	4	4	0	0	0	3	0	0	0	3	0	0	0	1	0	0	15	
	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%		
PEAK HR :	05:00 PM - 06:00 PM																TOTAL	
PEAK HR VOL :	3	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	
PEAK HR FACTOR :	0.25	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.333	
	0.292												0.250					

National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Hellman Ave
City: Monterey Park

Project ID: 19-05183-015
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N New Ave		N New Ave		E Hellman Ave		E Hellman Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	3	1	1	1	1	0	3	10
7:15 AM	2	3	0	6	5	1	5	1	23
7:30 AM	0	3	1	1	0	1	1	1	8
7:45 AM	3	0	1	2	0	1	1	1	9
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	1	5	3	10
8:30 AM	0	0	0	1	2	0	1	0	4
8:45 AM	2	0	1	4	0	0	1	0	8
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	7	9	4	16	8	5	14	9	72
	43.75%	56.25%	20.00%	80.00%	61.54%	38.46%	60.87%	39.13%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	5	6	2	9	5	3	7	3	40
PEAK HR FACTOR :	0.417	0.500	0.500	0.375	0.250	0.750	0.350	0.750	0.435
	0.550		0.458		0.333		0.417		

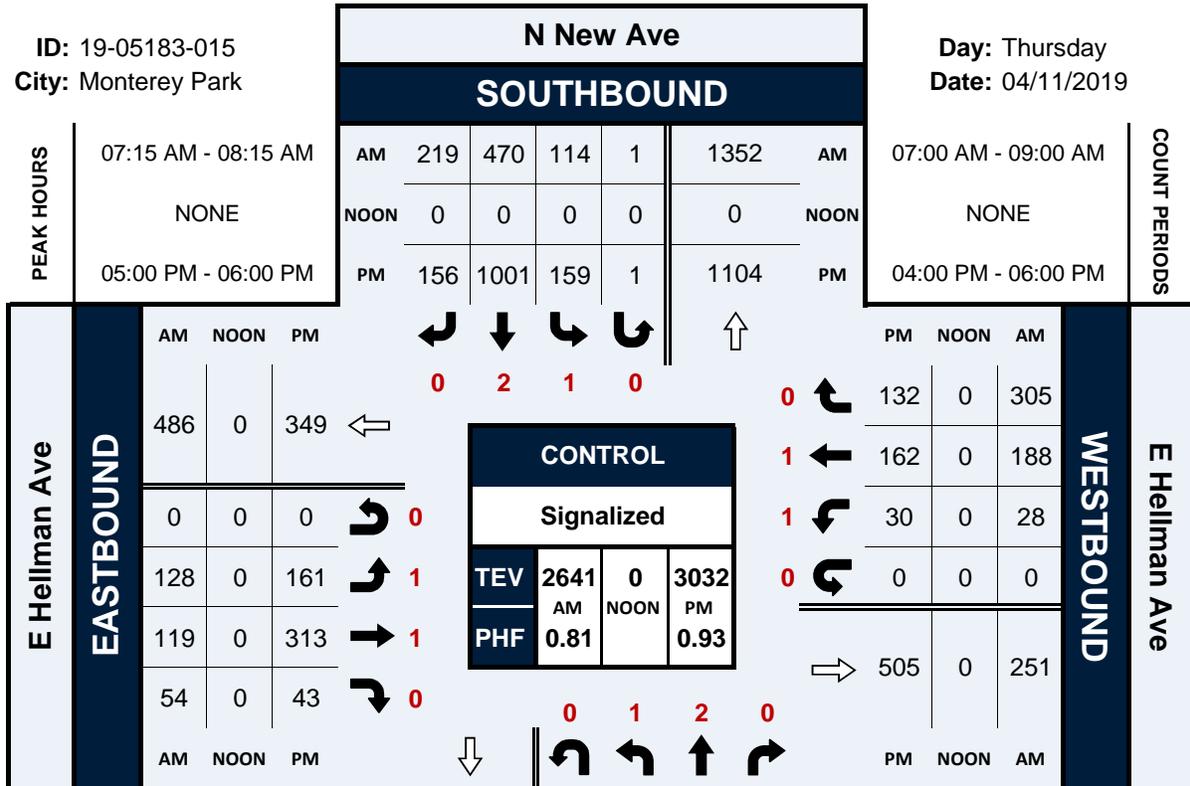
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	1	0	0	3	1	5
4:15 PM	0	1	0	1	0	1	3	0	6
4:30 PM	0	0	4	1	0	0	0	0	5
4:45 PM	1	0	1	1	0	1	1	3	8
5:00 PM	1	0	0	0	0	0	1	0	2
5:15 PM	0	1	2	0	0	0	0	0	3
5:30 PM	1	3	2	0	1	2	1	1	11
5:45 PM	0	0	2	2	2	0	4	1	11
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	3	5	11	6	3	4	13	6	51
	37.50%	62.50%	64.71%	35.29%	42.86%	57.14%	68.42%	31.58%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	4	6	2	3	2	6	2	27
PEAK HR FACTOR :	0.500	0.333	0.750	0.250	0.375	0.250	0.375	0.500	0.614
	0.375		0.500		0.417		0.400		

N New Ave & E Hellman Ave

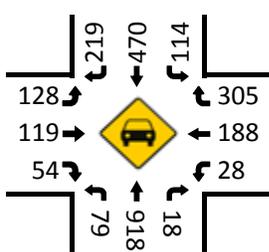
Peak Hour Turning Movement Count

ID: 19-05183-015
City: Monterey Park

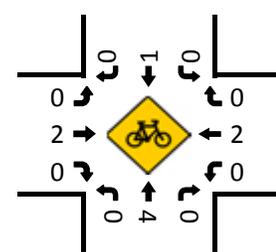
Day: Thursday
Date: 04/11/2019



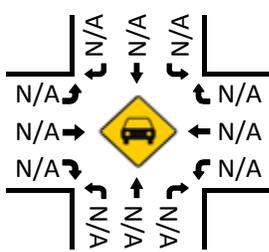
Total Vehicles (AM)



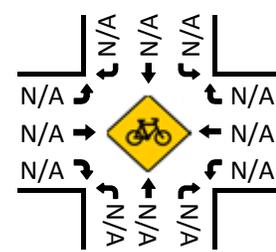
Bikes (AM)



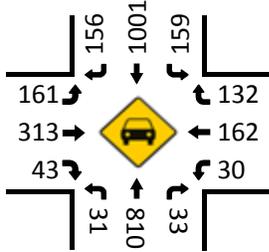
Total Vehicles (Noon)



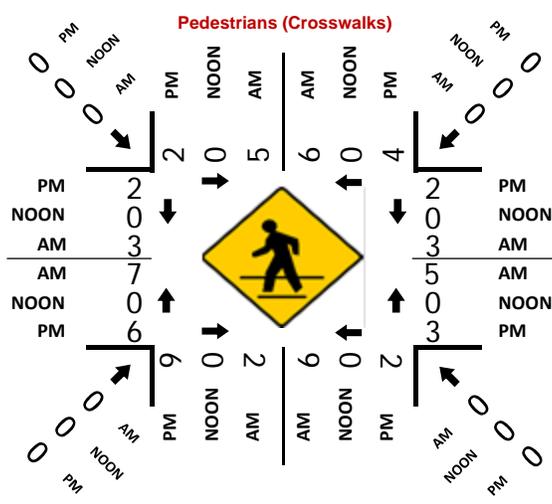
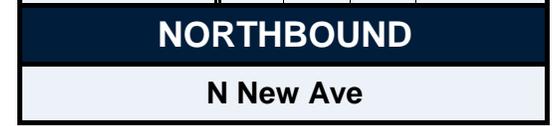
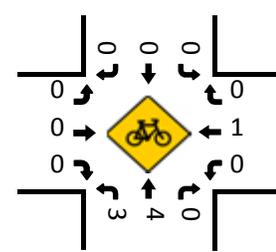
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & W Emerson Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-009
 Date: 4/11/2019

Total

NS/EW Streets:	N Atlantic Blvd				N Atlantic Blvd				W Emerson Ave				W Emerson Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	3	198	1	0	5	142	0	0	0	3	5	0	8	2	14	0	381
7:15 AM	5	250	5	0	15	161	1	0	2	5	6	0	9	1	19	0	479
7:30 AM	10	284	2	0	11	197	1	0	6	3	9	0	17	4	31	0	575
7:45 AM	12	300	8	0	15	219	3	0	4	4	14	0	16	9	23	0	627
8:00 AM	14	250	8	0	43	224	3	0	5	6	10	0	14	7	20	0	604
8:15 AM	9	227	13	0	28	236	0	0	4	8	19	0	11	9	25	0	589
8:30 AM	5	196	4	0	21	195	3	0	10	9	7	0	11	12	18	0	491
8:45 AM	9	197	10	0	41	217	5	0	10	6	10	0	11	7	26	0	549
TOTAL VOLUMES :	67	1902	51	0	179	1591	16	0	41	44	80	0	97	51	176	0	4295
APPROACH %'s :	3.32%	94.16%	2.52%	0.00%	10.02%	89.08%	0.90%	0.00%	24.85%	26.67%	48.48%	0.00%	29.94%	15.74%	54.32%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	45	1061	31	0	97	876	7	0	19	21	52	0	58	29	99	0	2395
PEAK HR FACTOR :	0.804	0.884	0.596	0.000	0.564	0.928	0.583	0.000	0.792	0.656	0.684	0.000	0.853	0.806	0.798	0.000	0.955
	0.888				0.907				0.742				0.894				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	13	238	19	0	24	181	4	0	14	16	12	0	6	13	22	0	562
4:15 PM	16	245	12	0	17	213	3	0	13	12	17	0	10	14	14	0	586
4:30 PM	14	251	19	0	31	209	4	0	14	19	16	0	5	17	19	0	618
4:45 PM	14	235	13	0	24	217	1	0	9	12	15	0	15	13	17	0	585
5:00 PM	18	272	8	0	24	197	4	0	6	11	14	0	9	14	20	0	597
5:15 PM	23	236	6	0	29	247	2	0	11	26	16	0	5	14	20	0	635
5:30 PM	25	269	11	0	35	260	1	0	11	20	16	0	13	15	18	0	694
5:45 PM	21	237	18	0	38	250	0	0	9	23	23	0	9	14	23	0	665
TOTAL VOLUMES :	144	1983	106	0	222	1774	19	0	87	139	129	0	72	114	153	0	4942
APPROACH %'s :	6.45%	88.80%	4.75%	0.00%	11.02%	88.04%	0.94%	0.00%	24.51%	39.15%	36.34%	0.00%	21.24%	33.63%	45.13%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	87	1014	43	0	126	954	7	0	37	80	69	0	36	57	81	0	2591
PEAK HR FACTOR :	0.870	0.932	0.597	0.000	0.829	0.917	0.438	0.000	0.841	0.769	0.750	0.000	0.692	0.950	0.880	0.000	0.933
	0.938				0.918				0.845				0.946				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & W Emerson Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-009
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Atlantic Blvd				N Atlantic Blvd				W Emerson Ave				W Emerson Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	0	2	0	0	0	6	0	0	0	0	0	0	0	1	0	0	9
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.417
					0.333								0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	0	2	1	0	1	5	0	0	0	1	0	0	0	1	1	0	12
APPROACH %'s :	0.00%	66.67%	33.33%	0.00%	16.67%	83.33%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	1	4	0	0	0	0	0	0	0	0	0	0	7
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.875
					0.625												

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & W Emerson Ave
City: Monterey Park

Project ID: 19-05183-009
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Atlantic Blvd		N Atlantic Blvd		W Emerson Ave		W Emerson Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	3	0	6	0	1	1	1	1	13
7:15 AM	2	3	0	0	3	0	0	0	8
7:30 AM	2	0	5	0	3	3	0	0	13
7:45 AM	2	1	3	2	1	2	1	2	14
8:00 AM	2	3	3	0	0	4	1	0	13
8:15 AM	2	2	5	3	0	3	0	7	22
8:30 AM	2	2	9	5	6	3	2	1	30
8:45 AM	0	4	2	2	5	1	0	1	15
TOTAL VOLUMES :	EB 15	WB 15	EB 33	WB 12	NB 19	SB 17	NB 5	SB 12	TOTAL 128
APPROACH %'s :	50.00%	50.00%	73.33%	26.67%	52.78%	47.22%	29.41%	70.59%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	8	6	16	5	4	12	2	9	62
PEAK HR FACTOR :	1.000	0.500	0.800	0.417	0.333	0.750	0.500	0.321	0.705
	0.700		0.656		0.667		0.393		

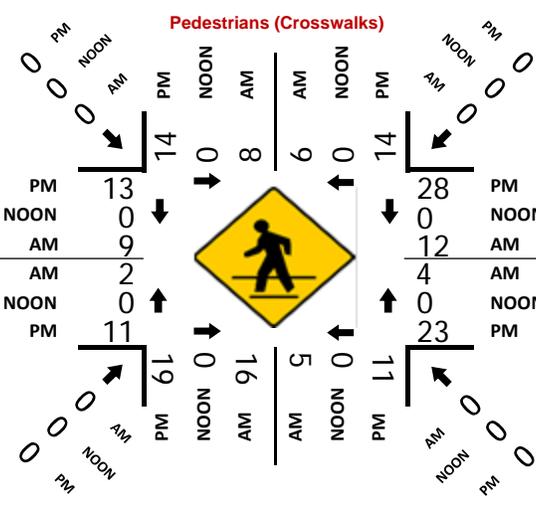
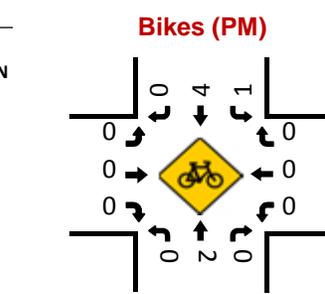
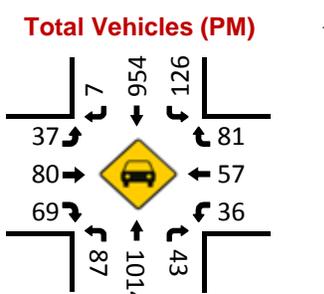
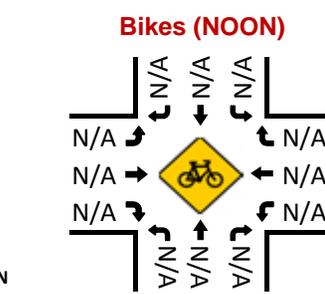
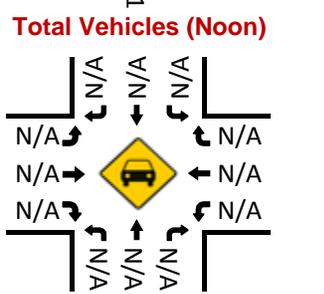
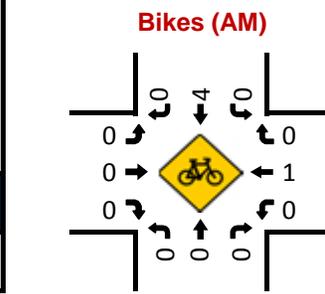
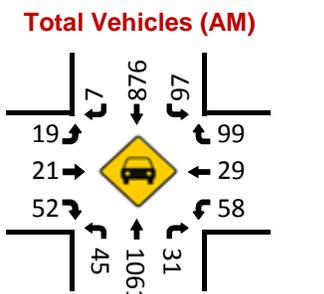
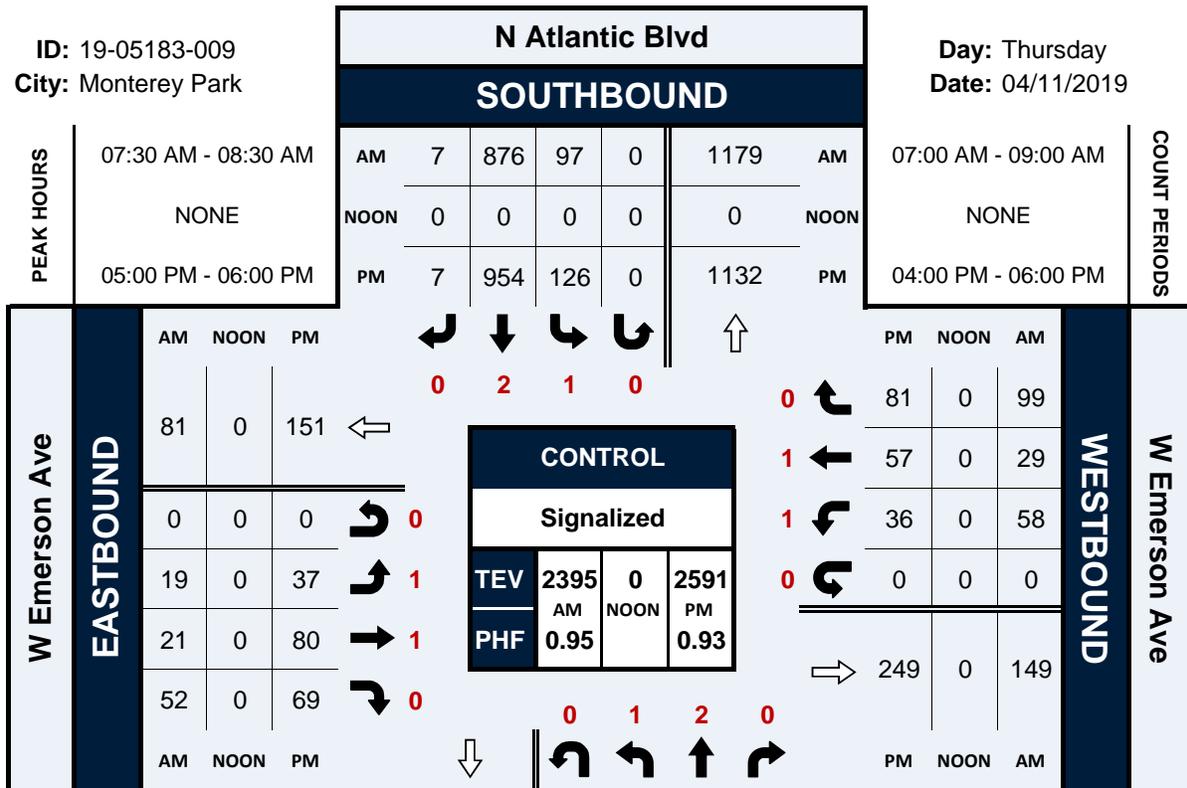
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	3	3	1	3	4	5	3	1	23
4:15 PM	3	5	7	2	6	5	1	5	34
4:30 PM	1	1	2	6	2	3	3	2	20
4:45 PM	1	3	6	3	12	10	5	2	42
5:00 PM	3	4	1	2	5	3	2	1	21
5:15 PM	3	4	1	1	3	7	4	5	28
5:30 PM	3	0	8	1	5	8	1	1	27
5:45 PM	5	6	9	7	10	10	4	6	57
TOTAL VOLUMES :	EB 22	WB 26	EB 35	WB 25	NB 47	SB 51	NB 23	SB 23	TOTAL 252
APPROACH %'s :	45.83%	54.17%	58.33%	41.67%	47.96%	52.04%	50.00%	50.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	14	14	19	11	23	28	11	13	133
PEAK HR FACTOR :	0.700	0.583	0.528	0.393	0.575	0.700	0.688	0.542	0.583
	0.636		0.469		0.638		0.600		

N Atlantic Blvd & W Emerson Ave

Peak Hour Turning Movement Count

ID: 19-05183-009
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Emerson Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-012
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				E Emerson Ave				E Emerson Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	0	167	1	0	5	79	4	0	3	9	3	0	3	8	22	0	304
7:15 AM	3	239	10	0	7	119	3	0	5	36	4	0	12	32	21	0	491
7:30 AM	3	268	12	0	1	160	7	0	9	22	5	0	16	51	28	0	582
7:45 AM	5	231	2	0	3	158	8	0	6	16	9	0	20	50	36	0	544
8:00 AM	4	259	13	0	7	154	11	0	12	35	5	0	9	26	21	0	556
8:15 AM	4	209	3	0	15	146	12	0	14	19	9	0	7	28	14	0	480
8:30 AM	4	203	8	0	14	148	6	0	14	10	6	0	6	16	25	0	460
8:45 AM	5	216	9	0	11	161	10	0	13	20	7	0	12	24	35	0	523
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	28	1792	58	0	63	1125	61	0	76	167	48	0	85	235	202	0	3940
	1.49%	95.42%	3.09%	0.00%	5.04%	90.07%	4.88%	0.00%	26.12%	57.39%	16.49%	0.00%	16.28%	45.02%	38.70%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	15	997	37	0	18	591	29	0	32	109	23	0	57	159	106	0	2173
PEAK HR FACTOR :	0.750	0.930	0.712	0.000	0.643	0.923	0.659	0.000	0.667	0.757	0.639	0.000	0.713	0.779	0.736	0.000	0.933
	0.927				0.927				0.788				0.759				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	11	187	20	0	15	248	7	0	18	29	12	0	8	18	20	0	593
4:15 PM	13	218	21	0	12	214	10	0	20	32	8	0	10	25	25	0	608
4:30 PM	8	188	25	0	12	237	7	0	19	32	14	0	5	24	9	0	580
4:45 PM	3	200	18	0	16	267	13	0	22	30	7	0	9	16	19	0	620
5:00 PM	10	201	23	1	22	253	16	2	13	46	12	0	10	16	17	0	642
5:15 PM	8	230	30	0	20	270	10	1	21	32	8	0	9	23	9	0	671
5:30 PM	2	256	24	0	20	241	11	0	18	54	8	0	9	26	17	0	686
5:45 PM	9	221	22	0	24	232	6	0	22	55	6	0	7	26	18	0	648
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	64	1701	183	1	141	1962	80	3	153	310	75	0	67	174	134	0	5048
	3.28%	87.28%	9.39%	0.05%	6.45%	89.75%	3.66%	0.14%	28.44%	57.62%	13.94%	0.00%	17.87%	46.40%	35.73%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	29	908	99	1	86	996	43	3	74	187	34	0	35	91	61	0	2647
PEAK HR FACTOR :	0.725	0.887	0.825	0.250	0.896	0.922	0.672	0.375	0.841	0.850	0.708	0.000	0.875	0.875	0.847	0.000	0.965
	0.919				0.937				0.889				0.899				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Emerson Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-012
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				E Emerson Ave				E Emerson Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
	8:00 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	3	0	0	0	4	0	0	0	2	1	0	0	1	0	0	11	
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%		
PEAK HR :	07:15 AM - 08:15 AM																TOTAL	
PEAK HR VOL :	0	2	0	0	0	2	0	0	0	2	0	0	0	1	0	0	7	
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.583	
	0.500				0.500				0.500				0.250					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
	4:45 PM	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	4
	5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	5:15 PM	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	1	4	1	0	0	1	0	0	1	3	1	0	1	1	0	0	14	
	16.67%	66.67%	16.67%	0.00%	0.00%	100.00%	0.00%	0.00%	20.00%	60.00%	20.00%	0.00%	50.00%	50.00%	0.00%	0.00%		
PEAK HR :	05:00 PM - 06:00 PM																TOTAL	
PEAK HR VOL :	1	1	1	0	0	1	0	0	0	0	1	0	1	0	0	0	6	
PEAK HR FACTOR :	0.25	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.500	
	0.375				0.250				0.250				0.250					

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Emerson Ave
City: Monterey Park

Project ID: 19-05183-012
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		E Emerson Ave		E Emerson Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	1	0	1	0	0	2	5	0	9
7:15 AM	1	1	1	5	9	1	4	0	22
7:30 AM	3	1	2	2	2	1	2	0	13
7:45 AM	2	0	0	0	1	1	3	5	12
8:00 AM	0	1	1	1	1	4	1	2	11
8:15 AM	3	3	6	2	1	4	1	0	20
8:30 AM	3	0	0	0	3	2	1	1	10
8:45 AM	5	3	2	3	1	0	3	2	19
TOTAL VOLUMES :	EB 18	WB 9	EB 13	WB 13	NB 18	SB 15	NB 20	SB 10	TOTAL 116
APPROACH %'s :	66.67%	33.33%	50.00%	50.00%	54.55%	45.45%	66.67%	33.33%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	6	3	4	8	13	7	10	7	58
PEAK HR FACTOR :	0.500	0.750	0.500	0.400	0.361	0.438	0.625	0.350	0.659
	0.563		0.500		0.500		0.531		

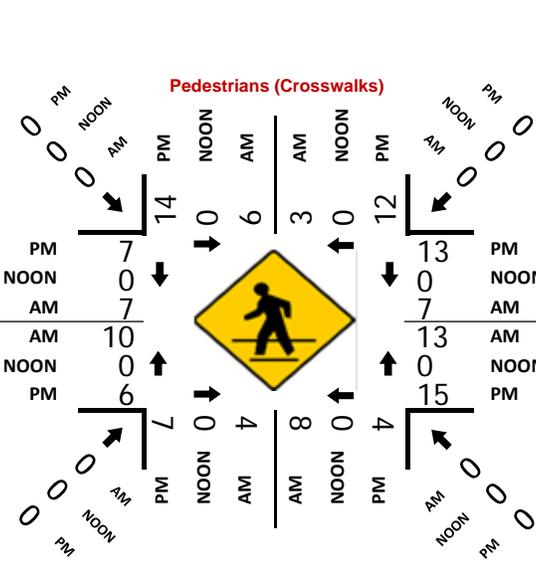
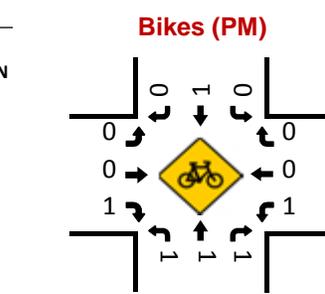
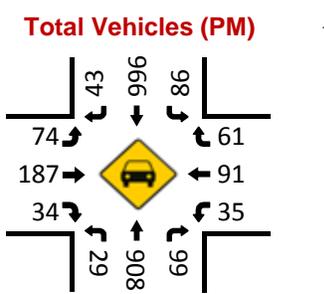
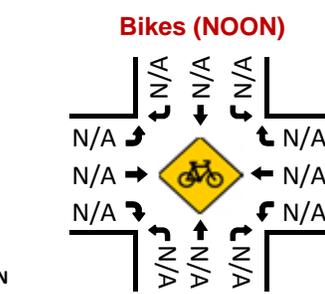
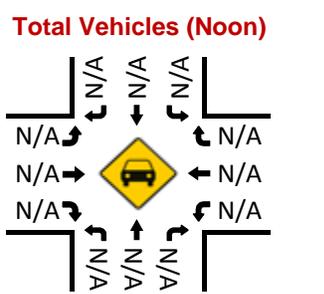
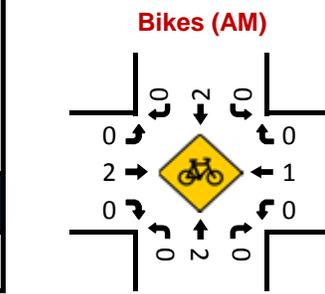
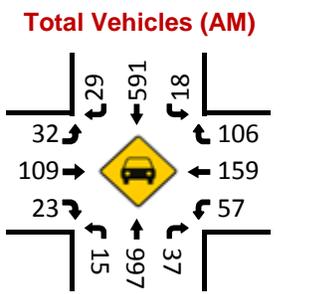
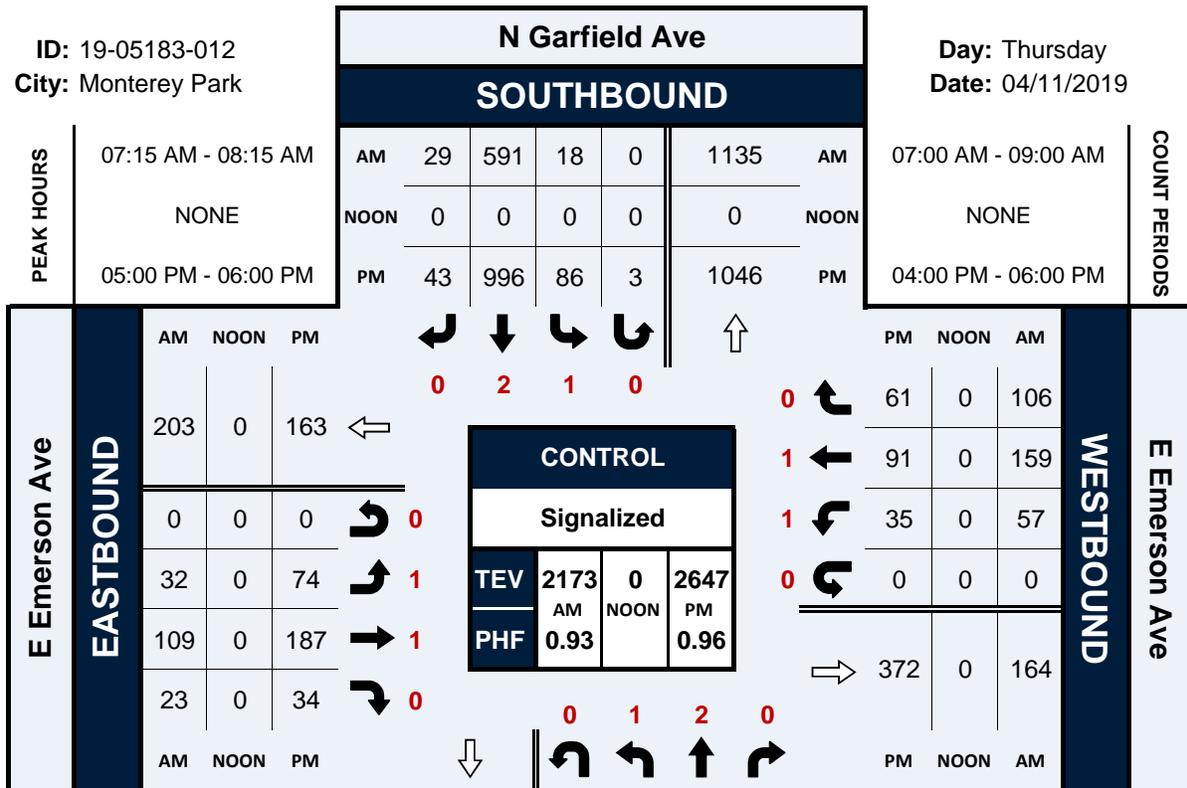
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	12	3	1	0	2	5	3	2	28
4:15 PM	8	3	10	1	4	4	0	3	33
4:30 PM	5	9	1	3	2	5	0	2	27
4:45 PM	6	5	1	0	4	2	1	0	19
5:00 PM	2	4	2	1	7	3	0	3	22
5:15 PM	2	2	1	0	3	3	0	0	11
5:30 PM	6	1	2	1	3	1	3	4	21
5:45 PM	4	5	2	2	2	6	3	0	24
TOTAL VOLUMES :	EB 45	WB 32	EB 20	WB 8	NB 27	SB 29	NB 10	SB 14	TOTAL 185
APPROACH %'s :	58.44%	41.56%	71.43%	28.57%	48.21%	51.79%	41.67%	58.33%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	14	12	7	4	15	13	6	7	78
PEAK HR FACTOR :	0.583	0.600	0.875	0.500	0.536	0.542	0.500	0.438	0.813
	0.722		0.688		0.700		0.464		

N Garfield Ave & E Emerson Ave

Peak Hour Turning Movement Count

ID: 19-05183-012
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-010
 Date: 4/11/2019

Total

NS/EW Streets:	N Atlantic Blvd				N Atlantic Blvd				Garvey Ave				Garvey Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	28	136	9	1	6	86	65	0	36	51	10	0	21	111	23	0	583
7:15 AM	42	185	18	0	8	99	75	0	48	71	19	0	23	128	26	0	742
7:30 AM	53	214	12	0	13	113	86	0	85	81	32	0	33	159	33	0	914
7:45 AM	51	212	15	0	13	130	100	0	64	87	46	0	39	190	26	0	973
8:00 AM	40	174	21	0	21	145	80	0	88	104	51	0	38	158	29	0	949
8:15 AM	50	175	13	0	18	169	78	0	45	65	26	0	34	161	24	0	858
8:30 AM	31	136	18	0	13	143	75	0	52	58	26	0	45	101	29	0	727
8:45 AM	55	156	22	0	23	140	61	0	35	73	28	0	49	119	25	0	786
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	350	1388	128	1	115	1025	620	0	453	590	238	0	282	1127	215	0	6532
	18.75%	74.34%	6.86%	0.05%	6.53%	58.24%	35.23%	0.00%	35.36%	46.06%	18.58%	0.00%	17.36%	69.40%	13.24%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	194	775	61	0	65	557	344	0	282	337	155	0	144	668	112	0	3694
PEAK HR FACTOR :	0.915	0.905	0.726	0.000	0.774	0.824	0.860	0.000	0.801	0.810	0.760	0.000	0.923	0.879	0.848	0.000	0.949
	0.923				0.911				0.796				0.906				
PM	1	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	28	180	39	0	43	131	30	0	80	214	60	0	27	54	25	0	911
4:15 PM	23	166	46	0	37	137	55	0	77	241	55	0	34	62	30	0	963
4:30 PM	36	194	48	0	41	163	41	0	73	220	51	0	27	53	32	0	979
4:45 PM	37	136	35	0	34	158	43	0	68	257	51	0	40	74	38	0	971
5:00 PM	35	179	52	0	28	152	40	0	77	227	38	0	37	59	48	0	972
5:15 PM	42	205	33	0	52	170	45	0	78	242	40	0	39	62	32	0	1040
5:30 PM	27	184	38	0	39	175	60	0	82	255	46	0	46	78	40	0	1070
5:45 PM	36	174	46	0	50	212	47	0	81	203	30	0	50	69	27	0	1025
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	264	1418	337	0	324	1298	361	0	616	1859	371	0	300	511	272	0	7931
	13.08%	70.23%	16.69%	0.00%	16.34%	65.46%	18.20%	0.00%	21.64%	65.32%	13.04%	0.00%	27.70%	47.18%	25.12%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	140	742	169	0	169	709	192	0	318	927	154	0	172	268	147	0	4107
PEAK HR FACTOR :	0.833	0.905	0.813	0.000	0.813	0.836	0.800	0.000	0.970	0.909	0.837	0.000	0.860	0.859	0.766	0.000	0.960
	0.938				0.866				0.913				0.895				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-010
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Atlantic Blvd				N Atlantic Blvd				Garvey Ave				Garvey Ave				TOTAL
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	1 NR	0 NU	2 SL	2 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	2	1	0	0	0	1	0	1	2	2	0	9
					0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	20.00%	40.00%	40.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.500
						0.250								0.375			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	2 SL	2 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	2 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	2	0	0	1	0	0	0	1	0	0	0	4
5:30 PM	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
5:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	2	1	0	0	3	2	0	1	3	0	0	1	1	0	0	16
	40.00%	40.00%	20.00%	0.00%	0.00%	60.00%	40.00%	0.00%	25.00%	75.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	2	1	0	0	3	1	0	1	2	0	0	1	1	0	0	14
PEAK HR FACTOR :	0.25	0.250	0.250	0.000	0.000	0.375	0.250	0.000	0.250	0.500	0.000	0.000	0.250	0.250	0.000	0.000	0.875
						0.500				0.750				0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Atlantic Blvd & Garvey Ave
City: Monterey Park

Project ID: 19-05183-010
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Atlantic Blvd		N Atlantic Blvd		Garvey Ave		Garvey Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	3	2	9	6	2	4	9	1	36
7:15 AM	5	0	2	0	2	3	3	1	16
7:30 AM	6	2	15	4	16	4	6	0	53
7:45 AM	4	4	7	0	2	3	4	1	25
8:00 AM	2	7	11	6	7	4	7	6	50
8:15 AM	3	1	3	1	2	2	10	2	24
8:30 AM	3	4	9	2	2	3	7	2	32
8:45 AM	7	11	12	2	16	4	13	6	71
TOTAL VOLUMES :	EB 33	WB 31	EB 68	WB 21	NB 49	SB 27	NB 59	SB 19	TOTAL 307
APPROACH %'s :	51.56%	48.44%	76.40%	23.60%	64.47%	35.53%	75.64%	24.36%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	15	14	36	11	27	13	27	9	152
PEAK HR FACTOR :	0.625	0.500	0.600	0.458	0.422	0.813	0.675	0.375	0.717
	0.806		0.618		0.500		0.692		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	4	3	5	4	2	11	1	4	34
4:15 PM	3	8	5	5	7	1	2	5	36
4:30 PM	8	12	8	2	3	2	6	12	53
4:45 PM	8	3	3	4	5	6	6	6	41
5:00 PM	7	7	7	3	9	7	7	2	49
5:15 PM	1	2	9	7	5	2	2	13	41
5:30 PM	1	3	9	8	4	7	1	3	36
5:45 PM	6	7	10	2	10	10	3	2	50
TOTAL VOLUMES :	EB 38	WB 45	EB 56	WB 35	NB 45	SB 46	NB 28	SB 47	TOTAL 340
APPROACH %'s :	45.78%	54.22%	61.54%	38.46%	49.45%	50.55%	37.33%	62.67%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	15	19	35	20	28	26	13	20	176
PEAK HR FACTOR :	0.536	0.679	0.875	0.625	0.700	0.650	0.464	0.385	0.880
	0.607		0.809		0.675		0.550		

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-013
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				E Garvey Ave				E Garvey Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	18	142	2	0	11	57	10	0	9	45	6	0	15	111	19	0	445
7:15 AM	17	227	9	0	9	102	16	0	23	85	3	0	22	173	24	0	710
7:30 AM	24	181	9	0	17	127	16	0	33	77	15	0	34	204	34	0	771
7:45 AM	14	194	10	0	17	134	23	0	32	75	14	0	24	215	28	0	780
8:00 AM	22	202	10	0	25	121	14	0	36	91	19	0	26	160	27	0	753
8:15 AM	10	180	9	0	15	121	11	0	25	68	7	0	20	140	32	0	638
8:30 AM	18	168	10	0	19	88	18	0	17	61	11	0	25	171	36	0	642
8:45 AM	20	193	8	0	21	88	11	0	31	74	12	0	33	123	34	0	648
TOTAL VOLUMES :	143	1487	67	0	134	838	119	0	206	576	87	0	199	1297	234	0	5387
APPROACH %'s :	8.43%	87.63%	3.95%	0.00%	12.28%	76.81%	10.91%	0.00%	23.71%	66.28%	10.01%	0.00%	11.50%	74.97%	13.53%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	77	804	38	0	68	484	69	0	124	328	51	0	106	752	113	0	3014
PEAK HR FACTOR :	0.802	0.885	0.950	0.000	0.680	0.903	0.750	0.000	0.861	0.901	0.671	0.000	0.779	0.874	0.831	0.000	0.966
	0.908				0.892				0.861				0.892				
PM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	17	129	20	0	40	156	23	0	35	190	19	0	32	69	29	0	759
4:15 PM	21	161	18	0	36	177	22	0	36	173	26	0	25	80	38	0	813
4:30 PM	18	127	18	0	35	181	17	0	37	227	31	0	19	98	29	0	837
4:45 PM	13	138	16	0	27	188	18	0	35	177	16	0	31	93	23	0	775
5:00 PM	18	136	12	0	46	208	12	0	36	232	18	0	19	100	30	0	867
5:15 PM	19	172	23	0	41	208	23	0	37	194	15	0	31	103	33	0	899
5:30 PM	18	173	18	0	44	208	11	0	22	244	20	0	31	116	31	0	936
5:45 PM	16	170	29	0	36	162	20	0	35	199	13	0	32	113	17	0	842
TOTAL VOLUMES :	140	1206	154	0	305	1488	146	0	273	1636	158	0	220	772	230	0	6728
APPROACH %'s :	9.33%	80.40%	10.27%	0.00%	15.73%	76.74%	7.53%	0.00%	13.21%	79.15%	7.64%	0.00%	18.00%	63.18%	18.82%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	71	651	82	0	167	786	66	0	130	869	66	0	113	432	111	0	3544
PEAK HR FACTOR :	0.934	0.941	0.707	0.000	0.908	0.945	0.717	0.000	0.878	0.890	0.825	0.000	0.883	0.931	0.841	0.000	0.947
	0.935				0.937				0.931				0.921				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-013
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				E Garvey Ave				E Garvey Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	7:15 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
	7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	3	1	0	6
	8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
	8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	1	1	0	0	4	1	0	0	5	0	0	0	5	2	0	19	
	0.00%	50.00%	50.00%	0.00%	0.00%	80.00%	20.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	71.43%	28.57%	0.00%		
PEAK HR :	07:15 AM - 08:15 AM																TOTAL	
PEAK HR VOL :	0	0	1	0	0	1	1	0	0	3	0	0	0	3	2	0	11	
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.500	0.000	0.458	
	0.250				0.500				0.375				0.313					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	1	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	5
	4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	4
	5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
	5:15 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	4
	5:30 PM	0	0	0	0	1	1	1	0	0	1	0	0	0	1	3	0	8
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	2	1	0	0	1	3	1	0	1	7	1	0	0	5	5	0	27	
	66.67%	33.33%	0.00%	0.00%	20.00%	60.00%	20.00%	0.00%	11.11%	77.78%	11.11%	0.00%	0.00%	50.00%	50.00%	0.00%		
PEAK HR :	05:00 PM - 06:00 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	1	2	1	0	0	5	0	0	0	3	4	0	16	
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.500	0.250	0.000	0.000	0.625	0.000	0.000	0.000	0.750	0.333	0.000	0.500	
	0.000				0.333				0.625				0.438					

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & E Garvey Ave
City: Monterey Park

Project ID: 19-05183-013
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		E Garvey Ave		E Garvey Ave			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	8	7	2	0	6	2	1	7	33
	7:15 AM	1	4	5	0	8	3	4	4	29
	7:30 AM	5	23	6	8	8	2	7	3	62
	7:45 AM	6	9	1	8	6	7	10	0	47
	8:00 AM	2	14	7	4	8	5	7	7	54
	8:15 AM	12	3	3	6	9	10	3	1	47
	8:30 AM	12	10	8	8	7	1	8	15	69
	8:45 AM	5	13	8	6	10	2	2	15	61
TOTAL VOLUMES :	EB 51	WB 83	EB 40	WB 40	NB 62	SB 32	NB 42	SB 52	TOTAL 402	
APPROACH %'s :	38.06%	61.94%	50.00%	50.00%	65.96%	34.04%	44.68%	55.32%		
PEAK HR :	07:15 AM - 08:15 AM								TOTAL	
PEAK HR VOL :	14	50	19	20	30	17	28	14	192	
PEAK HR FACTOR :	0.583	0.543	0.679	0.625	0.938	0.607	0.700	0.500	0.774	
	0.571		0.696		0.904		0.750			

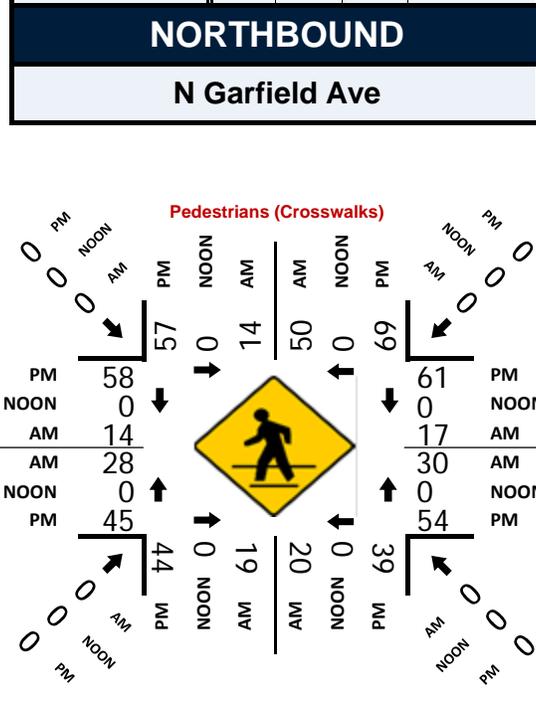
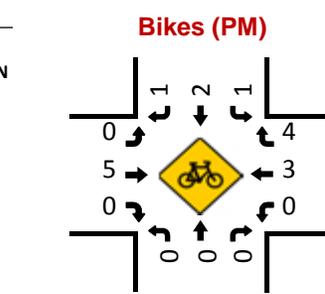
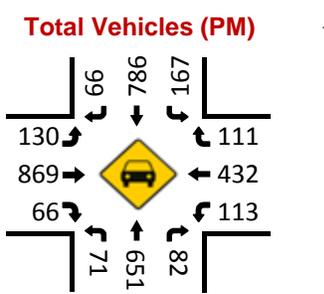
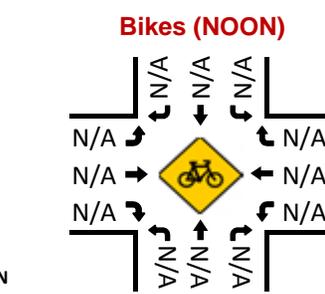
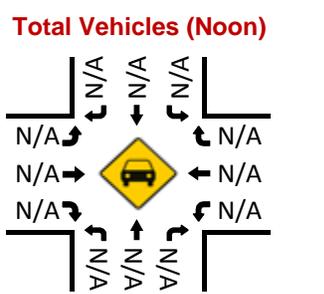
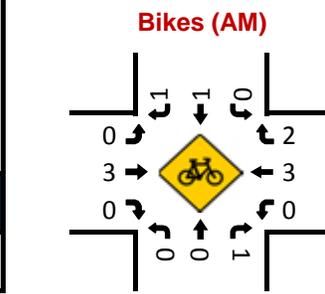
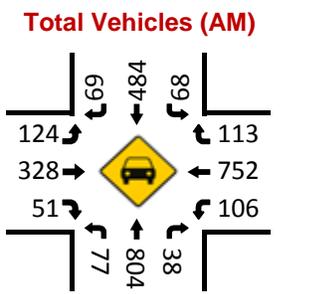
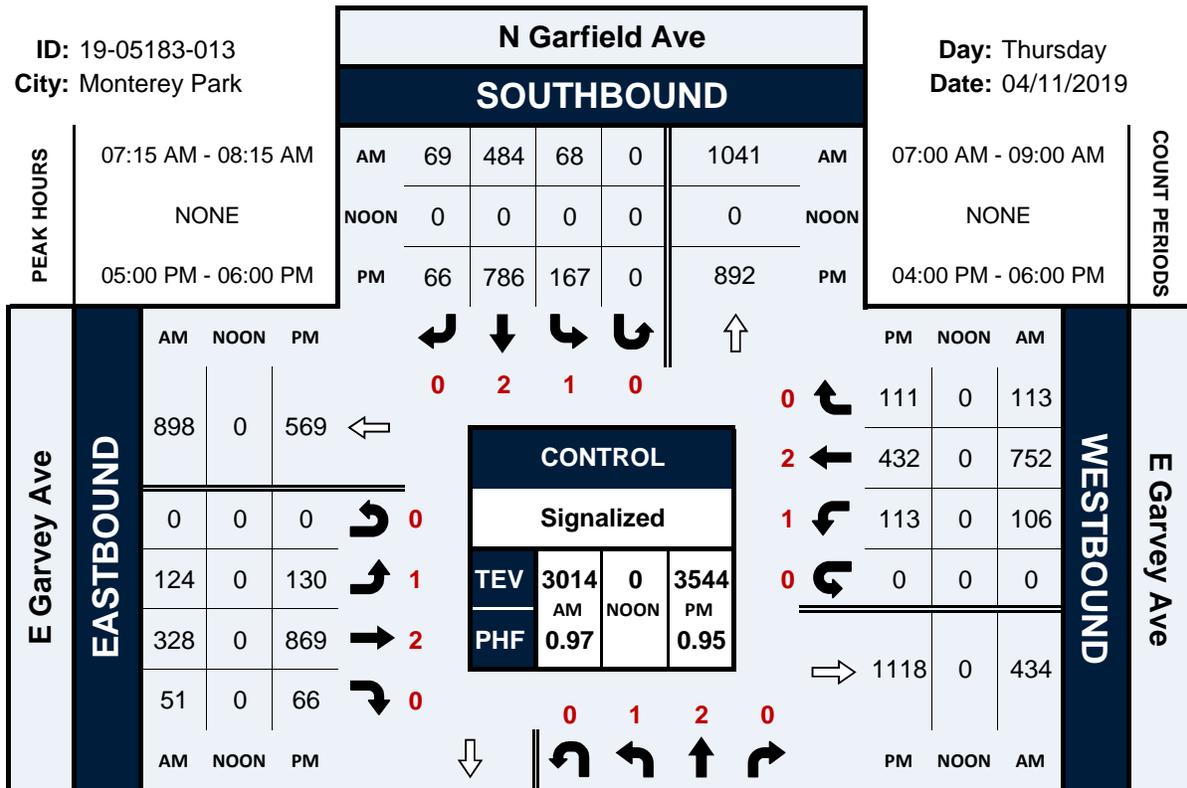
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	4:00 PM	8	20	19	12	9	4	18	20	110
	4:15 PM	28	34	23	12	13	18	20	23	171
	4:30 PM	19	8	10	8	12	12	18	15	102
	4:45 PM	16	8	12	10	12	9	22	14	103
	5:00 PM	15	30	11	15	18	15	6	14	124
	5:15 PM	15	10	8	11	7	27	12	15	105
	5:30 PM	17	17	12	9	10	6	10	11	92
	5:45 PM	10	12	13	4	19	13	17	18	106
TOTAL VOLUMES :	EB 128	WB 139	EB 108	WB 81	NB 100	SB 104	NB 123	SB 130	TOTAL 913	
APPROACH %'s :	47.94%	52.06%	57.14%	42.86%	49.02%	50.98%	48.62%	51.38%		
PEAK HR :	05:00 PM - 06:00 PM								TOTAL	
PEAK HR VOL :	57	69	44	39	54	61	45	58	427	
PEAK HR FACTOR :	0.838	0.575	0.846	0.650	0.711	0.565	0.662	0.806	0.861	
	0.700		0.798		0.846		0.736			

