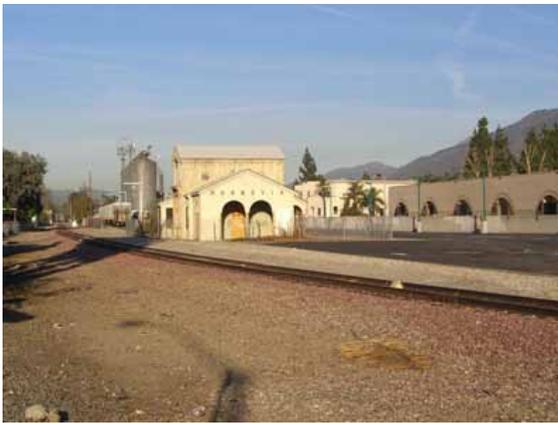


DRAFT

# Monrovia General Plan Proposed Land Use and Circulation Elements

ENVIRONMENTAL IMPACT REPORT



prepared for:  
**City of Monrovia**  
Planning Division  
415 South Ivy Avenue  
Monrovia, CA 91016

# Final Environmental Impact Report

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## **Monrovia General Plan Proposed Land Use and Circulation Elements**

**SCH No. 2007021135**

January 2008

Lead Agency:  
City of Monrovia  
Planning Division  
415 South Ivy Avenue  
Monrovia, CA 91016

Contact:  
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626-932-5539

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# 1.0 Introduction

This Environmental Impact Report (EIR) evaluates the environmental effects associated with the adoption and implementation of the proposed Land Use and Circulation Elements (proposed project) initiated by the City of Monrovia. The city's existing General Plan Land Use and Circulation Elements were adopted in 1993. The proposed project represents an update to only these two elements of the City's General Plan. The City completed a Public Review Draft of the proposed Land Use and Circulation Elements in September 2007. The adoption and implementation of the proposed Land Use and Circulation Elements constitutes a project for the purposes of the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

## Legal Requirements

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of CEQA (CEQA Guidelines) published by the Resources Agency of the State of California (California Code of Regulations, Section 15000 et seq.).

This EIR was prepared by professional environmental consultants under contract to the City of Monrovia. The City of Monrovia is the lead agency for the preparation of this EIR, as defined by CEQA (Public Resources Code, Section 21067, as amended). The content of this document reflects the independent judgment of the City.

This EIR meets the content and analysis requirements of a Program EIR, as defined in Section 15168 of the CEQA Guidelines. A Program EIR allows for a review of a series of actions that can be characterized as one large project, are related geographically, and as logical parts in the chain of actions contemplated in connection with issuance of rules, regulations, or plans. The Program EIR allows for a more exhaustive consideration of the effects and alternatives than would be practical in an EIR on separate individual actions and ensures consideration of cumulative impacts. This Program EIR does not entitle any specific individual development projects. Project-specific environmental analysis will be undertaken for specific individual development projects proposed pursuant to adoption and implementation of the proposed Land Use and Circulation Elements.

## Purposes of the EIR

This Program EIR is intended to provide information to public agencies, the general public, and decision makers regarding potential environmental impacts related to the adoption and long-term implementation of the proposed Land Use and Circulation Elements. The purpose of an EIR, under the provisions of CEQA, is "to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." (Public Resources Code Section 21002.1[a])

This Program EIR provides a first-tier analysis of the environmental effects of the proposed Land Use and Circulation Elements. Section 15152 of the CEQA Guidelines indicates that tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy, or program of

lesser scope, or to a site specific EIR or negative declaration. Subsequent activities in accordance with the Monrovia General Plan must be examined in light of this Program EIR to determine whether an additional environmental document must be prepared. If all of the project's potentially significant effects are determined to have been adequately analyzed by this EIR, no additional analysis is required.

If a subsequent project or later activity would have effects that were not examined in this Program EIR, or not examined at an appropriate level of detail to be used for the later activity, an initial study would be required. Based on the initial study, the City may reach any one of the following conclusions regarding subsequent projects:

- 1) No significant impacts are identified and a negative declaration or mitigated negative declaration may be adopted (CEQA Guidelines Section 15152);
- 2) Changes or additions are required, but the subsequent project is within the scope of the project covered by this Program EIR and no substantial change leading to major revisions of this Program EIR is required, thus an addendum to this Program EIR may be adopted (CEQA Guidelines Section 15164); or
- 3) Additional significant environmental effects could occur that were not adequately addressed in this Program EIR, and a subsequent or supplemental EIR is required (CEQA Guidelines Sects 15162 and 15163).

Accordingly, this Program EIR serves as an informational document for use by public agencies, the general public, and decision makers. While it is not a City of Monrovia policy document; it does, however, discuss the impacts of development pursuant to the proposed Land Use and Circulation Elements and related components, and analyzes project alternatives. This Program EIR will be used by the City of Monrovia Planning Commission and City Council in assessing impacts prior to adoption of the proposed Land Use and Circulation Elements.