N Garfield Ave & E Garvey Ave

Peak Hour Turning Movement Count

ID: 19-05183-013
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-016
 Date: 4/11/2019

Total

NS/EW Streets:	N New Ave				N New Ave				E Garvey Ave				E Garvey Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	10	80	9	0	10	24	17	0	18	48	2	0	1	92	38	0	349
7:15 AM	11	113	6	0	23	50	28	0	15	53	6	0	11	143	41	0	500
7:30 AM	8	127	6	0	35	80	37	0	33	111	3	0	4	164	57	0	665
7:45 AM	7	100	13	0	31	80	35	0	24	106	2	0	4	171	38	1	612
8:00 AM	7	65	13	0	40	53	28	0	24	118	11	0	9	132	24	0	524
8:15 AM	20	88	11	0	44	72	32	0	31	98	7	0	10	179	28	0	620
8:30 AM	13	98	14	0	30	45	31	0	30	107	8	0	11	185	33	0	605
8:45 AM	12	95	13	0	30	47	43	0	24	88	6	0	7	151	27	1	544
TOTAL VOLUMES :	88	766	85	0	243	451	251	0	199	729	45	0	57	1217	286	2	4419
APPROACH %'s :	9.37%	81.58%	9.05%	0.00%	25.71%	47.72%	26.56%	0.00%	20.45%	74.92%	4.62%	0.00%	3.65%	77.91%	18.31%	0.13%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	42	380	43	0	150	285	132	0	112	433	23	0	27	646	147	1	2421
PEAK HR FACTOR :	0.525	0.748	0.827	0.000	0.852	0.891	0.892	0.000	0.848	0.917	0.523	0.000	0.675	0.902	0.645	0.250	0.910
			0.824				0.933				0.928				0.912		
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:00 PM	8	61	25	0	43	81	45	0	24	188	16	0	14	110	34	0	649
4:15 PM	10	87	16	0	37	107	33	0	19	181	11	0	15	127	26	0	669
4:30 PM	15	81	24	0	42	93	45	0	34	201	10	0	13	135	39	0	732
4:45 PM	17	65	21	0	51	120	40	0	28	176	15	0	15	137	29	1	715
5:00 PM	13	76	21	0	39	119	46	0	36	195	24	0	12	148	35	0	764
5:15 PM	19	112	22	0	52	128	51	0	31	211	26	0	11	159	41	0	863
5:30 PM	13	84	23	0	54	111	36	0	32	209	23	0	24	151	40	0	800
5:45 PM	11	90	23	0	47	141	55	0	36	206	21	0	18	151	37	0	836
TOTAL VOLUMES :	106	656	175	0	365	900	351	0	240	1567	146	0	122	1118	281	1	6028
APPROACH %'s :	11.31%	70.01%	18.68%	0.00%	22.59%	55.69%	21.72%	0.00%	12.29%	80.24%	7.48%	0.00%	8.02%	73.46%	18.46%	0.07%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	56	362	89	0	192	499	188	0	135	821	94	0	65	609	153	0	3263
PEAK HR FACTOR :	0.737	0.808	0.967	0.000	0.889	0.885	0.855	0.000	0.938	0.973	0.904	0.000	0.677	0.958	0.933	0.000	0.945
			0.828				0.904				0.979				0.962		

National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Garvey Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-016
 Date: 4/11/2019

Bikes

NS/EW Streets:	N New Ave				N New Ave				E Garvey Ave				E Garvey Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	1	0	0	0	4	0	0	0	1	0	0	6
7:15 AM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	1	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	3	1	0	1	2	0	0	0	6	0	0	1	6	2	0	22
APPROACH %'s :	0.00%	75.00%	25.00%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	11.11%	66.67%	22.22%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	1	3	1	0	6
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.375	0.250	0.000	0.375
	0.250				0.250				0.625				0.333				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	2	1	0	0	0	0	0	0	2	0	0	0	2	1	0	8
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:45 PM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	4	1	0	0	3	0	0	0	8	0	0	0	4	1	0	21
APPROACH %'s :	0.00%	80.00%	20.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	4	1	0	0	1	0	0	0	5	0	0	0	3	1	0	15
PEAK HR FACTOR :	0.00	0.500	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.375	0.250	0.000	0.469
	0.417				0.250				0.625				0.333				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N New Ave & E Garvey Ave
City: Monterey Park

Project ID: 19-05183-016
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N New Ave		N New Ave		E Garvey Ave		E Garvey Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	2	2	1	0	5	1	1	1	13
7:15 AM	1	2	3	2	8	2	0	0	18
7:30 AM	5	0	2	3	7	2	1	1	21
7:45 AM	2	2	1	1	1	0	3	0	10
8:00 AM	2	4	3	0	4	0	0	2	15
8:15 AM	1	1	1	1	3	0	3	2	12
8:30 AM	3	2	3	4	8	0	2	5	27
8:45 AM	5	0	1	3	5	3	3	3	23
TOTAL VOLUMES :	EB 21	WB 13	EB 15	WB 14	NB 41	SB 8	NB 13	SB 14	TOTAL 139
APPROACH %'s :	61.76%	38.24%	51.72%	48.28%	83.67%	16.33%	48.15%	51.85%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL 58
PEAK HR VOL :	10	7	7	5	15	2	7	5	
PEAK HR FACTOR :	0.500	0.438	0.583	0.417	0.536	0.250	0.583	0.625	0.690
	0.708		0.600		0.472		0.600		

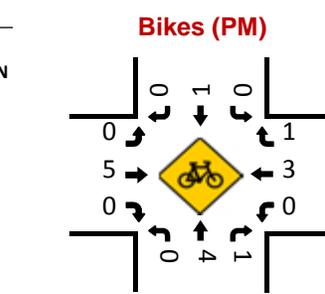
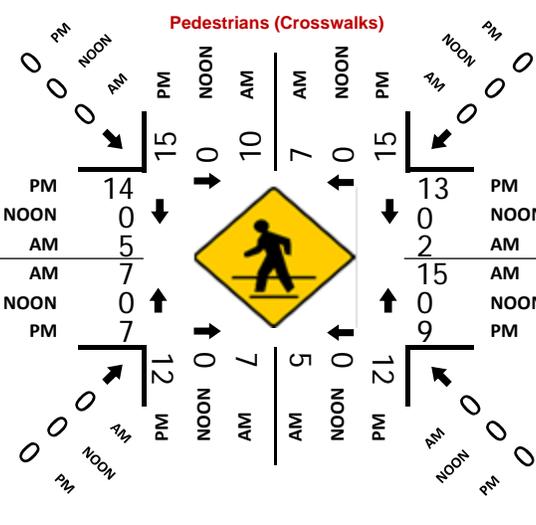
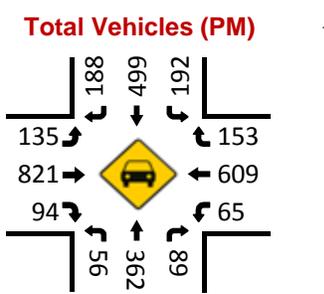
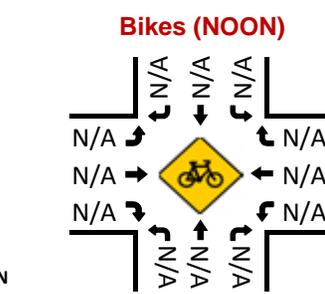
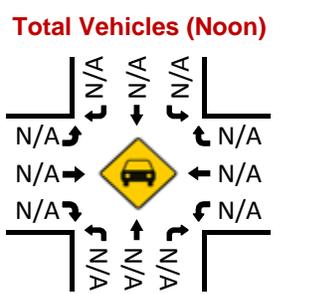
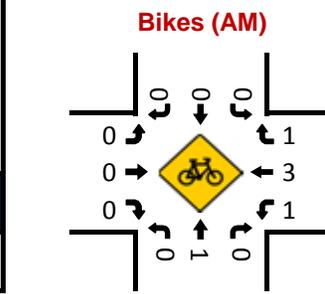
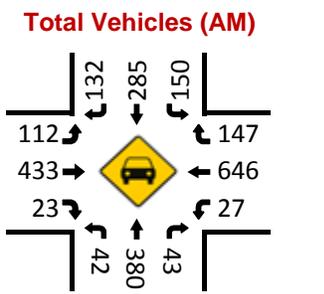
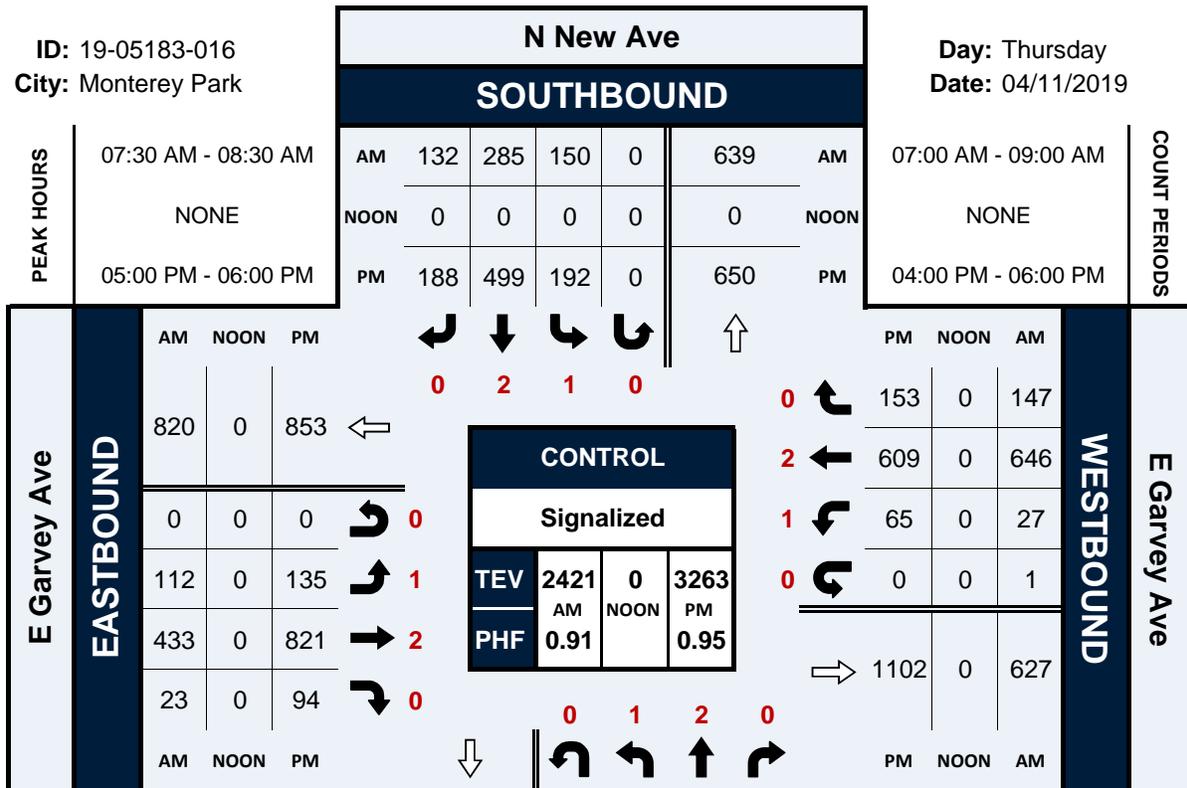
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	6	1	1	4	4	6	4	1	27
4:15 PM	2	5	5	2	7	4	2	2	29
4:30 PM	3	1	1	2	1	3	0	1	12
4:45 PM	5	4	1	0	5	1	5	4	25
5:00 PM	4	3	0	4	0	5	3	3	22
5:15 PM	2	3	3	1	1	3	0	4	17
5:30 PM	5	4	3	5	4	3	3	5	32
5:45 PM	4	5	6	2	4	2	1	2	26
TOTAL VOLUMES :	EB 31	WB 26	EB 20	WB 20	NB 26	SB 27	NB 18	SB 22	TOTAL 190
APPROACH %'s :	54.39%	45.61%	50.00%	50.00%	49.06%	50.94%	45.00%	55.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL 97
PEAK HR VOL :	15	15	12	12	9	13	7	14	
PEAK HR FACTOR :	0.750	0.750	0.500	0.600	0.563	0.650	0.583	0.700	0.758
	0.833		0.750		0.786		0.656		

N New Ave & E Garvey Ave

Peak Hour Turning Movement Count

ID: 19-05183-016
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Ramona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-001
 Date: 4/11/2019

Total

NS/EW Streets:	Corporate Center Dr				Corporate Center Dr				Ramona Blvd				Ramona Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0.5 NL	0 NT	1.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	197	0	2	0	0	0	0	0	0	10	22	1	31	150	0	0	413
7:15 AM	253	0	2	0	0	0	0	0	0	15	29	0	41	156	0	0	496
7:30 AM	244	0	3	0	0	0	0	0	0	15	43	0	56	151	0	0	512
7:45 AM	304	0	8	0	0	0	0	0	0	18	40	0	61	160	0	0	591
8:00 AM	291	0	9	0	0	0	0	0	0	14	30	0	68	198	0	0	610
8:15 AM	264	0	9	0	0	0	0	0	0	16	28	0	54	162	0	0	533
8:30 AM	249	0	6	0	0	0	0	0	0	18	25	0	39	147	0	0	484
8:45 AM	266	0	8	0	0	0	0	0	0	17	34	0	46	131	0	0	502
TOTAL VOLUMES :	2068	0	47	0	0	0	0	0	0	123	251	1	396	1255	0	0	4141
APPROACH %'s :	97.78%	0.00%	2.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	32.80%	66.93%	0.27%	23.99%	76.01%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1103	0	29	0	0	0	0	0	0	63	141	0	239	671	0	0	2246
PEAK HR FACTOR :	0.907	0.000	0.806	0.000	0.000	0.000	0.000	0.000	0.000	0.875	0.820	0.000	0.879	0.847	0.000	0.000	0.920
	0.907								0.879				0.855				
PM	0.5 NL	0 NT	1.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	164	0	52	0	0	0	0	0	0	69	43	0	38	45	0	0	411
4:15 PM	122	0	30	0	0	0	0	0	0	74	48	0	25	54	0	0	353
4:30 PM	133	0	47	0	0	0	0	0	0	91	71	0	24	46	0	0	412
4:45 PM	109	0	45	0	0	0	0	0	0	83	63	0	29	44	0	0	373
5:00 PM	155	0	80	0	0	0	0	0	0	99	63	0	40	40	0	0	477
5:15 PM	169	0	51	0	0	0	0	0	0	90	53	0	42	49	0	0	454
5:30 PM	153	0	58	0	0	0	0	0	0	67	41	0	35	56	0	0	410
5:45 PM	164	0	54	0	0	0	0	0	0	62	61	0	32	49	0	0	422
TOTAL VOLUMES :	1169	0	417	0	0	0	0	0	0	635	443	0	265	383	0	0	3312
APPROACH %'s :	73.71%	0.00%	26.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	58.91%	41.09%	0.00%	40.90%	59.10%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	641	0	243	0	0	0	0	0	0	318	218	0	149	194	0	0	1763
PEAK HR FACTOR :	0.948	0.000	0.759	0.000	0.000	0.000	0.000	0.000	0.000	0.803	0.865	0.000	0.887	0.866	0.000	0.000	0.924
	0.940								0.827				0.942				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Ramona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-001
 Date: 4/11/2019

Bikes

NS/EW Streets:	Corporate Center Dr				Corporate Center Dr				Ramona Blvd				Ramona Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250

National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Ramona Blvd
City: Monterey Park

Project ID: 19-05183-001
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Corporate Center Dr		Corporate Center Dr		Ramona Blvd		Ramona Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	1	0	0	0	0	1
APPROACH %'s :			0.00%	100.00%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :				0.250					0.250

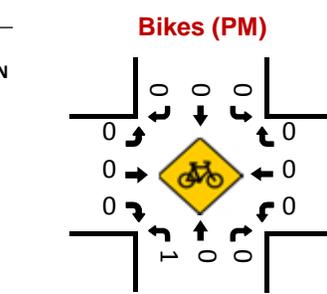
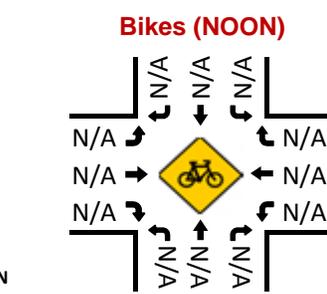
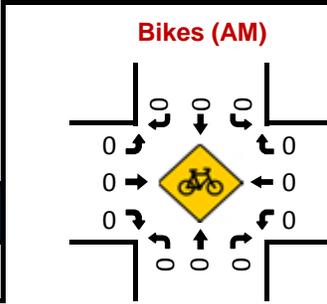
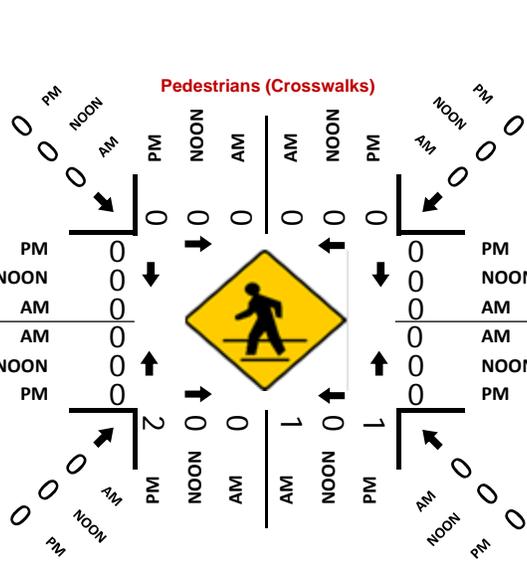
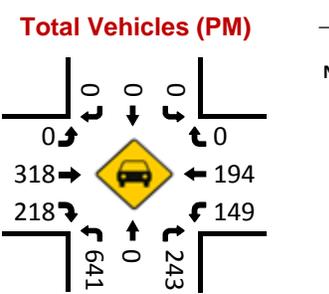
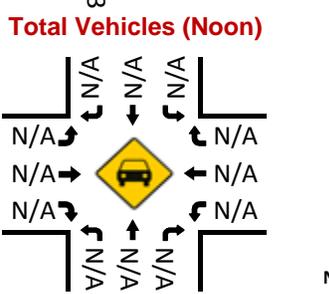
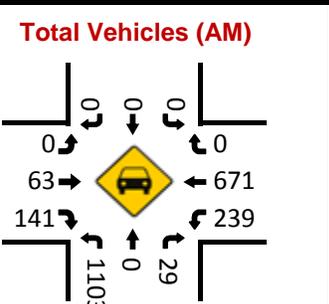
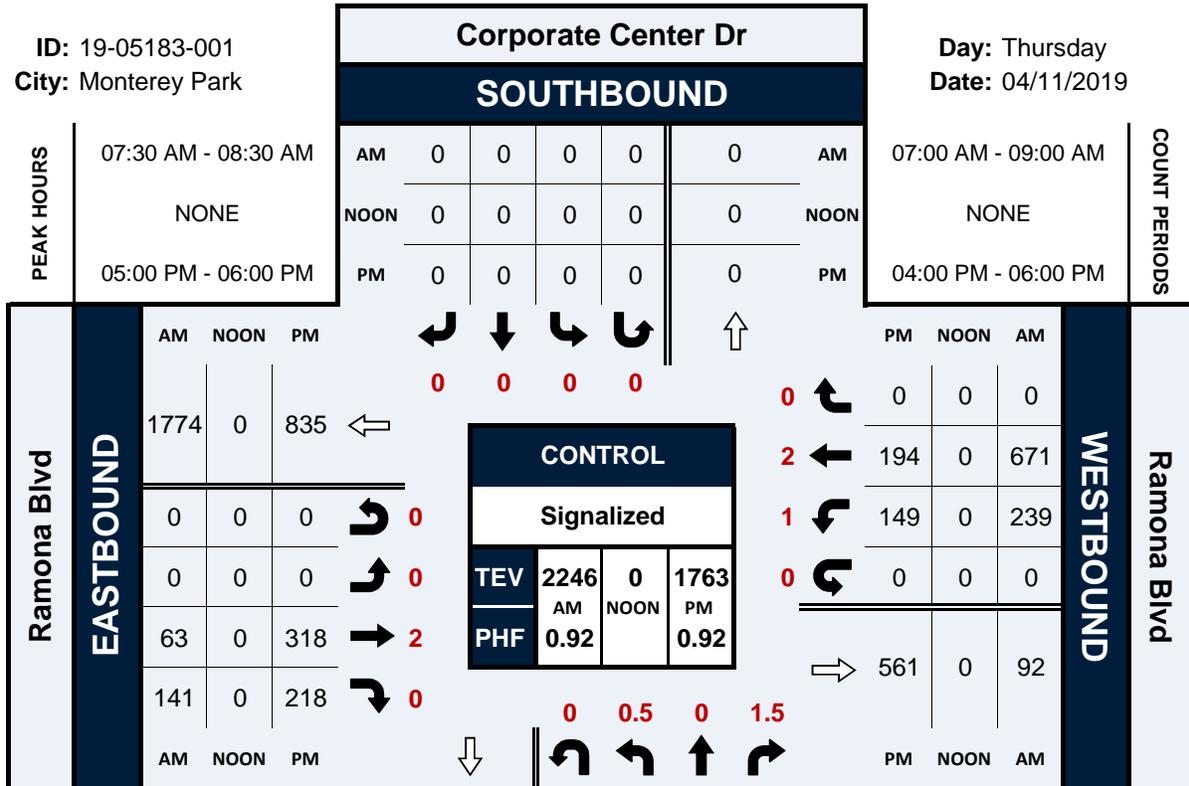
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES :	0	0	3	1	0	0	0	0	4
APPROACH %'s :			75.00%	25.00%					
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	2	1	0	0	0	0	3
PEAK HR FACTOR :			0.500	0.250					0.750

Corporate Center Dr & Ramona Blvd

Peak Hour Turning Movement Count

ID: 19-05183-001
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Off-Ramp & Ramona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-002
 Date: 4/11/2019

Total

NS/EW Streets:	I-10 SB Off-Ramp				I-10 SB Off-Ramp				Ramona Blvd				Ramona Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	12	0	27	0	0	12	0	0	0	151	0	0	202
7:15 AM	0	0	0	0	9	0	39	0	0	17	0	0	0	161	0	0	226
7:30 AM	0	0	0	0	16	0	61	0	0	18	0	0	0	143	0	0	238
7:45 AM	0	0	0	0	14	0	71	0	0	26	0	0	0	153	0	0	264
8:00 AM	0	0	0	0	14	0	58	0	0	23	0	0	0	206	0	0	301
8:15 AM	0	0	0	0	16	0	43	0	0	25	0	0	0	173	0	0	257
8:30 AM	0	0	0	0	10	0	37	0	0	24	0	0	0	149	0	0	220
8:45 AM	0	0	0	0	17	0	37	0	0	23	0	0	0	138	0	0	215
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	108	0	373	0	0	168	0	0	0	1274	0	0	1923
					22.45%	0.00%	77.55%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	60	0	233	0	0	92	0	0	0	675	0	0	1060
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.938	0.000	0.820	0.000	0.000	0.885	0.000	0.000	0.000	0.819	0.000	0.000	0.880
							0.862				0.885				0.819		
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	207	0	33	0	0	121	0	0	0	47	0	0	408
4:15 PM	0	0	0	0	243	0	25	0	0	104	0	0	0	57	0	0	429
4:30 PM	0	0	0	0	217	0	28	0	0	138	0	0	0	44	0	0	427
4:45 PM	0	0	0	0	233	0	28	0	0	129	0	0	0	43	0	0	433
5:00 PM	0	0	0	0	244	0	36	0	0	178	0	0	0	43	0	0	501
5:15 PM	0	0	0	0	251	0	39	0	0	144	0	0	0	53	0	0	487
5:30 PM	0	0	0	0	258	0	40	0	0	122	0	0	0	49	0	0	469
5:45 PM	0	0	0	0	240	0	40	0	0	112	0	0	0	45	0	0	437
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	1893	0	269	0	0	1048	0	0	0	381	0	0	3591
					87.56%	0.00%	12.44%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	993	0	155	0	0	556	0	0	0	190	0	0	1894
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.962	0.000	0.969	0.000	0.000	0.781	0.000	0.000	0.000	0.896	0.000	0.000	0.945
							0.963				0.781				0.896		

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Off-Ramp & Ramona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-002
 Date: 4/11/2019

Bikes

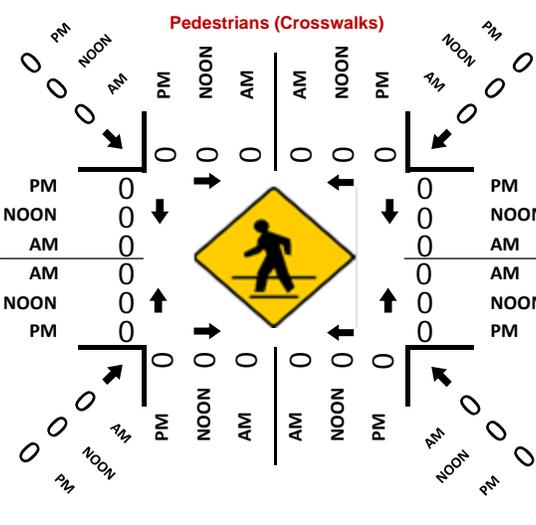
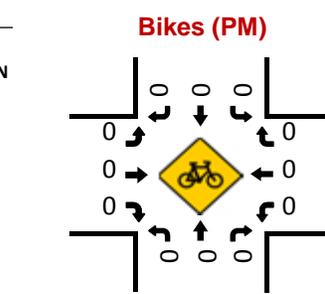
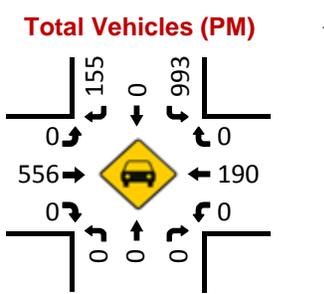
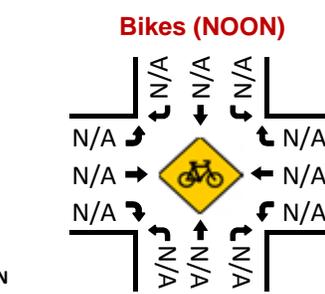
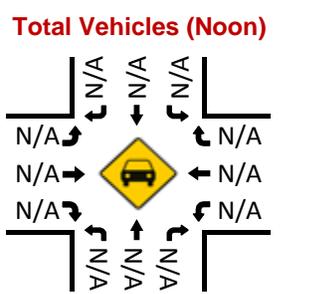
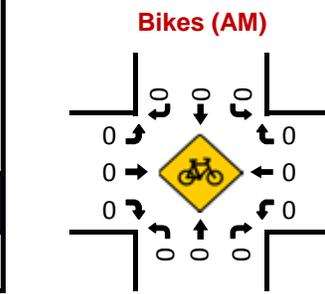
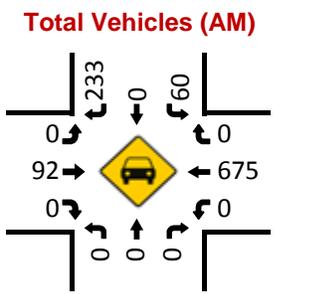
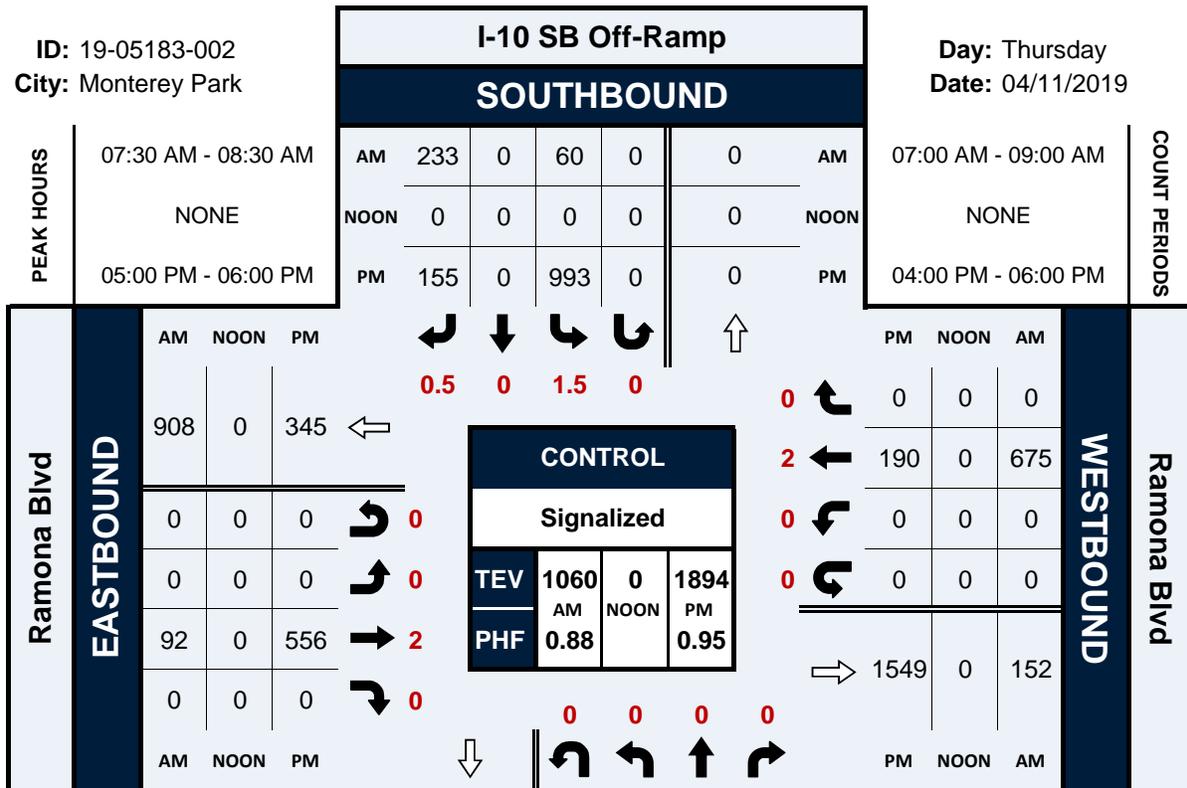
NS/EW Streets:	I-10 SB Off-Ramp				I-10 SB Off-Ramp				Ramona Blvd				Ramona Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	1.5	0	0.5	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	1.5	0	0.5	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0

I-10 SB Off-Ramp & Ramona Blvd

Peak Hour Turning Movement Count

ID: 19-05183-002
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & I-710 NB Off-Ramp
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-003
 Date: 4/11/2019

Total

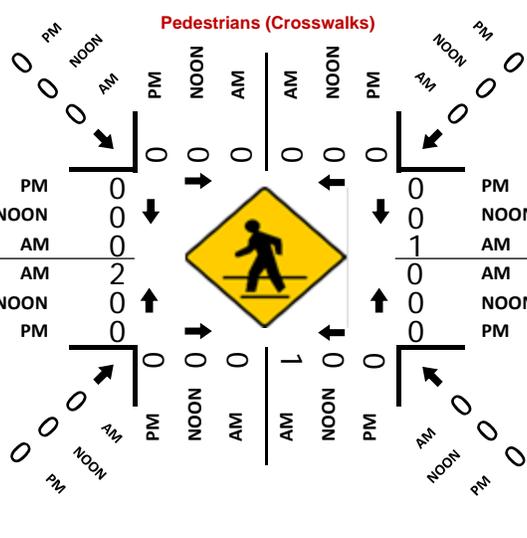
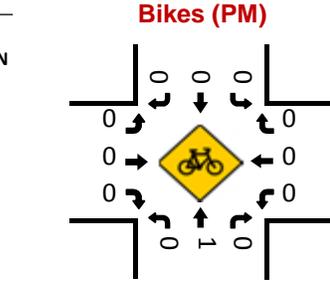
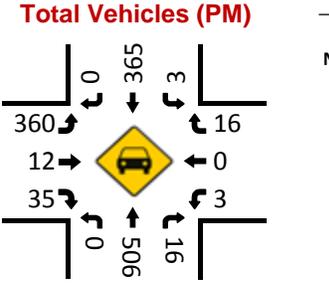
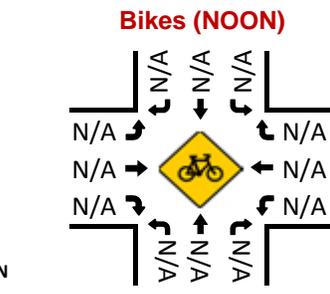
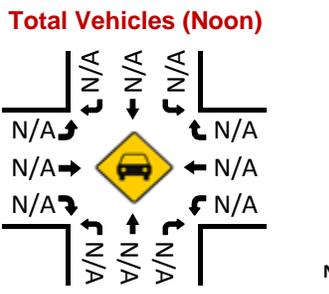
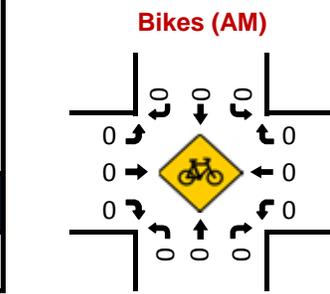
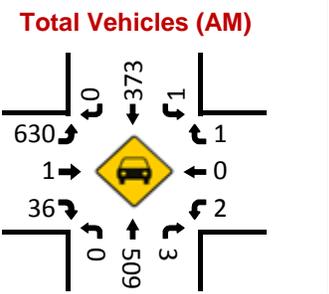
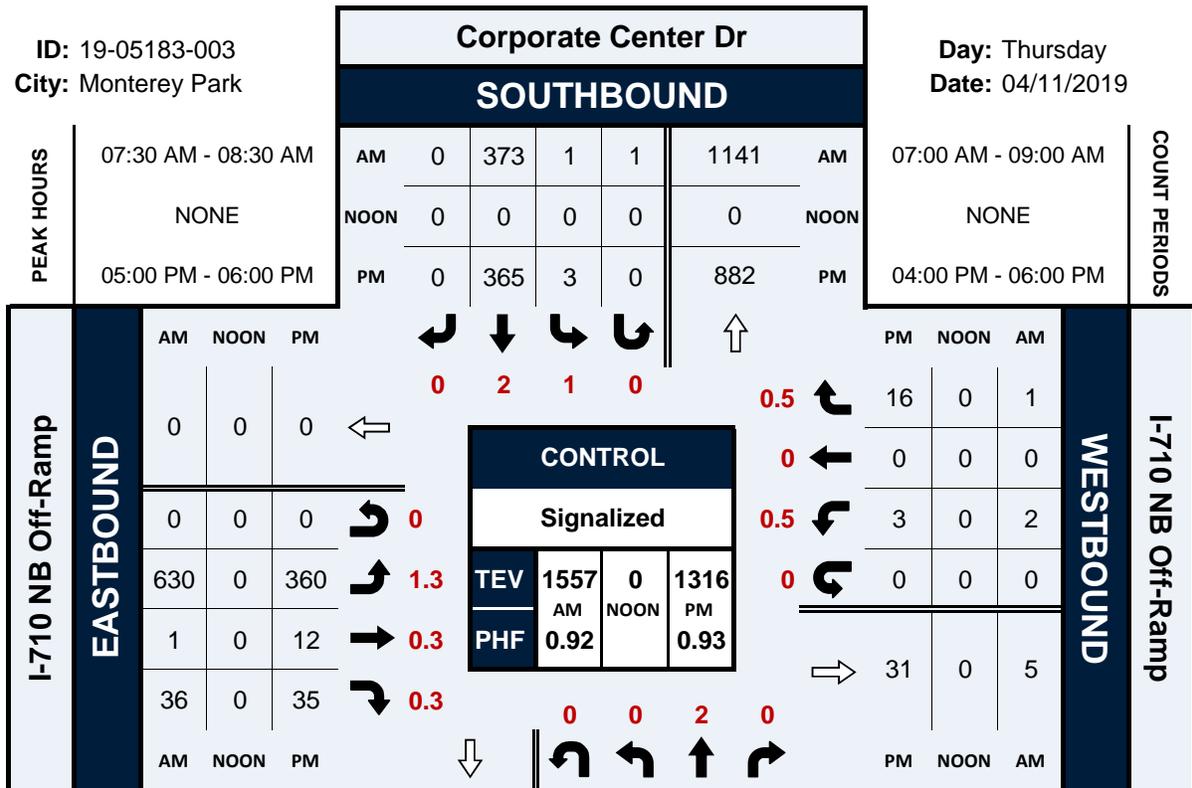
NS/EW Streets:	Corporate Center Dr				Corporate Center Dr				I-710 NB Off-Ramp				I-710 NB Off-Ramp				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	83	1	0	0	54	0	0	116	2	7	0	0	0	0	0	263
7:15 AM	0	103	1	0	0	69	0	0	144	0	6	0	0	0	0	0	323
7:30 AM	0	120	0	0	1	93	0	1	134	0	8	0	0	0	0	0	357
7:45 AM	0	134	0	0	0	102	0	0	176	1	11	0	0	0	0	0	424
8:00 AM	0	148	1	0	0	95	0	0	162	0	9	0	1	0	1	0	417
8:15 AM	0	107	2	0	0	83	0	0	158	0	8	0	1	0	0	0	359
8:30 AM	0	82	0	0	0	65	0	0	169	1	10	0	0	0	0	0	327
8:45 AM	0	76	2	0	0	79	0	0	194	1	10	0	2	0	1	0	365
TOTAL VOLUMES :	0	853	7	0	1	640	0	1	1253	5	69	0	4	0	2	0	2835
APPROACH %'s :	0.00%	99.19%	0.81%	0.00%	0.16%	99.69%	0.00%	0.16%	94.42%	0.38%	5.20%	0.00%	66.67%	0.00%	33.33%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	509	3	0	1	373	0	1	630	1	36	0	2	0	1	0	1557
PEAK HR FACTOR :	0.000	0.860	0.375	0.000	0.250	0.914	0.000	0.250	0.895	0.250	0.818	0.000	0.500	0.000	0.250	0.000	0.918
	0.859				0.919				0.887				0.375				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	104	3	0	2	76	0	0	110	3	10	0	1	0	4	0	313
4:15 PM	0	66	1	0	1	71	0	0	80	1	8	0	0	0	3	0	231
4:30 PM	0	95	1	0	2	94	0	0	83	3	2	0	0	0	2	0	282
4:45 PM	0	88	4	0	0	91	0	0	60	1	6	0	2	0	5	0	257
5:00 PM	0	168	5	0	1	99	0	0	64	4	6	0	1	0	5	0	353
5:15 PM	0	126	6	0	1	96	0	0	82	3	7	0	0	0	6	0	327
5:30 PM	0	106	4	0	1	76	0	0	111	4	16	0	1	0	2	0	321
5:45 PM	0	106	1	0	0	94	0	0	103	1	6	0	1	0	3	0	315
TOTAL VOLUMES :	0	859	25	0	8	697	0	0	693	20	61	0	6	0	30	0	2399
APPROACH %'s :	0.00%	97.17%	2.83%	0.00%	1.13%	98.87%	0.00%	0.00%	89.53%	2.58%	7.88%	0.00%	16.67%	0.00%	83.33%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	506	16	0	3	365	0	0	360	12	35	0	3	0	16	0	1316
PEAK HR FACTOR :	0.000	0.753	0.667	0.000	0.750	0.922	0.000	0.000	0.811	0.750	0.547	0.000	0.750	0.000	0.667	0.000	0.932
	0.754				0.920				0.777				0.792				

Corporate Center Dr & I-710 NB Off-Ramp

Peak Hour Turning Movement Count

ID: 19-05183-003
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Fremont Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-007
 Date: 4/11/2019

Total

NS/EW Streets:	Monterey Pass Rd				Monterey Pass Rd				Fremont Ave				Fremont Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	1 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	82	32	0	0	0	74	27	0	11	1	63	0	0	0	0	0	290
7:15 AM	108	58	0	0	0	84	40	0	22	0	85	0	0	0	0	0	397
7:30 AM	140	53	0	0	0	92	68	0	31	0	87	0	0	0	0	0	471
7:45 AM	112	58	2	0	0	136	42	0	31	0	129	0	0	0	0	0	510
8:00 AM	94	68	0	0	0	109	32	0	24	0	96	0	0	0	0	0	423
8:15 AM	72	60	0	0	0	122	27	0	23	0	90	0	0	0	0	0	394
8:30 AM	71	48	0	0	0	89	37	0	19	0	97	0	0	0	0	0	361
8:45 AM	69	49	0	0	0	89	30	0	23	0	87	0	0	0	0	0	347
TOTAL VOLUMES :	748	426	2	0	0	795	303	0	184	1	734	0	0	0	0	0	3193
APPROACH %'s :	63.61%	36.22%	0.17%	0.00%	0.00%	72.40%	27.60%	0.00%	20.02%	0.11%	79.87%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	454	237	2	0	0	421	182	0	108	0	397	0	0	0	0	0	1801
PEAK HR FACTOR :	0.811	0.871	0.250	0.000	0.000	0.774	0.669	0.000	0.871	0.000	0.769	0.000	0.000	0.000	0.000	0.000	0.883
			0.898				0.847				0.789						
PM	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	1 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	128	85	0	0	0	52	23	0	32	0	78	0	0	0	0	0	398
4:15 PM	122	94	0	0	0	47	20	0	32	0	87	0	0	0	0	0	402
4:30 PM	141	102	0	0	0	44	25	0	28	0	96	0	0	0	0	0	436
4:45 PM	136	87	0	0	0	59	29	0	37	0	76	0	0	0	0	0	424
5:00 PM	175	141	0	0	0	37	32	0	34	0	81	0	0	0	0	0	500
5:15 PM	195	113	0	0	0	47	40	0	29	0	101	0	0	0	0	0	525
5:30 PM	174	119	0	0	0	40	43	0	36	0	109	0	0	0	0	0	521
5:45 PM	184	123	3	0	0	47	38	0	35	0	99	0	0	0	0	0	529
TOTAL VOLUMES :	1255	864	3	0	0	373	250	0	263	0	727	0	0	0	0	0	3735
APPROACH %'s :	59.14%	40.72%	0.14%	0.00%	0.00%	59.87%	40.13%	0.00%	26.57%	0.00%	73.43%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	728	496	3	0	0	171	153	0	134	0	390	0	0	0	0	0	2075
PEAK HR FACTOR :	0.933	0.879	0.250	0.000	0.000	0.910	0.890	0.000	0.931	0.000	0.894	0.000	0.000	0.000	0.000	0.000	0.981
			0.971				0.931				0.903						

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Fremont Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-007
 Date: 4/11/2019

Bikes

NS/EW Streets:	Monterey Pass Rd				Monterey Pass Rd				Fremont Ave				Fremont Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	1 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0	0	0	0	5
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250				0.250				0.250								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	1 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	4
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0	0	0	0	12
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	2	0	0	0	0	3	0	0	0	0	0	8
PEAK HR FACTOR :	0.00	0.375	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
	0.375				0.500				0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Fremont Ave
City: Monterey Park

Project ID: 19-05183-007
Date: 4/11/2019

Pedestrians (Crosswalks)

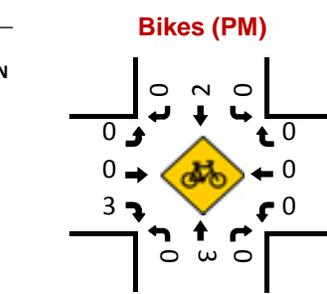
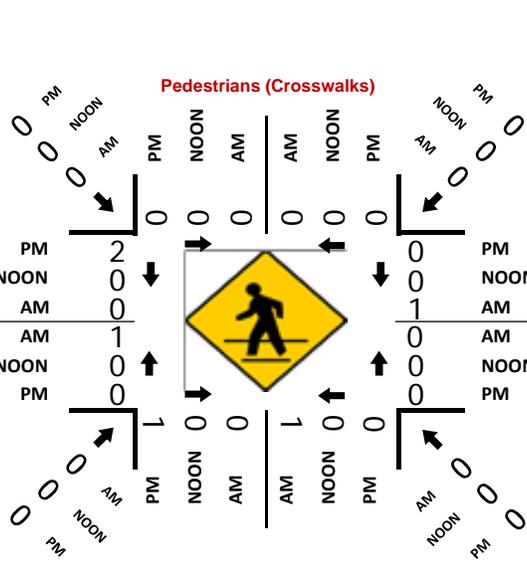
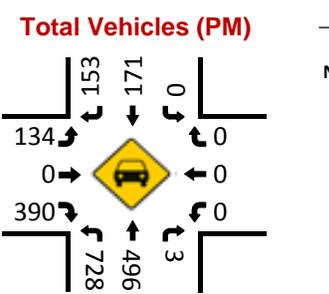
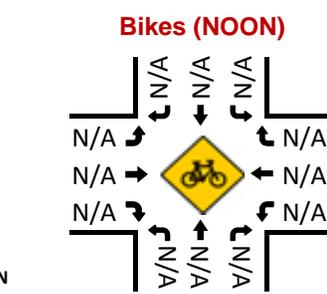
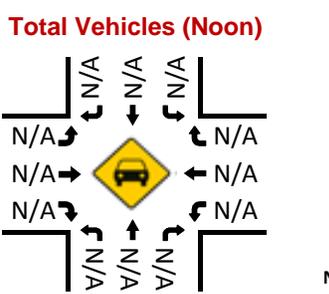
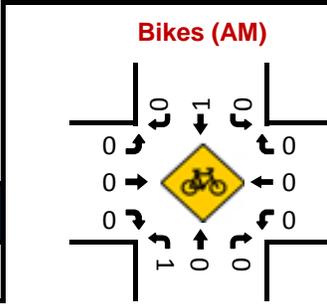
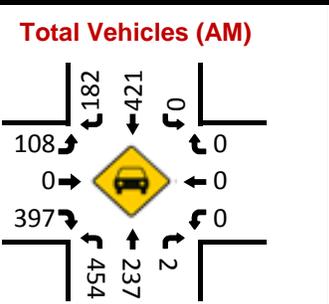
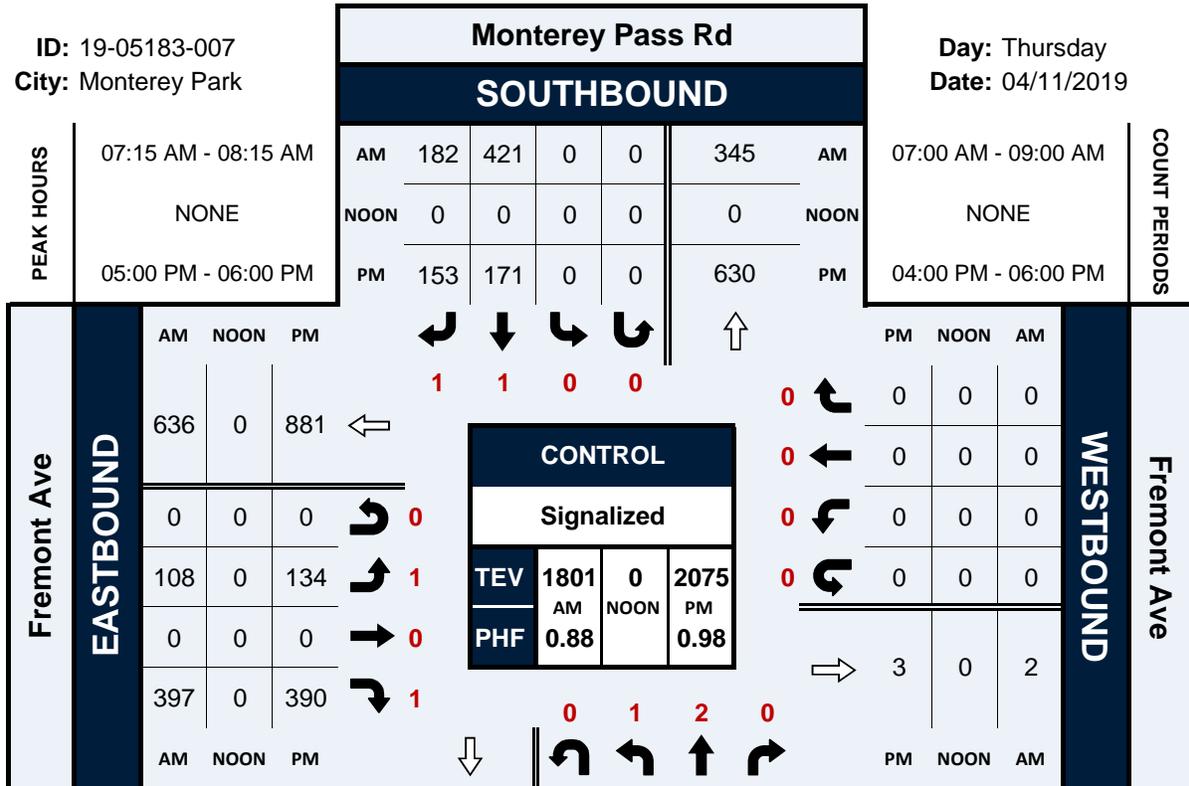
NS/EW Streets:	Monterey Pass Rd		Monterey Pass Rd		Fremont Ave		Fremont Ave		NORTH LEG CUT OUT		NORTH LEG 2 CUT OUT		SOUTH LEG CUT OUT		SOUTH LEG 2 CUT OUT		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EB		WB		EB		WB		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	
AM																	
7:00 AM	0	0	0	0	0	0	0	0									0
7:15 AM	0	0	0	0	0	0	0	0									0
7:30 AM	0	0	0	0	0	0	0	0									0
7:45 AM	0	0	0	0	0	0	0	0									1
8:00 AM	0	0	0	1	0	1	1	0									5
8:15 AM	0	0	0	0	0	0	0	0									1
8:30 AM	0	0	0	0	0	0	0	0									0
8:45 AM	0	0	0	1	0	1	0	0									3
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL
APPROACH %'s :	0	0	0	2	0	2	1	0	0	0	0	2	1	2	0	0	10
PEAK HR :	07:15 AM - 08:15 AM		0.00%	100.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	100.00%	33.33%	66.67%			
PEAK HR VOL :	0	0	0	1	0	1	1	0	0	0	0	2	1	0	0	0	6
PEAK HR FACTOR :			0.250	0.250	0.250	0.250	0.250	0.250			0.500	0.500	0.250	0.250			0.300
PM																	
4:00 PM	0	0	0	1	0	0	0	0									1
4:15 PM	0	0	0	0	0	0	0	0									0
4:30 PM	0	0	0	0	0	0	0	0									0
4:45 PM	0	0	0	0	0	0	0	0									0
5:00 PM	0	0	0	0	0	0	0	0									0
5:15 PM	0	0	0	0	0	0	0	0									0
5:30 PM	0	0	1	0	0	0	0	0									2
5:45 PM	0	0	0	0	0	0	0	2									5
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL
APPROACH %'s :	0	0	1	1	0	0	0	2	0	0	1	0	2	1	0	0	8
PEAK HR :	05:00 PM - 06:00 PM		50.00%	50.00%			0.00%	100.00%			100.00%	0.00%	66.67%	33.33%			
PEAK HR VOL :	0	0	1	0	0	0	0	2	0	0	1	0	2	1	0	0	7
PEAK HR FACTOR :			0.250	0.250			0.250	0.250			0.250	0.250	0.500	0.250			0.350

Monterey Pass Rd & Fremont Ave

Peak Hour Turning Movement Count

ID: 19-05183-007
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: S Garfield Ave & W Newmark Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-014
 Date: 4/11/2019

Total

NS/EW Streets:	S Garfield Ave				S Garfield Ave				W Newmark Ave				W Newmark Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	156	15	0	8	65	3	0	3	30	4	0	33	33	26	0	378
7:15 AM	3	191	44	0	5	110	7	0	11	48	2	0	65	59	36	0	581
7:30 AM	8	179	27	0	10	153	11	0	10	35	5	0	87	100	32	0	657
7:45 AM	7	168	20	0	12	131	7	0	18	44	6	0	73	74	25	0	585
8:00 AM	8	210	43	0	16	151	7	0	15	46	2	0	48	38	33	0	617
8:15 AM	7	134	23	0	8	123	7	0	11	29	3	0	43	41	31	0	460
8:30 AM	6	184	25	0	7	107	5	0	8	40	4	0	37	44	30	0	497
8:45 AM	3	159	19	0	12	104	6	0	8	30	5	0	36	77	40	0	499
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	44	1381	216	0	78	944	53	0	84	302	31	0	422	466	253	0	4274
	2.68%	84.16%	13.16%	0.00%	7.26%	87.81%	4.93%	0.00%	20.14%	72.42%	7.43%	0.00%	36.99%	40.84%	22.17%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	26	748	134	0	43	545	32	0	54	173	15	0	273	271	126	0	2440
PEAK HR FACTOR :	0.813	0.890	0.761	0.000	0.672	0.891	0.727	0.000	0.750	0.901	0.625	0.000	0.784	0.678	0.875	0.000	0.928
	0.870				0.891				0.890				0.765				
PM	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	5	123	27	0	23	151	19	0	11	92	8	0	28	41	21	0	549
4:15 PM	9	156	29	0	27	156	16	0	13	75	6	0	36	35	17	0	575
4:30 PM	4	125	33	0	15	199	10	0	13	89	11	0	25	40	27	0	591
4:45 PM	7	126	41	0	32	165	9	0	10	73	11	0	36	36	18	0	564
5:00 PM	9	148	46	0	36	203	15	0	18	76	11	0	36	42	14	0	654
5:15 PM	8	162	53	0	29	203	12	0	10	97	10	0	43	45	21	0	693
5:30 PM	8	193	49	0	38	217	17	0	12	114	10	0	17	54	21	0	750
5:45 PM	8	157	47	0	26	146	18	0	11	95	10	0	33	61	18	0	630
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	58	1190	325	0	226	1440	116	0	98	711	77	0	254	354	157	0	5006
	3.69%	75.65%	20.66%	0.00%	12.68%	80.81%	6.51%	0.00%	11.06%	80.25%	8.69%	0.00%	33.20%	46.27%	20.52%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	33	660	195	0	129	769	62	0	51	382	41	0	129	202	74	0	2727
PEAK HR FACTOR :	0.917	0.855	0.920	0.000	0.849	0.886	0.861	0.000	0.708	0.838	0.932	0.000	0.750	0.828	0.881	0.000	0.909
	0.888				0.882				0.871				0.904				

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Garfield Ave & W Newmark Ave
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-014
 Date: 4/11/2019

Bikes

NS/EW Streets:	S Garfield Ave				S Garfield Ave				W Newmark Ave				W Newmark Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	0	0	1	1	0	0	0	4	0	0	1	6	0	0	15
	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	14.29%	85.71%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	2	0	0	0	3	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.750
					0.250				0.500				0.375				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	4
5:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	1	0	3	2	0	0	0	6	0	0	0	5	0	0	18
	0.00%	50.00%	50.00%	0.00%	60.00%	40.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	1	0	0	0	4	0	0	0	2	0	0	8
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.250	0.000	0.000	0.400
					0.250				0.333				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Garfield Ave & W Newmark Ave
City: Monterey Park

Project ID: 19-05183-014
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	S Garfield Ave		S Garfield Ave		W Newmark Ave		W Newmark Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	1	2	5	1	0	1	0	12
7:15 AM	0	3	5	4	3	0	6	3	24
7:30 AM	2	4	2	10	6	1	4	4	33
7:45 AM	0	5	6	12	2	3	11	6	45
8:00 AM	5	1	1	9	2	1	9	2	30
8:15 AM	2	3	4	2	4	1	3	4	23
8:30 AM	2	2	2	4	9	7	7	3	36
8:45 AM	0	8	3	5	6	0	2	4	28
TOTAL VOLUMES :	EB 13	WB 27	EB 25	WB 51	NB 33	SB 13	NB 43	SB 26	TOTAL 231
APPROACH %'s :	32.50%	67.50%	32.89%	67.11%	71.74%	28.26%	62.32%	37.68%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	7	13	14	35	13	5	30	15	132
PEAK HR FACTOR :	0.350	0.650	0.583	0.729	0.542	0.417	0.682	0.625	0.733
	0.833		0.681		0.643		0.662		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	7	3	5	1	1	4	8	6	35
4:15 PM	1	1	8	5	7	3	13	9	47
4:30 PM	3	1	3	4	1	0	10	4	26
4:45 PM	1	5	3	5	9	1	1	4	29
5:00 PM	5	4	2	4	5	4	2	3	29
5:15 PM	3	3	13	4	2	4	2	6	37
5:30 PM	4	6	5	1	4	3	4	7	34
5:45 PM	2	6	9	3	3	1	3	9	36
TOTAL VOLUMES :	EB 26	WB 29	EB 48	WB 27	NB 32	SB 20	NB 43	SB 48	TOTAL 273
APPROACH %'s :	47.27%	52.73%	64.00%	36.00%	61.54%	38.46%	47.25%	52.75%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	14	19	29	12	14	12	11	25	136
PEAK HR FACTOR :	0.700	0.792	0.558	0.750	0.700	0.750	0.688	0.694	0.919
	0.825		0.603		0.722		0.750		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Brightwood St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-028
 Date: 4/11/2019

Total

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				Brightwood St				Brightwood St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	3	117	3	0	3	127	9	0	25	6	9	0	16	13	13	0	344
7:15 AM	1	172	8	0	3	179	19	0	25	9	12	0	17	19	17	0	481
7:30 AM	7	184	10	0	3	166	36	0	22	20	18	0	22	34	12	0	534
7:45 AM	16	243	5	0	12	229	45	0	28	29	24	0	14	42	23	0	710
8:00 AM	6	206	14	0	7	214	14	0	31	43	21	0	20	12	18	0	606
8:15 AM	4	158	11	0	8	181	10	0	14	12	13	0	10	16	12	0	449
8:30 AM	7	134	9	0	5	197	11	0	7	7	16	0	20	20	4	0	437
8:45 AM	14	178	9	0	11	222	7	0	9	4	16	0	20	15	15	0	520
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	58	1392	69	0	52	1515	151	0	161	130	129	0	139	171	114	0	4081
	3.82%	91.64%	4.54%	0.00%	3.03%	88.18%	8.79%	0.00%	38.33%	30.95%	30.71%	0.00%	32.78%	40.33%	26.89%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	30	805	37	0	25	788	114	0	106	101	75	0	73	107	70	0	2331
PEAK HR FACTOR :	0.469	0.828	0.661	0.000	0.521	0.860	0.633	0.000	0.855	0.587	0.781	0.000	0.830	0.637	0.761	0.000	0.821
		0.826				0.810				0.742				0.791			
PM	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	218	24	1	20	194	14	0	23	45	19	0	11	14	4	0	595
4:15 PM	12	252	20	0	15	154	9	0	18	57	18	0	15	10	5	0	585
4:30 PM	3	228	29	0	20	164	5	0	26	52	14	0	14	12	5	0	572
4:45 PM	6	234	34	0	14	186	8	0	22	69	14	0	12	14	6	0	619
5:00 PM	12	294	41	0	13	174	16	0	33	79	12	0	6	9	3	0	692
5:15 PM	13	276	38	0	15	183	18	0	36	78	17	0	11	15	10	0	710
5:30 PM	13	285	38	0	16	166	12	0	44	75	18	0	18	16	3	0	704
5:45 PM	10	292	48	0	4	195	15	0	29	64	19	0	9	11	9	0	705
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	77	2079	272	1	117	1416	97	0	231	519	131	0	96	101	45	0	5182
	3.17%	85.59%	11.20%	0.04%	7.18%	86.87%	5.95%	0.00%	26.22%	58.91%	14.87%	0.00%	39.67%	41.74%	18.60%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	48	1147	165	0	48	718	61	0	142	296	66	0	44	51	25	0	2811
PEAK HR FACTOR :	0.923	0.975	0.859	0.000	0.750	0.921	0.847	0.000	0.807	0.937	0.868	0.000	0.611	0.797	0.625	0.000	0.990
		0.971				0.957				0.920				0.811			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Brightwood St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-028
 Date: 4/11/2019

Bikes

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				Brightwood St				Brightwood St					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU		
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
TOTAL VOLUMES :	0	0	1	0	0	3	0	0	0	1	1	0	0	1	0	0	7	
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL	
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	3	
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375
	0.250				0.500				0.500									
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU		
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	3	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
5:30 PM	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
TOTAL VOLUMES :	0	3	3	0	0	5	0	0	0	0	0	0	2	0	0	0	13	
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL	
PEAK HR VOL :	0	3	3	0	0	2	0	0	0	0	0	0	0	0	0	0	8	
PEAK HR FACTOR :	0.00	0.375	0.375	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.375				0.500				0.500									

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Brightwood St
City: Monterey Park

Project ID: 19-05183-028
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Atlantic Blvd		Atlantic Blvd		Brightwood St		Brightwood St			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	0	1	2	0	0	1	0	3	7
	7:15 AM	0	0	0	0	0	1	0	1	2
	7:30 AM	1	1	0	1	0	0	1	1	5
	7:45 AM	0	0	0	1	0	1	1	0	3
	8:00 AM	0	0	0	0	0	1	0	2	3
	8:15 AM	0	1	2	1	0	0	2	1	7
	8:30 AM	0	0	0	1	1	1	0	2	5
	8:45 AM	0	0	0	0	0	0	1	3	4
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	25.00%	75.00%	50.00%	50.00%	16.67%	83.33%	27.78%	72.22%	36	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL	
PEAK HR VOL :	1	1	0	2	0	3	2	4	13	
PEAK HR FACTOR :	0.250	0.250		0.500		0.750	0.500	0.500	0.650	
	0.250		0.500		0.750		0.750			

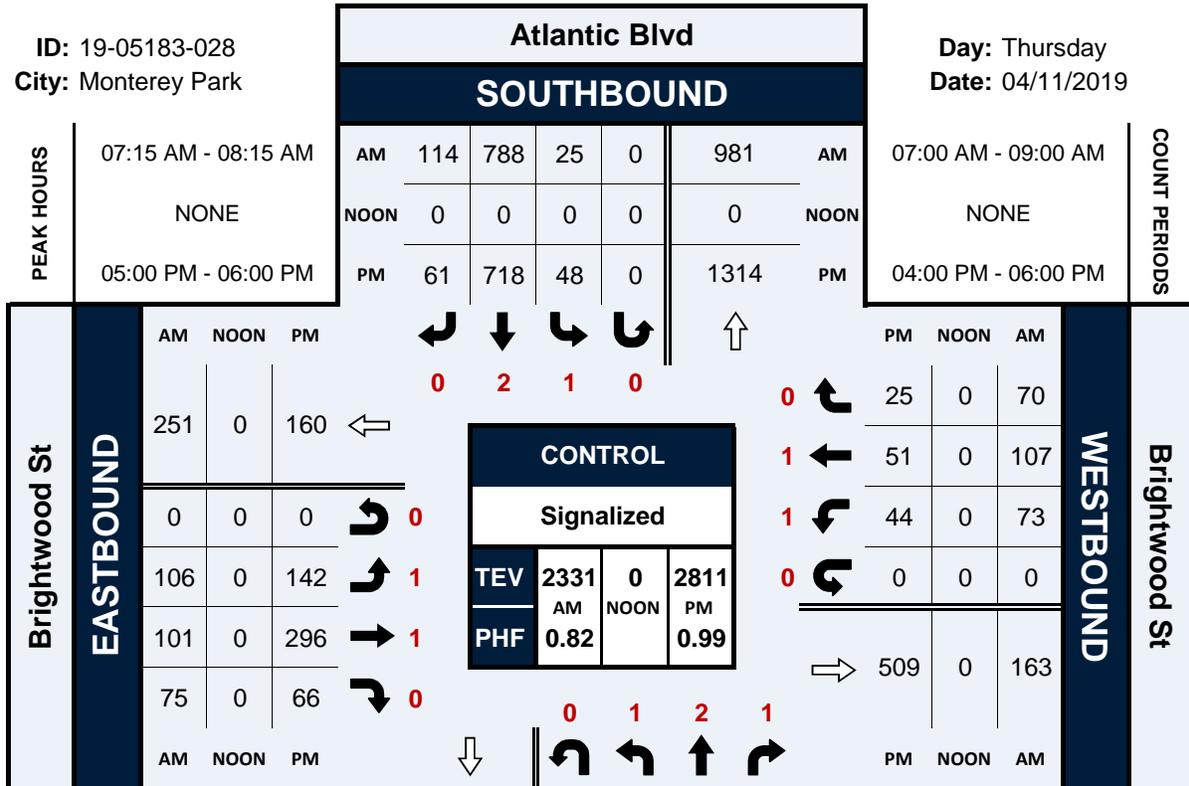
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	4:00 PM	0	0	0	0	0	1	1	0	2
	4:15 PM	1	0	0	0	3	0	3	2	9
	4:30 PM	0	1	0	0	1	1	0	2	5
	4:45 PM	0	1	0	0	1	3	0	2	7
	5:00 PM	0	0	1	0	1	0	1	1	4
	5:15 PM	0	0	0	0	1	0	0	3	4
	5:30 PM	0	0	2	0	1	0	0	0	3
	5:45 PM	0	0	2	0	0	0	1	1	4
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	33.33%	66.67%	100.00%	0.00%	61.54%	38.46%	35.29%	64.71%	38	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL	
PEAK HR VOL :	0	0	5	0	3	0	2	5	15	
PEAK HR FACTOR :			0.625		0.750		0.500	0.417	0.938	
			0.625		0.750		0.583			

Atlantic Blvd & Brightwood St

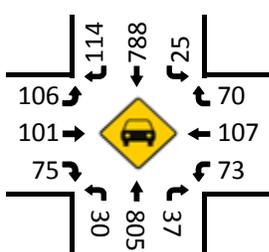
Peak Hour Turning Movement Count

ID: 19-05183-028
City: Monterey Park

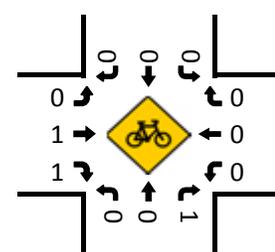
Day: Thursday
Date: 04/11/2019



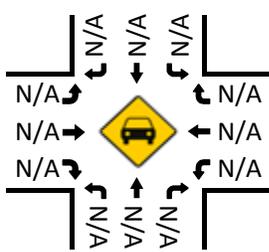
Total Vehicles (AM)



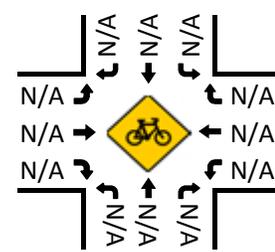
Bikes (AM)



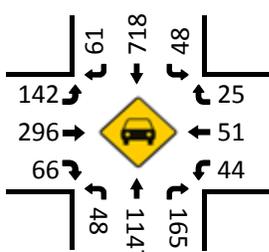
Total Vehicles (Noon)



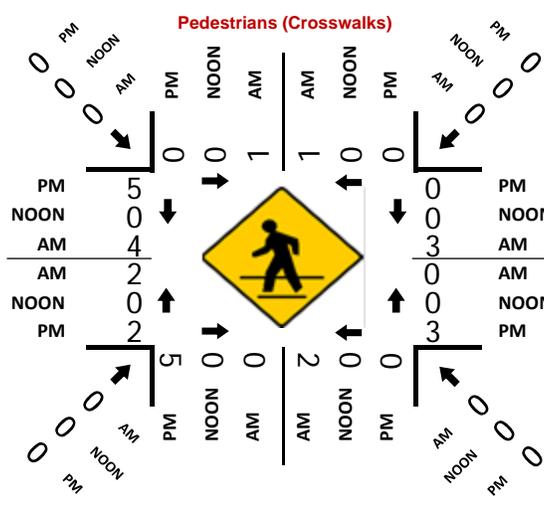
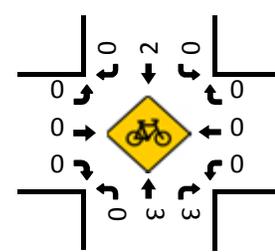
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Ford Blvd/I-710 NB On-Ramp & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-004
 Date: 4/11/2019

Total

NS/EW Streets:	N Ford Blvd/I-710 NB On-Ramp				N Ford Blvd/I-710 NB On-Ramp				Floral Dr				Floral Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	72	8	55	0	0	0	0	0	1	82	12	0	14	94	23	0	361
7:15 AM	82	7	55	0	0	0	0	0	17	110	9	0	23	111	20	0	434
7:30 AM	82	8	68	0	0	0	0	0	24	108	11	0	17	102	38	0	458
7:45 AM	76	11	74	0	0	0	0	0	17	106	15	0	17	120	35	0	471
8:00 AM	68	11	87	0	0	0	0	0	11	101	12	0	14	107	22	0	433
8:15 AM	83	8	52	0	0	0	0	0	9	94	16	0	15	97	20	0	394
8:30 AM	80	9	48	0	0	0	0	0	6	117	14	0	12	78	18	0	382
8:45 AM	75	7	45	0	0	0	0	0	9	163	10	0	10	85	15	0	419
TOTAL VOLUMES :	618	69	484	0	0	0	0	0	94	881	99	0	122	794	191	0	3352
APPROACH %'s :	52.78%	5.89%	41.33%	0.00%					8.75%	82.03%	9.22%	0.00%	11.02%	71.73%	17.25%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	308	37	284	0	0	0	0	0	69	425	47	0	71	440	115	0	1796
PEAK HR FACTOR :	0.939	0.841	0.816	0.000	0.000	0.000	0.000	0.000	0.719	0.966	0.783	0.000	0.772	0.917	0.757	0.000	0.953
			0.947							0.946				0.910			
PM	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	42	16	82	0	0	0	0	0	8	100	16	0	19	112	28	0	423
4:15 PM	39	26	96	0	0	0	0	0	7	129	11	0	34	103	17	0	462
4:30 PM	48	10	90	0	0	0	0	0	3	140	12	0	25	136	19	0	483
4:45 PM	41	10	99	0	0	0	0	0	6	132	15	0	21	110	16	0	450
5:00 PM	64	6	100	0	0	0	0	0	5	112	11	0	22	125	10	0	455
5:15 PM	49	10	102	0	0	0	0	0	3	140	3	0	17	126	15	0	465
5:30 PM	64	12	120	0	0	0	0	0	8	148	6	0	14	92	17	0	481
5:45 PM	42	18	96	0	0	0	0	0	4	159	10	0	8	112	27	0	476
TOTAL VOLUMES :	389	108	785	0	0	0	0	0	44	1060	84	0	160	916	149	0	3695
APPROACH %'s :	30.34%	8.42%	61.23%	0.00%					3.70%	89.23%	7.07%	0.00%	13.06%	74.78%	12.16%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	219	46	418	0	0	0	0	0	20	559	30	0	61	455	69	0	1877
PEAK HR FACTOR :	0.855	0.639	0.871	0.000	0.000	0.000	0.000	0.000	0.625	0.879	0.682	0.000	0.693	0.903	0.639	0.000	0.976
			0.871							0.880				0.926			

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Ford Blvd/I-710 NB On-Ramp & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-004
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Ford Blvd/I-710 NB On-Ramp				N Ford Blvd/I-710 NB On-Ramp				Floral Dr				Floral Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
PEAK HR :	07:15 AM - 08:15 AM								0.00% 100.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.750
										0.500				0.250			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	0	0	0	0	0	0	0	0	6	2	0	0	1	0	0	10
PEAK HR :	05:00 PM - 06:00 PM								0.00% 75.00% 25.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.313
										0.250				0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Ford Blvd/I-710 NB On-Ramp & Floral Dr
City: Monterey Park

Project ID: 19-05183-004
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Ford Blvd/I-710 NB On-Ramp		N Ford Blvd/I-710 NB On-Ramp		Floral Dr		Floral Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	2	0	0	0	0	2	0	0	4
7:15 AM	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	5	1	0	0	0	0	6
7:45 AM	1	0	0	0	0	0	0	0	1
8:00 AM	1	0	2	0	0	0	0	1	4
8:15 AM	0	0	0	3	0	1	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	6	0	7	4	0	3	0	1	21
APPROACH %'s :	100.00%	0.00%	63.64%	36.36%	0.00%	100.00%	0.00%	100.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	4	0	7	1	0	0	0	1	13
PEAK HR FACTOR :	0.500		0.350	0.250				0.250	0.542
	0.500		0.333				0.250		

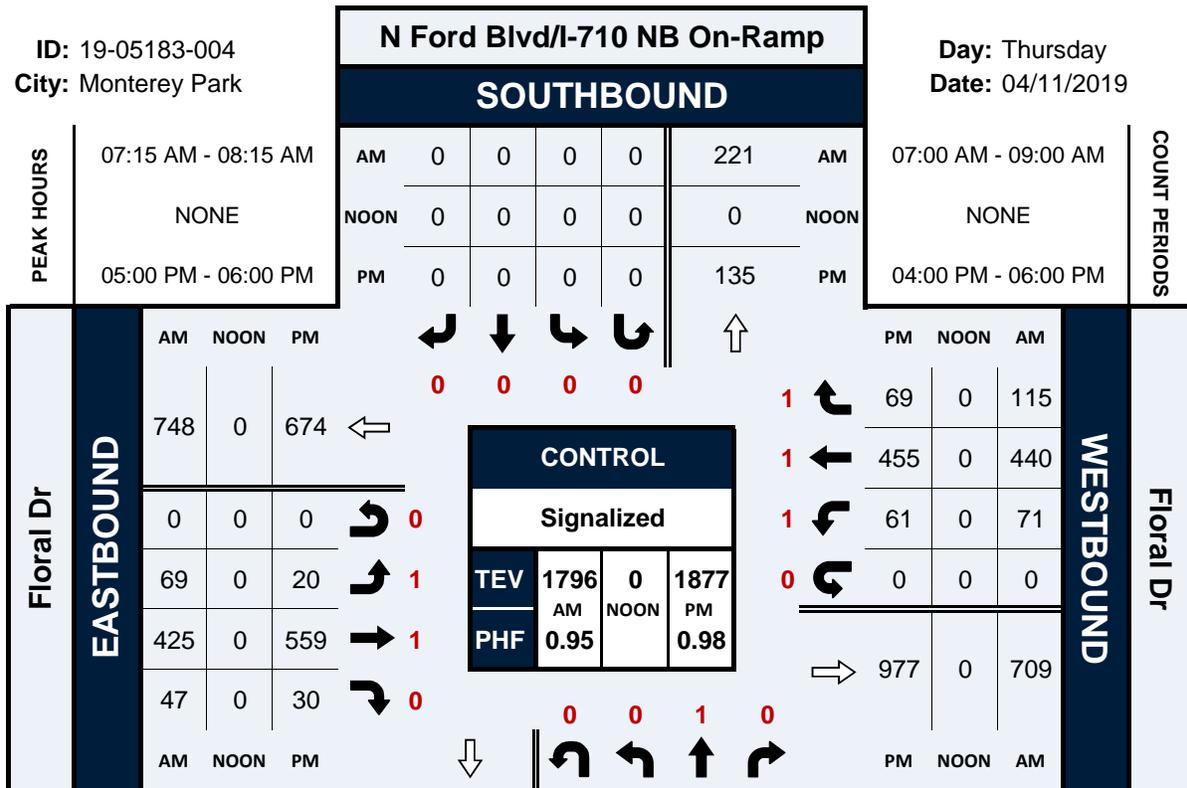
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	1
4:30 PM	3	0	0	0	0	0	0	0	3
4:45 PM	1	0	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	3	0	0	0	0	0	0	3
5:30 PM	0	0	1	0	1	0	0	0	2
5:45 PM	0	1	0	1	0	0	0	0	2
TOTAL VOLUMES :	4	4	1	1	1	1	1	0	13
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	4	1	1	1	0	0	0	7
PEAK HR FACTOR :		0.333	0.250	0.250	0.250				0.583
	0.333		0.500		0.250				

N Ford Blvd/I-710 NB On-Ramp & Floral Dr

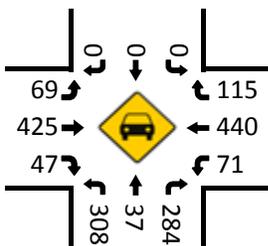
Peak Hour Turning Movement Count

ID: 19-05183-004
City: Monterey Park

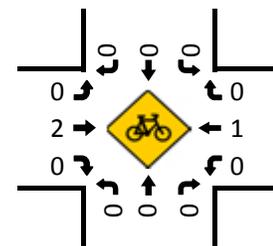
Day: Thursday
Date: 04/11/2019



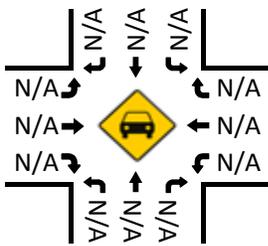
Total Vehicles (AM)



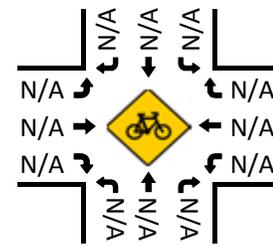
Bikes (AM)



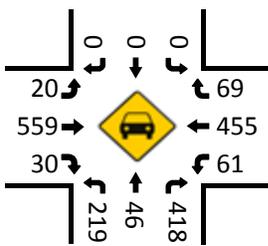
Total Vehicles (Noon)



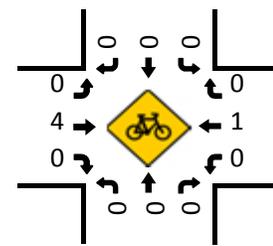
Bikes (NOON)



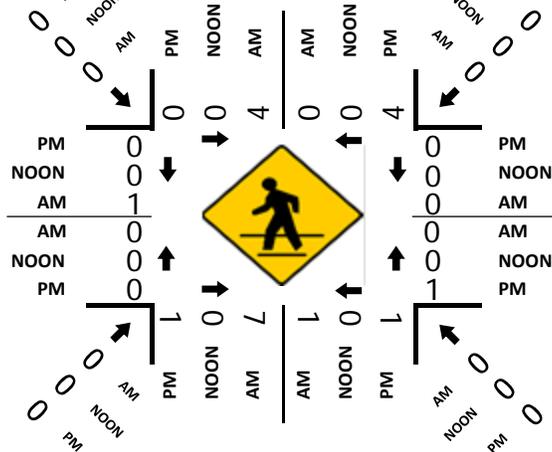
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-005
 Date: 4/11/2019

Total

NS/EW Streets:	Corporate Center Dr				Corporate Center Dr				Floral Dr				Floral Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	0	0	1	0	1	0	2	2	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	10	44	9	0	5	3	4	0	28	100	2	0	4	117	23	0	349
7:15 AM	10	47	7	0	11	3	6	0	25	131	8	0	3	127	24	0	402
7:30 AM	17	73	22	0	8	11	10	0	28	127	13	0	11	136	33	0	489
7:45 AM	11	113	11	0	13	12	9	0	35	123	16	0	6	139	37	0	525
8:00 AM	10	91	19	0	19	11	7	0	49	129	5	0	8	137	26	0	511
8:15 AM	6	48	8	0	16	4	9	0	32	105	3	0	0	105	25	0	361
8:30 AM	7	34	17	0	8	2	13	0	38	131	2	0	2	84	20	0	358
8:45 AM	2	39	14	0	19	2	10	0	42	166	5	0	3	102	20	0	424
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	73	489	107	0	99	48	68	0	277	1012	54	0	37	947	208	0	3419
	10.91%	73.09%	15.99%	0.00%	46.05%	22.33%	31.63%	0.00%	20.63%	75.35%	4.02%	0.00%	3.10%	79.45%	17.45%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	48	324	59	0	51	37	32	0	137	510	42	0	28	539	120	0	1927
PEAK HR FACTOR :	0.706	0.717	0.670	0.000	0.671	0.771	0.800	0.000	0.699	0.973	0.656	0.000	0.636	0.969	0.811	0.000	0.918
			0.798				0.811				0.941				0.944		
PM	0	1	0	0	1	0	1	0	2	2	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	9	13	19	0	23	19	37	0	12	164	4	0	2	109	12	0	423
4:15 PM	5	22	21	0	24	7	40	0	16	203	3	0	1	106	13	0	461
4:30 PM	7	21	36	0	31	22	57	0	11	215	6	0	4	116	11	0	537
4:45 PM	2	32	33	0	29	16	30	0	6	206	5	0	2	110	5	0	476
5:00 PM	5	37	43	0	39	31	56	0	18	196	7	0	4	104	15	0	555
5:15 PM	5	34	38	0	31	16	39	0	11	219	6	0	7	105	17	0	528
5:30 PM	4	47	32	0	26	20	21	0	16	246	8	0	4	95	10	0	529
5:45 PM	4	24	37	0	23	10	18	0	13	239	6	0	3	125	13	0	515
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	41	230	259	0	226	141	298	0	103	1688	45	0	27	870	96	0	4024
	7.74%	43.40%	48.87%	0.00%	33.98%	21.20%	44.81%	0.00%	5.61%	91.94%	2.45%	0.00%	2.72%	87.61%	9.67%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	18	142	150	0	119	77	134	0	58	900	27	0	18	429	55	0	2127
PEAK HR FACTOR :	0.900	0.755	0.872	0.000	0.763	0.621	0.598	0.000	0.806	0.915	0.844	0.000	0.643	0.858	0.809	0.000	0.958
			0.912				0.655				0.912				0.890		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-005
 Date: 4/11/2019

Bikes

NS/EW Streets:	Corporate Center Dr				Corporate Center Dr				Floral Dr				Floral Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	1 SL	0 ST	1 SR	0 SU	2 EL	2 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
PEAK HR :	07:15 AM - 08:15 AM								50.00% 50.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.750
									0.500				0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	1 SL	0 ST	1 SR	0 SU	2 EL	2 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	0	0	0	0	6	0	0	0	1	0	0	8
PEAK HR :	05:00 PM - 06:00 PM								0.00% 100.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.313
									0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Corporate Center Dr & Floral Dr
City: Monterey Park

Project ID: 19-05183-005
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Corporate Center Dr		Corporate Center Dr		Floral Dr		Floral Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	1	0	0	0	1
7:15 AM	1	0	0	0	1	0	0	0	2
7:30 AM	1	0	0	0	3	1	0	0	5
7:45 AM	0	0	1	1	1	2	0	0	5
8:00 AM	2	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	3	0	0	3
8:30 AM	0	0	2	0	2	0	0	0	4
8:45 AM	1	0	0	0	1	0	0	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	5	0	4	1	9	6	0	0	25
	100.00%	0.00%	80.00%	20.00%	60.00%	40.00%			
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	4	0	2	1	5	3	0	0	15
PEAK HR FACTOR :	0.500		0.500	0.250	0.417	0.375			0.750
	0.500		0.375		0.500				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	3	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	3	0	0	2	0	0	0	5
5:30 PM	0	0	0	2	0	2	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	3	4	0	2	2	2	0	0	13
	42.86%	57.14%	0.00%	100.00%	50.00%	50.00%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	3	0	2	2	2	0	0	9
PEAK HR FACTOR :		0.250		0.250	0.250	0.250			0.450
	0.250		0.250		0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-006
 Date: 4/11/2019

Total

NS/EW Streets:	Monterey Pass Rd				Monterey Pass Rd				Floral Dr				Floral Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	22	70	9	0	14	47	8	0	25	51	16	0	14	96	13	1	386
7:15 AM	21	92	10	0	21	66	23	0	31	86	34	0	25	114	40	0	563
7:30 AM	30	102	16	0	19	62	16	0	39	67	30	0	17	123	28	0	549
7:45 AM	24	114	19	0	30	84	22	0	39	75	22	0	30	117	47	0	623
8:00 AM	35	104	15	0	18	84	26	0	44	80	29	0	26	116	29	0	606
8:15 AM	31	88	26	0	22	65	23	0	45	72	15	0	16	86	25	0	514
8:30 AM	20	79	24	0	18	63	13	0	32	87	26	0	20	70	21	0	473
8:45 AM	22	69	19	0	44	78	15	0	40	135	23	0	21	85	13	1	565
TOTAL VOLUMES :	NL 205	NT 718	NR 138	NU 0	SL 186	ST 549	SR 146	SU 0	EL 295	ET 653	ER 195	EU 0	WL 169	WT 807	WR 216	WU 2	TOTAL 4279
APPROACH %'s :	19.32%	67.67%	13.01%	0.00%	21.11%	62.32%	16.57%	0.00%	25.81%	57.13%	17.06%	0.00%	14.15%	67.59%	18.09%	0.17%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL 2341
PEAK HR VOL :	110	412	60	0	88	296	87	0	153	308	115	0	98	470	144	0	2341
PEAK HR FACTOR :	0.786	0.904	0.789	0.000	0.733	0.881	0.837	0.000	0.869	0.895	0.846	0.000	0.817	0.955	0.766	0.000	0.939
	0.927				0.866				0.941				0.918				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	22	92	28	0	25	65	8	0	39	157	20	0	14	81	22	1	574
4:15 PM	13	81	24	0	28	85	8	0	49	156	37	1	15	66	25	1	589
4:30 PM	14	109	21	0	35	93	6	0	52	179	31	0	20	74	17	0	651
4:45 PM	17	125	27	0	40	86	8	0	56	194	32	0	13	60	14	0	672
5:00 PM	22	137	32	0	40	82	7	0	53	204	27	0	20	67	18	0	709
5:15 PM	29	150	29	0	24	88	8	0	72	180	26	0	16	78	19	0	719
5:30 PM	12	151	32	0	27	106	12	0	61	216	31	0	14	67	12	1	742
5:45 PM	20	122	29	0	28	84	10	0	61	204	33	0	17	89	27	0	724
TOTAL VOLUMES :	NL 149	NT 967	NR 222	NU 0	SL 247	ST 689	SR 67	SU 0	EL 443	ET 1490	ER 237	EU 1	WL 129	WT 582	WR 154	WU 3	TOTAL 5380
APPROACH %'s :	11.14%	72.27%	16.59%	0.00%	24.63%	68.69%	6.68%	0.00%	20.41%	68.63%	10.92%	0.05%	14.86%	67.05%	17.74%	0.35%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL 2894
PEAK HR VOL :	83	560	122	0	119	360	37	0	247	804	117	0	67	301	76	1	2894
PEAK HR FACTOR :	0.716	0.927	0.953	0.000	0.744	0.849	0.771	0.000	0.858	0.931	0.886	0.000	0.838	0.846	0.704	0.250	0.975
	0.919				0.890				0.948				0.836				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-006
 Date: 4/11/2019

Bikes

NS/EW Streets:	Monterey Pass Rd				Monterey Pass Rd				Floral Dr				Floral Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	4
	0.00%	100.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	1.000
	0.250								0.250				0.500				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	2	0	0	0	0	4	0	0	1	0	0	7
5:15 PM	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	1	2	0	1	5	0	0	2	0	4	0	0	2	0	0	19
	40.00%	20.00%	40.00%	0.00%	16.67%	83.33%	0.00%	0.00%	33.33%	0.00%	66.67%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	1	2	0	1	4	0	0	0	0	4	0	0	2	0	0	15
PEAK HR FACTOR :	0.25	0.250	0.500	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.536
	0.500				0.625				0.250				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Pass Rd & Floral Dr
City: Monterey Park

Project ID: 19-05183-006
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Monterey Pass Rd		Monterey Pass Rd		Floral Dr		Floral Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	1	0	2	2	3	0	0	8
7:15 AM	0	0	2	3	4	4	2	0	15
7:30 AM	3	0	0	3	0	3	0	0	9
7:45 AM	0	1	4	1	3	0	4	1	14
8:00 AM	2	0	2	1	4	2	1	0	12
8:15 AM	0	1	4	0	2	0	1	1	9
8:30 AM	1	2	0	1	2	3	1	0	10
8:45 AM	0	2	3	2	1	4	1	2	15
TOTAL VOLUMES :	EB 6	WB 7	EB 15	WB 13	NB 18	SB 19	NB 10	SB 4	TOTAL 92
APPROACH %'s :	46.15%	53.85%	53.57%	46.43%	48.65%	51.35%	71.43%	28.57%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL 50
PEAK HR VOL :	5	1	8	8	11	9	7	1	
PEAK HR FACTOR :	0.417	0.250	0.500	0.667	0.688	0.563	0.438	0.250	0.833
	0.500		0.800		0.625		0.400		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	4	1	3	1	0	1	10
4:15 PM	1	3	0	0	0	1	2	1	8
4:30 PM	3	0	1	2	5	3	0	0	14
4:45 PM	0	0	0	0	1	2	0	0	3
5:00 PM	0	1	0	1	1	2	0	2	7
5:15 PM	0	1	2	2	0	1	0	2	8
5:30 PM	0	0	6	3	3	4	0	0	16
5:45 PM	0	1	2	2	3	2	0	1	11
TOTAL VOLUMES :	EB 4	WB 6	EB 15	WB 11	NB 16	SB 16	NB 2	SB 7	TOTAL 77
APPROACH %'s :	40.00%	60.00%	57.69%	42.31%	50.00%	50.00%	22.22%	77.78%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL 42
PEAK HR VOL :	0	3	10	8	7	9	0	5	
PEAK HR FACTOR :		0.750	0.417	0.667	0.583	0.563		0.625	0.656
	0.750		0.500		0.571		0.625		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & W Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-027
 Date: 4/11/2019

Total

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				W Floral Dr				W Floral Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	TOTAL
7:00 AM	47	120	9	0	5	130	38	0	18	13	34	0	9	16	2	0	441
7:15 AM	50	131	12	0	6	134	49	0	35	11	41	0	5	24	5	0	503
7:30 AM	41	194	4	0	7	167	53	1	26	9	46	0	13	23	7	0	591
7:45 AM	50	189	11	0	8	205	33	0	38	15	49	0	6	18	7	0	629
8:00 AM	42	202	13	0	14	205	38	0	39	13	51	0	5	15	9	0	646
8:15 AM	48	130	8	0	12	143	29	0	34	13	45	0	9	17	9	0	497
8:30 AM	58	132	14	0	5	182	49	0	32	12	35	0	10	12	6	0	547
8:45 AM	55	170	13	0	6	165	57	0	55	16	37	0	6	20	11	0	611
TOTAL VOLUMES :	391	1268	84	0	63	1331	346	1	277	102	338	0	63	145	56	0	4465
APPROACH %'s :	22.43%	72.75%	4.82%	0.00%	3.62%	76.45%	19.87%	0.06%	38.63%	14.23%	47.14%	0.00%	23.86%	54.92%	21.21%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	183	716	40	0	35	711	173	1	138	48	187	0	29	80	28	0	2369
PEAK HR FACTOR :	0.915	0.886	0.769	0.000	0.625	0.867	0.816	0.250	0.885	0.800	0.917	0.000	0.558	0.833	0.778	0.000	0.917
	0.913				0.895				0.905				0.797				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	TOTAL
4:00 PM	30	175	8	0	25	189	32	1	89	31	65	0	14	27	11	0	697
4:15 PM	37	185	17	1	15	172	27	2	79	33	81	0	20	18	13	0	700
4:30 PM	40	171	9	1	22	141	32	0	75	35	63	0	26	20	6	0	641
4:45 PM	35	204	13	0	14	161	22	0	80	34	65	0	20	24	8	0	680
5:00 PM	37	197	13	0	11	184	35	0	115	33	79	0	16	27	10	0	757
5:15 PM	48	253	15	1	13	184	25	1	70	36	49	0	15	25	9	0	744
5:30 PM	40	214	30	1	20	187	34	2	110	35	56	0	20	19	14	0	782
5:45 PM	53	258	14	0	26	187	39	0	82	37	64	0	15	21	7	0	803
TOTAL VOLUMES :	320	1657	119	4	146	1405	246	6	700	274	522	0	146	181	78	0	5804
APPROACH %'s :	15.24%	78.90%	5.67%	0.19%	8.10%	77.93%	13.64%	0.33%	46.79%	18.32%	34.89%	0.00%	36.05%	44.69%	19.26%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	178	922	72	2	70	742	133	3	377	141	248	0	66	92	40	0	3086
PEAK HR FACTOR :	0.840	0.893	0.600	0.500	0.673	0.992	0.853	0.375	0.820	0.953	0.785	0.000	0.825	0.852	0.714	0.000	0.961
	0.903				0.940				0.844				0.934				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & W Floral Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-027
 Date: 4/11/2019

Bikes

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				W Floral Dr				W Floral Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	3	0	0	0	1	0	0	0	1	0	0	5
PEAK HR :	07:15 AM - 08:15 AM				0.00%				100.00%				0.00%				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500
										0.250				0.250			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
4:00 PM	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	1	0	0	9	0	0	1	2	1	0	0	0	0	0	15
PEAK HR :	05:00 PM - 06:00 PM				0.00%				50.00%				25.00%				TOTAL
PEAK HR VOL :	0	1	1	0	0	4	0	0	1	1	1	0	0	0	0	0	9
PEAK HR FACTOR :	0.00	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.450
										0.375							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & W Floral Dr
City: Monterey Park

Project ID: 19-05183-027
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Atlantic Blvd		Atlantic Blvd		W Floral Dr		W Floral Dr			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	0	0	3	6	1	4	3	0	17
	7:15 AM	0	0	2	2	2	0	0	2	8
	7:30 AM	0	0	2	4	1	1	0	0	8
	7:45 AM	0	0	4	4	1	2	2	2	15
	8:00 AM	0	0	2	2	0	1	1	2	8
	8:15 AM	0	0	7	6	2	0	3	3	21
	8:30 AM	0	0	0	4	2	1	1	3	11
	8:45 AM	0	0	12	15	1	0	1	1	30
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	0	0	32	43	10	9	11	13	118	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL	
PEAK HR VOL :	0	0	10	12	4	4	3	6	39	
PEAK HR FACTOR :			0.625	0.750	0.500	0.500	0.375	0.750	0.650	
			0.688		0.667		0.563			

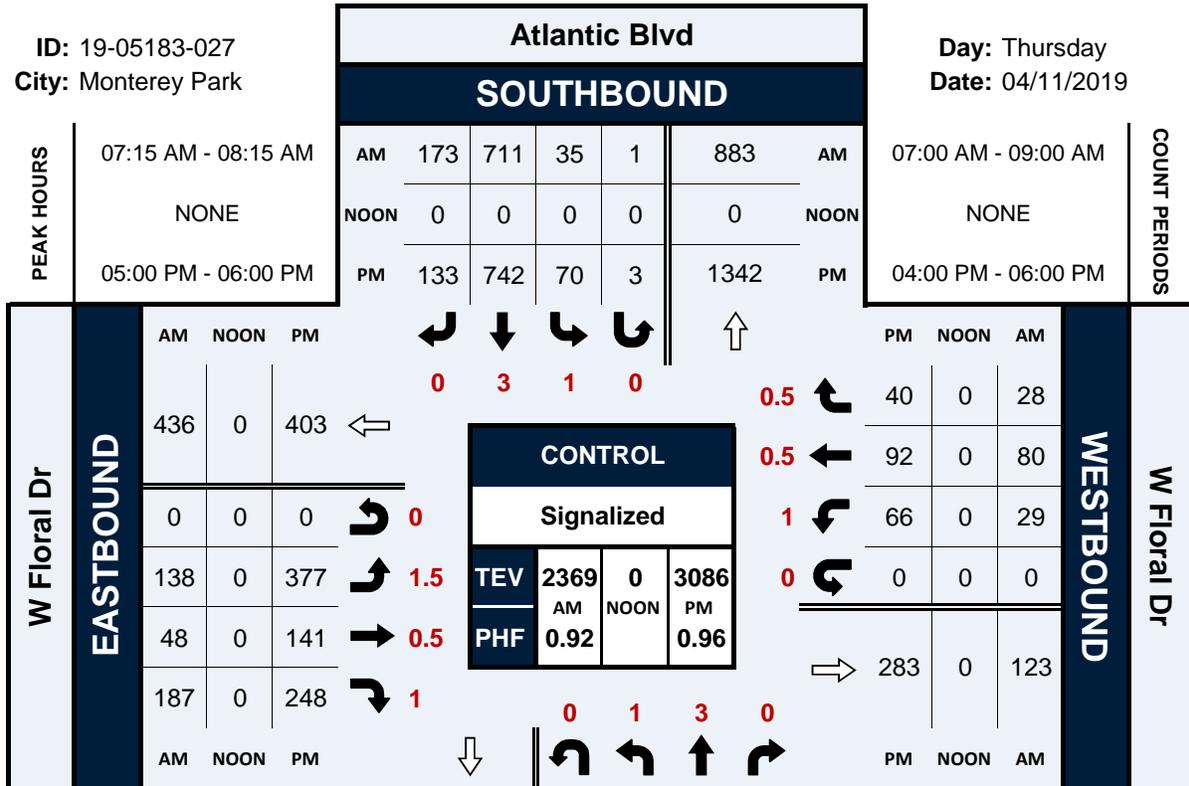
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	4:00 PM	0	0	11	5	1	1	3	8	29
	4:15 PM	0	0	12	12	1	0	6	4	35
	4:30 PM	0	0	26	5	6	1	1	6	45
	4:45 PM	0	0	7	3	0	0	7	6	23
	5:00 PM	0	0	11	11	1	0	2	10	35
	5:15 PM	0	0	7	5	0	0	3	3	18
	5:30 PM	0	0	12	13	1	0	5	2	33
	5:45 PM	0	0	12	14	0	0	2	6	34
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	0	0	98	68	10	2	29	45	252	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL	
PEAK HR VOL :	0	0	42	43	2	0	12	21	120	
PEAK HR FACTOR :			0.875	0.768	0.500	0.500	0.600	0.525	0.857	
			0.817		0.500		0.688			

Atlantic Blvd & W Floral Dr

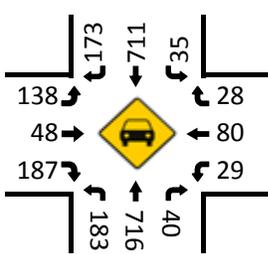
Peak Hour Turning Movement Count

ID: 19-05183-027
City: Monterey Park

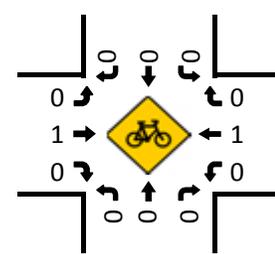
Day: Thursday
Date: 04/11/2019



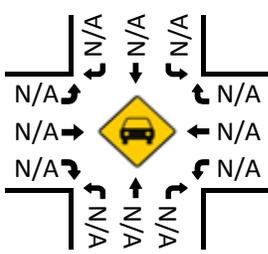
Total Vehicles (AM)



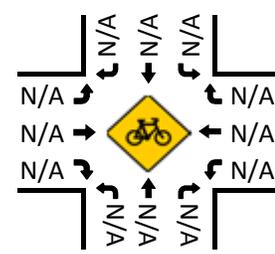
Bikes (AM)



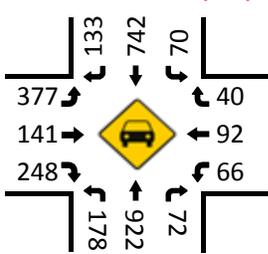
Total Vehicles (Noon)



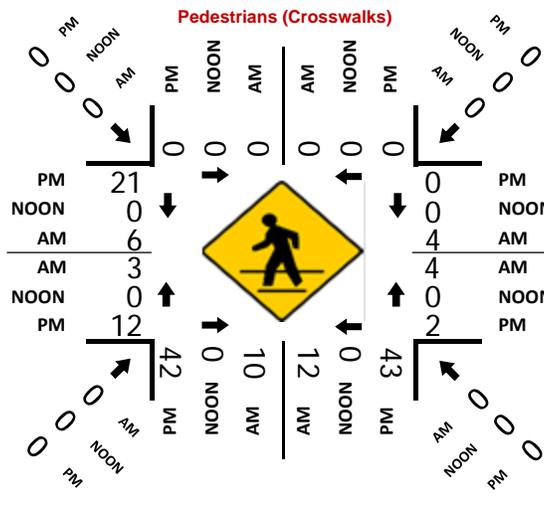
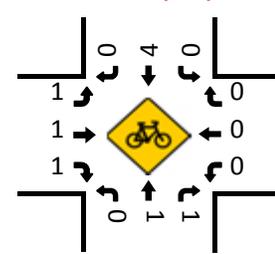
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bleakwood Ave & Avenida Cesar Chavez
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-030
 Date: 4/11/2019