## Scope of the Project

The project analyzed in this EIR is the adoption and implementation of the proposed Land Use and Circulation Elements and any subsequent revisions to Title 17 (Zoning Code) of the Monrovia Municipal Code requirements to implement the proposed amendments. The proposed Land Use and Circulation Elements are comprehensive in nature and apply to all properties within the City's boundaries. The proposed Land Use and Circulation Elements are intended to guide land use and planning decisions in the City of Monrovia through the year 2030. The Zoning Code serves as the mechanism to achieve the goals, policies, and development expectations established in the General Plan. Under California law, the Zoning Code must be consistent with the General Plan.

## Scope of the Environmental Analysis

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that adoption and implementation of the proposed Land Use and Circulation Elements may have a significant effect on the environment with respect to the following:

- 
- Aesthetics
  - Air Quality
  - Cultural Resources
  - Hazards and Hazardous Materials
  - Hydrology and Water Quality
  - Land Use and Planning
  - Noise
  - Population and Housing
  - Public Services
  - Recreation
  - Transportation and Traffic
  - Utilities and Service Systems

Appendix A contains the Initial Study and Notice of Preparation (NOP) for this project. Appendix B contains air quality worksheets. Appendix C contains a noise technical report completed for the proposed project. Appendix D contains a traffic study completed for the proposed project. All other reference documents cited in this EIR are on file with the City of Monrovia Planning Division, 415 South Ivy Avenue, Monrovia, CA 91016.

## Background

To define the scope of the investigation of the Program EIR, the City of Monrovia distributed a NOP in February 2007 to city, county, and state agencies; other public agencies; and interested private organizations and individuals. The purpose of the NOP was to identify agency and public concerns regarding potential impacts of the proposed project. Comment letters were received from the following:

- South Coast Air Quality Management District
- California Department of Transportation
- Native American Heritage Commission
- Metropolitan Transportation Authority
- California Public Utilities Commission
- Southern California Association of Governments
- City of Irwindale
- S. Eric Pare
- Martin Dala & Michele Brandenburg
- David Dginger
- Alberto Banos
- Kurt Wickline
- Sam Morrissey
- Nerses Berberian
- Paul Greenwood

In addition, City staff received oral comments at a March 26, 2007 scoping meeting on the NOP and Initial Study. Written comments received during the 30-day public review period for the NOP are included in Appendix A of this EIR.

## Availability of Draft EIR

This Draft Program EIR is available for public inspection at the City of Monrovia Planning Division, 415 South Ivy Avenue, Monrovia; the Monrovia Public Library, located at 321 South Myrtle Avenue in Monrovia; and via the City's website at <http://www.ci.monrovia.ca.us/>. Documents may be reviewed during regular business hours.

## Comments Requested

Comments from all agencies and individuals are invited regarding the information contained in the Draft Program EIR. Where possible, those responding should endeavor to provide the information they feel is lacking in the Draft Program EIR, or should indicate where the information may be found. All comments on the Draft Program EIR should be sent to the following City of Monrovia contact:

Steve Sizemore, Planning Division Manager  
City of Monrovia, Planning Division  
415 South Ivy Avenue  
Monrovia, CA 91016  
ssizemore@ci.monrovia.ca.us

Following a 45-day period of circulation and review of the Draft Program EIR, all comments pertaining to environmental issues and the City's responses to the comments will be incorporated into a Final Program EIR prior to certification of the document by the City of Monrovia. A 10-day public comment period in which the Final Program EIR will be made available for public review will precede certification of the document by the City of Monrovia.

## Structure of this EIR

This EIR is organized into eight sections. The Executive Summary includes a brief project description and summarizes project impacts and mitigation measures. Section 1.0 is this Introduction. Section 2.0 provides a detailed description of the proposed project. Section 3.0 analyzes project impacts and identifies mitigation measures designed to reduce significant impacts. Section 4.0 provides an analysis of alternatives to the proposed project. An analysis of cumulative impacts, growth inducing impacts, significant irreversible environmental impacts and areas of no significant impact is provided in Section 5.0. Section 6.0 contains reference information.

The Appendices consist of the NOP and Responses to the NOP (Appendix A) and technical documents (Appendices B through D) included as supporting information to the EIR. In compliance with CEQA Section 21081.6, a Mitigation Monitoring and Reporting Program (MMRP) will be prepared as a separately bound document that will be adopted in conjunction with the certification of the Final EIR and project approval.

## Approach to EIR Analysis

As stated above, the approach to the analysis presented in this EIR is programmatic in nature given the broad scope of the proposed Land Use and Circulation Elements. Each environmental issue is analyzed in the same manner, starting with a discussion of the existing environmental setting. Thresholds of significance are then defined, as they are used to measure the project's potential impact in the environmental impact section. The analysis section examines the environmental effects resulting from implementation over time of the proposed Land Use and Circulation Elements. If the analysis indicates that implementation of the goals and policies will result in a significant impact for a particular environmental issue, mitigation measures are included. For each environmental issue area examined in Chapter 3.0, the discussion concludes a statement regarding the level of impact remaining with implementation of the mitigation measures. Chapter 4.0 provides an overview of the environmental impacts and a discussion of cumulative impacts. Chapter 5.0 compares to the proposed project to alternatives that are intended to reduce or eliminate significant environmental impacts of the proposed project. Chapter 6.0 is a list of references used throughout this EIR. Chapter 7.0 is a list of acronyms and abbreviations found throughout this EIR. Chapter 8.0 lists the preparers of this EIR.