NS/EW Streets:		Total																								
		Bleakwood Ave				Bleakwood Ave				Avenida Cesar Chavez				Avenida Cesar Chavez				TOTAL								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL									
	NL	NT	NR	NU	NL2	SL	ST	SR	SU	SR2	EL	ET	ER	EU	EU2	WL		WT	WR	WU	WT2	E2U	E2L2	E2T2	E2R2	E2U2
7:00 AM	0	0	0	0	0	9	0	8	0	0	7	60	0	0	0	0	72	2	0	1	0	0	0	3	0	2
7:15 AM	0	0	0	0	0	8	0	10	0	0	15	121	0	0	0	0	87	13	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	14	0	13	0	0	20	102	0	0	0	0	109	9	0	0	0	0	0	2	0	6
7:45 AM	0	0	0	0	0	15	0	23	0	0	24	117	0	0	2	0	93	19	0	2	0	0	0	5	0	1
8:00 AM	0	0	0	0	0	18	0	13	0	1	21	110	0	0	1	0	92	23	0	3	0	1	2	0	1	1
8:15 AM	0	0	0	0	0	16	0	4	0	1	23	75	0	0	2	0	94	24	0	1	0	1	3	0	4	4
8:30 AM	0	0	0	0	0	19	0	19	0	0	23	134	0	0	1	0	121	23	0	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	21	0	11	0	1	32	176	0	0	2	0	114	33	0	0	0	0	1	0	1	1
TOTAL VOLUMES:	NL	NT	NR	NU	NL2	SL	ST	SR	SU	SR2	EL	ET	ER	EU	EU2	WL	WT	WR	WU	WT2	E2U	E2L2	E2T2	E2R2	E2U2	TOTAL
APPROACH %:	0	0	0	0	0	120	0	101	0	3	165	895	0	0	8	0	782	146	0	10	0	2	16	0	18	2266
PEAK HR VOL:	0	0	0	0	0	74	0	47	0	3	99	495	0	0	6	0	421	103	0	6	0	2	6	0	6	1268
PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.881	0.000	0.618	0.000	0.750	0.773	0.703	0.000	0.000	0.750	0.000	0.870	0.780	0.000	0.500	0.000	0.500	0.500	0.000	0.375	0.809

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bleakwood Ave & Avenida Cesar Chavez
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-030
 Date: 4/11/2019

NS/EW Streets:		Bikes																				TOTAL									
		Bleakwood Ave					Bleakwood Ave					Avenida Cesar Chavez					Avenida Cesar Chavez														
AM		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND														
	7:00 AM	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3
	8:45 AM	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	TOTAL VOLUMES:	NL	NT	NR	NU	NL2	SL	ST	SR	SU	SR2	EL	ET	ER	EU	EU2	WL	WT	WR	WU	WT2	E2U	E2L2	E2T2	E2R2	E2U2	TOTAL				
APPROACH %s:	0	1	0	0	0	0	0	1	0	0	0	3	0	0	0	0	1	1	0	0	0	0	0	1	0	8					
PEAK HR VOL:	0	1	0	0	0	0	0	1	0	0	0	3	0	0	0	0	1	1	0	0	0	0	0	1	0	7					
PEAK HR FACTOR:	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.583					
	08:00 AM - 09:00 AM																														
	0	1	0	0	0	0	0	1	0	0	0	3	0	0	0	0	1	1	0	0	0	0	0	1	0	7					
	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.583					
PM		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND														
	4:00 PM	0	0	0	0	0	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	5
	5:00 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	TOTAL VOLUMES:	NL	NT	NR	NU	NL2	SL	ST	SR	SU	SR2	EL	ET	ER	EU	EU2	WL	WT	WR	WU	WT2	E2U	E2L2	E2T2	E2R2	E2U2	TOTAL				
APPROACH %s:	0	0	0	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	5	0	2	3	0	0	17					
PEAK HR VOL:	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	1	0	0	0	1	0	6					
PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.375					
	05:00 PM - 06:00 PM																														
	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	1	0	0	0	1	0	6					
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.375					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bleakwood Ave & Avenida Cesar Chavez
City: Monterey Park

Project ID: 19-05183-030
Date: 4/11/2019

Pedestrians (Crosswalks)

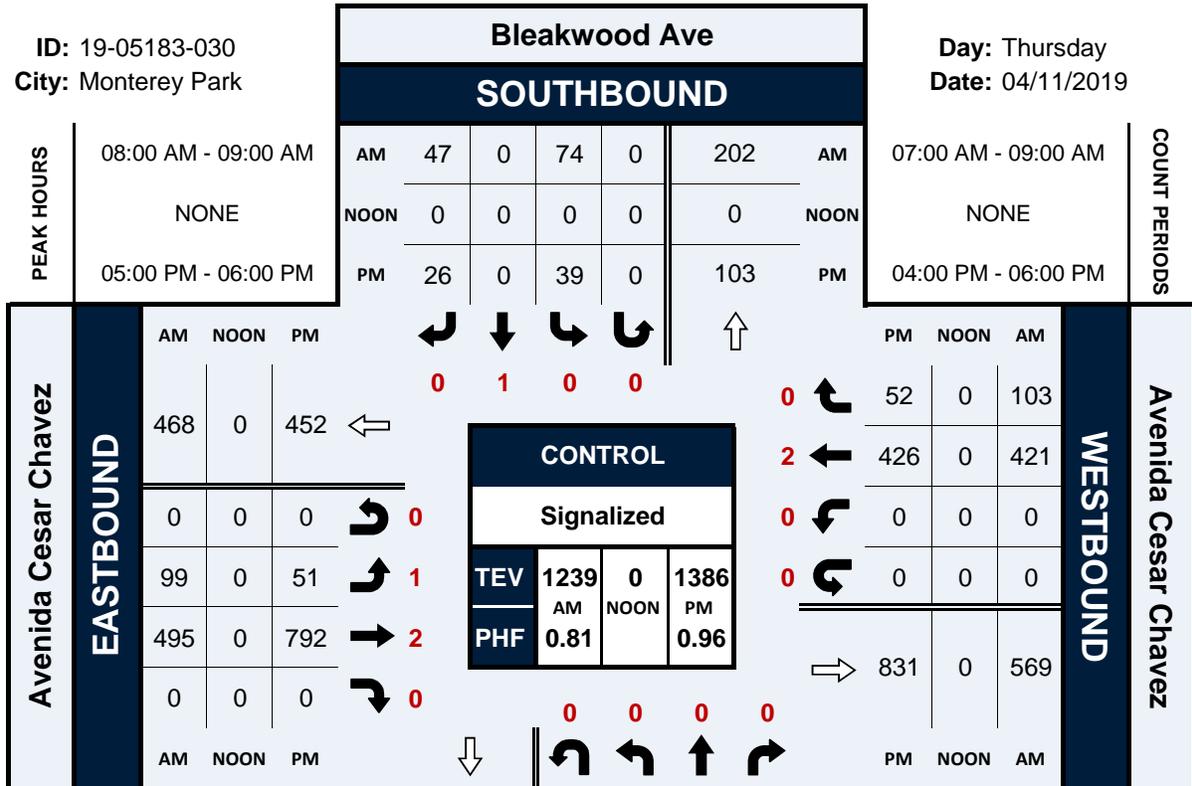
NS/EW Streets:	Bleakwood Ave		Bleakwood Ave		Avenida Cesar Chavez		Avenida Cesar Chavez					
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		WEST LEG 2		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB		
	7:00 AM	2	1	0	0	0	0	0	0	0	0	3
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	1	0	0	0	5	0	0	0	0	0	6
	7:45 AM	3	2	0	0	1	1	0	0	0	0	7
	8:00 AM	4	0	0	0	2	1	0	0	0	0	7
	8:15 AM	1	1	0	0	6	0	0	0	0	0	8
	8:30 AM	5	1	0	0	2	0	0	0	0	0	8
	8:45 AM	6	1	0	0	6	2	0	0	0	0	15
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	22	6	0	0	22	4	0	0	0	0	54	
	78.57%	21.43%			84.62%	15.38%						
PEAK HR :	08:00 AM - 09:00 AM										TOTAL	
PEAK HR VOL :	16	3	0	0	16	3	0	0	0	0	38	
PEAK HR FACTOR :	0.667	0.750			0.667	0.375					0.633	
	0.679				0.594							
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		WEST LEG 2		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB		
	4:00 PM	3	2	0	0	0	1	0	0	0	0	6
	4:15 PM	2	2	0	0	1	1	0	0	0	0	6
	4:30 PM	2	4	0	0	2	0	0	0	0	0	8
	4:45 PM	5	1	0	0	0	0	0	0	0	0	6
	5:00 PM	0	0	0	0	1	0	0	0	0	0	1
	5:15 PM	2	0	0	0	0	0	0	0	0	0	2
	5:30 PM	1	2	0	0	0	0	0	0	0	1	4
	5:45 PM	1	7	0	0	0	1	0	0	0	0	9
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	16	18	0	0	4	3	0	0	0	1	42	
	47.06%	52.94%			57.14%	42.86%			0.00%	100.00%		
PEAK HR :	05:00 PM - 06:00 PM										TOTAL	
PEAK HR VOL :	4	9	0	0	1	1	0	0	0	1	16	
PEAK HR FACTOR :	0.500	0.321			0.250	0.250				0.250	0.444	
	0.406				0.500				0.250			

Bleakwood Ave & Avenida Cesar Chavez

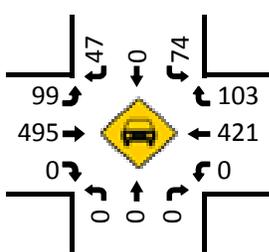
Peak Hour Turning Movement Count

ID: 19-05183-030
City: Monterey Park

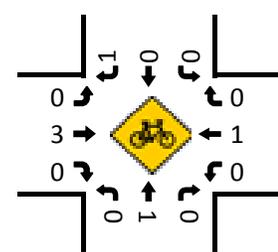
Day: Thursday
Date: 04/11/2019



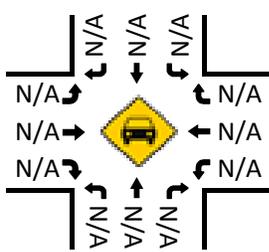
Total Vehicles (AM)



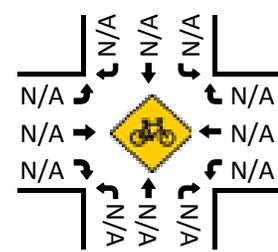
Bikes (AM)



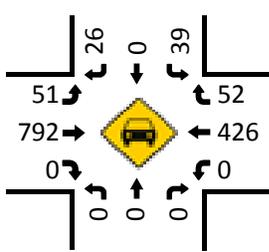
Total Vehicles (Noon)



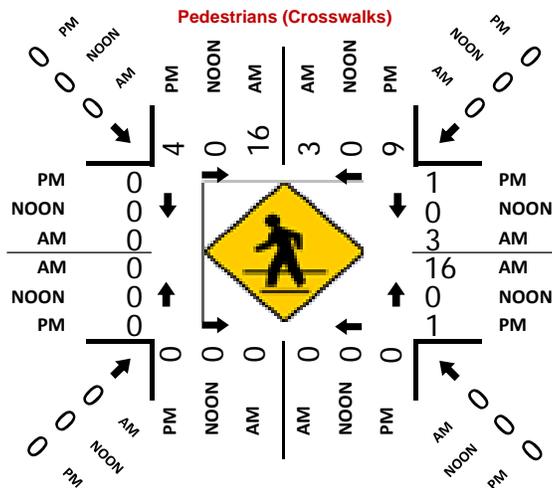
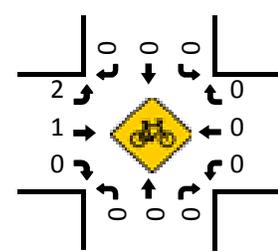
Bikes (Noon)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Collegian Ave & Avenida Cesar Chavez
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-029
 Date: 4/11/2019

Total

NS/EW Streets:	Collegian Ave				Collegian Ave				Avenida Cesar Chavez				Avenida Cesar Chavez				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	9	13	6	0	3	2	11	0	13	41	2	0	4	121	25	0	250
7:15 AM	13	16	9	0	10	6	10	0	15	68	3	0	3	166	46	0	365
7:30 AM	11	17	8	0	11	5	13	0	10	88	2	0	3	150	26	0	344
7:45 AM	4	26	7	0	5	9	11	0	9	109	5	0	14	166	33	1	399
8:00 AM	8	14	13	0	10	5	9	0	15	90	1	0	7	139	22	0	333
8:15 AM	15	20	6	0	13	11	24	0	11	67	5	0	14	153	20	0	359
8:30 AM	14	18	7	0	11	8	22	0	18	65	4	0	5	193	22	0	387
8:45 AM	37	33	5	0	11	13	30	0	16	87	3	0	10	210	39	0	494
TOTAL VOLUMES :	111	157	61	0	74	59	130	0	107	615	25	0	60	1298	233	1	2931
APPROACH %'s :	33.74%	47.72%	18.54%	0.00%	28.14%	22.43%	49.43%	0.00%	14.32%	82.33%	3.35%	0.00%	3.77%	81.53%	14.64%	0.06%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	74	85	31	0	45	37	85	0	60	309	13	0	36	695	103	0	1573
PEAK HR FACTOR :	0.500	0.644	0.596	0.000	0.865	0.712	0.708	0.000	0.833	0.858	0.650	0.000	0.643	0.827	0.660	0.000	0.796
	0.633				0.773				0.901				0.805				
PM	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	10	16	20	0	19	12	18	0	29	152	3	0	8	106	18	0	411
4:15 PM	7	18	8	0	16	14	26	0	26	155	3	0	7	95	21	3	399
4:30 PM	10	26	11	0	9	14	28	0	23	197	1	0	8	76	26	0	429
4:45 PM	8	24	22	0	12	13	23	0	34	184	9	0	8	110	20	0	467
5:00 PM	8	36	28	0	24	21	16	0	31	162	12	0	13	107	17	1	476
5:15 PM	10	29	19	0	16	13	29	0	27	177	10	0	9	99	25	0	463
5:30 PM	12	31	25	0	14	13	27	0	35	169	7	0	5	102	12	1	453
5:45 PM	6	31	16	0	17	19	21	0	24	168	12	0	14	105	24	0	457
TOTAL VOLUMES :	71	211	149	0	127	119	188	0	229	1364	57	0	72	800	163	5	3555
APPROACH %'s :	16.47%	48.96%	34.57%	0.00%	29.26%	27.42%	43.32%	0.00%	13.88%	82.67%	3.45%	0.00%	6.92%	76.92%	15.67%	0.48%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	38	120	94	0	66	60	95	0	127	692	38	0	35	418	74	2	1859
PEAK HR FACTOR :	0.792	0.833	0.839	0.000	0.688	0.714	0.819	0.000	0.907	0.940	0.792	0.000	0.673	0.950	0.740	0.500	0.976
	0.875				0.906				0.944				0.958				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Collegian Ave & Avenida Cesar Chavez
City: Monterey Park
Control: Signalized

Project ID: 19-05183-029
Date: 4/11/2019

Bikes

NS/EW Streets:	Collegian Ave				Collegian Ave				Avenida Cesar Chavez				Avenida Cesar Chavez				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	0	0	0	0	1	2	0	0	1	2	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	0	2	0	0	0	4	0	0	8
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	5
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.000	0.625
				0.250						0.250				0.750			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4
5:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	4
TOTAL VOLUMES :	0	1	1	0	0	0	0	0	1	4	0	0	2	3	1	2	15
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	80.00%	0.00%	0.00%	25.00%	37.50%	12.50%	25.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	2	0	0	0	1	1	2	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.250	0.250	0.250	0.438
				0.000					0.250	0.750				0.250	0.250	0.250	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Collegian Ave & Avenida Cesar Chavez
City: Monterey Park

Project ID: 19-05183-029
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Collegian Ave		Collegian Ave		Avenida Cesar Chavez		Avenida Cesar Chavez		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	3	21	6	3	5	4	2	1	45
7:15 AM	4	17	9	3	2	2	5	3	45
7:30 AM	4	39	7	5	5	0	6	0	66
7:45 AM	5	17	12	1	1	1	4	0	41
8:00 AM	6	29	4	4	4	5	6	1	59
8:15 AM	8	30	2	6	4	4	7	2	63
8:30 AM	6	25	4	8	2	2	6	4	57
8:45 AM	12	100	6	16	4	6	21	2	167
TOTAL VOLUMES :	EB 48	WB 278	EB 50	WB 46	NB 27	SB 24	NB 57	SB 13	TOTAL 543
APPROACH %'s :	14.72%	85.28%	52.08%	47.92%	52.94%	47.06%	81.43%	18.57%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	32	184	16	34	14	17	40	9	346
PEAK HR FACTOR :	0.667	0.460	0.667	0.531	0.875	0.708	0.476	0.563	0.518
	0.482		0.568		0.775		0.533		

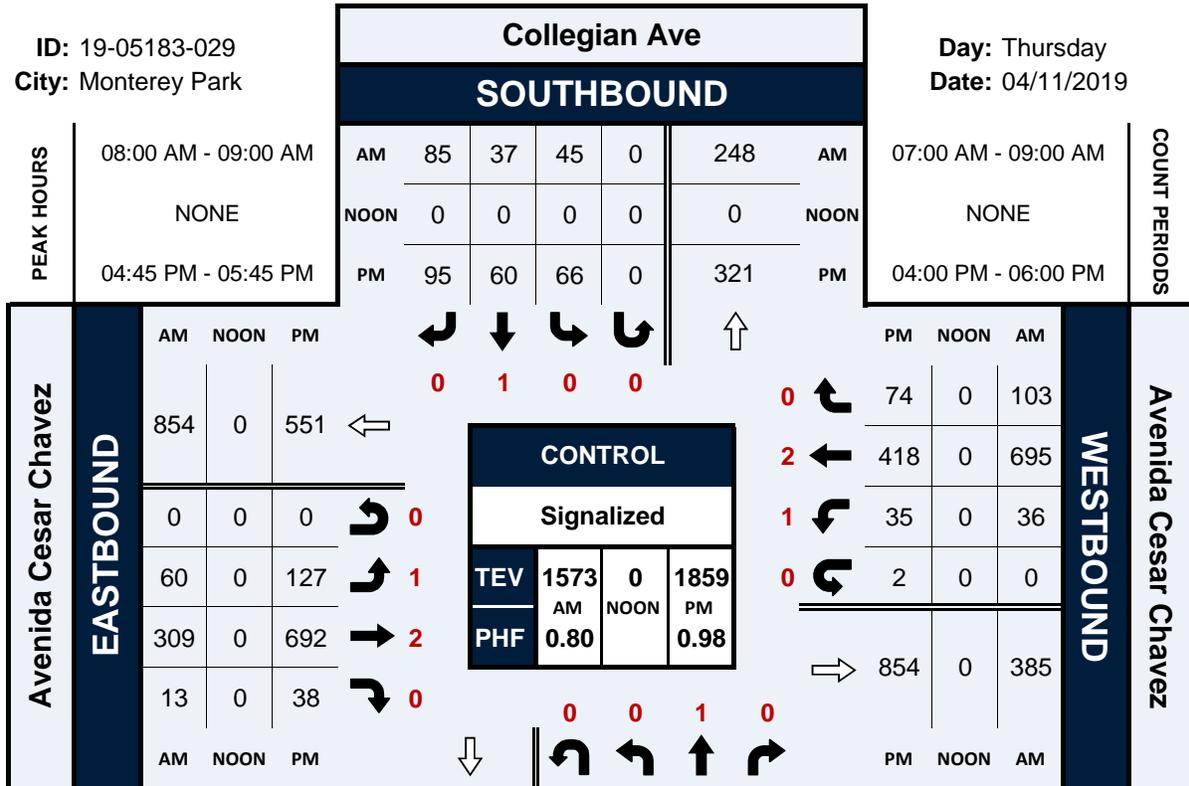
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	22	14	11	5	4	7	3	2	68
4:15 PM	28	15	7	3	4	11	4	3	75
4:30 PM	28	19	5	6	1	5	9	4	77
4:45 PM	8	27	6	1	5	2	6	3	58
5:00 PM	34	20	8	4	2	10	3	4	85
5:15 PM	25	21	8	5	8	9	4	10	90
5:30 PM	14	24	2	2	0	3	3	1	49
5:45 PM	17	12	5	0	4	6	3	2	49
TOTAL VOLUMES :	EB 176	WB 152	EB 52	WB 26	NB 28	SB 53	NB 35	SB 29	TOTAL 551
APPROACH %'s :	53.66%	46.34%	66.67%	33.33%	34.57%	65.43%	54.69%	45.31%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	81	92	24	12	15	24	16	18	282
PEAK HR FACTOR :	0.596	0.852	0.750	0.600	0.469	0.600	0.667	0.450	0.783
	0.801		0.692		0.574		0.607		

Collegian Ave & Avenida Cesar Chavez

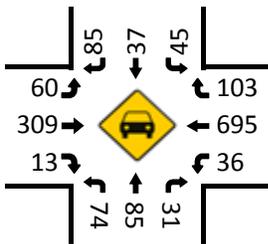
Peak Hour Turning Movement Count

ID: 19-05183-029
City: Monterey Park

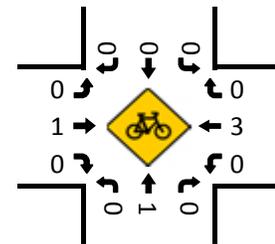
Day: Thursday
Date: 04/11/2019



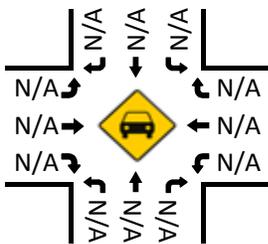
Total Vehicles (AM)



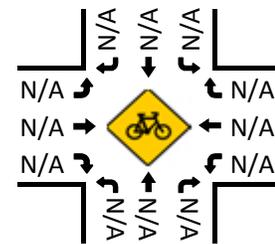
Bikes (AM)



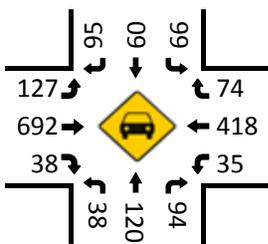
Total Vehicles (Noon)



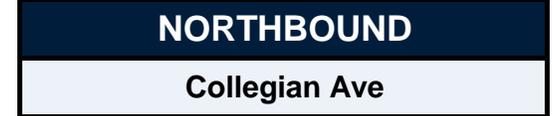
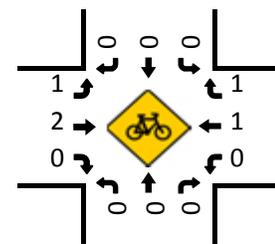
Bikes (NOON)



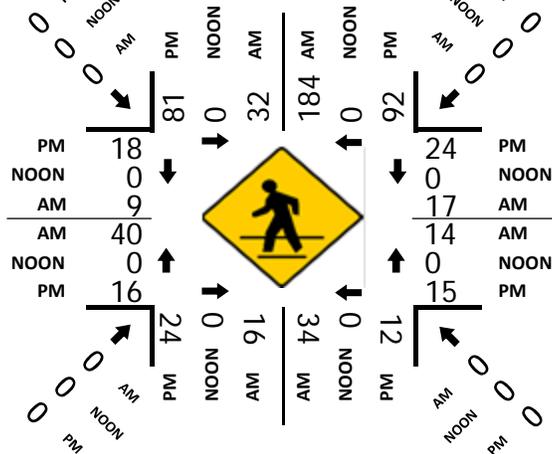
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Avenida Cesar Chavez/Riggin St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-026
 Date: 4/11/2019

Total

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				Avenida Cesar Chavez/Riggin St				Avenida Cesar Chavez/Riggin St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	57	129	5	0	10	141	24	0	16	22	20	0	33	104	20	0	581
7:15 AM	53	146	12	0	15	150	27	0	22	39	34	0	26	118	36	0	678
7:30 AM	44	176	15	0	10	169	14	0	21	39	38	0	24	131	33	0	714
7:45 AM	48	221	13	1	21	208	31	1	18	75	32	0	31	117	19	0	836
8:00 AM	52	182	20	0	27	177	20	0	27	60	21	0	25	107	23	0	741
8:15 AM	53	170	17	1	24	150	28	0	22	35	17	0	23	85	12	0	637
8:30 AM	65	185	18	0	17	159	44	0	19	42	31	0	21	147	24	0	772
8:45 AM	60	222	14	0	18	162	35	1	23	43	45	0	16	136	24	0	799
TOTAL VOLUMES :	NL 432	NT 1431	NR 114	NU 2	SL 142	ST 1316	SR 223	SU 2	EL 168	ET 355	ER 238	EU 0	WL 199	WT 945	WR 191	WU 0	TOTAL 5758
APPROACH %'s :	21.83%	72.31%	5.76%	0.10%	8.44%	78.19%	13.25%	0.12%	22.08%	46.65%	31.27%	0.00%	14.91%	70.79%	14.31%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	218	758	68	2	89	694	123	1	86	212	101	0	100	456	78	0	TOTAL 2986
PEAK HR FACTOR :	0.838	0.857	0.850	0.500	0.824	0.834	0.699	0.250	0.796	0.707	0.789	0.000	0.806	0.776	0.813	0.000	0.893
	0.924				0.869				0.798				0.826				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:00 PM	35	179	48	2	54	177	25	0	29	115	38	0	24	63	23	0	812
4:15 PM	27	190	73	0	56	162	32	0	36	127	29	0	26	54	19	0	831
4:30 PM	41	198	78	1	58	171	21	0	29	152	32	0	20	54	23	0	878
4:45 PM	38	192	66	0	53	149	37	0	40	164	27	0	25	63	26	0	880
5:00 PM	26	206	76	2	51	176	34	0	37	141	21	0	27	68	26	0	891
5:15 PM	32	248	66	0	50	142	31	1	44	160	27	0	18	68	30	0	917
5:30 PM	40	246	55	1	65	164	28	0	43	145	22	0	27	63	31	0	930
5:45 PM	27	252	60	0	50	165	42	0	37	132	36	0	13	73	36	0	923
TOTAL VOLUMES :	NL 266	NT 1711	NR 522	NU 6	SL 437	ST 1306	SR 250	SU 1	EL 295	ET 1136	ER 232	EU 0	WL 180	WT 506	WR 214	WU 0	TOTAL 7062
APPROACH %'s :	10.62%	68.30%	20.84%	0.24%	21.92%	65.50%	12.54%	0.05%	17.74%	68.31%	13.95%	0.00%	20.00%	56.22%	23.78%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	125	952	257	3	216	647	135	1	161	578	106	0	85	272	123	0	TOTAL 3661
PEAK HR FACTOR :	0.781	0.944	0.845	0.375	0.831	0.919	0.804	0.250	0.915	0.903	0.736	0.000	0.787	0.932	0.854	0.000	0.984
	0.966				0.957				0.915				0.984				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Avenida Cesar Chavez/Riggin St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-026
 Date: 4/11/2019

Bikes

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				Avenida Cesar Chavez/Riggin St				Avenida Cesar Chavez/Riggin St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	1	3	0	0	0	0	1	0	3	2	1	0	10
					33.33%	66.67%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	50.00%	33.33%	16.67%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	3	2	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.500	0.000	0.000	0.750
					0.250								0.625				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
4:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4
5:45 PM	0	3	1	0	0	2	0	0	0	2	0	0	0	0	0	0	8
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	7	1	0	1	3	0	0	0	4	0	0	1	4	0	0	22
	11.11%	77.78%	11.11%	0.00%	25.00%	75.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	20.00%	80.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	6	1	0	0	3	0	0	0	2	0	0	0	1	0	0	14
PEAK HR FACTOR :	0.25	0.500	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.438
					0.375								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & Avenida Cesar Chavez/Riggin St
City: Monterey Park

Project ID: 19-05183-026
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Atlantic Blvd		Atlantic Blvd		Avenida Cesar Chavez/Riggin St		Avenida Cesar Chavez/Riggin St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	3	30	0	2	3	1	1	2	42
7:15 AM	3	13	3	13	1	13	2	2	50
7:30 AM	0	34	1	5	3	5	1	2	51
7:45 AM	1	10	4	2	3	1	1	2	24
8:00 AM	6	37	0	3	2	2	0	2	52
8:15 AM	6	30	1	0	5	2	1	3	48
8:30 AM	1	56	2	6	2	3	0	10	80
8:45 AM	4	68	2	3	3	7	4	7	98
TOTAL VOLUMES :	EB 24	WB 278	EB 13	WB 34	NB 22	SB 34	NB 10	SB 30	TOTAL 445
APPROACH %'s :	7.95%	92.05%	27.66%	72.34%	39.29%	60.71%	25.00%	75.00%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	14	133	7	11	12	8	2	17	204
PEAK HR FACTOR :	0.583	0.594	0.438	0.458	0.600	0.667	0.500	0.425	0.638
	0.645		0.563		0.714		0.475		

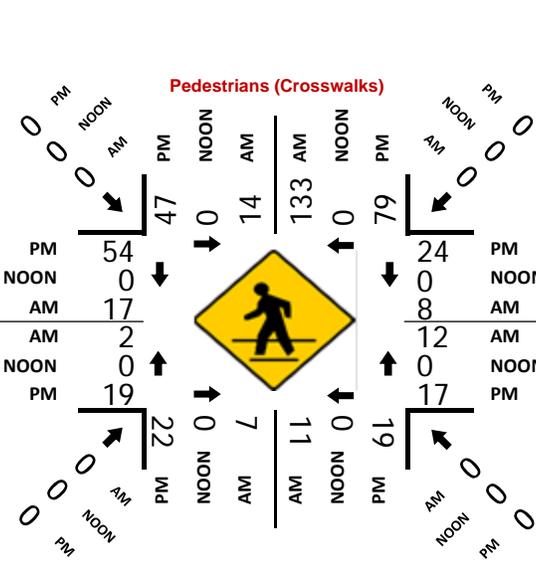
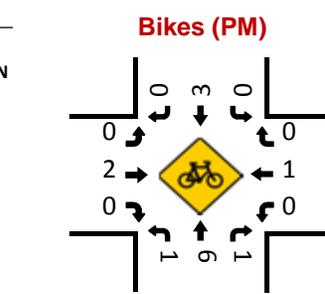
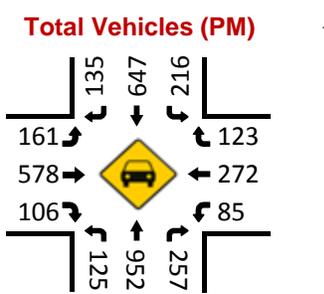
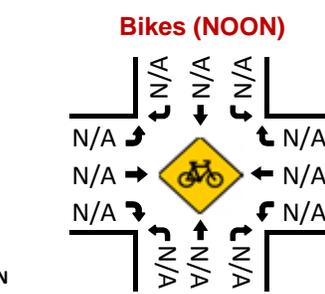
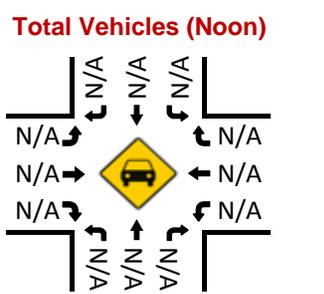
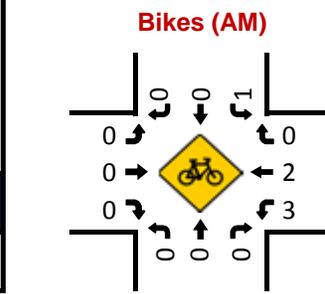
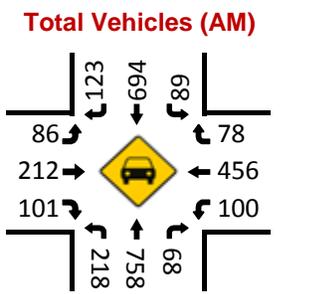
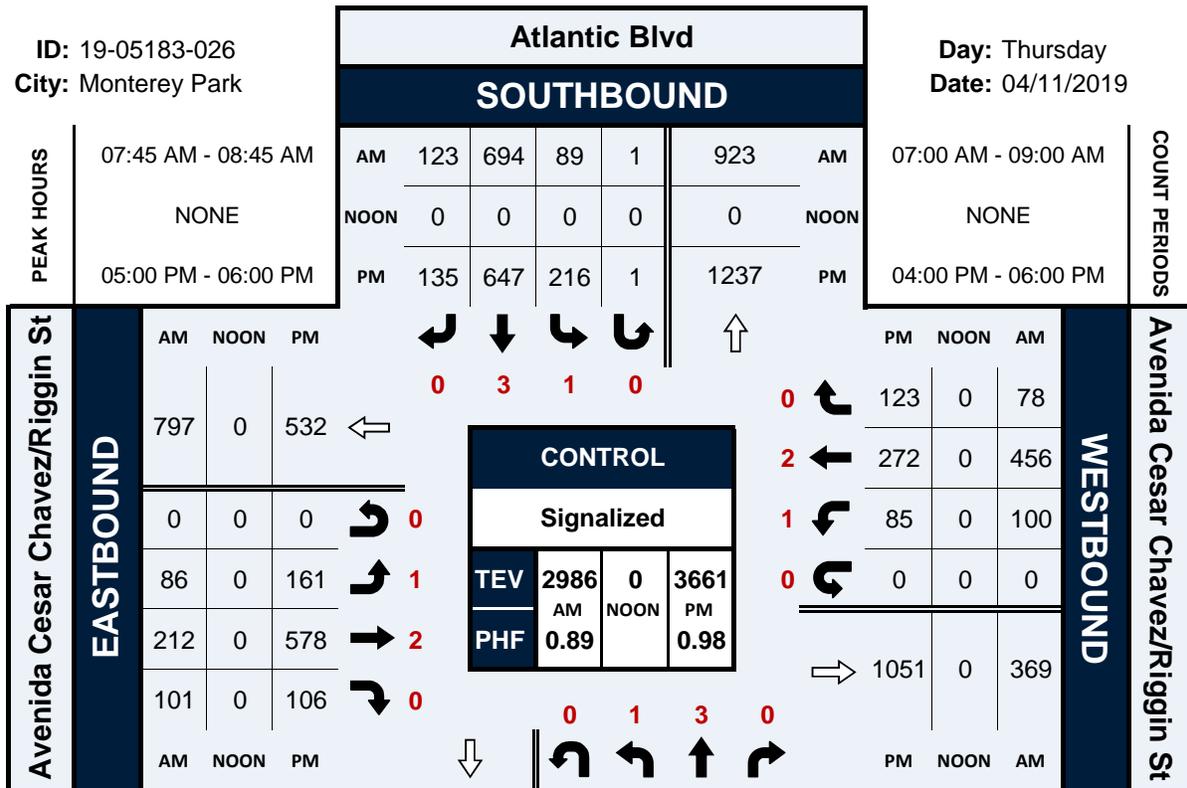
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	18	14	3	5	7	9	9	15	80
4:15 PM	12	14	1	4	3	7	2	7	50
4:30 PM	21	39	5	5	18	6	5	16	115
4:45 PM	8	20	2	0	1	3	6	11	51
5:00 PM	16	24	7	4	4	3	4	17	79
5:15 PM	15	17	5	5	5	10	5	17	79
5:30 PM	5	19	5	4	5	4	3	14	59
5:45 PM	11	19	5	6	3	7	7	6	64
TOTAL VOLUMES :	EB 106	WB 166	EB 33	WB 33	NB 46	SB 49	NB 41	SB 103	TOTAL 577
APPROACH %'s :	38.97%	61.03%	50.00%	50.00%	48.42%	51.58%	28.47%	71.53%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	47	79	22	19	17	24	19	54	281
PEAK HR FACTOR :	0.734	0.823	0.786	0.792	0.850	0.600	0.679	0.794	0.889
	0.788		0.932		0.683		0.830		

Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Peak Hour Turning Movement Count

ID: 19-05183-026
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-025
 Date: 4/11/2019

Total

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd					1st St/SR 60 WB Off-Ramp				1st St/SR 60 WB Off-Ramp				TOTAL			
	NORTHBOUND				SOUTHBOUND					EASTBOUND				WESTBOUND							
AM	1 NL	2 NT	0 NR	0 NU	0 SL	3 ST	0 SR	0 SU	0 SR2	1 EL	0 ET	1 ER	0 EU	0.5 WL	1 WT	0.5 WR	0 WU				
7:00 AM	32	153	119	2	0	165	15	0	104	5	0	48	0	55	42	40	0	780			
7:15 AM	48	159	158	2	0	208	18	0	89	10	0	44	0	59	59	45	0	899			
7:30 AM	64	181	100	2	0	223	15	0	82	5	0	58	0	53	77	53	0	913			
7:45 AM	95	194	95	1	0	244	26	0	78	7	0	55	0	87	86	54	0	1022			
8:00 AM	46	179	96	1	0	206	24	0	75	19	0	49	0	74	62	57	0	888			
8:15 AM	38	197	76	0	0	177	27	0	55	6	0	58	0	72	61	58	0	825			
8:30 AM	62	199	72	1	0	213	16	0	84	8	0	72	0	64	57	64	0	912			
8:45 AM	64	212	56	1	0	209	18	0	100	13	0	70	0	84	68	82	0	977			
TOTAL VOLUMES :	NL 449	NT 1474	NR 772	NU 10	SL 0	ST 1645	SR 159	SU 0	SR2 667	EL 73	ET 0	ER 454	EU 0	WL 548	WT 512	WR 453	WU 66	TOTAL 7216			
APPROACH %'s :	16.60%	54.49%	28.54%	0.37%	0.00%	66.57%	6.43%	0.00%	26.99%	13.85%	0.00%	86.15%	0.00%	36.22%	33.84%	29.94%	0.00%				
PEAK HR :	07:15 AM - 08:15 AM																				
PEAK HR VOL :	253	713	449	6	0	881	83	0	324	41	0	206	0	273	284	209	0	TOTAL 3722			
PEAK HR FACTOR :	0.666	0.919	0.710	0.750	0.000	0.903	0.798	0.000	0.910	0.539	0.000	0.888	0.000	0.784	0.826	0.917	0.000	0.910			
	0.923				0.925					0.908				0.844							
PM	1 NL	2 NT	0 NR	0 NU	0 SL	3 ST	0 SR	0 SU	0 SR2	1 EL	0 ET	1 ER	0 EU	0.5 WL	1 WT	0.5 WR	0 WU				
4:00 PM	21	180	78	2	0	202	15	0	91	37	0	88	0	49	30	61	0	854			
4:15 PM	21	203	78	0	0	219	10	0	90	41	0	107	0	70	50	62	0	951			
4:30 PM	24	206	84	3	0	210	22	0	93	52	0	72	0	54	24	57	0	901			
4:45 PM	25	187	79	1	0	179	21	0	73	43	0	82	0	59	54	69	0	872			
5:00 PM	27	195	96	0	0	196	15	0	88	47	0	126	0	44	38	72	0	944			
5:15 PM	22	246	96	0	0	191	19	0	66	39	0	95	0	57	63	80	0	974			
5:30 PM	24	235	77	1	0	180	33	1	77	35	0	63	0	53	59	77	0	915			
5:45 PM	30	220	75	0	0	193	20	0	105	19	0	81	0	56	48	111	0	958			
TOTAL VOLUMES :	NL 194	NT 1672	NR 663	NU 7	SL 0	ST 1570	SR 155	SU 1	SR2 683	EL 313	ET 0	ER 714	EU 0	WL 442	WT 366	WR 589	WU 0	TOTAL 7369			
APPROACH %'s :	7.65%	65.93%	26.14%	0.28%	0.00%	65.17%	6.43%	0.04%	28.35%	30.48%	0.00%	69.52%	0.00%	31.64%	26.20%	42.16%	0.00%				
PEAK HR :	05:00 PM - 06:00 PM																				
PEAK HR VOL :	103	896	344	1	0	760	87	1	336	140	0	365	0	210	208	340	0	TOTAL 3791			
PEAK HR FACTOR :	0.858	0.911	0.896	0.250	0.000	0.969	0.659	0.250	0.800	0.745	0.000	0.724	0.000	0.921	0.825	0.766	0.000	0.973			
	0.923				0.931					0.730				0.881							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
City: Monterey Park

Project ID: 19-05183-025
Date: 4/11/2019

Pedestrians (Crosswalks)

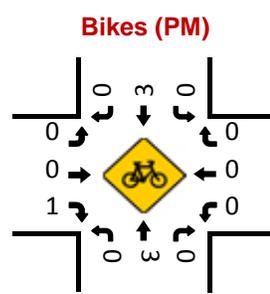
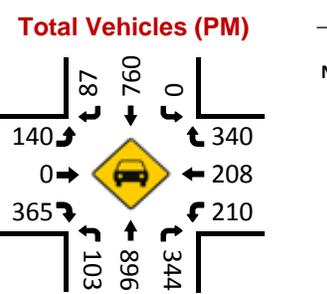
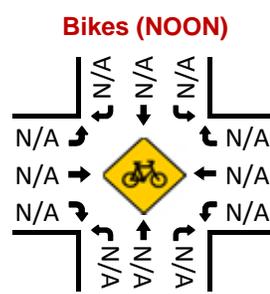
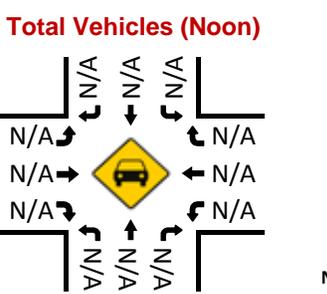
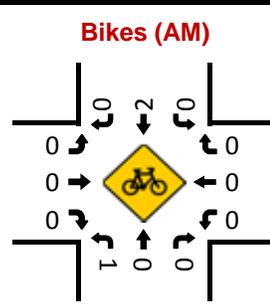
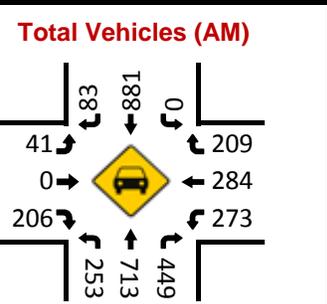
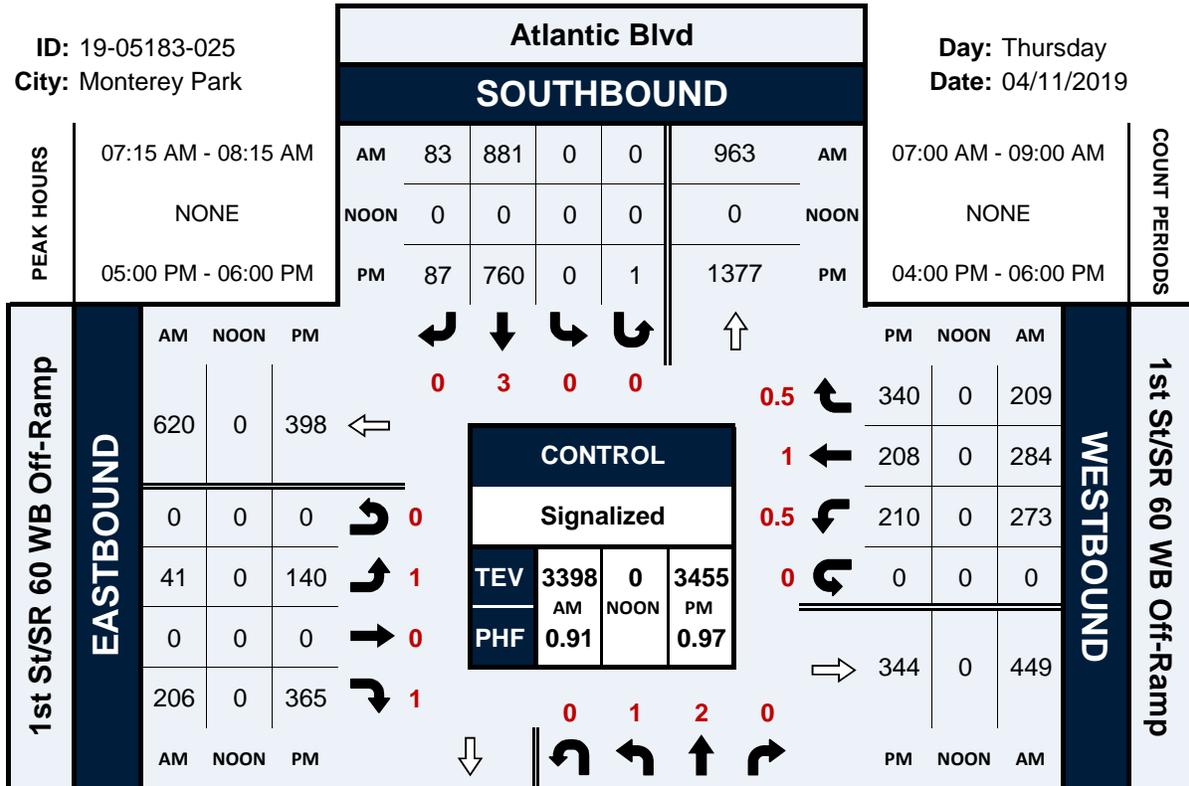
NS/EW Streets:	Atlantic Blvd		Atlantic Blvd		1st St/SR 60 WB Off-Ramp		1st St/SR 60 WB Off-Ramp		NORTH LEG CUT OUT		NORTH LEG 2 CUT OUT		SOUTH LEG CUT OUT		SOUTH LEG 2 CUT OUT		TOTAL	
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EB	WB	EB	WB	EB	WB	EB	WB		
	EB	WB	EB	WB	NB	SB	NB	SB										
AM																		
7:00 AM	0	0	0	0	0	1	2	2	1					2	1	0	0	7
7:15 AM	0	0	0	0	1	0	1	0						2	0	1	0	5
7:30 AM	0	2	0	0	2	2	3	0						2	0	0	2	13
7:45 AM	0	5	0	0	2	1	1	2						1	1	1	3	17
8:00 AM	0	0	0	0	0	1	5	2						4	0	0	0	12
8:15 AM	1	3	0	0	1	0	2	3						1	4	0	1	16
8:30 AM	0	8	0	0	0	0	2	3						4	1	0	0	18
8:45 AM	2	3	0	0	0	0	3	7						6	2	1	0	24
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL	
APPROACH %'s :	3	21	0	0	6	5	19	18	0	0	0	0	22	9	3	6	112	
	12.50%	87.50%			54.55%	45.45%	51.35%	48.65%							33.33%	66.67%		
PEAK HR :	07:15 AM - 08:15 AM																	
PEAK HR VOL :	0	7	0	0	5	4	10	4	0	0	0	0	9	1	2	5	47	
PEAK HR FACTOR :	0.350	0.350			0.625	0.500	0.500	0.500					0.563	0.250	0.500	0.417	0.691	
						0.563							0.625			0.438		
PM																		
4:00 PM	2	1	0	0	2	0	6	1						6	2	0	1	21
4:15 PM	0	0	0	0	3	0	2	7						2	6	0	3	23
4:30 PM	3	0	0	0	1	3	1	4						0	4	0	1	17
4:45 PM	3	0	0	0	0	1	3	1						5	2	3	0	18
5:00 PM	4	1	0	0	0	4	2	0						2	0	3	0	16
5:15 PM	5	3	0	0	2	0	4	3						0	3	1	4	25
5:30 PM	1	1	0	0	2	0	1	4						0	3	1	2	15
5:45 PM	1	2	0	0	0	1	3	3						1	1	1	0	13
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL	
APPROACH %'s :	19	8	0	0	10	9	22	23	0	0	0	0	16	21	9	11	148	
	70.37%	29.63%			52.63%	47.37%	48.89%	51.11%							45.00%	55.00%		
PEAK HR :	05:00 PM - 06:00 PM																	
PEAK HR VOL :	11	7	0	0	4	5	10	10	0	0	0	0	3	7	6	6	69	
PEAK HR FACTOR :	0.550	0.583			0.500	0.313	0.625	0.625					0.375	0.583	0.500	0.375	0.690	
		0.563				0.563	0.714						0.833		0.600			

Atlantic Blvd & 1st St/SR 60 WB Off-Ramp

Peak Hour Turning Movement Count

ID: 19-05183-025
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & SR-60 EB Ramps
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-024
 Date: 4/11/2019

Total

NS/EW Streets:	Atlantic Blvd					Atlantic Blvd				SR-60 EB Ramps				SR-60 EB Ramps				
AM	NORTHBOUND					SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	300	0	0	79	0	114	59	0	97	0	115	0	0	0	0	0	764
7:15 AM	0	354	0	0	94	0	131	74	0	95	0	138	0	0	0	0	0	886
7:30 AM	0	352	0	0	124	0	160	90	0	115	2	190	0	0	0	0	0	1033
7:45 AM	0	339	0	0	96	0	201	104	0	146	0	192	0	0	0	0	0	1078
8:00 AM	0	314	0	0	85	0	184	99	0	105	1	170	0	0	0	0	0	958
8:15 AM	0	244	0	0	63	0	149	73	0	114	0	136	0	0	0	0	0	779
8:30 AM	0	257	1	0	71	0	156	80	0	153	0	123	0	0	0	0	0	841
8:45 AM	0	237	3	0	58	0	191	78	0	164	1	135	0	0	0	0	0	867
TOTAL VOLUMES :	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	2397	4	0	670	0	1286	657	0	989	4	1199	0	0	0	0	0	7206
APPROACH %'s :	0.00%	78.05%	0.13%	0.00%	21.82%	0.00%	66.19%	33.81%	0.00%	45.12%	0.18%	54.70%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																	
PEAK HR VOL :	0	1359	0	0	399	0	676	367	0	461	3	690	0	0	0	0	0	3955
PEAK HR FACTOR :	0.000	0.960	0.000	0.000	0.804	0.000	0.841	0.882	0.000	0.789	0.375	0.898	0.000	0.000	0.000	0.000	0.000	0.917
	0.923					0.855				0.854								
PM	NORTHBOUND					SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	275	1	0	74	0	171	71	1	83	0	167	0	0	0	0	0	843
4:15 PM	0	284	1	0	77	0	194	104	0	91	0	140	0	0	0	0	0	891
4:30 PM	0	298	0	0	81	0	213	76	0	100	0	99	0	0	0	0	0	867
4:45 PM	0	255	0	0	65	0	147	84	0	94	0	147	0	0	0	0	0	792
5:00 PM	0	281	4	0	67	0	173	99	1	110	0	144	0	0	0	1	0	880
5:15 PM	0	314	6	0	59	0	164	84	0	103	0	144	0	0	0	0	0	874
5:30 PM	0	275	2	0	50	0	135	64	0	118	2	162	0	0	0	0	0	808
5:45 PM	0	260	0	0	56	0	138	72	0	105	0	224	0	0	0	0	0	855
TOTAL VOLUMES :	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	2242	14	0	529	0	1335	654	2	804	2	1227	0	0	0	1	0	6810
APPROACH %'s :	0.00%	80.50%	0.50%	0.00%	18.99%	0.00%	67.05%	32.85%	0.10%	39.55%	0.10%	60.35%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																	
PEAK HR VOL :	0	1118	5	0	290	0	727	363	1	395	0	530	0	0	0	1	0	3430
PEAK HR FACTOR :	0.000	0.938	0.313	0.000	0.895	0.000	0.853	0.873	0.250	0.898	0.000	0.901	0.000	0.000	0.000	0.250	0.000	0.962
	0.932					0.915				0.910				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & SR-60 EB Ramps
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-024
 Date: 4/11/2019

Bikes

NS/EW Streets:	Atlantic Blvd				Atlantic Blvd				SR-60 EB Ramps				SR-60 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
			0.250				0.500										
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	0	16
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
			0.375				0.250										

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlantic Blvd & SR-60 EB Ramps
City: Monterey Park

Project ID: 19-05183-024
Date: 4/11/2019

Pedestrians (Crosswalks)

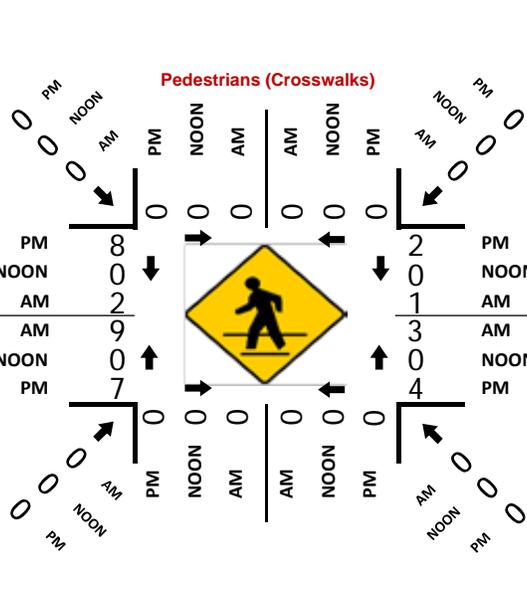
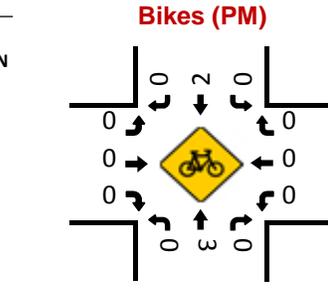
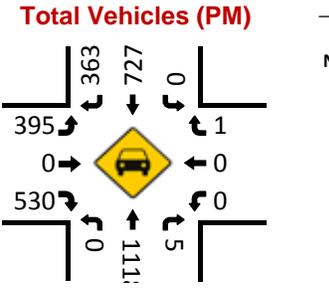
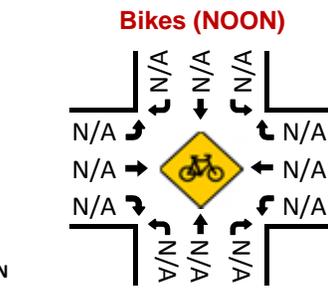
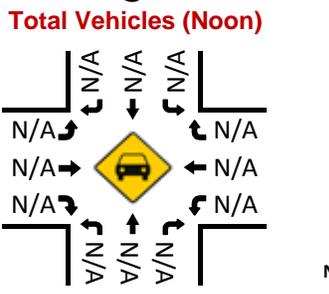
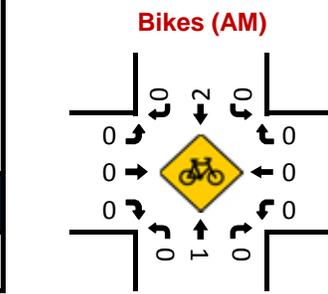
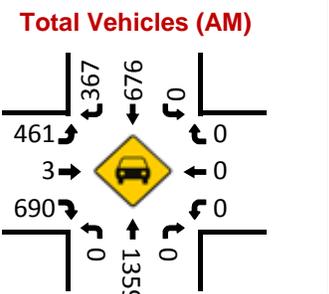
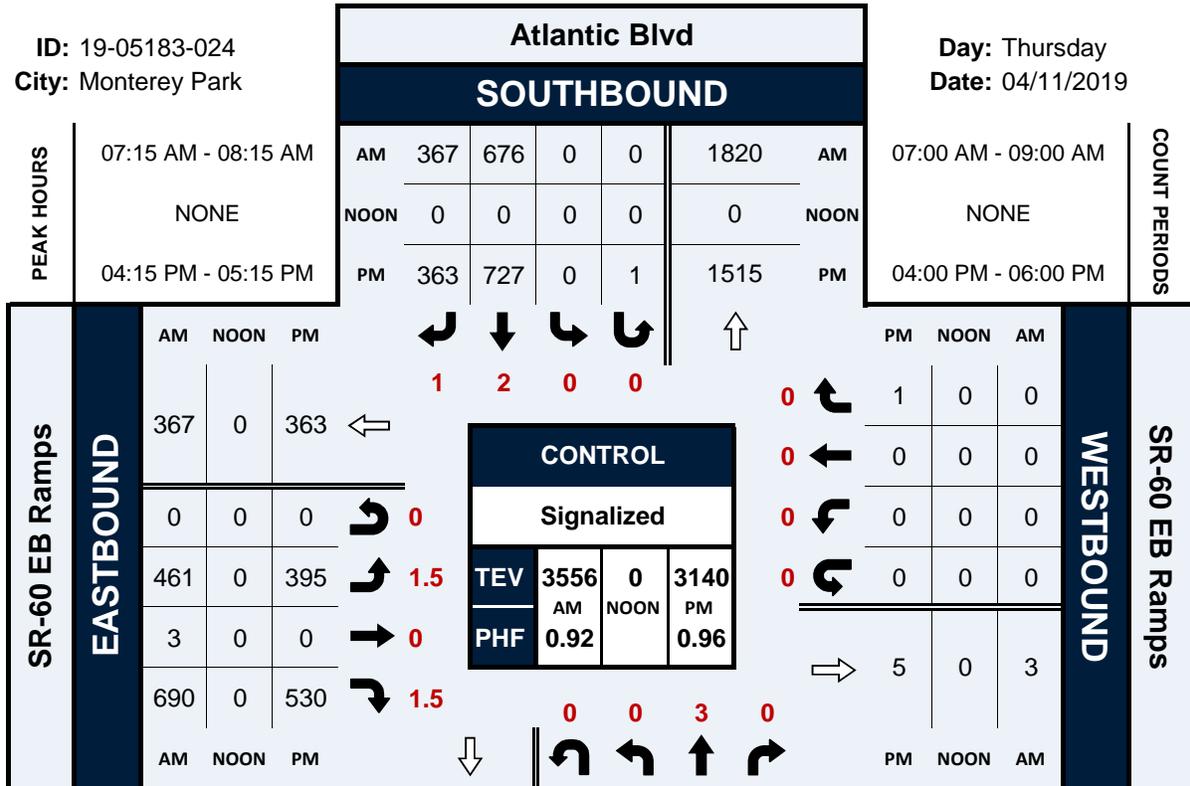
NS/EW Streets:	Atlantic Blvd		Atlantic Blvd		SR-60 EB Ramps		SR-60 EB Ramps		NORTH LEG CUT OUT		NORTH LEG 2 CUT OUT		SOUTH LEG CUT OUT		SOUTH LEG 2 CUT OUT		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EB	WB	EB	WB	EB	WB	EB	WB	
	EB	WB	EB	WB	NB	SB	NB	SB									
AM																	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	2					3
7:15 AM	0	0	0	0	0	0	3	0	1	1	0	2					7
7:30 AM	0	0	0	0	1	0	1	1	2	1	0	2					8
7:45 AM	0	0	0	0	2	1	1	0	2	0	0	1					7
8:00 AM	0	0	0	0	0	0	4	1	0	0	1	4					10
8:15 AM	0	0	0	0	1	0	2	3	1	0	0	1					8
8:30 AM	0	0	0	0	0	0	4	1	0	0	0	4					9
8:45 AM	0	0	0	0	0	1	7	1	1	1	0	6					17
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL
APPROACH %'s :	0	0	0	0	4	2	22	8	7	3	1	22	0	0	0	0	69
					66.67%	33.33%	73.33%	26.67%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	3	1	9	2	5	2	1	9	0	0	0	0	32
PEAK HR FACTOR :					0.375	0.250	0.563	0.500	0.625	0.500	0.250	0.563	0	0	0	0	0.800
					0.333		0.550		0.583		0.500						
PM																	
4:00 PM	0	0	0	0	0	0	3	0	0	0	0	6					9
4:15 PM	0	0	0	0	2	0	1	0	4	0	0	2					9
4:30 PM	0	0	0	0	0	0	1	5	0	1	0	0					7
4:45 PM	0	0	0	0	1	1	4	3	0	2	0	5					16
5:00 PM	0	0	0	0	1	1	1	0	1	3	0	1					8
5:15 PM	0	0	0	0	1	0	0	2	4	1	0	0					8
5:30 PM	0	0	0	0	1	0	0	2	2	1	3	0					9
5:45 PM	0	0	0	0	1	2	2	3	0	1	0	1					10
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	EB	WB	EB	WB	TOTAL
APPROACH %'s :	0	0	0	0	7	4	12	15	11	9	3	15	0	0	0	0	76
					63.64%	36.36%	44.44%	55.56%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	4	2	7	8	5	6	0	8	0	0	0	0	40
PEAK HR FACTOR :					0.500	0.500	0.438	0.400	0.313	0.500	0	0.400	0	0	0	0	0.625
					0.750		0.536		0.688		0.400						

Atlantic Blvd & SR-60 EB Ramps

Peak Hour Turning Movement Count

ID: 19-05183-024
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Riggin St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-023
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Riggin St				Riggin St				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU		
7:00 AM	11	100	2	1	14	149	30	0	18	25	10	0	15	38	20	0	433	
7:15 AM	23	114	2	1	26	208	31	0	29	42	14	0	17	47	32	0	586	
7:30 AM	7	106	3	0	23	234	45	0	25	58	15	0	19	63	35	0	633	
7:45 AM	24	117	2	2	36	230	38	0	29	46	17	0	21	99	42	0	703	
8:00 AM	15	110	5	1	32	248	45	0	40	56	25	0	24	60	33	0	694	
8:15 AM	18	135	9	3	31	218	45	0	28	64	23	0	23	45	33	0	675	
8:30 AM	26	114	5	1	15	217	44	0	29	45	9	0	11	72	29	0	617	
8:45 AM	32	102	7	1	20	172	38	0	24	25	20	0	11	41	17	0	510	
TOTAL VOLUMES :	156	898	35	10	197	1676	316	0	222	361	133	0	141	465	241	0	4851	
APPROACH %'s :	14.19%	81.71%	3.18%	0.91%	9.00%	76.56%	14.44%	0.00%	31.01%	50.42%	18.58%	0.00%	16.65%	54.90%	28.45%	0.00%		
PEAK HR :	07:30 AM - 08:30 AM																	TOTAL
PEAK HR VOL :	64	468	19	6	122	930	173	0	122	224	80	0	87	267	143	0	2705	
PEAK HR FACTOR :	0.667	0.867	0.528	0.500	0.847	0.938	0.961	0.000	0.763	0.875	0.800	0.000	0.906	0.674	0.851	0.000	0.962	
		0.844				0.942				0.880				0.767				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL	
4:00 PM	24	106	11	2	47	160	26	0	44	96	31	0	10	38	15	0	610	
4:15 PM	28	139	5	2	28	160	29	0	33	95	41	0	9	21	30	0	620	
4:30 PM	21	132	15	1	61	181	33	0	49	97	38	0	8	35	17	0	688	
4:45 PM	25	139	16	2	56	161	30	0	43	114	31	0	7	38	32	0	694	
5:00 PM	24	145	7	0	41	180	40	0	49	108	32	0	7	38	38	0	709	
5:15 PM	35	159	8	0	40	153	34	0	44	125	31	0	8	48	29	0	714	
5:30 PM	17	161	10	3	48	178	33	0	52	110	27	0	6	58	28	0	731	
5:45 PM	24	160	13	0	53	165	30	0	44	107	33	0	12	46	31	0	718	
TOTAL VOLUMES :	198	1141	85	10	374	1338	255	0	358	852	264	0	67	322	220	0	5484	
APPROACH %'s :	13.81%	79.57%	5.93%	0.70%	19.01%	68.02%	12.96%	0.00%	24.29%	57.80%	17.91%	0.00%	11.00%	52.87%	36.12%	0.00%		
PEAK HR :	05:00 PM - 06:00 PM																	TOTAL
PEAK HR VOL :	100	625	38	3	182	676	137	0	189	450	123	0	33	190	126	0	2872	
PEAK HR FACTOR :	0.714	0.970	0.731	0.250	0.858	0.939	0.856	0.000	0.909	0.900	0.932	0.000	0.688	0.819	0.829	0.000	0.982	
		0.948				0.953				0.953				0.948				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Rigin St
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-023
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Rigin St				Rigin St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	3
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	2	0	0	0	5	0	0	0	3	0	0	10
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.333
	0.250				0.250				0.500				0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	3	0	0	0	3	0	0	0	0	1	0	1	0	0	0	8
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.750												

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Riggin St
City: Monterey Park

Project ID: 19-05183-023
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		Riggin St		Riggin St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	1	0	1	0	0	2	2	8
7:15 AM	1	0	0	5	0	5	2	0	13
7:30 AM	1	1	2	0	2	0	2	2	10
7:45 AM	0	0	1	1	2	1	2	3	10
8:00 AM	1	3	1	3	0	1	1	0	10
8:15 AM	1	1	1	0	1	0	2	3	9
8:30 AM	0	2	1	1	2	1	6	0	13
8:45 AM	0	2	0	1	1	1	0	1	6
TOTAL VOLUMES :	EB 6	WB 10	EB 6	WB 12	NB 8	SB 9	NB 17	SB 11	TOTAL 79
APPROACH %'s :	37.50%	62.50%	33.33%	66.67%	47.06%	52.94%	60.71%	39.29%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	3	5	5	4	5	2	7	8	39
PEAK HR FACTOR :	0.750	0.417	0.625	0.333	0.625	0.500	0.875	0.667	0.975
	0.500		0.563		0.583		0.750		

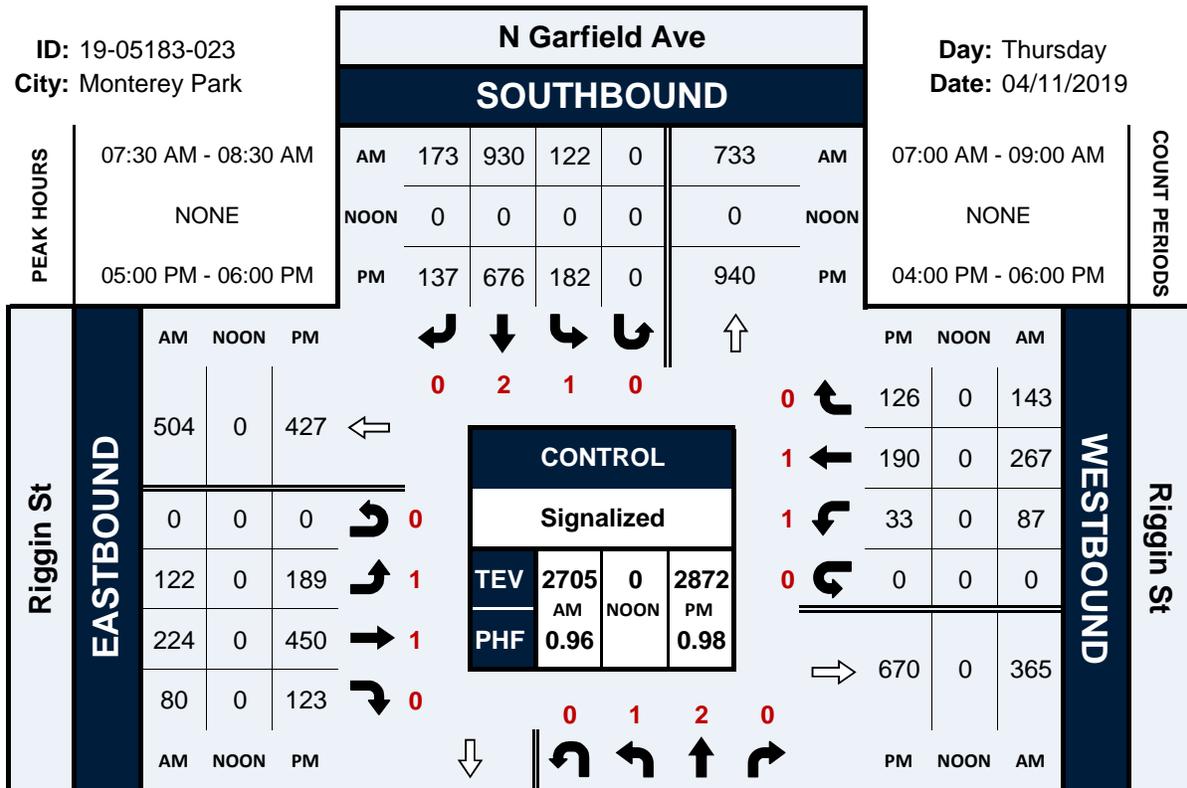
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	4	2	1	2	0	2	3	14
4:15 PM	0	0	1	0	0	0	1	0	2
4:30 PM	2	2	2	1	1	0	0	2	10
4:45 PM	2	0	0	0	0	0	2	2	6
5:00 PM	0	1	1	2	3	1	1	3	12
5:15 PM	1	3	3	0	3	1	0	0	11
5:30 PM	0	2	6	2	4	0	1	3	18
5:45 PM	2	1	7	1	4	1	3	3	22
TOTAL VOLUMES :	EB 7	WB 13	EB 22	WB 7	NB 17	SB 3	NB 10	SB 16	TOTAL 95
APPROACH %'s :	35.00%	65.00%	75.86%	24.14%	85.00%	15.00%	38.46%	61.54%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	3	7	17	5	14	3	5	9	63
PEAK HR FACTOR :	0.375	0.583	0.607	0.625	0.875	0.750	0.417	0.750	0.716
	0.625		0.688		0.850		0.583		

N Garfield Ave & Riggin St

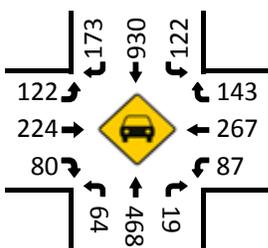
Peak Hour Turning Movement Count

ID: 19-05183-023
City: Monterey Park

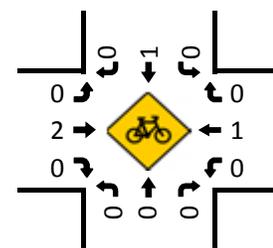
Day: Thursday
Date: 04/11/2019



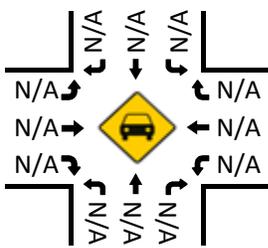
Total Vehicles (AM)



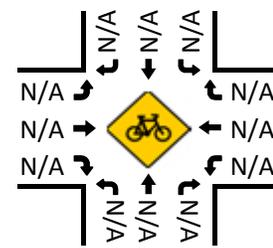
Bikes (AM)



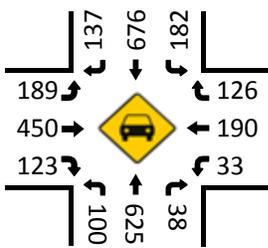
Total Vehicles (Noon)



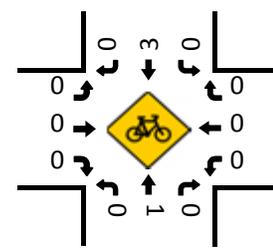
Bikes (NOON)



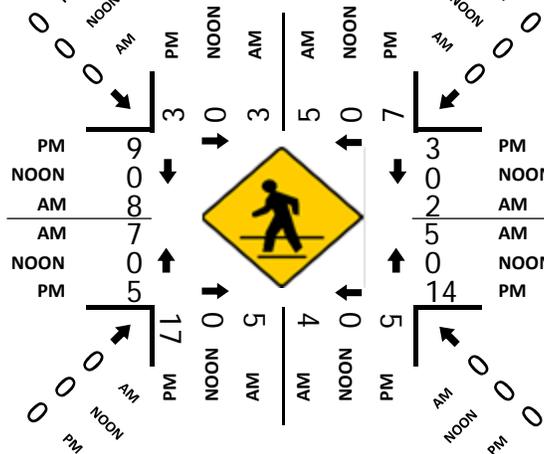
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Pomona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-022
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Pomona Blvd				Pomona Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	2	1	0	0	0	2	1	0	0	0	0	0	0	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	199	103	0	0	0	74	81	0	0	0	0	0	40	286	23	0	806
7:15 AM	203	95	0	0	0	122	101	0	0	0	0	0	31	251	42	0	845
7:30 AM	163	94	0	0	0	165	92	0	0	0	0	0	19	218	25	0	776
7:45 AM	177	118	0	0	0	159	97	0	0	0	0	0	22	224	23	0	820
8:00 AM	139	104	0	0	0	196	82	0	0	0	0	0	12	211	23	0	767
8:15 AM	142	98	0	0	0	173	76	0	0	0	0	0	18	196	38	0	741
8:30 AM	128	100	0	0	0	163	81	0	0	0	0	0	19	206	41	0	738
8:45 AM	137	100	0	0	0	129	73	0	0	0	0	0	38	215	44	0	736
TOTAL VOLUMES :	NL 1288	NT 812	NR 0	NU 0	SL 0	ST 1181	SR 683	SU 0	EL 0	ET 0	ER 0	EU 0	WL 199	WT 1807	WR 259	WU 0	TOTAL 6229
APPROACH %'s :	61.33%	38.67%	0.00%	0.00%	0.00%	63.36%	36.64%	0.00%					8.79%	79.78%	11.43%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL 3247
PEAK HR VOL :	742	410	0	0	0	520	371	0	0	0	0	0	112	979	113	0	3247
PEAK HR FACTOR :	0.914	0.869	0.000	0.000	0.000	0.788	0.918	0.000	0.000	0.000	0.000	0.000	0.700	0.856	0.673	0.000	0.961
	0.954				0.867								0.862				
PM	2	1	0	0	0	2	1	0	0	0	0	0	0	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	100	114	0	0	0	169	27	0	0	0	0	0	23	156	28	0	617
4:15 PM	82	129	0	0	0	172	34	0	0	0	0	0	38	197	51	0	703
4:30 PM	95	120	0	0	0	187	15	0	0	0	0	0	24	191	48	0	680
4:45 PM	110	129	0	0	0	177	22	0	0	0	0	0	17	182	47	0	684
5:00 PM	89	123	0	0	0	195	15	1	0	0	0	0	31	194	40	0	688
5:15 PM	109	154	0	0	0	179	20	0	0	0	0	0	30	197	36	0	725
5:30 PM	87	129	0	0	0	194	34	0	0	0	0	0	29	180	44	0	697
5:45 PM	101	130	0	0	0	172	37	0	0	0	0	0	31	204	54	0	729
TOTAL VOLUMES :	NL 773	NT 1028	NR 0	NU 0	SL 0	ST 1445	SR 204	SU 1	EL 0	ET 0	ER 0	EU 0	WL 223	WT 1501	WR 348	WU 0	TOTAL 5523
APPROACH %'s :	42.92%	57.08%	0.00%	0.00%	0.00%	87.58%	12.36%	0.06%					10.76%	72.44%	16.80%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL 2839
PEAK HR VOL :	386	536	0	0	0	740	106	1	0	0	0	0	121	775	174	0	2839
PEAK HR FACTOR :	0.885	0.870	0.000	0.000	0.000	0.949	0.716	0.250	0.000	0.000	0.000	0.000	0.976	0.950	0.806	0.000	0.974
	0.876				0.929								0.926				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Pomona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-022
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Pomona Blvd				Pomona Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	1 NT	0 NR	0 NU	0 SL	2 ST	1 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	3 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	3
TOTAL VOLUMES :	0	0	1	0	0	2	1	0	0	0	0	0	0	3	0	0	6
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	1 NT	0 NR	0 NU	0 SL	2 ST	1 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	3 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	0	5	0	0	0	4	1	0	0	0	0	0	0	1	1	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.417

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Pomona Blvd
City: Monterey Park

Project ID: 19-05183-022
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		Pomona Blvd		Pomona Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	1	2
7:30 AM	1	0	0	0	1	1	0	1	4
7:45 AM	1	2	0	0	3	1	0	0	7
8:00 AM	1	1	0	0	0	1	1	0	4
8:15 AM	1	0	0	0	0	0	0	1	2
8:30 AM	1	1	0	0	2	4	0	0	8
8:45 AM	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	EB 6	WB 4	EB 0	WB 0	NB 6	SB 8	NB 1	SB 3	TOTAL 28
APPROACH %'s :	60.00%	40.00%			42.86%	57.14%	25.00%	75.00%	
PEAK HR :	07:00 AM - 08:00 AM								TOTAL 13
PEAK HR VOL :	3	2	0	0	4	2	0	2	
PEAK HR FACTOR :	0.750	0.250			0.333	0.500		0.500	0.464
	0.417				0.375		0.500		

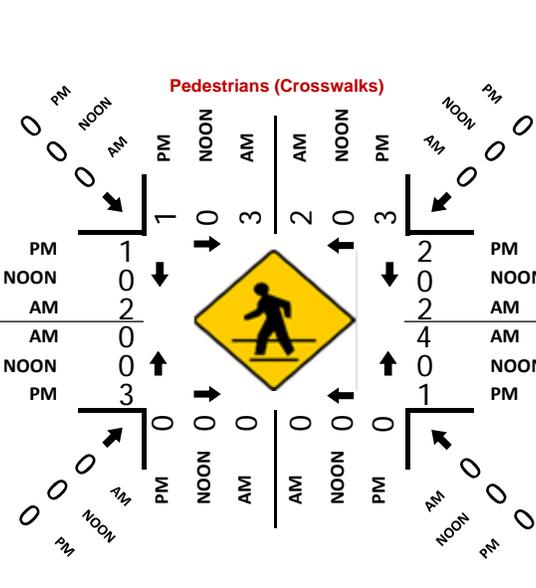
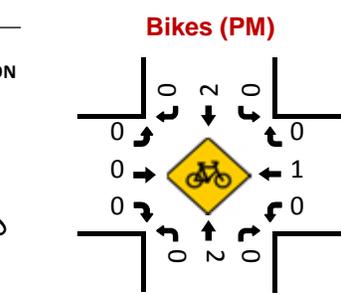
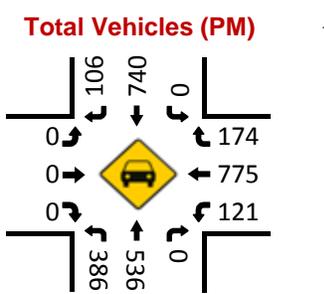
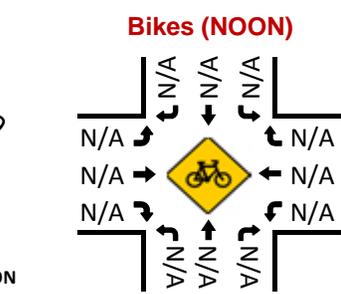
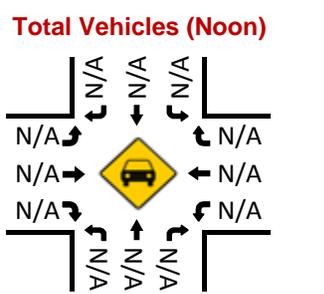
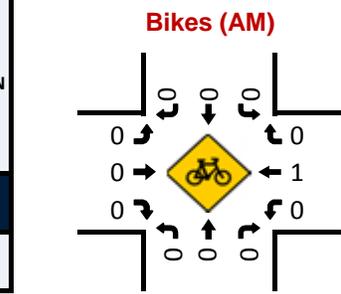
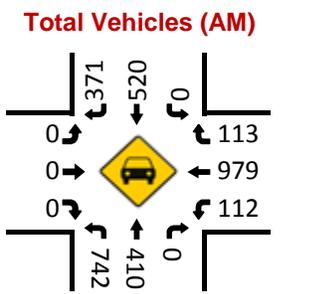
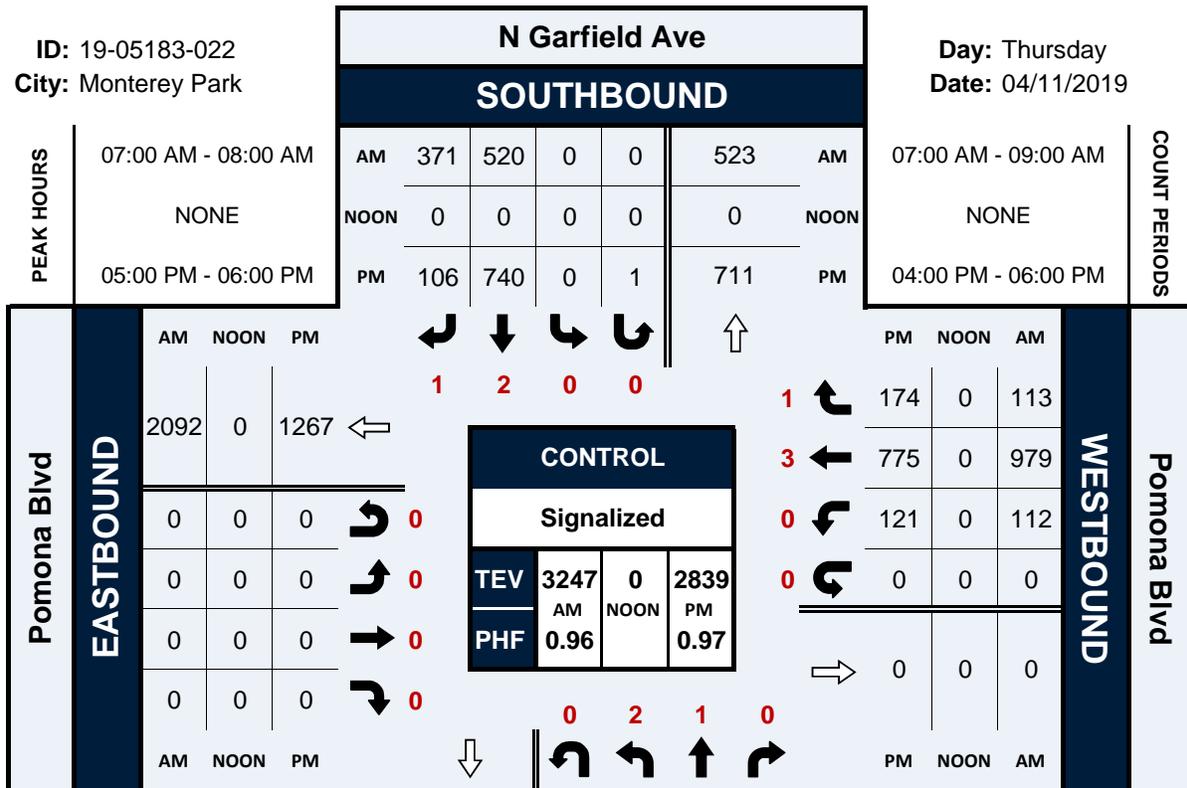
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	3	0	0	0	3
4:15 PM	1	2	0	0	1	1	2	1	8
4:30 PM	0	0	0	0	2	0	1	1	4
4:45 PM	0	2	0	0	1	0	0	0	3
5:00 PM	1	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	1	0	0	0	1
5:30 PM	0	2	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	2	2	1	5
TOTAL VOLUMES :	EB 2	WB 7	EB 0	WB 0	NB 8	SB 3	NB 6	SB 3	TOTAL 29
APPROACH %'s :	22.22%	77.78%			72.73%	27.27%	66.67%	33.33%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL 11
PEAK HR VOL :	1	3	0	0	1	2	3	1	
PEAK HR FACTOR :	0.250	0.375			0.250	0.250	0.375	0.250	0.550
	0.500				0.375		0.333		

N Garfield Ave & Pomona Blvd

Peak Hour Turning Movement Count

ID: 19-05183-022
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Via Campo
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-021
 Date: 4/11/2019

Total

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Via Campo				Via Campo				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	3	1	0	1.5	1.5	0	0	1	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	139	22	0	28	80	0	0	26	107	81	0	7	0	138	0	628
7:15 AM	0	137	39	0	36	125	0	0	15	143	70	0	9	0	118	0	692
7:30 AM	0	118	24	0	38	130	0	0	37	224	126	0	4	0	129	0	830
7:45 AM	0	122	32	0	43	152	0	0	34	184	146	0	10	0	115	0	838
8:00 AM	0	100	37	0	57	141	0	0	47	201	137	0	12	0	120	0	852
8:15 AM	0	119	31	0	37	165	0	0	38	181	108	0	7	0	81	0	767
8:30 AM	0	135	50	0	40	128	0	0	37	180	108	0	10	0	64	0	752
8:45 AM	0	154	36	0	34	146	0	0	27	125	86	0	9	0	51	0	668
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1024	271	0	313	1067	0	0	261	1345	862	0	68	0	816	0	6027
	0.00%	79.07%	20.93%	0.00%	22.68%	77.32%	0.00%	0.00%	10.58%	54.50%	34.93%	0.00%	7.69%	0.00%	92.31%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	459	124	0	175	588	0	0	156	790	517	0	33	0	445	0	3287
PEAK HR FACTOR :	0.000	0.941	0.838	0.000	0.768	0.891	0.000	0.000	0.830	0.882	0.885	0.000	0.688	0.000	0.862	0.000	0.964
			0.946			0.944				0.945					0.898		
PM	0	3	1	0	1.5	1.5	0	0	1	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	144	52	0	55	137	0	0	26	273	113	0	5	0	45	0	850
4:15 PM	0	150	67	0	58	167	0	0	22	221	105	0	12	0	34	0	836
4:30 PM	0	156	59	0	44	148	0	0	24	288	125	0	6	0	39	0	889
4:45 PM	0	165	62	0	54	164	0	0	21	233	128	0	10	0	43	0	880
5:00 PM	0	147	42	0	49	150	0	0	24	293	122	0	16	0	51	0	894
5:15 PM	0	180	34	0	64	169	0	0	16	249	119	0	7	0	51	0	889
5:30 PM	0	153	54	0	66	143	0	0	26	283	126	0	8	0	54	0	913
5:45 PM	0	143	35	0	57	152	0	0	38	285	87	0	7	0	41	0	845
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1238	405	0	447	1230	0	0	197	2125	925	0	71	0	358	0	6996
	0.00%	75.35%	24.65%	0.00%	26.65%	73.35%	0.00%	0.00%	6.07%	65.45%	28.49%	0.00%	16.55%	0.00%	83.45%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	645	192	0	233	626	0	0	87	1058	495	0	41	0	199	0	3576
PEAK HR FACTOR :	0.000	0.896	0.774	0.000	0.883	0.926	0.000	0.000	0.837	0.903	0.967	0.000	0.641	0.000	0.921	0.000	0.979
			0.922			0.922				0.934					0.896		

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Via Campo
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-021
 Date: 4/11/2019

Bikes

NS/EW Streets:	N Garfield Ave				N Garfield Ave				Via Campo				Via Campo				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
TOTAL VOLUMES :	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
TOTAL VOLUMES :	1	3	0	0	1	3	0	0	0	1	1	0	0	1	2	0	13
APPROACH %'s :	25.00%	75.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	33.33%	66.67%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1	0	0	1	1	0	0	0	0	1	0	0	1	1	0	6
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.750

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Garfield Ave & Via Campo
City: Monterey Park

Project ID: 19-05183-021
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Garfield Ave		N Garfield Ave		Via Campo		Via Campo		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	3	1	0	0	0	1	5
7:30 AM	0	0	1	0	1	1	0	1	4
7:45 AM	0	0	0	0	3	1	0	0	4
8:00 AM	0	0	0	0	0	1	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	1	3	0	1	8
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	6	2	5	7	1	3	24
			75.00%	25.00%	41.67%	58.33%	25.00%	75.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	1	0	4	3	1	1	10
PEAK HR FACTOR :			0.250	0	0.333	0.750	0.250	0.250	0.625
			0.250		0.438		0.500		

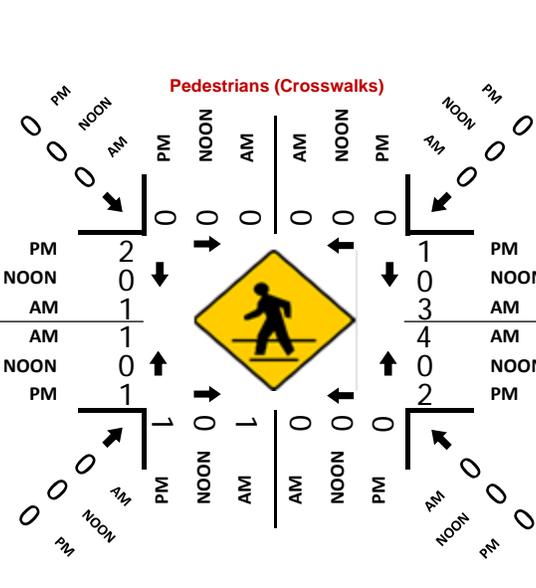
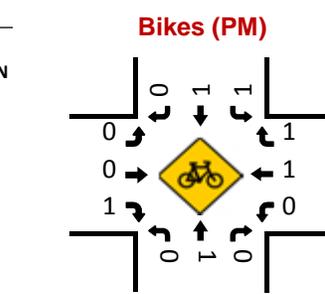
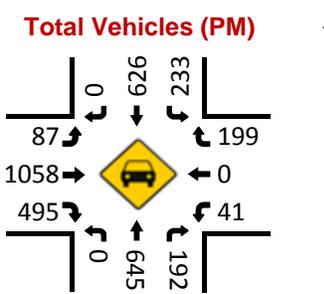
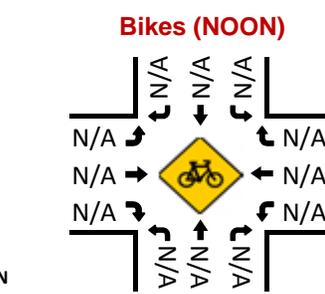
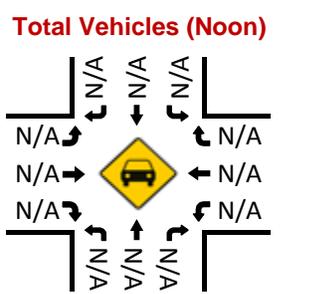
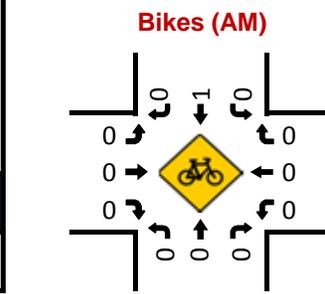
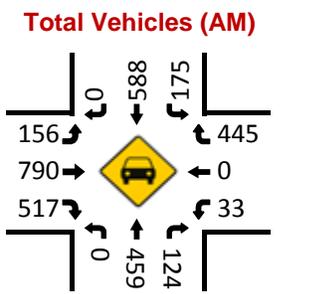
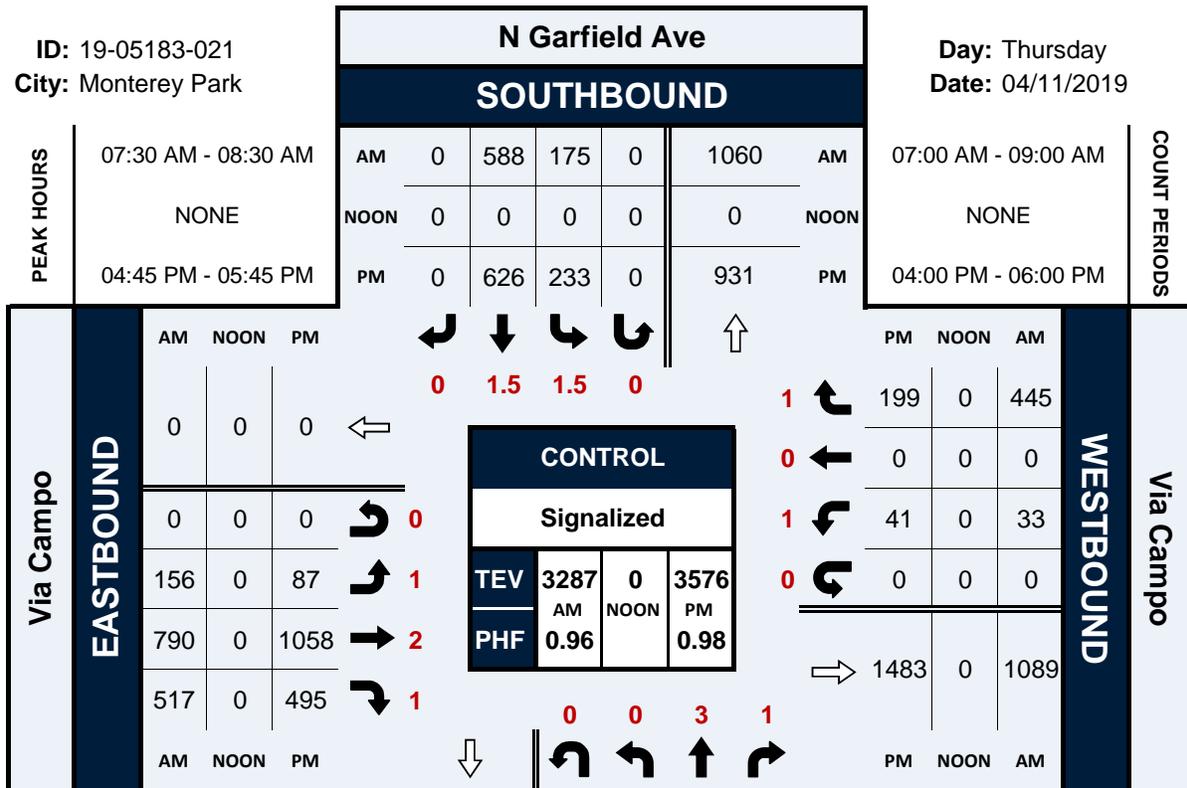
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	3	0	0	0	3
4:15 PM	0	0	0	6	1	1	2	0	10
4:30 PM	0	0	0	0	2	0	1	1	4
4:45 PM	0	0	0	0	1	0	0	1	2
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	1	0	0	1	3
5:30 PM	0	0	0	0	0	1	1	0	2
5:45 PM	0	0	0	0	0	2	1	1	4
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	6	8	4	5	4	28
			14.29%	85.71%	66.67%	33.33%	55.56%	44.44%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	1	0	2	1	1	2	7
PEAK HR FACTOR :			0.250	0	0.500	0.250	0.250	0.500	0.583
			0.250		0.750		0.750		

N Garfield Ave & Via Campo

Peak Hour Turning Movement Count

ID: 19-05183-021
City: Monterey Park

Day: Thursday
Date: 04/11/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Wilcox Ave & E Pomona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-020
 Date: 4/11/2019

Total

NS/EW Streets:	Wilcox Ave				Wilcox Ave				E Pomona Blvd				E Pomona Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	95	52	0	0	0	25	7	0	0	0	0	0	57	234	9	0	479
7:15 AM	99	108	0	0	0	61	4	0	0	0	0	0	79	210	15	0	576
7:30 AM	92	88	0	0	0	68	8	0	0	0	0	0	103	225	19	0	603
7:45 AM	89	113	0	0	0	73	4	0	0	0	0	0	109	188	27	0	603
8:00 AM	77	108	0	0	0	86	5	0	0	0	0	0	93	155	23	0	547
8:15 AM	68	113	0	0	0	104	2	0	0	0	0	0	112	196	13	0	608
8:30 AM	72	83	0	0	0	71	4	0	0	0	0	0	108	193	35	0	566
8:45 AM	55	51	0	0	0	52	8	0	0	0	0	0	91	203	25	0	485
TOTAL VOLUMES :	647	716	0	0	0	540	42	0	0	0	0	0	752	1604	166	0	4467
APPROACH %'s :	47.47%	52.53%	0.00%	0.00%	0.00%	92.78%	7.22%	0.00%	0.00%	0.00%	0.00%	0.00%	29.82%	63.60%	6.58%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	326	422	0	0	0	331	19	0	0	0	0	0	417	764	82	0	2361
PEAK HR FACTOR :	0.886	0.934	0.000	0.000	0.000	0.796	0.594	0.000	0.000	0.000	0.000	0.000	0.931	0.849	0.759	0.000	0.971
	0.926				0.825								0.910				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	60	63	0	0	0	81	0	0	0	0	0	0	93	235	20	0	552
4:15 PM	64	63	0	0	0	77	3	0	0	0	0	0	103	174	29	0	513
4:30 PM	57	64	0	0	0	96	3	0	0	0	0	0	119	231	35	0	605
4:45 PM	67	75	0	0	0	111	4	0	0	0	0	0	109	208	38	0	612
5:00 PM	64	72	0	0	0	104	3	0	0	0	0	0	124	202	42	0	611
5:15 PM	59	82	0	0	0	107	4	0	0	0	0	0	125	179	45	0	601
5:30 PM	58	72	0	0	0	113	2	0	0	0	0	0	114	195	58	0	612
5:45 PM	56	77	0	0	0	89	1	0	0	0	0	0	116	203	42	0	584
TOTAL VOLUMES :	485	568	0	0	0	778	20	0	0	0	0	0	903	1627	309	0	4690
APPROACH %'s :	46.06%	53.94%	0.00%	0.00%	0.00%	97.49%	2.51%	0.00%	0.00%	0.00%	0.00%	0.00%	31.81%	57.31%	10.88%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	248	301	0	0	0	435	13	0	0	0	0	0	472	784	183	0	2436
PEAK HR FACTOR :	0.925	0.918	0.000	0.000	0.000	0.962	0.813	0.000	0.000	0.000	0.000	0.000	0.944	0.942	0.789	0.000	0.995
	0.967				0.974								0.978				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Wilcox Ave & E Pomona Blvd
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-020
 Date: 4/11/2019

Bikes

NS/EW Streets:	Wilcox Ave				Wilcox Ave				E Pomona Blvd				E Pomona Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	2	0	0	0	2	0	0	0	0	0	0	0.5	2	0.5	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	4
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500
													0.500				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	2	2	0	0	0	2	0	0	0	0	0	0	0.5	2	0.5	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	4	0	0	0	0	0	0	0	3	0	0	8
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.417
													0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Wilcox Ave & E Pomona Blvd
City: Monterey Park

Project ID: 19-05183-020
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Wilcox Ave		Wilcox Ave		E Pomona Blvd		E Pomona Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	1	1	0	1	1	0	2	6
7:15 AM	0	0	0	0	0	3	0	2	5
7:30 AM	3	2	0	0	0	8	0	1	14
7:45 AM	2	0	0	0	1	4	0	0	7
8:00 AM	0	0	0	0	2	0	2	2	6
8:15 AM	2	2	0	0	1	1	0	0	6
8:30 AM	2	0	0	0	1	2	1	0	6
8:45 AM	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES :	9	5	1	0	7	19	3	7	51
APPROACH %'s :	64.29%	35.71%	100.00%	0.00%	26.92%	73.08%	30.00%	70.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	7	4	0	0	4	13	2	3	33
PEAK HR FACTOR :	0.583	0.500			0.500	0.406	0.250	0.375	0.589
	0.550				0.531		0.313		

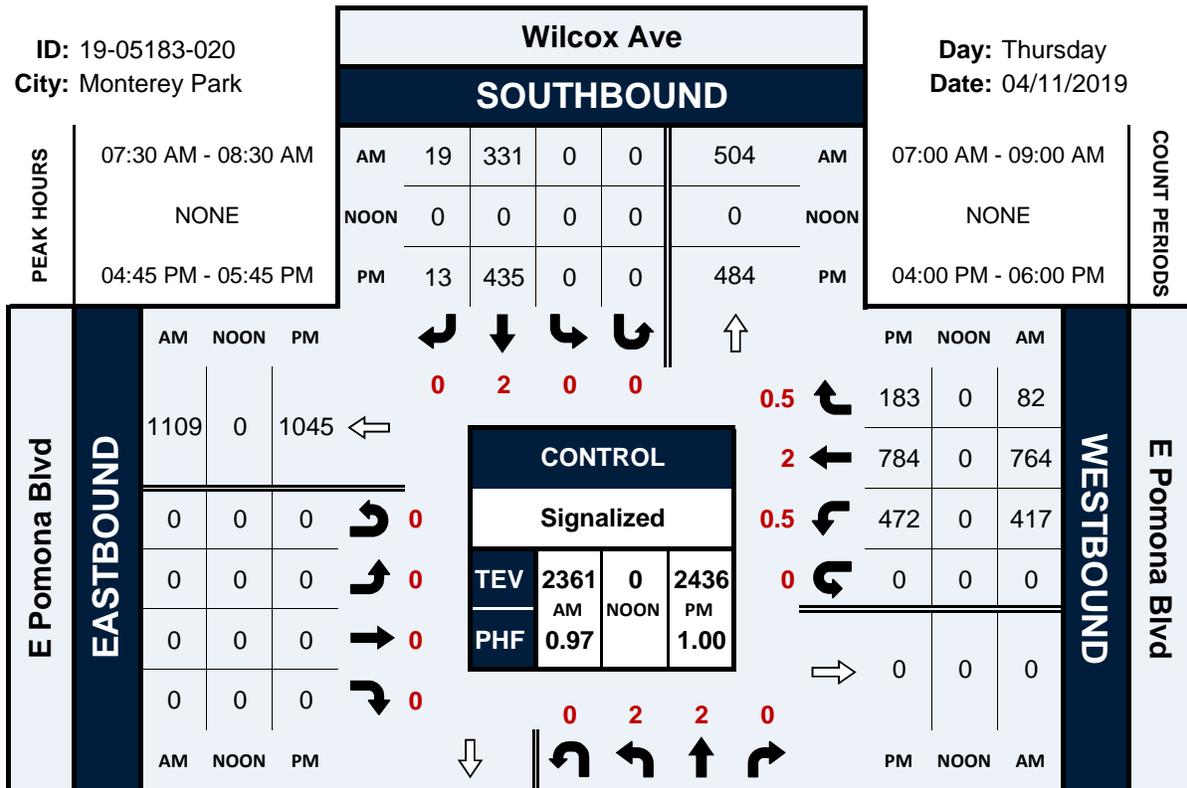
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	2	3	0	2	0	0	6	0	13
4:15 PM	1	1	0	0	2	0	3	0	7
4:30 PM	1	2	0	0	0	0	4	0	7
4:45 PM	2	5	0	0	7	0	0	1	15
5:00 PM	1	2	0	0	2	1	1	0	7
5:15 PM	0	3	0	0	0	1	1	2	7
5:30 PM	2	1	0	0	1	0	1	2	7
5:45 PM	1	2	0	0	1	5	4	0	13
TOTAL VOLUMES :	10	19	0	2	13	7	20	5	76
APPROACH %'s :	34.48%	65.52%	0.00%	100.00%	65.00%	35.00%	80.00%	20.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	5	11	0	0	10	2	3	5	36
PEAK HR FACTOR :	0.625	0.550			0.357	0.500	0.750	0.625	0.600
	0.571				0.429		0.667		

Wilcox Ave & E Pomona Blvd

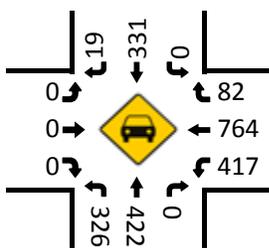
Peak Hour Turning Movement Count

ID: 19-05183-020
City: Monterey Park

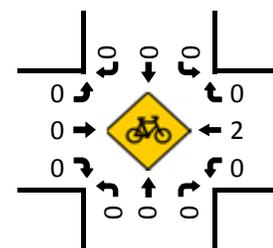
Day: Thursday
Date: 04/11/2019



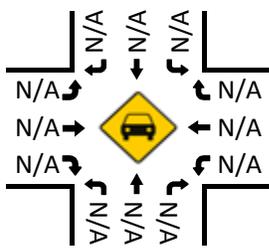
Total Vehicles (AM)



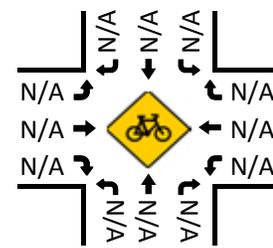
Bikes (AM)



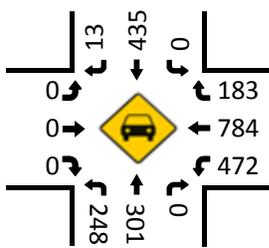
Total Vehicles (Noon)



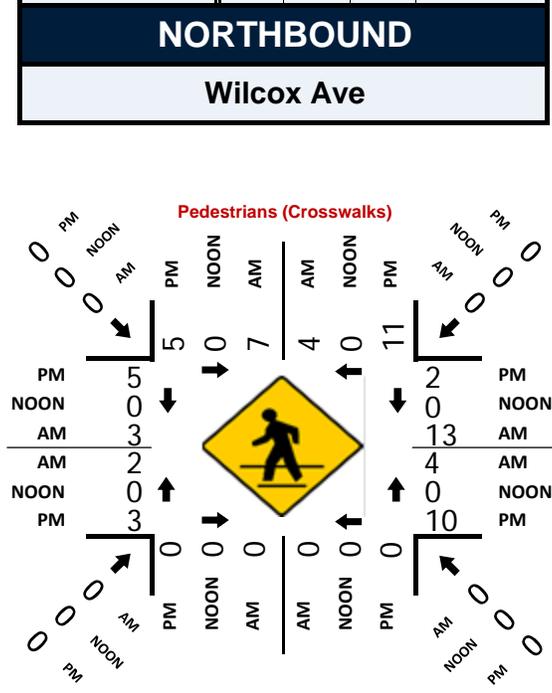
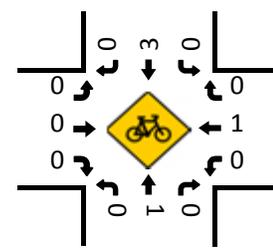
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Markland Dr/Vail Ave & Potrero Grande Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-019
 Date: 4/11/2019

Total

NS/EW Streets:	Markland Dr/Vail Ave				Markland Dr/Vail Ave				Potrero Grande Dr				Potrero Grande Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0.5	0.5	1	0	0	1	0	0	1	1	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	21	18	68	0	9	41	0	0	3	11	14	0	33	125	8	0	351
7:15 AM	24	31	78	0	20	58	1	0	2	16	21	0	68	138	13	0	470
7:30 AM	26	45	138	0	34	60	1	0	4	7	17	0	79	145	21	0	577
7:45 AM	12	26	162	0	40	61	1	0	7	39	20	0	55	130	20	0	573
8:00 AM	8	25	149	0	39	47	1	0	4	23	18	0	62	111	23	0	510
8:15 AM	10	21	139	0	31	52	0	0	11	53	14	0	46	125	30	0	532
8:30 AM	17	18	138	0	42	59	2	0	6	33	14	0	41	109	19	0	498
8:45 AM	13	6	104	0	25	41	2	0	2	32	14	0	50	128	15	0	432
TOTAL VOLUMES :	131	190	976	0	240	419	8	0	39	214	132	0	434	1011	149	0	3943
APPROACH %'s :	10.10%	14.65%	75.25%	0.00%	35.98%	62.82%	1.20%	0.00%	10.13%	55.58%	34.29%	0.00%	27.23%	63.43%	9.35%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	56	117	588	0	144	220	3	0	26	122	69	0	242	511	94	0	2192
PEAK HR FACTOR :	0.538	0.650	0.907	0.000	0.900	0.902	0.750	0.000	0.591	0.575	0.863	0.000	0.766	0.881	0.783	0.000	0.950
	0.910				0.900				0.696				0.864				
PM	0.5	0.5	1	0	0	1	0	0	1	1	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	6	12	128	0	61	48	2	0	9	15	34	0	65	109	17	0	506
4:15 PM	5	12	153	0	46	46	3	0	10	24	40	0	74	110	26	0	549
4:30 PM	7	15	134	0	68	45	0	0	7	12	33	0	109	129	29	0	588
4:45 PM	7	12	164	0	57	51	1	0	12	15	61	0	89	137	33	0	639
5:00 PM	6	12	173	0	60	49	0	0	9	10	48	0	131	139	35	0	672
5:15 PM	6	22	182	0	68	43	1	0	7	10	59	0	103	122	28	0	651
5:30 PM	4	14	192	0	60	47	0	0	8	16	39	0	102	115	27	0	624
5:45 PM	9	19	183	0	77	44	2	0	11	11	48	0	75	107	32	0	618
TOTAL VOLUMES :	50	118	1309	0	497	373	9	0	73	113	362	0	748	968	227	0	4847
APPROACH %'s :	3.39%	7.99%	88.63%	0.00%	56.54%	42.43%	1.02%	0.00%	13.32%	20.62%	66.06%	0.00%	38.50%	49.82%	11.68%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	23	60	711	0	245	190	2	0	36	51	207	0	425	513	123	0	2586
PEAK HR FACTOR :	0.821	0.682	0.926	0.000	0.901	0.931	0.500	0.000	0.750	0.797	0.848	0.000	0.811	0.923	0.879	0.000	0.962
	0.945				0.975				0.835				0.870				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Markland Dr/Vail Ave & Potrero Grande Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-019
 Date: 4/11/2019

Bikes

NS/EW Streets:	Markland Dr/Vail Ave				Markland Dr/Vail Ave				Potrero Grande Dr				Potrero Grande Dr						
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
		0.5	0.5	1	0	0	1	0	0	1	1	1	0	1	1.5	0.5		0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR		WU	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0	0
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0		0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0		
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%		
PEAK HR :	07:30 AM - 08:30 AM																TOTAL		
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0		
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	
				0.250						0.250				0.500					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
		0.5	0.5	1	0	1	0	0	1	1	1	0	1	1.5	0.5	0		0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR		WU	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0		
APPROACH %'s :	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%		
PEAK HR :	04:45 PM - 05:45 PM																TOTAL		
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	
														0.250					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Markland Dr/Vail Ave & Potrero Grande Dr
City: Monterey Park

Project ID: 19-05183-019
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Markland Dr/Vail Ave		Markland Dr/Vail Ave		Potrero Grande Dr		Potrero Grande Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	1	2	1	0	0	4
7:15 AM	1	0	0	1	1	2	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	2	1	2	0	0	5
8:00 AM	0	0	1	1	1	0	0	0	3
8:15 AM	0	0	3	1	0	0	0	0	4
8:30 AM	0	0	1	2	0	1	0	0	4
8:45 AM	1	1	0	0	0	0	0	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	66.67%	33.33%	38.46%	61.54%	45.45%	54.55%	0	0	27
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	4	4	2	2	0	0	12
PEAK HR FACTOR :			0.333	0.500	0.500	0.250			0.600
			0.500		0.333				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	2	0	0	0	4
4:30 PM	1	1	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	1	1	0	0	0	1	0	0	3
5:15 PM	0	0	0	2	0	2	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%	40.00%	60.00%	0	0	13
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	1	1	0	2	0	3	0	0	7
PEAK HR FACTOR :	0.250	0.250	0.250	0.250	0.375	0.375			0.438
		0.250	0.250		0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlas Ave & Potrero Grande Dr
 City: Monterey Park
 Control: 1-Way Stop (SB)

Project ID: 19-05183-018
 Date: 4/11/2019

Total

NS/EW Streets:	Atlas Ave				Atlas Ave				Potrero Grande Dr				Potrero Grande Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	26	0	27	73	0	0	0	155	1	0	283
7:15 AM	0	0	0	0	1	0	14	0	28	86	0	0	0	199	0	0	328
7:30 AM	0	0	0	0	0	0	23	0	37	138	0	0	0	206	0	0	404
7:45 AM	0	0	0	0	0	0	25	0	64	164	0	0	0	185	0	0	438
8:00 AM	0	0	0	0	1	0	20	0	68	147	0	0	0	171	4	0	411
8:15 AM	0	0	0	0	0	0	19	0	78	150	0	0	0	187	1	0	435
8:30 AM	0	0	0	0	1	0	16	0	65	146	0	0	0	169	4	0	401
8:45 AM	0	0	0	0	2	0	26	0	53	122	0	2	0	162	4	0	371
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	6	0	169	0	420	1026	0	2	0	1434	14	0	3071
					3.43%	0.00%	96.57%	0.00%	29.01%	70.86%	0.00%	0.14%	0.00%	99.03%	0.97%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	87	0	247	599	0	0	0	749	5	0	1688
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.870	0.000	0.792	0.913	0.000	0.000	0.000	0.909	0.313	0.000	0.963
							0.880				0.928				0.915		
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	39	0	13	207	0	0	0	168	2	0	430
4:15 PM	0	0	0	0	2	0	35	0	14	208	0	0	0	175	2	0	436
4:30 PM	0	0	0	0	1	0	59	0	13	208	0	1	0	191	3	0	476
4:45 PM	0	0	0	0	1	0	51	0	17	224	0	0	0	218	2	0	513
5:00 PM	0	0	0	0	2	0	85	0	18	232	0	0	0	213	0	0	550
5:15 PM	0	0	0	0	4	0	41	0	14	237	0	0	0	216	0	0	512
5:30 PM	0	0	0	0	5	0	58	0	19	253	0	2	0	194	0	0	531
5:45 PM	0	0	0	0	1	0	37	0	18	244	0	0	0	170	1	1	472
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	17	0	405	0	126	1813	0	3	0	1545	10	1	3920
					4.03%	0.00%	95.97%	0.00%	6.49%	93.36%	0.00%	0.15%	0.00%	99.29%	0.64%	0.06%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	12	0	235	0	68	946	0	2	0	841	2	0	2106
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.600	0.000	0.691	0.000	0.895	0.935	0.000	0.250	0.000	0.964	0.250	0.000	0.957
							0.710				0.927				0.958		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlas Ave & Potrero Grande Dr
 City: Monterey Park
 Control: 1-Way Stop (SB)

Project ID: 19-05183-018
 Date: 4/11/2019

Bikes

NS/EW Streets:	Atlas Ave				Atlas Ave				Potrero Grande Dr				Potrero Grande Dr						
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	0	0	0	0	1.5	0	1.5	0	0	2	0	0	0	2	0	0			
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU			
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1		
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1		
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL		
APPROACH %'s :	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3		
									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%			
PEAK HR :	07:30 AM - 08:30 AM																TOTAL		
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2		
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500		
													0.500						
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	0	0	0	0	1.5	0	1.5	0	0	2	0	0	0	2	0	0			
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU			
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL		
APPROACH %'s :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2		
													0.00%				100.00%	0.00%	0.00%
PEAK HR :	04:45 PM - 05:45 PM																TOTAL		
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250		
													0.250						

National Data & Surveying Services

Intersection Turning Movement Count

Location: Atlas Ave & Potrero Grande Dr
City: Monterey Park

Project ID: 19-05183-018
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Atlas Ave		Atlas Ave		Potrero Grande Dr		Potrero Grande Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	0	1	0	0	0	0	0	0	1
7:45 AM	0	2	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES :	EB 2	WB 4	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 6
APPROACH %'s :	33.33% 66.67%								
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	3	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.250 0.375 0.500								0.500

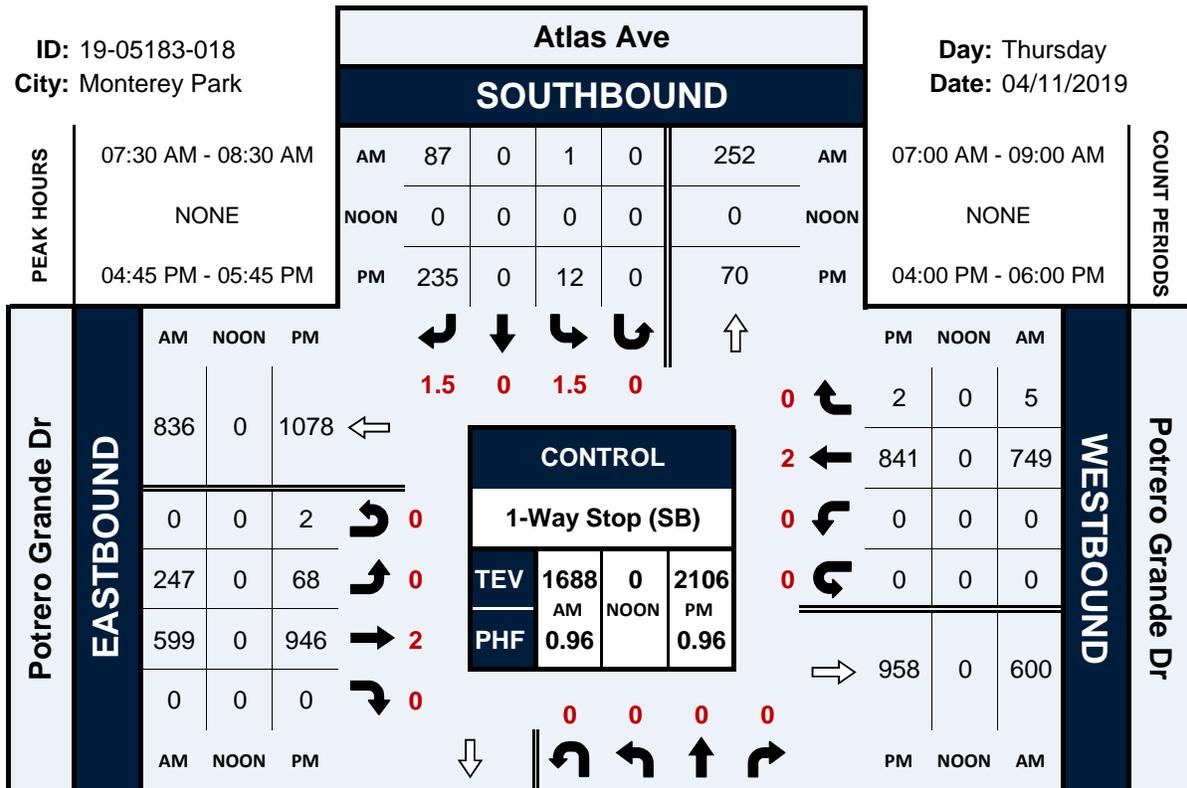
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	4	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	1
5:15 PM	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	EB 7	WB 1	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 8
APPROACH %'s :	87.50% 12.50%								
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	1	1	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250 0.250 0.500								0.500

Atlas Ave & Potrero Grande Dr

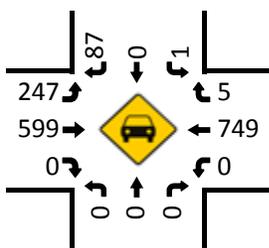
Peak Hour Turning Movement Count

ID: 19-05183-018
City: Monterey Park

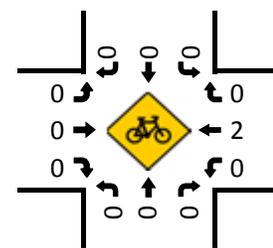
Day: Thursday
Date: 04/11/2019



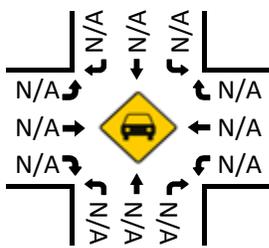
Total Vehicles (AM)



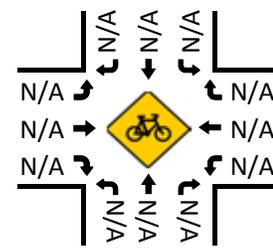
Bikes (AM)



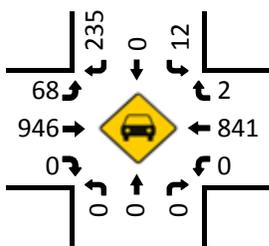
Total Vehicles (Noon)



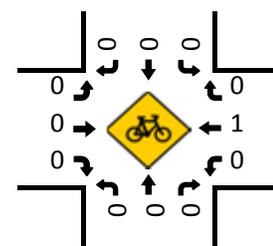
Bikes (NOON)



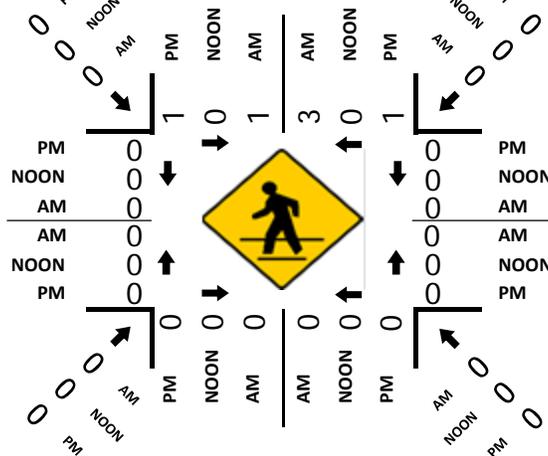
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Saturn St/Market Place Dr & Potrero Grande Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-017
 Date: 4/11/2019

Total

NS/EW Streets:	Saturn St/Market Place Dr				Saturn St/Market Place Dr				Potrero Grande Dr				Potrero Grande Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	1	0	1	0.5	1.5	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	5	6	3	0	31	14	13	0	12	126	21	0	3	35	29	0	298
7:15 AM	2	7	1	0	49	10	8	0	12	159	22	0	3	41	35	0	349
7:30 AM	6	9	4	0	32	7	7	0	14	158	21	0	0	72	28	0	358
7:45 AM	3	12	6	0	38	18	12	0	16	175	35	0	1	76	36	0	428
8:00 AM	5	15	0	0	50	16	12	0	11	157	24	0	2	86	26	0	404
8:15 AM	4	7	2	0	39	7	13	0	16	178	29	0	3	64	28	0	390
8:30 AM	4	8	1	0	39	11	10	0	16	136	30	0	1	77	49	0	382
8:45 AM	6	13	5	0	55	11	9	0	10	118	32	0	4	56	36	0	355
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	35	77	22	0	333	94	84	0	107	1207	214	0	17	507	267	0	2964
	26.12%	57.46%	16.42%	0.00%	65.17%	18.40%	16.44%	0.00%	7.00%	78.99%	14.01%	0.00%	2.15%	64.10%	33.75%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	16	42	9	0	166	52	47	0	59	646	118	0	7	303	139	0	1604
PEAK HR FACTOR :	0.800	0.700	0.375	0.000	0.830	0.722	0.904	0.000	0.922	0.907	0.843	0.000	0.583	0.881	0.709	0.000	0.937
	0.798				0.849				0.910				0.884				
PM	1	1	1	0	1	0.5	1.5	0	1	2	0	0	1	2	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	26	31	3	0	79	15	41	0	32	74	5	0	2	121	82	0	511
4:15 PM	17	23	4	0	73	15	27	0	29	81	5	0	5	135	73	0	487
4:30 PM	22	27	2	0	67	21	42	0	21	98	2	0	5	161	75	0	543
4:45 PM	21	28	4	0	65	19	26	0	30	102	10	0	1	171	78	0	555
5:00 PM	40	38	5	0	60	20	44	0	27	91	6	0	7	205	92	0	635
5:15 PM	29	32	1	0	68	22	41	0	36	113	12	0	5	182	60	0	601
5:30 PM	28	32	3	0	61	25	39	0	31	79	11	0	1	150	93	0	553
5:45 PM	27	34	4	0	65	23	26	0	24	90	5	0	3	193	82	0	576
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	210	245	26	0	538	160	286	0	230	728	56	0	29	1318	635	0	4461
	43.66%	50.94%	5.41%	0.00%	54.67%	16.26%	29.07%	0.00%	22.68%	71.79%	5.52%	0.00%	1.46%	66.50%	32.04%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	124	136	13	0	254	90	150	0	118	373	34	0	16	730	327	0	2365
PEAK HR FACTOR :	0.775	0.895	0.650	0.000	0.934	0.900	0.852	0.000	0.819	0.825	0.708	0.000	0.571	0.890	0.879	0.000	0.931
	0.822				0.943				0.815				0.882				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Saturn St/Market Place Dr & Potrero Grande Dr
 City: Monterey Park
 Control: Signalized

Project ID: 19-05183-017
 Date: 4/11/2019

Bikes

NS/EW Streets:	Saturn St/Market Place Dr				Saturn St/Market Place Dr				Potrero Grande Dr				Potrero Grande Dr					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	1	1	0	1	0.5	1.5	0	1	2	0	0	1	2	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0
	7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0
	8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	1	1	0	1	0.5	1.5	0	1	2	0	0	1	2	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Saturn St/Market Place Dr & Potrero Grande Dr
City: Monterey Park

Project ID: 19-05183-017
Date: 4/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Saturn St/Market Place Dr		Saturn St/Market Place Dr		Potrero Grande Dr		Potrero Grande Dr			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG			
		EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	7:00 AM	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	1	0	0	0	0	0	1
	7:30 AM	0	0	3	1	0	0	0	0	4
	7:45 AM	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	4	1	0	0	0	0	0	5
APPROACH %'s :			80.00%	20.00%						
PEAK HR :	07:45 AM - 08:45 AM									TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :										

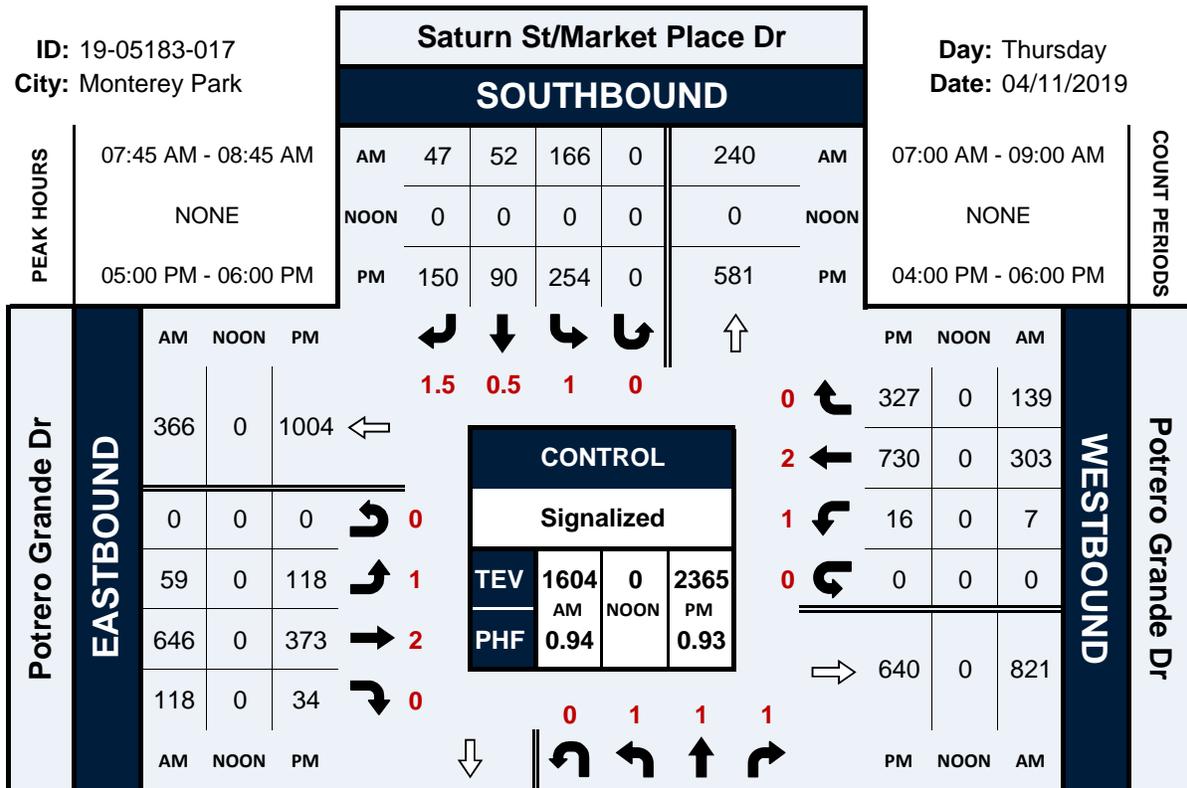
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG			
		EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
	4:00 PM	0	0	1	0	0	0	0	1	2
	4:15 PM	1	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	2	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	1	0	0	1	0	2
	5:30 PM	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	1	0	1	3	0	0	1	1	7	
APPROACH %'s :	100.00%	0.00%	25.00%	75.00%			50.00%	50.00%		
PEAK HR :	05:00 PM - 06:00 PM									TOTAL
PEAK HR VOL :	0	0	0	1	0	0	1	0	2	
PEAK HR FACTOR :			0.250	0.250			0.250	0.250	0.250	

Saturn St/Market Place Dr & Potrero Grande Dr

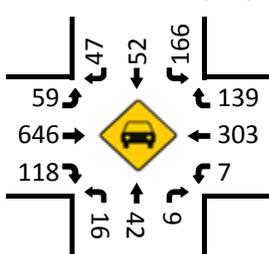
Peak Hour Turning Movement Count

ID: 19-05183-017
City: Monterey Park

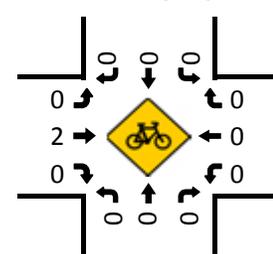
Day: Thursday
Date: 04/11/2019



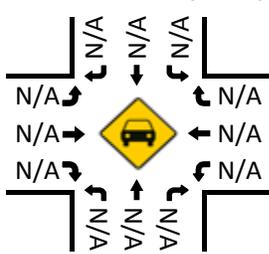
Total Vehicles (AM)



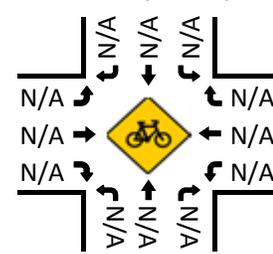
Bikes (AM)



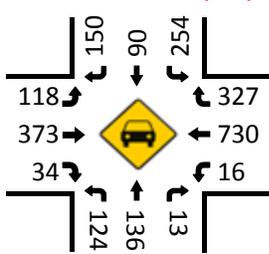
Total Vehicles (Noon)



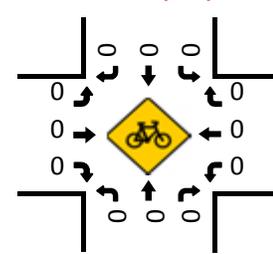
Bikes (NOON)



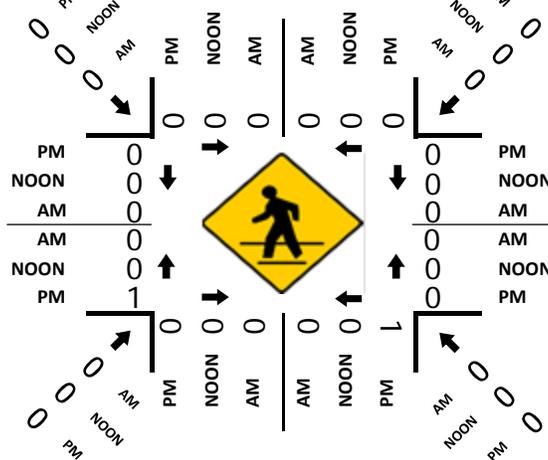
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



VOLUME

Atlantic Blvd Bet. Hellman Ave & Garvey Ave

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_003

DAILY TOTALS					NB	SB	EB	WB	Total		
					16,735	16,836	0	0	33,571		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	52	61			113	12:00	234	284			518
00:15	40	39			79	12:15	263	285			548
00:30	24	30			54	12:30	273	268			541
00:45	29	145	28	158	57 303	12:45	250	1020	292	1129	542 2149
01:00	20	32			52	13:00	249	238			487
01:15	19	18			37	13:15	228	262			490
01:30	19	23			42	13:30	262	285			547
01:45	17	75	20	93	37 168	13:45	266	1005	262	1047	528 2052
02:00	20	15			35	14:00	268	222			490
02:15	5	12			17	14:15	264	286			550
02:30	11	9			20	14:30	263	243			506
02:45	11	47	14	50	25 97	14:45	257	1052	276	1027	533 2079
03:00	8	6			14	15:00	270	288			558
03:15	11	11			22	15:15	264	257			521
03:30	11	7			18	15:30	277	282			559
03:45	14	44	9	33	23 77	15:45	251	1062	289	1116	540 2178
04:00	16	11			27	16:00	292	259			551
04:15	14	21			35	16:15	301	249			550
04:30	15	9			24	16:30	313	297			610
04:45	21	66	30	71	51 137	16:45	308	1214	291	1096	599 2310
05:00	38	33			71	17:00	293	285			578
05:15	27	49			76	17:15	290	294			584
05:30	40	39			79	17:30	295	289			584
05:45	39	144	65	186	104 330	17:45	319	1197	318	1186	637 2383
06:00	78	82			160	18:00	293	321			614
06:15	108	92			200	18:15	313	283			596
06:30	140	107			247	18:30	244	311			555
06:45	158	484	144	425	302 909	18:45	249	1099	250	1165	499 2264
07:00	190	143			333	19:00	325	222			547
07:15	317	180			497	19:15	273	229			502
07:30	273	226			499	19:30	251	202			453
07:45	298	1078	253	802	551 1880	19:45	230	1079	217	870	447 1949
08:00	272	262			534	20:00	253	193			446
08:15	253	280			533	20:15	201	219			420
08:30	229	240			469	20:30	180	186			366
08:45	231	985	293	1075	524 2060	20:45	216	850	231	829	447 1679
09:00	203	210			413	21:00	200	198			398
09:15	205	224			429	21:15	182	194			376
09:30	227	209			436	21:30	175	168			343
09:45	181	816	290	933	471 1749	21:45	179	736	196	756	375 1492
10:00	194	231			425	22:00	159	161			320
10:15	214	235			449	22:15	144	138			282
10:30	240	255			495	22:30	110	121			231
10:45	188	836	276	997	464 1833	22:45	97	510	91	511	188 1021
11:00	232	272			504	23:00	92	99			191
11:15	216	245			461	23:15	85	76			161
11:30	219	244			463	23:30	45	56			101
11:45	249	916	229	990	478 1906	23:45	53	275	60	291	113 566
TOTALS	5636	5813			11449	TOTALS	11099	11023			22122
SPLIT %	49.2%	50.8%			34.1%	SPLIT %	50.2%	49.8%			65.9%

DAILY TOTALS					NB	SB	EB	WB	Total
					16,735	16,836	0	0	33,571

AM Peak Hour	07:15	08:00			07:30	PM Peak Hour	17:30	17:45			17:30
AM Pk Volume	1160	1075			2117	PM Pk Volume	1220	1233			2431
Pk Hr Factor	0.915	0.917			0.961	Pk Hr Factor	0.956	0.960			0.954
7 - 9 Volume	2063	1877	0	0	3940	4 - 6 Volume	2411	2282	0	0	4693
7 - 9 Peak Hour	07:15	08:00			07:30	4 - 6 Peak Hour	16:15	17:00			17:00
7 - 9 Pk Volume	1160	1075	0	0	2117	4 - 6 Pk Volume	1215	1186	0	0	2383
Pk Hr Factor	0.915	0.917	0.000	0.000	0.961	Pk Hr Factor	0.970	0.932	0.000	0.000	0.935

VOLUME

Garfield Ave Bet. Hellman Ave & Garvey Ave

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_006

DAILY TOTALS					NB	SB	EB	WB	Total		
					14,817	11,333	0	0	26,150		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	36	35			71	12:00	200	176			376
00:15	29	25			54	12:15	233	184			417
00:30	33	23			56	12:30	196	157			353
00:45	20	118	19	102	39 220	12:45	217	846	166	683	383 1529
01:00	16	24			40	13:00	224	176			400
01:15	21	14			35	13:15	241	183			424
01:30	18	27			45	13:30	220	167			387
01:45	11	66	16	81	27 147	13:45	266	951	171	697	437 1648
02:00	8	15			23	14:00	225	168			393
02:15	12	10			22	14:15	219	180			399
02:30	15	11			26	14:30	256	192			448
02:45	15	50	10	46	25 96	14:45	273	973	202	742	475 1715
03:00	10	3			13	15:00	261	202			463
03:15	9	7			16	15:15	250	213			463
03:30	10	11			21	15:30	237	192			429
03:45	6	35	7	28	13 63	15:45	230	978	209	816	439 1794
04:00	16	3			19	16:00	241	202			443
04:15	23	14			37	16:15	262	238			500
04:30	30	10			40	16:30	223	221			444
04:45	27	96	16	43	43 139	16:45	243	969	211	872	454 1841
05:00	33	15			48	17:00	235	218			453
05:15	37	16			53	17:15	251	222			473
05:30	33	31			64	17:30	225	227			452
05:45	56	159	32	94	88 253	17:45	273	984	215	882	488 1866
06:00	72	28			100	18:00	241	242			483
06:15	119	41			160	18:15	229	188			417
06:30	147	59			206	18:30	259	207			466
06:45	149	487	72	200	221 687	18:45	212	941	168	805	380 1746
07:00	172	87			259	19:00	209	150			359
07:15	273	112			385	19:15	197	182			379
07:30	276	163			439	19:30	184	156			340
07:45	277	998	154	516	431 1514	19:45	161	751	139	627	300 1378
08:00	249	143			392	20:00	156	120			276
08:15	265	161			426	20:15	174	164			338
08:30	259	149			408	20:30	162	151			313
08:45	265	1038	133	586	398 1624	20:45	123	615	134	569	257 1184
09:00	236	139			375	21:00	98	122			220
09:15	242	144			386	21:15	136	139			275
09:30	229	117			346	21:30	105	110			215
09:45	250	957	141	541	391 1498	21:45	108	447	119	490	227 937
10:00	229	158			387	22:00	112	113			225
10:15	218	136			354	22:15	91	95			186
10:30	234	172			406	22:30	86	82			168
10:45	233	914	143	609	376 1523	22:45	62	351	71	361	133 712
11:00	225	175			400	23:00	54	62			116
11:15	257	182			439	23:15	52	53			105
11:30	212	189			401	23:30	27	45			72
11:45	230	924	192	738	422 1662	23:45	36	169	45	205	81 374
TOTALS	5842	3584			9426	TOTALS	8975	7749			16724
SPLIT %	62.0%	38.0%			36.0%	SPLIT %	53.7%	46.3%			64.0%

DAILY TOTALS					NB	SB	EB	WB	Total
					14,817	11,333	0	0	26,150
AM Peak Hour	07:15	11:30			07:30	PM Peak Hour	14:30	17:15	17:15
AM Pk Volume	1075	741			1688	PM Pk Volume	1040	906	1896
Pk Hr Factor	0.970	0.965			0.961	Pk Hr Factor	0.952	0.936	0.971
7 - 9 Volume	2036	1102	0	0	3138	4 - 6 Volume	1953	1754	0 0 3707
7 - 9 Peak Hour	07:15	07:30			07:30	4 - 6 Peak Hour	17:00	16:15	17:00
7 - 9 Pk Volume	1075	621	0	0	1688	4 - 6 Pk Volume	984	888	0 0 1866
Pk Hr Factor	0.970	0.952	0.000	0.000	0.961	Pk Hr Factor	0.901	0.933	0.000 0.000 0.956

VOLUME

New Ave Bet. Hellman Ave & Garvey Ave

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_010

DAILY TOTALS					NB	SB	EB	WB	Total		
					8,821	9,674	0	0	18,495		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	21	36			57	12:00	139	139			278
00:15	27	28			55	12:15	137	154			291
00:30	20	32			52	12:30	120	126			246
00:45	15	83	18	114	33 197	12:45	134	530	145	564	279 1094
01:00	22	17			39	13:00	139	160			299
01:15	12	8			20	13:15	122	126			248
01:30	9	20			29	13:30	111	135			246
01:45	17	60	11	56	28 116	13:45	120	492	146	567	266 1059
02:00	12	17			29	14:00	110	148			258
02:15	8	12			20	14:15	121	150			271
02:30	9	13			22	14:30	129	129			258
02:45	7	36	15	57	22 93	14:45	159	519	184	611	343 1130
03:00	7	6			13	15:00	141	177			318
03:15	13	12			25	15:15	140	205			345
03:30	10	7			17	15:30	141	155			296
03:45	10	40	3	28	13 68	15:45	139	561	161	698	300 1259
04:00	10	9			19	16:00	130	152			282
04:15	17	6			23	16:15	133	183			316
04:30	22	13			35	16:30	138	178			316
04:45	17	66	11	39	28 105	16:45	139	540	178	691	317 1231
05:00	21	19			40	17:00	136	167			303
05:15	40	12			52	17:15	172	215			387
05:30	37	21			58	17:30	155	196			351
05:45	38	136	20	72	58 208	17:45	184	647	198	776	382 1423
06:00	41	23			64	18:00	158	193			351
06:15	51	42			93	18:15	160	195			355
06:30	82	40			122	18:30	147	210			357
06:45	93	267	65	170	158 437	18:45	138	603	143	741	281 1344
07:00	132	68			200	19:00	113	130			243
07:15	172	115			287	19:15	131	123			254
07:30	190	164			354	19:30	114	137			251
07:45	176	670	128	475	304 1145	19:45	89	447	113	503	202 950
08:00	131	128			259	20:00	98	138			236
08:15	134	118			252	20:15	90	95			185
08:30	159	138			297	20:30	64	105			169
08:45	165	589	123	507	288 1096	20:45	84	336	106	444	190 780
09:00	170	155			325	21:00	88	114			202
09:15	164	143			307	21:15	70	119			189
09:30	118	127			245	21:30	64	102			166
09:45	134	586	118	543	252 1129	21:45	54	276	100	435	154 711
10:00	127	118			245	22:00	63	95			158
10:15	108	112			220	22:15	40	92			132
10:30	133	116			249	22:30	37	90			127
10:45	125	493	128	474	253 967	22:45	49	189	64	341	113 530
11:00	105	175			280	23:00	46	58			104
11:15	128	131			259	23:15	39	54			93
11:30	144	139			283	23:30	29	47			76
11:45	130	507	128	573	258 1080	23:45	34	148	36	195	70 343
TOTALS	3533	3108			6641	TOTALS	5288	6566			11854
SPLIT %	53.2%	46.8%			35.9%	SPLIT %	44.6%	55.4%			64.1%

DAILY TOTALS					NB	SB	EB	WB	Total
					8,821	9,674	0	0	18,495

AM Peak Hour	07:00	10:45			08:30	PM Peak Hour	17:15	17:15			17:15
AM Pk Volume	670	573			1217	PM Pk Volume	669	802			1471
Pk Hr Factor	0.882	0.819			0.936	Pk Hr Factor	0.909	0.933			0.950
7 - 9 Volume	1259	982	0	0	2241	4 - 6 Volume	1187	1467	0	0	2654
7 - 9 Peak Hour	07:00	07:30			07:15	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	670	538	0	0	1204	4 - 6 Pk Volume	647	776	0	0	1423
Pk Hr Factor	0.882	0.820	0.000	0.000	0.850	Pk Hr Factor	0.879	0.902	0.000	0.000	0.919

VOLUME

Garvey Ave Bet. Fremont Ave & Atlantic Blvd

Day: Thursday
Date: 4/11/2019City: Monterey Park
Project #: CA19_5184_011

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	12,545	9,524	22,069					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			14	17	31	12:00			153	139	292			
00:15			16	19	35	12:15			152	134	286			
00:30			9	13	22	12:30			175	112	287			
00:45			13	52	8	57	12:45		115	595	170	555	285	1150
01:00			15	9	24	13:00			135	133	268			
01:15			5	7	12	13:15			119	160	279			
01:30			7	6	13	13:30			108	144	252			
01:45			4	31	8	30	13:45		149	511	153	590	302	1101
02:00			4	6	10	14:00			128	138	266			
02:15			5	5	10	14:15			205	127	332			
02:30			8	5	13	14:30			259	118	377			
02:45			6	23	9	25	14:45		300	892	198	581	498	1473
03:00			5	3	8	15:00			238	140	378			
03:15			4	4	8	15:15			244	130	374			
03:30			4	5	9	15:30			303	142	445			
03:45			2	15	4	16	15:45		337	1122	134	546	471	1668
04:00			8	4	12	16:00			428	116	544			
04:15			0	9	9	16:15			347	136	483			
04:30			5	10	15	16:30			400	122	522			
04:45			12	25	9	32	16:45		363	1538	139	513	502	2051
05:00			18	15	33	17:00			386	138	524			
05:15			18	23	41	17:15			406	126	532			
05:30			23	31	54	17:30			364	162	526			
05:45			17	76	40	109	17:45		399	1555	133	559	532	2114
06:00			30	69	99	18:00			409	138	547			
06:15			35	114	149	18:15			365	140	505			
06:30			52	109	161	18:30			382	133	515			
06:45			54	171	176	468	18:45		361	1517	117	528	478	2045
07:00			83	189	272	19:00			286	116	402			
07:15			145	264	409	19:15			222	113	335			
07:30			152	311	463	19:30			160	97	257			
07:45			212	592	394	1158	19:45		160	828	93	419	253	1247
08:00			212	264	476	20:00			113	104	217			
08:15			134	260	394	20:15			108	104	212			
08:30			134	261	395	20:30			103	94	197			
08:45			145	625	228	1013	20:45		94	418	85	387	179	805
09:00			112	151	263	21:00			83	76	159			
09:15			110	165	275	21:15			70	110	180			
09:30			121	111	232	21:30			50	62	112			
09:45			102	445	115	542	21:45		50	253	72	320	122	573
10:00			129	107	236	22:00			45	60	105			
10:15			121	95	216	22:15			64	39	103			
10:30			126	105	231	22:30			34	31	65			
10:45			113	489	97	404	22:45		33	176	36	166	69	342
11:00			122	94	216	23:00			26	36	62			
11:15			120	93	213	23:15			28	29	57			
11:30			117	106	223	23:30			17	27	44			
11:45			155	514	98	391	23:45		11	82	23	115	34	197
TOTALS			3058	4245	7303	TOTALS			9487	5279	14766			
SPLIT %			41.9%	58.1%	33.1%	SPLIT %			64.2%	35.8%	66.9%			

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	12,545	9,524	22,069		
AM Peak Hour			07:15	07:15	07:15	PM Peak Hour			17:15	14:45	17:15
AM Pk Volume			721	1233	1954	PM Pk Volume			1578	610	2137
Pk Hr Factor			0.850	0.782	0.806	Pk Hr Factor			0.965	0.770	0.977
7 - 9 Volume	0	0	1217	2171	3388	4 - 6 Volume	0	0	3093	1072	4165
7 - 9 Peak Hour			07:15	07:15	07:15	4 - 6 Peak Hour			16:30	16:45	17:00
7 - 9 Pk Volume	0	0	721	1233	1954	4 - 6 Pk Volume	0	0	1555	565	2114
Pk Hr Factor	0.000	0.000	0.850	0.782	0.806	Pk Hr Factor	0.000	0.000	0.958	0.872	0.993

VOLUME

Monterey Pass Rd Bet. Garvey Ave & Vagabond Dr

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					9,626	8,256	0	0	17,882		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	6	16			22	12:00	136	109			245
00:15	11	14			25	12:15	134	90			224
00:30	7	12			19	12:30	122	102			224
00:45	11	35	6	48	17	83	113	505	165	466	278
01:00	8	9			17	13:00	135	131			266
01:15	9	12			21	13:15	107	116			223
01:30	5	10			15	13:30	96	131			227
01:45	4	26	7	38	11	64	137	475	146	524	283
02:00	2	7			9	14:00	136	123			259
02:15	6	8			14	14:15	121	111			232
02:30	3	11			14	14:30	163	126			289
02:45	4	15	5	31	9	46	180	600	133	493	313
03:00	12	6			18	15:00	160	163			323
03:15	12	1			13	15:15	180	132			312
03:30	6	6			12	15:30	200	134			334
03:45	14	44	14	27	28	71	192	732	144	573	336
04:00	8	9			17	16:00	204	154			358
04:15	13	8			21	16:15	219	139			358
04:30	20	7			27	16:30	279	129			408
04:45	39	80	9	33	48	113	269	971	134	556	403
05:00	16	12			28	17:00	310	147			457
05:15	21	19			40	17:15	268	135			403
05:30	29	24			53	17:30	313	148			461
05:45	31	97	40	95	71	192	306	1197	147	577	453
06:00	40	42			82	18:00	251	141			392
06:15	61	62			123	18:15	247	160			407
06:30	71	59			130	18:30	228	128			356
06:45	83	255	118	281	201	536	224	950	119	548	343
07:00	113	109			222	19:00	175	100			275
07:15	197	169			366	19:15	135	105			240
07:30	162	168			330	19:30	81	76			157
07:45	182	654	222	668	404	1322	96	487	93	374	189
08:00	156	202			358	20:00	72	74			146
08:15	149	216			365	20:15	65	106			171
08:30	136	199			335	20:30	60	79			139
08:45	134	575	179	796	313	1371	53	250	68	327	121
09:00	108	131			239	21:00	61	71			132
09:15	126	113			239	21:15	48	74			122
09:30	110	115			225	21:30	40	62			102
09:45	114	458	115	474	229	932	41	190	45	252	86
10:00	124	115			239	22:00	38	45			83
10:15	129	115			244	22:15	46	42			88
10:30	96	115			211	22:30	22	23			45
10:45	103	452	100	445	203	897	25	131	28	138	53
11:00	90	99			189	23:00	12	30			42
11:15	100	101			201	23:15	18	19			37
11:30	106	97			203	23:30	12	22			34
11:45	104	400	107	404	211	804	5	47	17	88	22
TOTALS	3091	3340			6431	TOTALS	6535	4916			11451
SPLIT %	48.1%	51.9%			36.0%	SPLIT %	57.1%	42.9%			64.0%

DAILY TOTALS					NB	SB	EB	WB	Total		
					9,626	8,256	0	0	17,882		
AM Peak Hour	07:15	07:45		07:45	PM Peak Hour	17:00	17:30		17:00		
AM Pk Volume	697	839		1462	PM Pk Volume	1197	596		1774		
Pk Hr Factor	0.885	0.945		0.905	Pk Hr Factor	0.956	0.931		0.962		
7 - 9 Volume	1229	1464	0	0	2693	4 - 6 Volume	2168	1133	0	0	3301
7 - 9 Peak Hour	07:15	07:45		07:45	4 - 6 Peak Hour	17:00	17:00				17:00
7 - 9 Pk Volume	697	839	0	0	1462	4 - 6 Pk Volume	1197	577	0	0	1774
Pk Hr Factor	0.885	0.945	0.000	0.000	0.905	Pk Hr Factor	0.956	0.975	0.000	0.000	0.962

VOLUME

Corporate Center Dr Bet. Floral Dr & Casuda Canyon Dr

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					4,047	3,832	0	0	7,879		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	1	7			8	12:00	63	105			168
00:15	0	3			3	12:15	73	97			170
00:30	1	5			6	12:30	67	75			142
00:45	1	3	0	15	18	12:45	93	296	59	336	632
01:00	1	3			4	13:00	83	66			149
01:15	2	0			2	13:15	89	40			129
01:30	2	3			5	13:30	71	52			123
01:45	3	8	3	9	17	13:45	55	298	72	230	528
02:00	0	3			3	14:00	58	55			113
02:15	2	3			5	14:15	46	76			122
02:30	1	1			2	14:30	51	78			129
02:45	0	3	2	9	12	14:45	57	212	67	276	488
03:00	0	2			2	15:00	50	91			141
03:15	1	1			2	15:15	39	74			113
03:30	1	0			1	15:30	46	96			142
03:45	0	2	3	6	8	15:45	49	184	77	338	522
04:00	0	1			1	16:00	78	122			200
04:15	0	3			3	16:15	50	107			157
04:30	2	2			4	16:30	56	134			190
04:45	2	4	7	13	17	16:45	57	241	103	466	707
05:00	6	5			11	17:00	95	179			274
05:15	7	7			14	17:15	90	123			213
05:30	15	2			17	17:30	100	105			205
05:45	30	58	7	21	79	17:45	78	363	95	502	865
06:00	44	13			57	18:00	65	110			175
06:15	63	11			74	18:15	48	90			138
06:30	82	12			94	18:30	47	61			108
06:45	85	274	27	63	337	18:45	44	204	62	323	527
07:00	121	21			142	19:00	27	43			70
07:15	121	48			169	19:15	15	39			54
07:30	142	57			199	19:30	10	40			50
07:45	201	585	74	200	785	19:45	15	67	23	145	212
08:00	157	57			214	20:00	17	21			38
08:15	128	39			167	20:15	10	28			38
08:30	121	50			171	20:30	13	26			39
08:45	90	496	49	195	691	20:45	9	49	15	90	139
09:00	94	41			135	21:00	2	25			27
09:15	70	38			108	21:15	3	14			17
09:30	61	31			92	21:30	11	11			22
09:45	62	287	23	133	420	21:45	2	18	8	58	76
10:00	48	25			73	22:00	4	7			11
10:15	38	30			68	22:15	4	7			11
10:30	53	40			93	22:30	1	8			9
10:45	45	184	38	133	317	22:45	3	12	3	25	37
11:00	38	52			90	23:00	4	7			11
11:15	53	51			104	23:15	3	5			8
11:30	48	48			96	23:30	2	8			10
11:45	51	190	74	225	415	23:45	0	9	1	21	30
TOTALS	2094	1022			3116	TOTALS	1953	2810			4763
SPLIT %	67.2%	32.8%			39.5%	SPLIT %	41.0%	59.0%			60.5%

DAILY TOTALS					NB	SB	EB	WB	Total
					4,047	3,832	0	0	7,879

AM Peak Hour	07:30	11:45			07:15	PM Peak Hour	17:00	16:30			17:00
AM Pk Volume	628	351			857	PM Pk Volume	363	539			865
Pk Hr Factor	0.781	0.836			0.779	Pk Hr Factor	0.908	0.753			0.789
7 - 9 Volume	1081	395	0	0	1476	4 - 6 Volume	604	968	0	0	1572
7 - 9 Peak Hour	07:30	07:15			07:15	4 - 6 Peak Hour	17:00	16:30			17:00
7 - 9 Pk Volume	628	236	0	0	857	4 - 6 Pk Volume	363	539	0	0	865
Pk Hr Factor	0.781	0.797	0.000	0.000	0.779	Pk Hr Factor	0.908	0.753	0.000	0.000	0.789

VOLUME

Garvey Ave Bet. Atlantic Blvd & Garfield Ave

Day: Thursday
Date: 4/11/2019City: Monterey Park
Project #: CA19_5184_012

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	0						11,163	9,310	20,473	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			39	15	54		12:00			181	164	345			
00:15			24	17	41		12:15			170	144	314			
00:30			21	15	36		12:30			210	146	356			
00:45			17	101	19	66	12:45			166	727	166	620	332	1347
01:00			18	7	25		13:00			196	165	361			
01:15			11	12	23		13:15			177	157	334			
01:30			7	14	21		13:30			170	154	324			
01:45			6	42	10	43	13:45			172	715	155	631	327	1346
02:00			5	11	16		14:00			147	122	269			
02:15			8	5	13		14:15			184	141	325			
02:30			5	6	11		14:30			232	132	364			
02:45			3	21	8	30	14:45			238	801	156	551	394	1352
03:00			6	4	10		15:00			293	153	446			
03:15			6	3	9		15:15			204	143	347			
03:30			6	5	11		15:30			237	120	357			
03:45			1	19	6	18	15:45			279	1013	133	549	412	1562
04:00			5	2	7		16:00			257	148	405			
04:15			6	8	14		16:15			269	116	385			
04:30			5	14	19		16:30			268	138	406			
04:45			16	32	12	36	16:45			234	1028	144	546	378	1574
05:00			13	17	30		17:00			259	133	392			
05:15			14	15	29		17:15			242	135	377			
05:30			13	33	46		17:30			222	143	365			
05:45			10	50	42	107	17:45			205	928	132	543	337	1471
06:00			24	56	80		18:00			305	152	457			
06:15			27	86	113		18:15			254	143	397			
06:30			38	87	125		18:30			259	146	405			
06:45			30	119	109	338	18:45			265	1083	127	568	392	1651
07:00			44	138	182		19:00			211	106	317			
07:15			118	188	306		19:15			190	108	298			
07:30			105	251	356		19:30			147	97	244			
07:45			135	402	238	815	19:45			140	688	89	400	229	1088
08:00			138	192	330		20:00			130	92	222			
08:15			85	170	255		20:15			131	107	238			
08:30			102	219	321		20:30			114	101	215			
08:45			113	438	178	759	20:45			108	483	81	381	189	864
09:00			129	149	278		21:00			106	86	192			
09:15			120	111	231		21:15			100	97	197			
09:30			128	157	285		21:30			86	63	149			
09:45			120	497	132	549	21:45			77	369	78	324	155	693
10:00			154	144	298		22:00			72	50	122			
10:15			132	139	271		22:15			72	48	120			
10:30			134	137	271		22:30			58	39	97			
10:45			160	580	139	559	22:45			36	238	33	170	69	408
11:00			150	145	295		23:00			49	32	81			
11:15			147	158	305		23:15			58	24	82			
11:30			160	137	297		23:30			28	25	53			
11:45			174	631	165	605	23:45			23	158	21	102	44	260
TOTALS			2932	3925	6857		TOTALS			8231	5385	13616			
SPLIT %			42.8%	57.2%	33.5%		SPLIT %			60.5%	39.5%	66.5%			

DAILY TOTALS					NB	SB						EB	WB	Total
					0	0						11,163	9,310	20,473
AM Peak Hour			11:45	07:15	07:15		PM Peak Hour			18:00	12:45	18:00		
AM Pk Volume			735	869	1365		PM Pk Volume			1083	642	1651		
Pk Hr Factor			0.875	0.866	0.915		Pk Hr Factor			0.888	0.967	0.903		
7 - 9 Volume	0	0	840	1574	2414		4 - 6 Volume	0	0	1956	1089	3045		
7 - 9 Peak Hour			07:15	07:15	07:15		4 - 6 Peak Hour			16:15	16:45	16:00		
7 - 9 Pk Volume	0	0	496	869	1365		4 - 6 Pk Volume	0	0	1030	555	1574		
Pk Hr Factor	0.000	0.000	0.899	0.866	0.915		Pk Hr Factor	0.000	0.000	0.957	0.964	0.969		

VOLUME

Atlantic Blvd Bet. Garvey Ave & Floral Dr

Day: Thursday
Date: 4/11/2019City: Monterey Park
Project #: CA19_5184_004

DAILY TOTALS					NB	SB	EB	WB	Total		
					14,363	13,187	0	0	27,550		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	33	41			74	12:00	216	186			402
00:15	19	30			49	12:15	251	187			438
00:30	17	32			49	12:30	202	199			401
00:45	12	81	20	123	32	12:45	215	884	168	740	383
					204						1624
01:00	12	25			37	13:00	175	200			375
01:15	8	10			18	13:15	186	205			391
01:30	14	18			32	13:30	186	240			426
01:45	8	42	13	66	21	13:45	197	744	222	867	419
					108						1611
02:00	14	7			21	14:00	205	180			385
02:15	4	9			13	14:15	211	187			398
02:30	8	13			21	14:30	236	225			461
02:45	6	32	10	39	16	14:45	217	869	218	810	435
					71						1679
03:00	7	7			14	15:00	239	235			474
03:15	9	3			12	15:15	261	235			496
03:30	8	9			17	15:30	242	229			471
03:45	8	32	7	26	15	15:45	221	963	186	885	407
					58						1848
04:00	14	6			20	16:00	301	214			515
04:15	14	19			33	16:15	300	199			499
04:30	15	9			24	16:30	276	209			485
04:45	28	71	21	55	49	16:45	286	1163	229	851	515
					126						2014
05:00	49	29			78	17:00	327	193			520
05:15	29	50			79	17:15	322	229			551
05:30	35	51			86	17:30	340	207			547
05:45	33	146	67	197	100	17:45	272	1261	233	862	505
					343						2123
06:00	64	78			142	18:00	287	225			512
06:15	95	88			183	18:15	294	270			564
06:30	112	93			205	18:30	237	220			457
06:45	131	402	124	383	255	18:45	251	1069	223	938	474
					785						2007
07:00	146	172			318	19:00	294	172			466
07:15	202	161			363	19:15	257	162			419
07:30	187	216			403	19:30	224	167			391
07:45	224	759	205	754	429	19:45	229	1004	143	644	372
					1513						1648
08:00	205	216			421	20:00	222	169			391
08:15	188	192			380	20:15	178	145			323
08:30	170	232			402	20:30	154	154			308
08:45	171	734	234	874	405	20:45	161	715	140	608	301
					1608						1323
09:00	191	188			379	21:00	148	168			316
09:15	203	201			404	21:15	162	167			329
09:30	175	202			377	21:30	130	122			252
09:45	173	742	193	784	366	21:45	117	557	132	589	249
					1526						1146
10:00	175	206			381	22:00	126	121			247
10:15	175	224			399	22:15	96	96			192
10:30	199	200			399	22:30	55	88			143
10:45	216	765	154	784	370	22:45	71	348	81	386	152
					1549						734
11:00	232	207			439	23:00	42	60			102
11:15	222	166			388	23:15	36	52			88
11:30	189	173			362	23:30	33	46			79
11:45	194	837	180	726	374	23:45	32	143	38	196	70
					1563						339
TOTALS	4643	4811			9454	TOTALS	9720	8376			18096
SPLIT %	49.1%	50.9%			34.3%	SPLIT %	53.7%	46.3%			65.7%

DAILY TOTALS					NB	SB	EB	WB	Total		
					14,363	13,187	0	0	27,550		
AM Peak Hour	10:30	08:00		07:30	PM Peak Hour	16:45	17:45		16:45		
AM Pk Volume	869	874		1633	PM Pk Volume	1275	948		2133		
Pk Hr Factor	0.936	0.934		0.952	Pk Hr Factor	0.938	0.878		0.968		
7 - 9 Volume	1493	1628	0	0	3121	4 - 6 Volume	2424	1713	0	0	4137
7 - 9 Peak Hour	07:15	08:00		07:30	4 - 6 Peak Hour	16:45	17:00				16:45
7 - 9 Pk Volume	818	874	0	0	1633	4 - 6 Pk Volume	1275	862	0	0	2133
Pk Hr Factor	0.913	0.934	0.000	0.000	0.952	Pk Hr Factor	0.938	0.925	0.000	0.000	0.968

VOLUME

Garfield Ave Bet. Garvey Ave & El Repetto Dr

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_007

DAILY TOTALS					NB	SB	EB	WB	Total		
					12,984	13,452	0	0	26,436		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	27	32			59	12:00	164	197			361
00:15	28	30			58	12:15	163	193			356
00:30	17	38			55	12:30	160	161			321
00:45	13	85	15	115	28 200	12:45	170	657	169	720	339 1377
01:00	20	11			31	13:00	168	161			329
01:15	10	21			31	13:15	183	184			367
01:30	9	19			28	13:30	166	181			347
01:45	10	49	6	57	16 106	13:45	183	700	222	748	405 1448
02:00	11	15			26	14:00	189	164			353
02:15	11	11			22	14:15	173	185			358
02:30	10	20			30	14:30	226	206			432
02:45	11	43	13	59	24 102	14:45	229	817	215	770	444 1587
03:00	11	10			21	15:00	245	245			490
03:15	17	9			26	15:15	243	228			471
03:30	16	10			26	15:30	209	221			430
03:45	13	57	12	41	25 98	15:45	236	933	225	919	461 1852
04:00	10	7			17	16:00	226	237			463
04:15	12	23			35	16:15	236	248			484
04:30	24	38			62	16:30	276	213			489
04:45	26	72	29	97	55 169	16:45	250	988	259	957	509 1945
05:00	35	24			59	17:00	262	274			536
05:15	44	35			79	17:15	260	272			532
05:30	59	39			98	17:30	251	300			551
05:45	60	198	40	138	100 336	17:45	289	1062	290	1136	579 2198
06:00	51	76			127	18:00	273	296			569
06:15	74	105			179	18:15	239	249			488
06:30	117	130			247	18:30	239	254			493
06:45	126	368	147	458	273 826	18:45	201	952	214	1013	415 1965
07:00	135	200			335	19:00	188	246			434
07:15	195	244			439	19:15	195	225			420
07:30	274	226			500	19:30	183	161			344
07:45	289	893	243	913	532 1806	19:45	153	719	166	798	319 1517
08:00	249	213			462	20:00	148	149			297
08:15	208	210			418	20:15	156	154			310
08:30	225	225			450	20:30	143	143			286
08:45	184	866	213	861	397 1727	20:45	123	570	117	563	240 1133
09:00	165	201			366	21:00	121	103			224
09:15	185	178			363	21:15	132	112			244
09:30	182	190			372	21:30	107	112			219
09:45	186	718	155	724	341 1442	21:45	114	474	95	422	209 896
10:00	165	192			357	22:00	91	97			188
10:15	159	172			331	22:15	81	93			174
10:30	159	172			331	22:30	69	84			153
10:45	142	625	194	730	336 1355	22:45	61	302	54	328	115 630
11:00	161	176			337	23:00	61	57			118
11:15	184	172			356	23:15	40	43			83
11:30	140	179			319	23:30	37	44			81
11:45	171	656	177	704	348 1360	23:45	42	180	37	181	79 361
TOTALS	4630	4897			9527	TOTALS	8354	8555			16909
SPLIT %	48.6%	51.4%			36.0%	SPLIT %	49.4%	50.6%			64.0%

DAILY TOTALS					NB	SB	EB	WB	Total		
					12,984	13,452	0	0	26,436		
AM Peak Hour	07:30	07:15		07:15	PM Peak Hour	17:15	17:15		17:15		
AM Pk Volume	1020	926		1933	PM Pk Volume	1073	1158		2231		
Pk Hr Factor	0.882	0.949		0.908	Pk Hr Factor	0.928	0.965		0.963		
7 - 9 Volume	1759	1774	0	0	3533	4 - 6 Volume	2050	2093	0	0	4143
7 - 9 Peak Hour	07:30	07:15		07:15	4 - 6 Peak Hour	17:00	17:00				17:00
7 - 9 Pk Volume	1020	926	0	0	1933	4 - 6 Pk Volume	1062	1136	0	0	2198
Pk Hr Factor	0.882	0.949	0.000	0.000	0.908	Pk Hr Factor	0.919	0.947	0.000	0.000	0.949

VOLUME

Garfield Ave Bet. El Repetto Dr & Riggin St

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_008

DAILY TOTALS					NB	SB	EB	WB	Total		
					11,893	13,268	0	0	25,161		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	34	16			50	12:00	187	159			346
00:15	39	30			69	12:15	176	161			337
00:30	38	18			56	12:30	149	153			302
00:45	16	127	11	75	27 202	12:45	151	663	181	654	332 1317
01:00	14	20			34	13:00	136	215			351
01:15	21	10			31	13:15	155	189			344
01:30	20	13			33	13:30	194	201			395
01:45	6	61	7	50	13 111	13:45	170	655	219	824	389 1479
02:00	18	12			30	14:00	125	212			337
02:15	11	13			24	14:15	171	194			365
02:30	28	12			40	14:30	188	225			413
02:45	15	72	10	47	25 119	14:45	183	667	247	878	430 1545
03:00	8	11			19	15:00	183	235			418
03:15	13	17			30	15:15	193	253			446
03:30	9	20			29	15:30	163	212			375
03:45	12	42	16	64	28 106	15:45	187	726	228	928	415 1654
04:00	11	13			24	16:00	175	230			405
04:15	22	20			42	16:15	196	230			426
04:30	29	34			63	16:30	207	264			471
04:45	24	86	41	108	65 194	16:45	209	787	226	950	435 1737
05:00	23	42			65	17:00	224	258			482
05:15	34	58			92	17:15	222	266			488
05:30	30	77			107	17:30	242	221			463
05:45	40	127	79	256	119 383	17:45	234	922	254	999	488 1921
06:00	67	69			136	18:00	236	259			495
06:15	90	112			202	18:15	226	220			446
06:30	104	140			244	18:30	229	203			432
06:45	115	376	155	476	270 852	18:45	217	908	191	873	408 1781
07:00	172	172			344	19:00	256	166			422
07:15	166	244			410	19:15	198	164			362
07:30	179	268			447	19:30	166	173			339
07:45	192	709	301	985	493 1694	19:45	188	808	138	641	326 1449
08:00	184	275			459	20:00	164	154			318
08:15	185	259			444	20:15	153	127			280
08:30	179	262			441	20:30	141	120			261
08:45	186	734	218	1014	404 1748	20:45	129	587	112	513	241 1100
09:00	160	195			355	21:00	117	98			215
09:15	146	196			342	21:15	114	116			230
09:30	146	193			339	21:30	150	106			256
09:45	141	593	179	763	320 1356	21:45	106	487	91	411	197 898
10:00	153	184			337	22:00	107	83			190
10:15	152	179			331	22:15	94	77			171
10:30	151	162			313	22:30	92	69			161
10:45	164	620	143	668	307 1288	22:45	61	354	66	295	127 649
11:00	173	160			333	23:00	62	54			116
11:15	136	166			302	23:15	43	46			89
11:30	171	155			326	23:30	29	37			66
11:45	150	630	156	637	306 1267	23:45	18	152	22	159	40 311
TOTALS	4177	5143			9320	TOTALS	7716	8125			15841
SPLIT %	44.8%	55.2%			37.0%	SPLIT %	48.7%	51.3%			63.0%

DAILY TOTALS					NB	SB	EB	WB	Total
					11,893	13,268	0	0	25,161
AM Peak Hour	07:30	07:30			07:30	PM Peak Hour	17:30	16:30	17:15
AM Pk Volume	740	1103			1843	PM Pk Volume	938	1014	1934
Pk Hr Factor	0.964	0.916			0.935	Pk Hr Factor	0.969	0.953	0.977
7 - 9 Volume	1443	1999	0	0	3442	4 - 6 Volume	1709	1949	0 0 3658
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	17:00	16:30	17:00
7 - 9 Pk Volume	740	1103	0	0	1843	4 - 6 Pk Volume	922	1014	0 0 1921
Pk Hr Factor	0.964	0.916	0.000	0.000	0.935	Pk Hr Factor	0.952	0.953	0.000 0.000 0.984

VOLUME

Avenida Cesar Chavez Bet. Vancouver Ave & Atlantic Blvd

Day: Thursday
Date: 4/11/2019City: Monterey Park
Project #: CA19_5184_015

DAILY TOTALS					NB	SB						Total		
					0	0						17,683		
					9,773		7,910							
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			9	12	21	12:00			207	148	355			
00:15			8	17	25	12:15			237	157	394			
00:30			9	13	22	12:30			150	129	279			
00:45			4	30	6	48	10	78	127	721	127	561	254	1282
01:00			4	5	9	13:00			118	104	222			
01:15			4	4	8	13:15			138	164	302			
01:30			3	7	10	13:30			195	177	372			
01:45			1	12	3	19	4	31	142	593	122	567	264	1160
02:00			3	4	7	14:00			135	95	230			
02:15			2	3	5	14:15			128	82	210			
02:30			8	5	13	14:30			114	116	230			
02:45			2	15	1	13	3	28	154	531	100	393	254	924
03:00			5	4	9	15:00			224	146	370			
03:15			3	2	5	15:15			230	155	385			
03:30			2	3	5	15:30			178	121	299			
03:45			2	12	2	11	4	23	210	842	119	541	329	1383
04:00			1	3	4	16:00			205	103	308			
04:15			9	8	17	16:15			219	106	325			
04:30			15	6	21	16:30			213	106	319			
04:45			5	30	8	25	13	55	206	843	120	435	326	1278
05:00			10	15	25	17:00			228	125	353			
05:15			8	12	20	17:15			221	123	344			
05:30			16	26	42	17:30			204	125	329			
05:45			20	54	55	108	75	162	228	881	133	506	361	1387
06:00			27	37	64	18:00			223	105	328			
06:15			26	59	85	18:15			213	150	363			
06:30			27	61	88	18:30			231	177	408			
06:45			41	121	92	249	133	370	227	894	132	564	359	1458
07:00			67	123	190	19:00			133	105	238			
07:15			85	156	241	19:15			130	93	223			
07:30			92	159	251	19:30			105	77	182			
07:45			127	371	154	592	281	963	110	478	70	345	180	823
08:00			120	157	277	20:00			124	70	194			
08:15			109	149	258	20:15			136	67	203			
08:30			132	204	336	20:30			115	63	178			
08:45			159	520	205	715	364	1235	119	494	72	272	191	766
09:00			125	181	306	21:00			71	56	127			
09:15			91	104	195	21:15			134	67	201			
09:30			97	93	190	21:30			133	43	176			
09:45			112	425	96	474	208	899	118	456	58	224	176	680
10:00			126	135	261	22:00			122	42	164			
10:15			158	178	336	22:15			69	37	106			
10:30			186	155	341	22:30			33	37	70			
10:45			155	625	108	576	263	1201	26	250	22	138	48	388
11:00			127	97	224	23:00			20	19	39			
11:15			128	115	243	23:15			14	16	30			
11:30			117	107	224	23:30			13	16	29			
11:45			146	518	151	470	297	988	10	57	13	64	23	121
TOTALS			2733	3300	6033	TOTALS			7040	4610	11650			
SPLIT %			45.3%	54.7%	34.1%	SPLIT %			60.4%	39.6%	65.9%			

DAILY TOTALS					NB	SB						Total
					0	0						17,683
					9,773		7,910					
AM Peak Hour			11:45	08:15	11:45	PM Peak Hour			17:45	12:45	17:45	
AM Pk Volume			740	739	1325	PM Pk Volume			895	572	1460	
Pk Hr Factor			0.781	0.901	0.841	Pk Hr Factor			0.969	0.808	0.895	
7 - 9 Volume	0	0	891	1307	2198	4 - 6 Volume	0	0	1724	941	2665	
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	17:00	17:00	
7 - 9 Pk Volume	0	0	520	715	1235	4 - 6 Pk Volume	0	0	881	506	1387	
Pk Hr Factor	0.000	0.000	0.818	0.872	0.848	Pk Hr Factor	0.000	0.000	0.966	0.951	0.961	

VOLUME

Atlantic Blvd Bet. Floral Dr & 1st St

Day: Thursday
Date: 4/11/2019City: Monterey Park
Project #: CA19_5184_005

DAILY TOTALS					NB	SB	EB	WB	Total		
					15,650	15,487	0	0	31,137		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	53	53			106	12:00	261	306			567
00:15	26	40			66	12:15	292	246			538
00:30	27	39			66	12:30	219	260			479
00:45	26	132	25	157	51	12:45	236	1008	231	1043	467
01:00	22	26			48	13:00	220	249			469
01:15	22	23			45	13:15	245	259			504
01:30	24	20			44	13:30	254	284			538
01:45	16	84	23	92	39	13:45	245	964	243	1035	488
02:00	14	11			25	14:00	228	262			490
02:15	17	19			36	14:15	240	225			465
02:30	15	12			27	14:30	244	271			515
02:45	10	56	13	55	23	14:45	200	912	215	973	415
03:00	10	9			19	15:00	267	278			545
03:15	13	10			23	15:15	233	290			523
03:30	12	14			26	15:30	231	224			455
03:45	13	48	9	42	22	15:45	227	958	241	1033	468
04:00	19	14			33	16:00	248	244			492
04:15	24	29			53	16:15	236	216			452
04:30	28	19			47	16:30	269	207			476
04:45	40	111	38	100	78	16:45	254	1007	230	897	484
05:00	55	35			90	17:00	237	236			473
05:15	46	64			110	17:15	297	230			527
05:30	80	65			145	17:30	316	219			535
05:45	70	251	89	253	159	17:45	275	1125	228	913	503
06:00	95	88			183	18:00	291	227			518
06:15	99	99			198	18:15	285	245			530
06:30	118	125			243	18:30	275	221			496
06:45	140	452	153	465	293	18:45	245	1096	269	962	514
07:00	157	170			327	19:00	223	273			496
07:15	162	185			347	19:15	193	220			413
07:30	223	197			420	19:30	213	230			443
07:45	237	779	209	761	446	19:45	236	865	217	940	453
08:00	224	238			462	20:00	238	243			481
08:15	223	203			426	20:15	239	217			456
08:30	248	235			483	20:30	222	182			404
08:45	241	936	201	877	442	20:45	186	885	164	806	350
09:00	225	216			441	21:00	169	181			350
09:15	230	179			409	21:15	190	174			364
09:30	193	221			414	21:30	163	156			319
09:45	191	839	186	802	377	21:45	141	663	152	663	293
10:00	252	236			488	22:00	143	146			289
10:15	226	247			473	22:15	89	109			198
10:30	243	261			504	22:30	87	96			183
10:45	229	950	217	961	446	22:45	76	395	78	429	154
11:00	235	239			474	23:00	66	74			140
11:15	225	224			449	23:15	51	58			109
11:30	233	256			489	23:30	49	70			119
11:45	252	945	277	996	529	23:45	23	189	30	232	53
TOTALS	5583	5561			11144	TOTALS	10067	9926			19993
SPLIT %	50.1%	49.9%			35.8%	SPLIT %	50.4%	49.6%			64.2%

DAILY TOTALS					NB	SB	EB	WB	Total
					15,650	15,487	0	0	31,137
AM Peak Hour	11:30	11:45			11:30	PM Peak Hour	17:15	14:30	17:30
AM Pk Volume	1038	1089			2123	PM Pk Volume	1179	1054	2086
Pk Hr Factor	0.889	0.890			0.936	Pk Hr Factor	0.933	0.909	0.975
7 - 9 Volume	1715	1638	0	0	3353	4 - 6 Volume	2132	1810	3942
7 - 9 Peak Hour	08:00	07:45			07:45	4 - 6 Peak Hour	17:00	16:45	17:00
7 - 9 Pk Volume	936	885	0	0	1817	4 - 6 Pk Volume	1125	915	2038
Pk Hr Factor	0.944	0.930	0.000	0.000	0.940	Pk Hr Factor	0.890	0.969	0.952

VOLUME

Garfield Ave Bet. Riggins St & Pomona Blvd

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_009

DAILY TOTALS					NB	SB	EB	WB	Total		
					11,386	12,821	0	0	24,207		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	42	19			61	12:00	185	147			332
00:15	36	29			65	12:15	174	177			351
00:30	38	16			54	12:30	147	168			315
00:45	20	136	14	78	34	12:45	167	673	181	673	348
01:00	15	18			33	13:00	147	175			322
01:15	25	11			36	13:15	172	171			343
01:30	21	25			46	13:30	208	200			408
01:45	12	73	8	62	20	13:45	167	694	202	748	369
02:00	18	11			29	14:00	131	183			314
02:15	12	15			27	14:15	175	169			344
02:30	28	12			40	14:30	157	198			355
02:45	15	73	10	48	25	14:45	173	636	215	765	388
03:00	10	9			19	15:00	172	202			374
03:15	14	23			37	15:15	178	229			407
03:30	10	22			32	15:30	170	188			358
03:45	11	45	16	70	27	15:45	185	705	214	833	399
04:00	11	20			31	16:00	168	220			388
04:15	23	26			49	16:15	176	203			379
04:30	31	38			69	16:30	182	246			428
04:45	24	89	48	132	72	16:45	180	706	196	865	376
05:00	18	50			68	17:00	184	231			415
05:15	31	68			99	17:15	177	217			394
05:30	29	86			115	17:30	200	189			389
05:45	46	124	99	303	145	17:45	206	767	216	853	422
06:00	73	84			157	18:00	216	236			452
06:15	77	119			196	18:15	192	223			415
06:30	95	157			252	18:30	182	186			368
06:45	107	352	157	517	264	18:45	203	793	199	844	402
07:00	108	172			280	19:00	235	170			405
07:15	129	242			371	19:15	178	183			361
07:30	122	268			390	19:30	166	172			338
07:45	157	516	279	961	436	19:45	168	747	136	661	304
08:00	158	288			446	20:00	172	146			318
08:15	178	262			440	20:15	146	129			275
08:30	170	252			422	20:30	151	113			264
08:45	151	657	197	999	348	20:45	169	638	115	503	284
09:00	151	181			332	21:00	149	91			240
09:15	144	219			363	21:15	135	102			237
09:30	139	186			325	21:30	155	97			252
09:45	130	564	167	753	297	21:45	119	558	90	380	209
10:00	152	184			336	22:00	128	79			207
10:15	154	173			327	22:15	97	76			173
10:30	136	176			312	22:30	96	70			166
10:45	152	594	154	687	306	22:45	73	394	57	282	130
11:00	169	152			321	23:00	68	49			117
11:15	140	178			318	23:15	51	50			101
11:30	166	154			320	23:30	49	28			77
11:45	158	633	159	643	317	23:45	51	219	34	161	85
TOTALS	3856	5253			9109	TOTALS	7530	7568			15098
SPLIT %	42.3%	57.7%			37.6%	SPLIT %	49.9%	50.1%			62.4%

DAILY TOTALS					NB	SB	EB	WB	Total		
					11,386	12,821	0	0	24,207		
AM Peak Hour	11:30	07:30			07:45	PM Peak Hour	17:30	16:30	17:30		
AM Pk Volume	683	1097			1744	PM Pk Volume	814	890	1678		
Pk Hr Factor	0.923	0.952			0.978	Pk Hr Factor	0.942	0.904	0.928		
7 - 9 Volume	1173	1960	0	0	3133	4 - 6 Volume	1473	1718	0	0	3191
7 - 9 Peak Hour	07:45	07:30			07:45	4 - 6 Peak Hour	17:00	16:30			17:00
7 - 9 Pk Volume	663	1097	0	0	1744	4 - 6 Pk Volume	767	890	0	0	1620
Pk Hr Factor	0.931	0.952	0.000	0.000	0.978	Pk Hr Factor	0.931	0.904	0.000	0.000	0.960

VOLUME

Pomona Blvd Bet. Garfield Ave & Gerhart Ave

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_014

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	0	8,073	8,073		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	12	12	12:00			0	105	105
00:15			0	15	15	12:15			0	112	112
00:30			0	6	6	12:30			0	120	120
00:45			0	4 37	4 37	12:45			0	114 451	114 451
01:00			0	12	12	13:00			0	138	138
01:15			0	4	4	13:15			0	164	164
01:30			0	7	7	13:30			0	132	132
01:45			0	9 32	9 32	13:45			0	140 574	140 574
02:00			0	3	3	14:00			0	119	119
02:15			0	5	5	14:15			0	120	120
02:30			0	6	6	14:30			0	112	112
02:45			0	6 20	6 20	14:45			0	134 485	134 485
03:00			0	3	3	15:00			0	124	124
03:15			0	7	7	15:15			0	135	135
03:30			0	6	6	15:30			0	152	152
03:45			0	8 24	8 24	15:45			0	123 534	123 534
04:00			0	3	3	16:00			0	99	99
04:15			0	4	4	16:15			0	135	135
04:30			0	6	6	16:30			0	132	132
04:45			0	17 30	17 30	16:45			0	140 506	140 506
05:00			0	14	14	17:00			0	98	98
05:15			0	32	32	17:15			0	154	154
05:30			0	45	45	17:30			0	142	142
05:45			0	41 132	41 132	17:45			0	122 516	122 516
06:00			0	67	67	18:00			0	129	129
06:15			0	46	46	18:15			0	140	140
06:30			0	81	81	18:30			0	149	149
06:45			0	126 320	126 320	18:45			0	120 538	120 538
07:00			0	101	101	19:00			0	115	115
07:15			0	142	142	19:15			0	101	101
07:30			0	157	157	19:30			0	122	122
07:45			0	182 582	182 582	19:45			0	101 439	101 439
08:00			0	169	169	20:00			0	97	97
08:15			0	141	141	20:15			0	86	86
08:30			0	126	126	20:30			0	121	121
08:45			0	154 590	154 590	20:45			0	89 393	89 393
09:00			0	116	116	21:00			0	83	83
09:15			0	129	129	21:15			0	78	78
09:30			0	108	108	21:30			0	66	66
09:45			0	111 464	111 464	21:45			0	58 285	58 285
10:00			0	117	117	22:00			0	53	53
10:15			0	105	105	22:15			0	62	62
10:30			0	104	104	22:30			0	28	28
10:45			0	106 432	106 432	22:45			0	35 178	35 178
11:00			0	108	108	23:00			0	23	23
11:15			0	79	79	23:15			0	31	31
11:30			0	119	119	23:30			0	28	28
11:45			0	104 410	104 410	23:45			0	19 101	19 101
TOTALS				3073	3073	TOTALS				5000	5000
SPLIT %				100.0%	38.1%	SPLIT %				100.0%	61.9%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	0	8,073	8,073

AM Peak Hour				07:15	07:15	PM Peak Hour				13:00	13:00
AM Pk Volume				650	650	PM Pk Volume				574	574
Pk Hr Factor				0.893	0.893	Pk Hr Factor				0.875	0.875
7 - 9 Volume	0	0	0	1172	1172	4 - 6 Volume	0	0	0	1022	1022
7 - 9 Peak Hour				07:15	07:15	4 - 6 Peak Hour				16:45	16:45
7 - 9 Pk Volume	0	0	0	650	650	4 - 6 Pk Volume	0	0	0	534	534
Pk Hr Factor	0.000	0.000	0.000	0.893	0.893	Pk Hr Factor	0.000	0.000	0.000	0.867	0.867

VOLUME

Potrero Grande Dr Bet. Markland Dr & Saturn St/Market Place Dr

Day: Thursday
Date: 4/11/2019

City: Monterey Park
Project #: CA19_5184_013

DAILY TOTALS					NB	SB	EB		WB	Total	
					0	0	10,115	10,942	21,057		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			7	17	24	12:00			158	161	319
00:15			10	14	24	12:15			151	178	329
00:30			3	6	9	12:30			174	220	394
00:45			4	24	28	12:45			168	651	819
01:00			7	2	9	13:00			155	206	361
01:15			1	4	5	13:15			197	189	386
01:30			4	7	11	13:30			190	224	414
01:45			2	14	16	13:45			201	743	944
02:00			2	4	6	14:00			165	164	329
02:15			2	11	13	14:15			168	202	370
02:30			5	8	13	14:30			156	192	348
02:45			0	9	9	14:45			178	667	845
03:00			2	1	3	15:00			216	170	386
03:15			4	7	11	15:15			169	184	353
03:30			0	3	3	15:30			200	200	400
03:45			2	8	10	15:45			206	791	997
04:00			8	6	14	16:00			193	198	391
04:15			13	13	26	16:15			192	188	380
04:30			15	7	22	16:30			217	192	409
04:45			25	61	86	16:45			261	863	1124
05:00			15	17	32	17:00			208	229	437
05:15			33	39	72	17:15			266	184	450
05:30			46	61	107	17:30			253	208	461
05:45			53	147	200	17:45			269	996	1265
06:00			68	82	150	18:00			251	175	426
06:15			54	77	131	18:15			243	165	408
06:30			88	124	212	18:30			194	164	358
06:45			85	295	380	18:45			207	895	1102
07:00			63	158	221	19:00			203	153	356
07:15			84	180	264	19:15			201	147	348
07:30			115	214	329	19:30			138	138	276
07:45			132	394	526	19:45			136	678	814
08:00			119	166	285	20:00			116	136	252
08:15			116	195	311	20:15			108	141	249
08:30			134	172	306	20:30			91	136	227
08:45			120	489	609	20:45			88	403	491
09:00			128	125	253	21:00			69	91	160
09:15			121	146	267	21:15			58	80	138
09:30			134	151	285	21:30			49	69	118
09:45			130	513	643	21:45			34	210	244
10:00			138	146	284	22:00			39	46	85
10:15			142	158	300	22:15			23	36	59
10:30			111	152	263	22:30			28	44	72
10:45			145	536	681	22:45			15	105	120
11:00			148	168	316	23:00			19	26	45
11:15			130	145	275	23:15			11	16	27
11:30			151	173	324	23:30			12	20	32
11:45			141	570	711	23:45			11	53	64
TOTALS			3060	3987	7047	TOTALS			7055	6955	14010
SPLIT %			43.4%	56.6%	33.5%	SPLIT %			50.4%	49.6%	66.5%

DAILY TOTALS					NB	SB	EB		WB	Total	
					0	0	10,115	10,942	21,057		
AM Peak Hour			11:45	07:30	11:45	PM Peak Hour			17:15	16:45	17:00
AM Pk Volume			624	760	1384	PM Pk Volume			1039	836	1875
Pk Hr Factor			0.897	0.888	0.855	Pk Hr Factor			0.966	0.913	0.956
7 - 9 Volume	0	0	883	1418	2301	4 - 6 Volume	0	0	1859	1622	3481
7 - 9 Peak Hour			07:45	07:30	07:30	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	501	760	1261	4 - 6 Pk Volume	0	0	996	836	1832
Pk Hr Factor	0.000	0.000	0.935	0.888	0.944	Pk Hr Factor	0.000	0.000	0.926	0.913	0.956

APPENDIX C
Existing Level of Service Worksheets

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.769
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level of Service: C

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.875
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 89 Level of Service: D

Table with columns for Street Name (Garfield Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.852
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 81 Level of Service: D

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.555
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level of Service: A

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.620
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.670
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include, Ovl), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, OvlAdjV/S, Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level of Service: C

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume for various movements.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat for various movements.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves for various movements.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume for various movements.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat for various movements.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves for various movements.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.642
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: B

Table with columns for Street Name (Corporate Center Dr, Ramona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.436
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level of Service: A

Table with columns for Street Name (Ramona Blvd, I-10 EB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.466
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Street Name: Corporate Center Dr/Golf Course E I-710 NB Off-Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0 0

Volume Module:
Base Vol: 0 509 3 1 373 0 630 1 36 2 0 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 509 3 1 373 0 630 1 36 2 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 509 3 1 373 0 630 1 36 2 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 509 3 1 373 0 630 1 36 2 0 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 509 3 1 373 0 630 1 36 2 0 1

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.99 0.01 1.00 2.00 0.00 1.89 0.01 0.10 0.67 0.00 0.33
Final Sat.: 0 3281 19 1600 3400 0 3022 5 173 1067 0 533

Capacity Analysis Module:
Vol/Sat: 0.00 0.16 0.16 0.00 0.11 0.00 0.21 0.21 0.21 0.00 0.00 0.00
Crit Moves: ****

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Street Name: Fremont Ave Monterey Pass Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:
Base Vol: 0 0 0 108 0 397 454 237 0 0 421 182
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 108 0 397 454 237 0 0 421 182
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 108 0 0 454 237 0 0 421 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 108 0 0 454 237 0 0 421 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
Final Volume: 0 0 0 108 0 0 454 237 0 0 421 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.07 0.00 0.00 0.28 0.07 0.00 0.00 0.25 0.00
Crit Moves: ****

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.635
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), Min. Green, Y+R, Lanes.

Table for Volume Module with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table for Saturation Flow Module with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.577
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), Min. Green, Y+R, Lanes.

Table for Volume Module with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table for Saturation Flow Module with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.655
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves for Capacity Analysis Module.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.586
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. for Saturation Flow Module.

Table with columns for Vol/Sat, Crit Moves for Capacity Analysis Module.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Street Name: Monterey Pass Rd/Mednik Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 1 0 1 1 0 1 0

Volume Module:

Base Vol: 110 412 60 88 296 87 153 308 115 98 470 144
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 110 412 60 88 296 87 153 308 115 98 470 144
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 110 412 60 88 296 87 153 308 115 98 470 144
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 110 412 60 88 296 87 153 308 115 98 470 144
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 110 412 60 88 296 87 153 308 115 98 470 144

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.04 1.00 1.00 1.06 1.06 1.00 1.04 1.00 1.00 1.04 1.00
Lanes: 1.00 1.75 0.25 1.00 1.00 1.00 1.00 1.46 0.54 1.00 1.53 0.47
Final Sat.: 1600 2893 407 1600 1700 1700 1600 2430 870 1600 2550 750

Capacity Analysis Module:

Vol/Sat: 0.07 0.14 0.15 0.06 0.17 0.05 0.10 0.13 0.13 0.06 0.18 0.19
Crit Moves: ****

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.567
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Street Name: Atlantic Blvd Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 1 0 1 0 2 1 0 1 1 0 0 1 1 0 0 1 0

Volume Module:

Base Vol: 183 716 40 35 711 173 138 48 187 29 80 28
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 183 716 40 35 711 173 138 48 187 29 80 28
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 183 716 40 35 711 173 138 48 187 29 80 28
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 183 716 40 35 711 173 138 48 187 29 80 28
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 183 716 40 35 711 173 138 48 187 29 80 28

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.04 1.00 1.00 1.05 1.00 1.00 1.00 1.06 1.00 1.00 1.00
Lanes: 1.00 2.84 0.16 1.00 2.41 0.59 1.48 0.52 1.00 1.00 0.74 0.26
Final Sat.: 1600 4746 254 1600 4061 939 2374 826 1700 1600 1185 415

Capacity Analysis Module:

Vol/Sat: 0.11 0.15 0.16 0.02 0.18 0.18 0.06 0.06 0.11 0.02 0.07 0.07
Crit Moves: ****

Monterey Park General Plan Existing Conditions #19 Bleakwood Avenue & Avenida Cesar Chavez													loss time
	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	
LANES	0	1	0	1	2	0	0	2	0	0	1	0	0.1
AM	74	0	47	99	495	0	0	421	103	2	6	6	
Capacity	0	1600	0	1600	3300	0	0	3300	0	0	1600	0	0.405
V/C	0	0.076	0	0.062	0.150	0	0	0.159	0	0	0.009	0	
Crit. Moves		**		**	**			**			**		

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 Monterey Park General Plan
 Existing Conditions
 AM Peak Hour

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.538
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 36 Level of Service: A

Street Name: Collegian Ave Avenida Cesar Chavez
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 1 1 0
 -----|-----|-----|-----|

Volume Module:
 Base Vol: 74 85 31 45 37 85 60 309 13 36 695 103
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 74 85 31 45 37 85 60 309 13 36 695 103
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 74 85 31 45 37 85 60 309 13 36 695 103
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 74 85 31 45 37 85 60 309 13 36 695 103
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 74 85 31 45 37 85 60 309 13 36 695 103
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.03 1.00 1.00 1.04 1.00
 Lanes: 0.39 0.45 0.16 0.27 0.22 0.51 1.00 1.92 0.08 1.00 1.74 0.26
 Final Sat.: 623 716 261 431 354 814 1600 3171 129 1600 2887 413
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.05 0.12 0.12 0.03 0.10 0.10 0.04 0.10 0.10 0.02 0.24 0.25
 Crit Moves: **** **** **** ****

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.627
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd (North/South Bound) and Avenida Cesar Chavez/Riggin St (East/West Bound).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd (North/South Bound) and 1st St/SR-60 WB Off-Ramp (East/West Bound).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.666
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Table with columns for Street Name (Atlantic Blvd, SR-60 EB Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan
Existing Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Garfield Ave & Riggins St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.817
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: D

Table with columns for Street Name (Garfield Ave, Riggins St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.775
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level of Service: C

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for each approach.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.688
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level of Service: B

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for each approach.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.608
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[11.6]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Atlas Ave and Potrero Grande Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim, and various delay values.

Table with columns for Capacity Module, Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Table with columns for Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Monterey Park General Plan Existing Conditions AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.423

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 30 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Potrero Grande Dr and Saturn St/Market Place Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Table with columns for Saturation Flow Module, Sat/Lane, Adjustment, Lanes, and Final Sat.

Table with columns for Capacity Analysis Module, Vol/Sat, and Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.827
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and Hellman Ave.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.847
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 79 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Garfield Ave and Hellman Ave.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.765
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level of Service: C

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Reduced Vol for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.586
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level of Service: A

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Reduced Vol for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.628
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: B

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.722
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include, Ovl), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, OvlAdjVol.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, OvlAdjV/S, Crit Moves.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level of Service: C

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.682
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: B

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.561
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with columns for Street Name (Corporate Center Dr, Ramona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.884
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: D

Table with columns for Street Name (Ramona Blvd, I-10 EB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Street Name: Corporate Center Dr/Golf Course E I-710 NB Off-Ramp

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0

Volume Module:
Base Vol: 0 506 16 3 365 0 360 12 35 3 0 16
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 506 16 3 365 0 360 12 35 3 0 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 506 16 3 365 0 360 12 35 3 0 16
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 506 16 3 365 0 360 12 35 3 0 16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Volume: 0 506 16 3 365 0 360 12 35 3 0 16

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.94 0.06 1.00 2.00 0.00 1.77 0.06 0.17 0.16 0.00 0.84
Final Sat.: 0 3202 98 1600 3400 0 2830 94 275 253 0 1347

Capacity Analysis Module:
Vol/Sat: 0.00 0.16 0.16 0.00 0.11 0.00 0.13 0.13 0.13 0.01 0.00 0.01
Crit Moves: **** **** **** ****

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Street Name: Fremont Ave Monterey Pass Rd

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:
Base Vol: 0 0 0 134 0 390 728 496 0 0 171 153
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 134 0 390 728 496 0 0 171 153
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 134 0 0 728 496 0 0 171 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 134 0 0 728 496 0 0 171 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
Final Volume: 0 0 0 134 0 0 728 496 0 0 171 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.08 0.00 0.00 0.46 0.15 0.00 0.00 0.10 0.00
Crit Moves: **** **** ****

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.721
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.709
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.638
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions #19 Bleakwood Avenue & Avenida Cesar Chavez													Loss Time
	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	
LANES	0	1	0	1	2	0	0	2	0	0	1	0	0.1
PM Capacity	39	0	26	51	792	0	0	426	52	2	10	9	
V/C	0	1600	0	1600	3300	0	0	3300	0	0	1600	0	0.394
Crit. Moves	0	0.041	0	0.032	0.240	0	0	0.145	0	0	0.013	0	**

EX AM 361 247.5
PM 290 396

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.549
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level of Service: A

Street Name:	Collegian Ave				Avenida Cesar Chavez					
	North Bound		South Bound		East Bound		West Bound			
Approach:	L	T	R	L	T	R	L	T	R	
Movement:										
Control:	Permitted		Permitted		Permitted		Permitted			
Rights:	Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0	0	1	0	0	0	1	0	1	0

Volume Module:												
Base Vol:	38	120	94	66	60	95	127	692	38	35	418	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	120	94	66	60	95	127	692	38	35	418	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	120	94	66	60	95	127	692	38	35	418	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	120	94	66	60	95	127	692	38	35	418	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	38	120	94	66	60	95	127	692	38	35	418	74

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.04	1.00
Lanes:	0.15	0.48	0.37	0.30	0.27	0.43	1.00	1.90	0.10	1.00	1.70	0.30
Final Sat.:	241	762	597	478	434	688	1600	3133	167	1600	2819	481

Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.04	0.14	0.14	0.08	0.22	0.23	0.02	0.15	0.15
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.746
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and Avenida Cesar Chavez/Riggin St.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan Existing Conditions PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.709
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.633
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and SR-60 EB Ramp.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Garfield Ave & Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.800
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Garfield Ave and Riggin St.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.688
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level of Service: B

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for each approach.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level of Service: C

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for each approach.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.608
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level of Service: B

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Reduced Vol for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.793
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level of Service: C

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Reduced Vol for various approaches.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[14.3]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes. Rows include Atlas Ave and Potrero Grande Dr with various traffic movements and lane configurations.

Volume Module:

Table showing traffic volume data including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for various movements.

Critical Gap Module:

Table showing critical gap and follow-up time data for different traffic movements.

Capacity Module:

Table showing capacity data including Conflict Vol, Potent Cap., Move Cap., and Volume/Cap for various movements.

Level of Service Module:

Table showing level of service data including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Monterey Park General Plan
Existing Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.627

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes. Rows include Potrero Grande Dr and Saturn St/Market Place Dr with various traffic movements and lane configurations.

Volume Module:

Table showing traffic volume data including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat for various movements.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat and Crit Moves for various movements.

APPENDIX D
FUTURE WITHOUT PLAN – LEVEL OF SERVICE WORKSHEETS

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.810
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level of Service: D

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.923
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 Level of Service: E

Table with columns for Street Name (Garfield Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.898
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 99 Level of Service: D

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.583
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level of Service: A

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: B

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level of Service: C

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include, Ovl), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level of Service: C

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: B

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.675
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level of Service: B

Table with columns for Street Name (Corporate Center Dr, Ramona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.456
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level of Service: A

Table with columns for Street Name (Ramona Blvd, I-10 EB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.494
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: A

Street Name:Corporate Center Dr/Golf Course E I-710 NB Off-Ramp

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0 0

Volume Module:

Base Vol: 0 509 3 1 373 0 630 1 36 2 0 1
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 540 3 1 396 0 669 1 38 2 0 1
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 540 3 1 396 0 669 1 38 2 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 540 3 1 396 0 669 1 38 2 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 540 3 1 396 0 669 1 38 2 0 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 540 3 1 396 0 669 1 38 2 0 1

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.99 0.01 1.00 2.00 0.00 1.89 0.01 0.10 0.67 0.00 0.33
Final Sat.: 0 3281 19 1600 3400 0 3022 5 173 1067 0 533

Capacity Analysis Module:

Vol/Sat: 0.00 0.16 0.17 0.00 0.12 0.00 0.22 0.22 0.22 0.00 0.00 0.00
Crit Moves: **** **

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.736
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Street Name: Fremont Ave Monterey Pass Rd

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:

Base Vol: 0 0 0 108 0 397 454 237 0 0 421 182
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 115 0 421 482 252 0 0 447 193
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 115 0 421 482 252 0 0 447 193
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 115 0 0 482 252 0 0 447 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 115 0 0 482 252 0 0 447 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 0 0 0 115 0 0 482 252 0 0 447 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.07 0.00 0.00 0.30 0.07 0.00 0.00 0.26 0.00
Crit Moves: **** **

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.668
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.607
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level of Service: B

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.689
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.655
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Street Name: Monterey Pass Rd/Mednik Ave Floral Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 1 0 1 1 0 1 0

Volume Module:

Base Vol: 110 412 60 88 296 87 153 308 115 98 470 144
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 117 437 64 93 314 92 162 327 122 104 499 153
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 117 437 64 93 314 92 162 327 122 104 499 153
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 117 437 64 93 314 92 162 327 122 104 499 153
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 117 437 64 93 314 92 162 327 122 104 499 153
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 117 437 64 93 314 92 162 327 122 104 499 153

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.04 1.00 1.00 1.06 1.06 1.00 1.04 1.00 1.00 1.04 1.00
Lanes: 1.00 1.75 0.25 1.00 1.00 1.00 1.00 1.46 0.54 1.00 1.53 0.47
Final Sat.: 1600 2893 407 1600 1700 1700 1600 2430 870 1600 2550 750

Capacity Analysis Module:

Vol/Sat: 0.07 0.15 0.16 0.06 0.18 0.05 0.10 0.13 0.14 0.07 0.20 0.20
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.605
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

Street Name: Atlantic Blvd Floral Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 1 0 1 0 2 1 0 1 1 0 0 1 1 0 0 1 0

Volume Module:

Base Vol: 183 716 40 35 711 173 138 48 187 29 80 28
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 194 760 42 37 755 184 147 51 199 31 85 30
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 194 760 42 37 755 184 147 51 199 31 85 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 194 760 42 37 755 184 147 51 199 31 85 30
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 194 760 42 37 755 184 147 51 199 31 85 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 194 760 42 37 755 184 147 51 199 31 85 30

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.04 1.00 1.00 1.05 1.00 1.00 1.00 1.06 1.00 1.00 1.00
Lanes: 1.00 2.84 0.16 1.00 2.41 0.59 1.48 0.52 1.00 1.00 0.74 0.26
Final Sat.: 1600 4746 254 1600 4061 939 2374 826 1700 1600 1185 415

Capacity Analysis Module:

Vol/Sat: 0.12 0.16 0.17 0.02 0.19 0.20 0.06 0.06 0.12 0.02 0.07 0.07
Crit Moves: **** **** **** ****

	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SEB	Loss time
LANES	0	1	0	1	2	0	0	2	0	0	1	0	0.1
AM Capacity	79	0	50	105	526	0	0	447	109	2	6	6	
V/C	0	1600	0	1600	3300	0	0	3300	0	0	1600	0	0.423

Crit. Moves

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Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #20 Collegian Ave & Avenida Cesar Chavez

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.555
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 37 Level of Service: A

 Street Name: Collegian Ave Avenida Cesar Chavez
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0
 Volume Module:
 Base Vol: 74 85 31 45 37 85 60 309 13 36 695 103
 Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
 Initial Bse: 79 90 33 48 39 90 64 328 14 38 738 109
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 79 90 33 48 39 90 64 328 14 38 738 109
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 79 90 33 48 39 90 64 328 14 38 738 109
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 79 90 33 48 39 90 64 328 14 38 738 109
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 79 90 33 48 39 90 64 328 14 38 738 109
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.03 1.00 1.00 1.04 1.00
 Lanes: 0.39 0.45 0.16 0.27 0.22 0.51 1.00 1.92 0.08 1.00 1.74 0.26
 Final Sat.: 623 716 261 431 354 814 1600 3171 129 1600 2887 413
 Capacity Analysis Module:
 Vol/Sat: 0.05 0.13 0.13 0.03 0.11 0.11 0.04 0.10 0.11 0.02 0.26 0.26
 Crit Moves: **** **** **** ****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Street Name: Atlantic Blvd Avenida Cesar Chavez/Riggin St
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 1 0 1 0 2 1 0 1 0 1 1 0

Volume Module:
Base Vol: 218 758 68 89 694 123 86 212 101 100 456 78
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 231 805 72 94 737 131 91 225 107 106 484 83
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 231 805 72 94 737 131 91 225 107 106 484 83
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 231 805 72 94 737 131 91 225 107 106 484 83
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 231 805 72 94 737 131 91 225 107 106 484 83
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 231 805 72 94 737 131 91 225 107 106 484 83

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.05 1.00 1.00 1.05 1.00 1.00 1.05 1.00 1.00 1.04 1.00
Lanes: 1.00 2.75 0.25 1.00 2.55 0.45 1.00 1.35 0.65 1.00 1.71 0.29
Final Sat.: 1600 4605 395 1600 4277 723 1600 2267 1033 1600 2833 467

Capacity Analysis Module:
Vol/Sat: 0.14 0.17 0.18 0.06 0.17 0.18 0.06 0.10 0.10 0.07 0.17 0.18
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.791
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Street Name: Atlantic Blvd 1st St/SR-60 WB Off-Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 0 0 0 2 1 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 253 713 0 0 881 83 41 0 206 273 284 209
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 269 757 0 0 935 88 44 0 219 290 302 222
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 269 757 0 0 935 88 44 0 219 290 302 222
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 269 757 0 0 935 88 44 0 219 290 302 222
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 269 757 0 0 935 88 44 0 219 290 302 222
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 269 757 0 0 935 88 44 0 219 290 302 222

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.05 1.00 1.00 1.06 1.06 1.06 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.74 0.26 1.00 0.00 1.00 0.71 0.74 0.55
Final Sat.: 1600 3400 0 0 4587 413 1600 0 1700 1140 1186 873

Capacity Analysis Module:
Vol/Sat: 0.17 0.22 0.00 0.00 0.20 0.21 0.03 0.00 0.13 0.18 0.25 0.25
Crit Moves: **** **** **** ****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.701
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and SR-60 EB Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.861
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 84 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Garfield Ave and Riggin St.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.817
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: D

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.724
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.601
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various movements.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr

Average Delay (sec/veh): 2.3 Worst Case Level of Service: B[12.0]

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Atlas Ave and Potrero Grande Dr.

Volume Module:

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with columns for Critical Gp and FollowUpTim.

Capacity Module:

Table with columns for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level of Service Module:

Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Monterey Park General Plan
Future 2040 Growth Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.443

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 30 Level of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, and Lanes for Potrero Grande Dr and Saturn St/Market Place Dr.

Volume Module:

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module:

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.872
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 88 Level of Service: D

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.893
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 97 Level of Service: D

Table with columns for Street Name (Garfield Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.806
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level of Service: D

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.623
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: B

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.761
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level of Service: C

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include, Ovl), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.800
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: D

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.589
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level of Service: A

Table with columns for Street Name (Corporate Center Dr, Ramona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.933
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 119 Level of Service: E

Table with columns for Street Name (Ramona Blvd, I-10 EB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Street Name:Corporate Center Dr/Golf Course E I-710 NB Off-Ramp

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0 0

Volume Module:

Base Vol: 0 506 16 3 365 0 360 12 35 3 0 16
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 537 17 3 388 0 382 13 37 3 0 17
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 537 17 3 388 0 382 13 37 3 0 17
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 537 17 3 388 0 382 13 37 3 0 17
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 537 17 3 388 0 382 13 37 3 0 17
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 537 17 3 388 0 382 13 37 3 0 17

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.94 0.06 1.00 2.00 0.00 1.77 0.06 0.17 0.16 0.00 0.84
Final Sat.: 0 3202 98 1600 3400 0 2830 94 275 253 0 1347

Capacity Analysis Module:

Vol/Sat: 0.00 0.17 0.17 0.00 0.11 0.00 0.14 0.14 0.14 0.01 0.00 0.01
Crit Moves: **** **** **** ****

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.779
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level Of Service: C

Street Name: Fremont Ave Monterey Pass Rd

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:

Base Vol: 0 0 0 134 0 390 728 496 0 0 171 153
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 142 0 414 773 527 0 0 182 162
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 142 0 414 773 527 0 0 182 162
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 142 0 414 773 527 0 0 182 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 142 0 414 773 527 0 0 182 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 0 0 0 142 0 414 773 527 0 0 182 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.09 0.00 0.00 0.48 0.15 0.00 0.00 0.11 0.00
Crit Moves: **** **** ****

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.764
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level of Service: C

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.759
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level of Service: C

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and Volume (Min. Green, Y+R, Lanes).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
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PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows include Atlantic Blvd and Floral Dr.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include Atlantic Blvd and Floral Dr.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include Atlantic Blvd and Floral Dr.

1.0617 growth factor 2019 to 2040

Monterey Park General Plan
 Future 2040 Growth Conditions
 #19 Bleakwood Avenue & Avenida Cesar Chavez

	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	Loss time
LANES	0	1	0	1	2	0	0	2	0	0	1	0	0.1
PM	41	0	28	54	841	0	0	452	55	2	11	10	
Capacity	0	1600	0	1600	3300	0	0	3300	0	0	1600	0	
V/C	0	0.043	0	0.034	0.255	0	0	0.154	0	0	0.014	0	0.412

Crit. Moves

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FUTURE 2040 AM 383 263
 PM 307.5 420.5

Monterey Park General Plan
 Future 2040 Growth Conditions
 PM Peak Hour

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
 Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.576
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level of Service: A

Street Name:	Collegian Ave				Avenida Cesar Chavez					
	North Bound		South Bound		East Bound		West Bound			
Approach:	L	T	R	L	T	R	L	T	R	
Movement:										
Control:	Permitted		Permitted		Permitted		Permitted			
Rights:	Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	38	120	94	66	60	95	127	692	38	35	418	74
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	40	127	100	70	64	101	135	735	40	37	444	79
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	127	100	70	64	101	135	735	40	37	444	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	127	100	70	64	101	135	735	40	37	444	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	127	100	70	64	101	135	735	40	37	444	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	127	100	70	64	101	135	735	40	37	444	79

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.04	1.00
Lanes:	0.15	0.48	0.37	0.30	0.27	0.43	1.00	1.90	0.10	1.00	1.70	0.30
Final Sat.:	241	762	597	478	434	688	1600	3133	167	1600	2819	481

Capacity Analysis Module:

Vol/Sat:	0.03	0.17	0.17	0.04	0.15	0.15	0.08	0.23	0.24	0.02	0.16	0.16
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.794
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and Avenida Cesar Chavez/Riggin St.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.666
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and SR-60 EB Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.838
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Garfield Ave and Riggin St.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.724
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.800
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: D

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: B

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.836
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: D

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[15.3]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Atlas Ave and Potrero Grande Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns for Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns for Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

Monterey Park General Plan
Future 2040 Growth Conditions
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Potrero Grande Dr and Saturn St/Market Place Dr.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat., Capacity Analysis Module, Vol/Sat, Crit Moves.

APPENDIX E
FUTURE WITH PLAN – LEVEL OF SERVICE WORKSHEETS

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.040
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.230
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Garfield Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.054
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.786
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level of Service: C

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.944
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 128 Level of Service: E

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.778
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level of Service: C

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected), Rights (Include), and various traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.923
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 Level of Service: E

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.785
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level of Service: C

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.810
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level of Service: D

Table with columns for Street Name (Corporate Center Dr, Ramona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and various traffic volume metrics like Min. Green, Y+R, Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.503
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level of Service: A

Table with columns for Street Name (Ramona Blvd, I-10 EB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic volume metrics like Min. Green, Y+R, Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for each approach.

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.507
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Street Name:Corporate Center Dr/Golf Course E I-710 NB Off-Ramp

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0 0

Volume Module:
Base Vol: 0 509 3 1 373 0 630 1 36 2 0 1
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 540 3 1 396 0 669 1 38 2 0 1
Added Vol: 0 41 0 0 140 0 0 0 18 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 581 3 1 536 0 669 1 56 2 0 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 581 3 1 536 0 669 1 56 2 0 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 581 3 1 536 0 669 1 56 2 0 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 581 3 1 536 0 669 1 56 2 0 1

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.99 0.01 1.00 2.00 0.00 1.84 0.01 0.15 0.67 0.00 0.33
Final Sat.: 0 3283 17 1600 3400 0 2948 5 248 1067 0 533

Capacity Analysis Module:
Vol/Sat: 0.00 0.18 0.18 0.00 0.16 0.00 0.23 0.23 0.23 0.00 0.00 0.00
Crit Moves: **** **** **** ****

Monterey Park General Plan
Future 2040 with General Plan
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.853
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 81 Level Of Service: D

Street Name: Fremont Ave Monterey Pass Rd

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:
Base Vol: 0 0 0 108 0 397 454 237 0 0 421 182
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 115 0 421 482 252 0 0 447 193
Added Vol: 0 0 0 23 0 16 22 26 0 0 152 19
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 138 0 437 504 278 0 0 599 212
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 138 0 0 504 278 0 0 599 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 138 0 0 504 278 0 0 599 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 0 0 0 138 0 0 504 278 0 0 599 0

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.09 0.00 0.00 0.32 0.08 0.00 0.00 0.35 0.00
Crit Moves: **** **** ****

Monterey Park General Plan
 Future 2040 with General Plan
 AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 58 Level of Service: C

Street Name:	Garfield Ave						Newmark Ave							
	North Bound		South Bound		East Bound		West Bound		East Bound		West Bound			
Approach:	L	T	R	L	T	R	L	T	R	L	T	R		
Movement:														
Control:	Protected		Protected		Permitted		Permitted		Permitted		Permitted			
Rights:	Include		Include		Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	26	748	134	43	545	32	54	173	15	273	271	126
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	28	794	142	46	579	34	57	184	16	290	288	134
Added Vol:	1	91	1	16	114	4	5	13	1	1	39	47
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	885	143	62	693	38	62	197	17	291	327	181
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	885	143	62	693	38	62	197	17	291	327	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	885	143	62	693	38	62	197	17	291	327	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	885	143	62	693	38	62	197	17	291	327	181

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.90	0.10	1.00	0.92	0.08	1.00	0.64	0.36
Final Sat.:	1600	3400	1700	1600	3134	166	1600	1473	127	1600	1030	570

Capacity Analysis Module:

Vol/Sat:	0.02	0.26	0.08	0.04	0.22	0.23	0.04	0.13	0.13	0.18	0.32	0.32
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 47 Level of Service: B

Street Name:	Atlantic Blvd						Brightwood St							
	North Bound		South Bound		East Bound		West Bound		East Bound		West Bound			
Approach:	L	T	R	L	T	R	L	T	R	L	T	R		
Movement:														
Control:	Permitted		Permitted		Permitted		Permitted		Permitted		Permitted			
Rights:	Include		Include		Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	30	805	37	25	788	114	106	101	75	73	107	70
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	32	855	39	27	837	121	113	107	80	78	114	74
Added Vol:	0	110	14	12	105	15	4	0	0	5	4	8
PasserByVol:	21	8	4	7	10	0	0	0	0	1	1	2
Initial Fut:	53	973	57	46	952	136	117	107	80	84	119	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	973	57	46	952	136	117	107	80	84	119	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	973	57	46	952	136	117	107	80	84	119	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	973	57	46	952	136	117	107	80	84	119	84

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.75	0.25	1.00	0.57	0.43	1.00	0.58	0.42
Final Sat.:	1600	3400	1700	1600	2900	400	1600	918	682	1600	935	665

Capacity Analysis Module:

Vol/Sat:	0.03	0.29	0.03	0.03	0.33	0.34	0.07	0.12	0.12	0.05	0.13	0.13
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Monterey Park General Plan
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.797
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-710 NB On-Ramp/Ford Blvd and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.716
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/McDonnell Ave and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.736
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

1.0617 growth factor 2019 to 2040

	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	loss time
LANES	0	1	0	2	0	0	0	2	0	0	1	0	0.1
AM	79	0	50	105	633	0	0	480	109	2	6	6	
Capacity	0	1600	0	3300	0	0	0	3300	0	0	1600	0	
V/C	0	0.081	0	0.066	0.192	0	0	0.178	0	0	0.009	0	0.433

Crit. Moves **

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #20 Collegian Ave & Avenida Cesar Chavez

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: B

 Street Name: Collegian Ave Avenida Cesar Chavez
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 0 0 1 0 0 0 0 0 1 0 0 1 0 1 1 0
 Volume Module:
 Base Vol: 74 85 31 45 37 85 60 309 13 36 695 103
 Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
 Initial Bse: 79 90 33 48 39 90 64 328 14 38 738 109
 Added Vol: 0 0 0 3 0 13 55 52 0 0 20 11
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 79 90 33 51 39 103 119 380 14 38 758 120
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 79 90 33 51 39 103 119 380 14 38 758 120
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 79 90 33 51 39 103 119 380 14 38 758 120
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 79 90 33 51 39 103 119 380 14 38 758 120
 Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.03 1.00 1.00 1.04 1.00
 Lanes: 0.39 0.45 0.16 0.26 0.20 0.54 1.00 1.93 0.07 1.00 1.73 0.27
 Final Sat.: 623 716 261 420 325 855 1600 3188 112 1600 2861 439
 Capacity Analysis Module:
 Vol/Sat: 0.05 0.13 0.13 0.03 0.12 0.12 0.07 0.12 0.12 0.02 0.26 0.27
 Crit Moves: ****

Monterey Park General Plan
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 59 Level Of Service: C

Street Name: Atlantic Blvd Avenida Cesar Chavez/Riggin St
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 2 1 0 1 0 2 1 0 1 0 1 1 0

Volume Module:
 Base Vol: 218 758 68 89 694 123 86 212 101 100 456 78
 Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
 Initial Bse: 231 805 72 94 737 131 91 225 107 106 484 83
 Added Vol: 78 114 21 8 63 3 11 24 18 11 37 9
 PasserByVol: 28 2 0 0 14 5 2 0 0 2 1 0
 Initial Fut: 337 921 93 102 814 139 104 249 125 119 522 92
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 337 921 93 102 814 139 104 249 125 119 522 92
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 337 921 93 102 814 139 104 249 125 119 522 92
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 337 921 93 102 814 139 104 249 125 119 522 92

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.05 1.00 1.00 1.05 1.00 1.00 1.05 1.00 1.00 1.04 1.00
 Lanes: 1.00 2.72 0.28 1.00 2.56 0.44 1.00 1.33 0.67 1.00 1.70 0.30
 Final Sat.: 1600 4559 441 1600 4302 698 1600 2229 1071 1600 2821 479

Capacity Analysis Module:
 Vol/Sat: 0.21 0.20 0.21 0.06 0.19 0.20 0.07 0.11 0.12 0.07 0.19 0.19
 Crit Moves: ****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.832
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 75 Level Of Service: D

Street Name: Atlantic Blvd 1st St/SR-60 WB Off-Ramp
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 2 0 0 0 0 2 1 0 1 0 0 1 0 1 0

Volume Module:
 Base Vol: 253 713 0 0 881 83 41 0 206 273 284 209
 Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
 Initial Bse: 269 757 0 0 935 88 44 0 219 290 302 222
 Added Vol: 1 187 0 0 92 0 0 0 1 0 0 26
 PasserByVol: 28 0 0 0 16 0 0 0 0 0 4 0
 Initial Fut: 298 944 0 0 1043 88 44 0 220 290 306 248
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 298 944 0 0 1043 88 44 0 220 290 306 248
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 298 944 0 0 1043 88 44 0 220 290 306 248
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 298 944 0 0 1043 88 44 0 220 290 306 248

Saturation Flow Module:
 Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
 Adjustment: 1.00 1.06 1.06 1.00 1.05 1.00 1.00 1.06 1.06 1.06 1.00 1.00
 Lanes: 1.00 2.00 0.00 0.00 2.77 0.23 1.00 0.00 1.00 0.69 0.72 0.59
 Final Sat.: 1600 3400 0 0 4626 374 1600 0 1700 1100 1159 941

Capacity Analysis Module:
 Vol/Sat: 0.19 0.28 0.00 0.00 0.23 0.24 0.03 0.00 0.13 0.18 0.26 0.26
 Crit Moves: ****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.735
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level of Service: C

Street Name:	Atlantic Blvd						SR-60 EB Ramp					
	North Bound		South Bound		East Bound		West Bound		North Bound		South Bound	
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted		Permitted		Permitted		Permitted		Permitted		Permitted	
Rights:	Include		Include		Include		Include		Include		Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1359	0	0	676	367	461	3	690	0	0	0
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	0	1443	0	0	718	390	489	3	733	0	0	0
Added Vol:	0	126	0	0	74	0	52	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1569	0	0	792	390	541	3	733	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1569	0	0	792	390	541	3	733	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1569	0	0	792	390	541	3	733	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1569	0	0	792	390	541	3	733	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.05	1.00	1.00	1.00	1.04	1.00	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	1.34	0.66	1.27	0.01	1.72	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	2245	1055	2035	12	2853	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.00	0.00	0.35	0.37	0.27	0.27	0.26	0.00	0.00	0.00
Crit Moves:	****			****	****	****						

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.941
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 125 Level of Service: E

Street Name:	Garfield Ave						Riggin St					
	North Bound		South Bound		East Bound		West Bound		North Bound		South Bound	
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted		Permitted		Permitted		Permitted		Permitted		Permitted	
Rights:	Include		Include		Include		Include		Include		Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	64	468	19	122	930	173	122	224	80	87	267	143
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	68	497	20	130	987	184	130	238	85	92	283	152
Added Vol:	38	56	16	2	59	12	16	20	27	9	35	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	553	36	132	1046	196	146	258	112	101	318	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	553	36	132	1046	196	146	258	112	101	318	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	553	36	132	1046	196	146	258	112	101	318	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	553	36	132	1046	196	146	258	112	101	318	154

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.03	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.68	0.32	1.00	0.70	0.30	1.00	0.67	0.33
Final Sat.:	1600	3103	197	1600	2796	504	1600	1116	484	1600	1079	521

Capacity Analysis Module:

Vol/Sat:	0.07	0.18	0.18	0.08	0.37	0.39	0.09	0.23	0.23	0.06	0.30	0.30
Crit Moves:	****			****	****	****						

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.858
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 83 Level of Service: D

Street Name:	Garfield Ave						Pomona Blvd					
	North Bound		South Bound		East Bound		West Bound		East Bound		West Bound	
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase		Split Phase		Permitted		Permitted		Permitted		Permitted	
Rights:	Include		Include		Include		Include		Include		Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	1	0	0	1	0	0	0	0	0	1

Volume Module:

Base Vol:	742	410	0	0	520	371	0	0	0	112	979	113
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	788	435	0	0	552	394	0	0	0	119	1039	120
Added Vol:	29	68	0	0	57	24	0	0	0	4	27	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	817	503	0	0	609	418	0	0	0	123	1066	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	817	503	0	0	609	418	0	0	0	123	1066	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	817	503	0	0	609	418	0	0	0	123	1066	148
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	817	503	0	0	609	418	0	0	0	123	1066	148

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.05	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.05	1.06
Lanes:	1.86	1.14	0.00	0.00	2.00	1.00	0.00	0.00	0.00	0.31	2.69	1.00
Final Sat.:	2970	1930	0	0	3400	1700	0	0	0	496	4504	1700

Capacity Analysis Module:

Vol/Sat:	0.28	0.26	0.00	0.00	0.18	0.25	0.00	0.00	0.00	0.08	0.24	0.09
Crit Moves:	****			****			****			****		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.756
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 58 Level of Service: C

Street Name:	Garfield Ave						Via Campo						
	North Bound		South Bound		East Bound		West Bound		East Bound		West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase		Split Phase		Permitted		Permitted		Permitted		Permitted		
Rights:	Include		Include		Include		Include		Ovl		Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0	0	3	0	1	1	1	1	0	0	1	0	0

Volume Module:

Base Vol:	0	459	124	175	588	0	156	790	517	33	0	445
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	0	487	132	186	624	0	166	839	549	35	0	472
Added Vol:	0	77	6	16	44	0	20	37	6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	564	138	202	668	0	186	876	555	35	0	472
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	564	138	202	668	0	186	876	555	35	0	472
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	564	138	202	668	0	186	876	555	35	0	472
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	564	138	202	668	0	186	876	555	35	0	472
OvlAdjVol:												138

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06	1.00	1.06	1.06
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00	1.00	0.00	1.00
Final Sat.:	0	5100	1700	1600	3400	0	1600	3400	1700	1600	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.08	0.13	0.20	0.00	0.12	0.26	0.33	0.02	0.00	0.28
OvlAdjV/S:												0.08
Crit Moves:	****			****			****	****				

Monterey Park General Plan
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level of Service: B

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.659
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: B

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr
Average Delay (sec/veh): 2.3 Worst Case Level of Service: B[12.5]
Street Name: Atlas Ave Potrero Grande Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 1 0 87 247 599 0 0 749 5
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 1 0 92 262 636 0 0 795 5
Added Vol: 0 0 0 0 0 0 0 33 0 0 79 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 1 0 92 262 669 0 0 874 5
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 1 0 92 262 669 0 0 874 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 0 0 1 0 92 262 669 0 0 874 5
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx 6.8 6.5 6.9 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTim:xxxxx xxxxx xxxxx 3.5 4.0 3.3 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Cnflct Vol: xxxxx xxxxx xxxxx 1733 2068 437 880 xxxxx xxxxx xxxxx xxxxx xxxxx
Potent Cap.: xxxxx xxxxx xxxxx 81 55 573 777 xxxxx xxxxx xxxxx xxxxx xxxxx
Move Cap.: xxxxx xxxxx xxxxx 59 36 573 777 xxxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxxx xxxxx xxxxx 0.02 0.00 0.16 0.34 xxxxx xxxxx xxxxx xxxxx xxxxx
Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx 0.3 1.5 xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del:xxxxx xxxxx xxxxx 66.1 xxxxx 11.8 12.0 xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * F * B B * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx 522 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx 0.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx 12.6 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * B * * * * * *
ApproachDel: xxxxx 12.5 xxxxx xxxxx
ApproachLOS: * B * * *

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr
Cycle (sec): 100 Critical Vol./Cap.(X): 0.460
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level of Service: A
Street Name: Potrero Grande Dr Saturn St/Market Place Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 1 0 0 1 1 1 0 2 0 1 1 0 2 0 1
Volume Module:
Base Vol: 16 42 9 166 52 47 59 646 118 7 303 139
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 17 45 10 176 55 50 63 686 125 7 322 148
Added Vol: 0 0 0 12 0 0 0 33 0 0 79 21
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 17 45 10 188 55 50 63 719 125 7 401 169
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 17 45 10 188 55 50 63 719 125 7 401 169
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 17 45 10 188 55 50 63 719 125 7 401 169
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 17 45 10 188 55 50 63 719 125 7 401 169
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1600 1700 1700 1600 1700 1700 1600 3400 1700 1600 3400 1700
Capacity Analysis Module:
Vol/Sat: 0.01 0.03 0.01 0.12 0.03 0.03 0.04 0.21 0.07 0.00 0.12 0.10
Crit Moves: **** * * * *

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.412
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Garfield Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.582
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Garfield Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.071
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Atlantic Blvd & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.094
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Atlantic Blvd, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.305
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.990
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: E

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include, Ovl), Rights, Min. Green, Y+R, Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.148
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module showing Vol/Sat and Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.914
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 108 Level of Service: E

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module showing Vol/Sat and Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.679
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr and Ramona Blvd with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Ramona Blvd & I-10 EB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.933
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 120 Level of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Ramona Blvd and I-10 EB Off-Ramp with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.477
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Street Name:Corporate Center Dr/Golf Course E I-710 NB Off-Ramp

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 1 0 0 0

Volume Module:

Base Vol: 0 506 16 3 365 0 360 12 35 3 0 16
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 537 17 3 388 0 382 13 37 3 0 17
Added Vol: 0 166 0 0 89 0 0 0 8 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 703 17 3 477 0 382 13 45 3 0 17
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 703 17 3 477 0 382 13 45 3 0 17
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 703 17 3 477 0 382 13 45 3 0 17
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 703 17 3 477 0 382 13 45 3 0 17

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.03 1.00 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 1.95 0.05 1.00 2.00 0.00 1.74 0.06 0.20 0.16 0.00 0.84
Final Sat.: 0 3225 75 1600 3400 0 2779 93 328 253 0 1347

Capacity Analysis Module:

Vol/Sat: 0.00 0.22 0.23 0.00 0.14 0.00 0.14 0.14 0.14 0.01 0.00 0.01
Crit Moves: **** **** **** ****

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.920
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 111 Level Of Service: E

Street Name: Fremont Ave Monterey Pass Rd

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Include Ignore Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 0 1 0 1

Volume Module:

Base Vol: 0 0 0 134 0 390 728 496 0 0 171 153
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 142 0 414 773 527 0 0 182 162
Added Vol: 0 0 0 71 0 40 99 98 0 0 60 74
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 213 0 454 872 625 0 0 242 236
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 0 0 0 213 0 0 872 625 0 0 242 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 213 0 0 872 625 0 0 242 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 0 0 0 213 0 0 872 625 0 0 242 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 0 0 0 1600 0 1700 1600 3400 0 0 1700 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.13 0.00 0.00 0.54 0.18 0.00 0.00 0.14 0.00
Crit Moves: **** **** ****

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.934
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 121 Level Of Service: E

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.927
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 116 Level Of Service: E

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 1.088
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Street Name: I-710 NB On-Ramp/Ford Blvd Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 1 0 0 1 0 0 0 0 0 1 0 1 0 1

Volume Module:
Base Vol: 219 46 418 0 0 0 20 559 30 61 455 69
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 233 49 444 0 0 0 21 593 32 65 483 73
Added Vol: 27 14 157 0 0 0 0 128 46 152 263 61
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 260 63 601 0 0 0 21 721 78 217 746 134
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 260 63 601 0 0 0 21 721 78 217 746 134
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 260 63 601 0 0 0 21 721 78 217 746 134
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 260 63 601 0 0 0 21 721 78 217 746 134

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.06 1.00 1.06 1.06 1.00 1.00 1.00 1.00 1.06 1.06
Lanes: 0.81 0.19 1.00 0.00 0.00 0.00 1.00 0.90 0.10 1.00 1.00 1.00
Final Sat.: 1288 312 1700 0 0 0 1600 1444 156 1600 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.16 0.20 0.35 0.00 0.00 0.00 0.01 0.50 0.50 0.14 0.44 0.08
Crit Moves: ****

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.824
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: D

Street Name: Corporate Center Dr/McDonnell Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 0 0 1 0 1 0 1 2 0 1 1 0 1 0 2 1 0

Volume Module:
Base Vol: 18 142 150 119 77 134 58 900 27 18 429 55
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 19 151 159 126 82 142 62 956 29 19 455 58
Added Vol: 0 16 16 39 0 186 44 242 0 0 290 30
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 19 167 175 165 82 328 106 1198 29 19 745 88
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 19 167 175 165 82 328 106 1198 29 19 745 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 19 167 175 165 82 328 106 1198 29 19 745 88
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 19 167 175 165 82 328 106 1198 29 19 745 88

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.06 1.06 1.00 1.03 1.00 1.00 1.05 1.00
Lanes: 0.05 0.46 0.49 1.00 1.00 1.00 2.00 1.95 0.05 1.00 2.68 0.32
Final Sat.: 85 739 776 1600 1700 1700 3200 3225 75 1600 4491 509

Capacity Analysis Module:
Vol/Sat: 0.01 0.23 0.23 0.10 0.05 0.19 0.03 0.37 0.38 0.01 0.17 0.17
Crit Moves: ****

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.894
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 97 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Monterey Pass Rd/Mednik Ave and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Atlantic Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.875
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 89 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and Floral Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
 Future 2040 with General Plan Conditions
 #19 Bleakwood Avenue & Avenida Cesar Chavez
 1.0617 growth factor 2019 to 2040

	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	Loss.time
LANES	0	1	0	1	2	0	0	2	0	0	1	0	0.1
PM	41	0	28	54	1147	0	0	679	55	2	11	10	
Capacity	0	1600	0	1600	3300	0	0	3300	0	0	1600	0	
V/C	0	0.043	0	0.034	0.348	0	0	0.222	0	0	0.014	0	0.414

Crit. Moves **

Monterey Park General Plan
 Future 2040 with General Plan
 PM Peak Hour

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 57 Level Of Service: C

Street Name:	Collegian Ave				Avenida Cesar Chavez				
	North Bound		South Bound		East Bound		West Bound		
Approach:	L	T	R	L	T	R	L	T	R
Movement:									
Control:	Permitted		Permitted		Permitted		Permitted		
Rights:	Include		Include		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	0	0	1	0	1

Volume Module:

Base Vol:	38	120	94	66	60	95	127	692	38	35	418	74
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	40	127	100	70	64	101	135	735	40	37	444	79
Added Vol:	0	0	0	24	1	119	151	154	1	0	108	31
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	127	100	94	65	220	286	889	41	37	552	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	127	100	94	65	220	286	889	41	37	552	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	127	100	94	65	220	286	889	41	37	552	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	127	100	94	65	220	286	889	41	37	552	110

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.04	1.00
Lanes:	0.15	0.48	0.37	0.25	0.17	0.58	1.00	1.91	0.09	1.00	1.67	0.33
Final Sat.:	241	762	597	398	273	929	1600	3158	142	1600	2770	530

Capacity Analysis Module:

Vol/Sat:	0.03	0.17	0.17	0.06	0.24	0.24	0.18	0.28	0.29	0.02	0.20	0.21
Crit Moves:	****			****			****					****

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Atlantic Blvd & Avenida Cesar Chavez/Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.039
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and Avenida Cesar Chavez/Riggin St.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.903
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 102 Level Of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
 Future 2040 with General Plan
 PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.813
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 70 Level of Service: D

Street Name:	Atlantic Blvd			SR-60 EB Ramp		
	Approach:			Approach:		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Permitted			Permitted		
Rights:	Include			Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	0 0 2 1 0	0 0 1 1 0	1 0 1 1 0	0 0 0 0 0		

Volume Module:

Base Vol:	0	1118	5	0	727	363	395	0	530	0	0	0
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	0	1187	5	0	772	385	419	0	563	0	0	0
Added Vol:	0	364	0	0	375	0	143	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1551	5	0	1147	385	562	0	563	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1551	5	0	1147	385	562	0	563	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1551	5	0	1147	385	562	0	563	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1551	5	0	1147	385	562	0	563	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.04	1.00	1.00	1.04	1.00	1.00	1.06	1.04	1.00	1.06	1.06
Lanes:	0.00	2.99	0.01	0.00	1.50	0.50	1.50	xxxx	1.50	0.00	0.00	0.00
Final Sat.:	0	4984	16	0	2495	805	2399	0	2501	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.32	0.00	0.46	0.48	0.23	0.00	0.23	0.00	0.00	0.00
Crit Moves:	****			****	****	****						

Monterey Park General Plan
 Future 2040 with General Plan
 PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggin St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.178
 Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level of Service: F

Street Name:	Garfield Ave			Riggin St		
	Approach:			Approach:		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Permitted			Permitted		
Rights:	Include			Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 0 1 0	1 0 0 1 0		

Volume Module:

Base Vol:	100	625	38	182	676	137	189	450	123	33	190	126
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	106	664	40	193	718	145	201	478	131	35	202	134
Added Vol:	143	205	51	6	205	50	51	111	110	52	105	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	249	869	91	199	923	195	252	589	241	87	307	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	249	869	91	199	923	195	252	589	241	87	307	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	869	91	199	923	195	252	589	241	87	307	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	249	869	91	199	923	195	252	589	241	87	307	139

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.03	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.65	0.35	1.00	0.71	0.29	1.00	0.69	0.31
Final Sat.:	1600	2995	305	1600	2741	559	1600	1136	464	1600	1102	498

Capacity Analysis Module:

Vol/Sat:	0.16	0.29	0.30	0.12	0.34	0.35	0.16	0.52	0.52	0.05	0.28	0.28
Crit Moves:	****			****	****	****						

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.868
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 86 Level of Service: D

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.938
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 124 Level of Service: E

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Include, Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.740
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level of Service: C

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.893
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 97 Level of Service: D

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr
Average Delay (sec/veh): 2.1 Worst Case Level of Service: C[17.3]
Street Name: Atlas Ave Potrero Grande Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 0 2 0 1
Volume Module:
Base Vol: 0 0 0 12 0 235 68 946 0 0 841 2
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 13 0 249 72 1004 0 0 893 2
Added Vol: 0 0 0 0 0 0 0 142 0 0 122 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 13 0 249 72 1146 0 0 1015 2
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 13 0 249 72 1146 0 0 1015 2
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 0 0 13 0 249 72 1146 0 0 1015 2
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxxx 6.8 6.5 6.9 4.1 xxxxx xxxxxx xxxxxx xxxxx xxxxxx
FollowUpTim:xxxxx xxxxx xxxxxx 3.5 4.0 3.3 2.2 xxxxx xxxxxx xxxxxx xxxxx xxxxxx
Capacity Module:
Cnflct Vol: xxxxx xxxxx xxxxxx 1732 2306 507 1017 xxxxx xxxxxx xxxxx xxxxx xxxxxx
Potent Cap.: xxxxx xxxxx xxxxxx 81 39 516 690 xxxxx xxxxxx xxxxx xxxxx xxxxxx
Move Cap.: xxxxx xxxxx xxxxxx xxxxxx 74 35 516 690 xxxxx xxxxxx xxxxx xxxxx xxxxxx
Volume/Cap: xxxxx xxxxx xxxxx 0.17 0.00 0.48 0.10 xxxxx xxxxx xxxxx xxxxx xxxxxx
Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx 0.3 xxxxx 0.9 0.3 xxxxx xxxxxx xxxxx xxxxx xxxxxx
Control Del:xxxxxx xxxxx xxxxxx 58.0 xxxxx 14.2 10.8 xxxxx xxxxxx xxxxxx xxxxx xxxxxx
LOS by Move: * * * F * B B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx 400 xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue:xxxxxx xxxxx xxxxxx xxxxxx 1.4 xxxxxx xxxxxx xxxxxx xxxxxx xxxxx xxxxxx
Shrd ConDel:xxxxxx xxxxx xxxxxx xxxxxx 18.3 xxxxxx xxxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
Shared LOS: * * * * C * * * * *
ApproachDel: xxxxxx 17.3 xxxxxx xxxxxx
ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Monterey Park General Plan
Future 2040 with General Plan
PM Peak Hour

Level of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr
Cycle (sec): 100 Critical Vol./Cap.(X): 0.721
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level of Service: C
Street Name: Potrero Grande Dr Saturn St/Market Place Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 1 0 0 1 1 1 0 2 0 1 1 0 2 0 1
Volume Module:
Base Vol: 124 136 13 254 90 150 118 373 34 16 730 327
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 132 144 14 270 96 159 125 396 36 17 775 347
Added Vol: 0 0 0 41 0 0 0 142 0 0 122 23
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 132 144 14 311 96 159 125 538 36 17 897 370
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 132 144 14 311 96 159 125 538 36 17 897 370
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 132 144 14 311 96 159 125 538 36 17 897 370
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 132 144 14 311 96 159 125 538 36 17 897 370
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.00 1.05 1.00 1.06 1.06 1.00 1.06 1.06
Lanes: 1.00 1.00 1.00 1.00 0.75 1.25 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1600 1700 1700 1600 1200 2100 1600 3400 1700 1600 3400 1700
Capacity Analysis Module:
Vol/Sat: 0.08 0.08 0.01 0.19 0.08 0.08 0.08 0.16 0.02 0.01 0.26 0.22
Crit Moves: **** **

APPENDIX F
MITIGATION – LEVEL OF SERVICE WORKSHEETS

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.918
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 110 Level of Service: E

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit, Split Phase), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.054
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.859
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: D

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various movements.

Monterey Park General Plan
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AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level of Service: C

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ovl), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various movements.

Monterey Park General Plan
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.840
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 77 Level of Service: D

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

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Future with Plan and Mitigation Conditions
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: B

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Table with columns for Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns for Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns for Capacity Analysis Module: Vol/Sat, Crit Moves.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.813
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr and Ramona Blvd with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.507
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/Golf Course E and I-710 NB Off-Ramp with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

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Future with Plan and Mitigation Conditions
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.482
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name (Fremont Ave, Monterey Pass Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Ignored), Rights (Include, Ignore), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.716
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 123 Level Of Service: C

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted, Prot+Permit, Permitted), Rights (Include, Ignore), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

Monterey Park General Plan
Future with Plan and Mitigation Conditions
AM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.628
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 Level of Service: B

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Prot+Permit), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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Future with Plan and Mitigation Conditions
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level of Service: C

Table with columns for Street Name (I-710 NB On-Ramp/Ford Blvd, Floral Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Street Name: Corporate Center Dr/McDonnell Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 0 0 2 0 0 1 0 2 0 1 1 0

Volume Module:
Base Vol: 48 324 59 51 37 32 137 510 42 28 539 120
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 51 344 63 54 39 34 145 541 45 30 572 127
Added Vol: 0 42 42 14 0 52 108 110 0 0 47 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 51 386 105 68 39 86 253 651 45 30 619 130
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 51 386 105 68 39 86 253 651 45 30 619 130
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 51 386 105 68 39 86 253 651 45 30 619 130
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 51 386 105 68 39 86 253 651 45 30 619 130

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.03 1.00 1.00 1.05 1.00
Lanes: 0.09 0.72 0.19 2.00 0.31 0.69 2.00 1.87 0.13 1.00 2.48 0.52
Final Sat.: 151 1140 309 3200 502 1098 3200 3095 205 1600 4165 835

Capacity Analysis Module:
Vol/Sat: 0.03 0.34 0.34 0.02 0.08 0.08 0.08 0.21 0.22 0.02 0.15 0.16
Crit Moves: ****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.736
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Street Name: Monterey Pass Rd/Mednik Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Prot+Permit Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 110 412 60 88 296 87 153 308 115 98 470 144
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 117 437 64 93 314 92 162 327 122 104 499 153
Added Vol: 64 6 3 0 15 4 17 89 32 1 43 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 181 443 67 93 329 96 179 416 154 105 542 153
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 181 443 67 93 329 96 179 416 154 105 542 153
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 181 443 67 93 329 96 179 416 154 105 542 153
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 181 443 67 93 329 96 179 416 154 105 542 153

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.04 1.00 1.00 1.04 1.00
Lanes: 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.46 0.54 1.00 1.56 0.44
Final Sat.: 1600 3400 1700 1600 1700 1700 1600 2435 865 1600 2596 704

Capacity Analysis Module:
Vol/Sat: 0.11 0.13 0.04 0.06 0.19 0.06 0.11 0.17 0.18 0.07 0.21 0.22
Crit Moves: ****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Collegian Ave and Avenida Cesar Chavez with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows include Collegian Ave and Avenida Cesar Chavez.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include Collegian Ave and Avenida Cesar Chavez.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include Collegian Ave and Avenida Cesar Chavez.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and 1st St/SR-60 WB Off-Ramp with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows include Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. Rows include Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves. Rows include Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and SR-60 EB Ramp details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggins St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.860
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Garfield Ave and Riggins St details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level of Service: C

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include, Include, Include, Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: B

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include, Include, Include, Ovl), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.641
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include Potrero Grande Dr and Saturn St/Market Place Dr with various movement and control details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume. Rows list various traffic volume and adjustment factors.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. Rows show saturation flow and adjustment values for different lane configurations.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves. Rows show capacity analysis results and critical moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Atlantic Blvd & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.281
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Atlantic Blvd, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit, Split Phase), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 New Ave & Hellman Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.033
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (New Ave, Hellman Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Garfield Ave & Emerson Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.132
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name (Garfield Ave, Emerson Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Atlantic Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.946
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 130 Level Of Service: E

Table with columns for Street Name (Atlantic Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ovl), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S values.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Garfield Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.002
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: F

Table with columns for Street Name (Garfield Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module:

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 New Ave & Garvey Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.779
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level of Service: C

Table with columns for Street Name (New Ave, Garvey Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Include), Rights, Min. Green, Y+R, Lanes.

Volume Module:

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with columns for Vol/Sat, Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Corporate Center Dr & Ramona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr and Ramona Blvd with various traffic movements and control settings.

Volume Module table showing traffic volume data for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Corporate Center Dr/Golf Course Entrance & I-710 NB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.470
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Corporate Center Dr/Golf Course E and I-710 NB Off-Ramp with various traffic movements and control settings.

Volume Module table showing traffic volume data for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different traffic movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various traffic movements.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Fremont Ave & Monterey Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.534
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level of Service: A

Table with columns for Street Name (Fremont Ave, Monterey Pass Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Ignored), Rights (Include, Ignore), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Garfield Ave & Newmark Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.831
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: D

Table with columns for Street Name (Garfield Ave, Newmark Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted, Prot+Permit, Ignored), Rights (Include, Ignore), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume and adjustment factors (Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various movements.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Atlantic Blvd & Brightwood St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.788
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 94 Level of Service: C

Table with columns for Street Name (Atlantic Blvd, Brightwood St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Prot+Permit), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 I-710 NB On-Ramp/Ford Blvd & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.906
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 103 Level of Service: E

Table with columns for Street Name (I-710 NB On-Ramp/Ford Blvd, Floral Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat and Crit Moves for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Corporate Center Dr/McDonnell Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.773
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Street Name:Corporate Center Dr/McDonnell Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 0 0 2 0 0 1 0 2 0 1 1 0

Volume Module:
Base Vol: 18 142 150 119 77 134 58 900 27 18 429 55
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 19 151 159 126 82 142 62 956 29 19 455 58
Added Vol: 0 16 16 39 0 186 44 242 0 0 290 30
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 19 167 175 165 82 328 106 1198 29 19 745 88
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 19 167 175 165 82 328 106 1198 29 19 745 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 19 167 175 165 82 328 106 1198 29 19 745 88
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 19 167 175 165 82 328 106 1198 29 19 745 88

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.03 1.00 1.00 1.05 1.00
Lanes: 0.05 0.46 0.49 2.00 0.20 0.80 2.00 1.95 0.05 1.00 2.68 0.32
Final Sat.: 85 739 776 3200 319 1281 3200 3225 75 1600 4491 509

Capacity Analysis Module:
Vol/Sat: 0.01 0.23 0.23 0.05 0.26 0.26 0.03 0.37 0.38 0.01 0.17 0.17
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Monterey Pass Rd/Mednik Ave & Floral Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.833
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Street Name: Monterey Pass Rd/Mednik Ave Floral Dr

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Prot+Permit Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 83 560 122 119 360 37 247 804 117 67 301 76
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 88 595 130 126 382 39 262 854 124 71 320 81
Added Vol: 47 31 1 0 41 20 61 242 106 3 233 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 135 626 131 126 423 59 323 1096 230 74 553 81
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 135 626 131 126 423 59 323 1096 230 74 553 81
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 135 626 131 126 423 59 323 1096 230 74 553 81
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 135 626 131 126 423 59 323 1096 230 74 553 81

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.06 1.06 1.00 1.06 1.06 1.00 1.04 1.00 1.00 1.04 1.00
Lanes: 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.65 0.35 1.00 1.75 0.25
Final Sat.: 1600 3400 1700 1600 1700 1700 1600 2744 556 1600 2892 408

Capacity Analysis Module:
Vol/Sat: 0.08 0.18 0.08 0.08 0.25 0.03 0.20 0.40 0.41 0.05 0.19 0.20
Crit Moves: **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Collegian Ave & Avenida Cesar Chavez

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Collegian Ave and Avenida Cesar Chavez.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Atlantic Blvd & 1st St/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.856
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 82 Level of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for Atlantic Blvd and 1st St/SR-60 WB Off-Ramp.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 Atlantic Blvd & SR-60 EB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Atlantic Blvd and SR-60 EB Ramp details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Garfield Ave & Riggins St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.981
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Garfield Ave and Riggins St details.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Garfield Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.759
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level Of Service: C

Table with columns for Street Name (Garfield Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include, Ovl), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Garfield Ave & Via Campo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.886
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: D

Table with columns for Street Name (Garfield Ave, Via Campo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include, Ovl), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilcox Ave & Pomona Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Table with columns for Street Name (Wilcox Ave, Pomona Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Permitted), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Markland Dr & Potrero Grande Dr/SR-60 WB Off-Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.823
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 72 Level Of Service: D

Table with columns for Street Name (Markland Dr, Potrero Grande Dr/SR-60 WB Off-Ramp), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected), Rights (Include), and traffic volume data (Min. Green, Y+R, Lanes).

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, and OvlAdjV/S for various approaches.

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Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Atlas Ave & Potrero Grande Dr

Average Delay (sec/veh): 2.1 Worst Case Level of Service: C[17.3]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for North and South Bound movements.

Volume Module:

Table showing traffic volume metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Critical Gap Module:

Table with columns for Critical Gap, FollowUpTim, and various performance metrics.

Capacity Module:

Table showing capacity metrics: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level of Service Module:

Table showing level of service metrics: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Saturn St/Market Place Dr & Potrero Grande Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.684
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for North, South, East, and West Bound movements.

Volume Module:

Table showing traffic volume metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module:

Table showing saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table showing capacity analysis metrics: Vol/Sat, Crit Moves.