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# 2.0 Project Description

## The Project

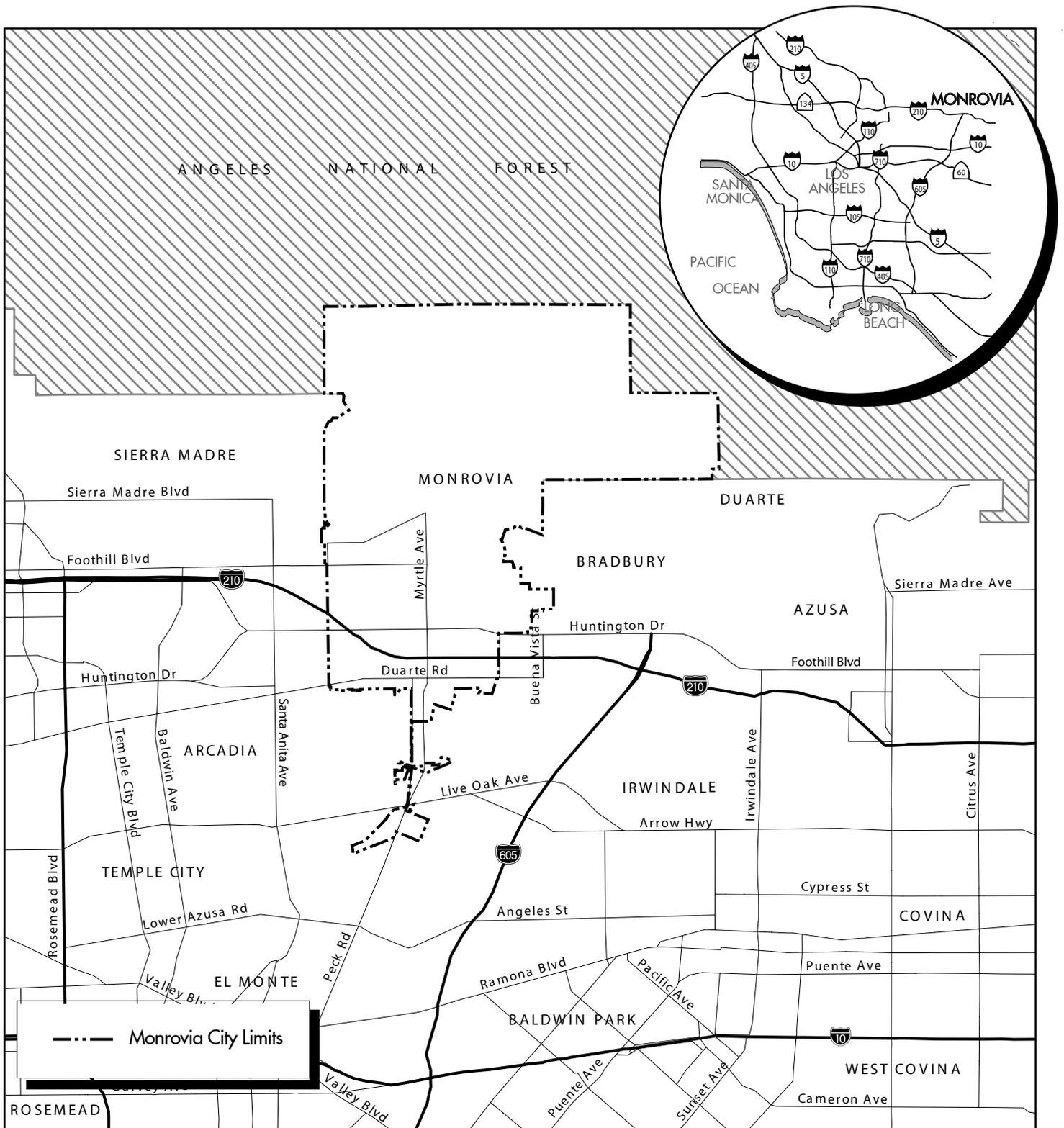
This Program EIR analyzes adoption and long-term implementation of: 1) proposed Land Use and Circulation Elements, and 2) any subsequent revisions to Title 17 (Zoning Code) of the Monrovia Municipal Code required to implement the proposed Land Use Element amendments. These actions are hereafter referred to collectively as the “proposed project.”

The proposed Land Use and Circulation Elements, together with other already adopted General Plan elements, guide the overall development in Monrovia through horizon year 2030. The proposed Land Use and Circulation Elements establish goals and policies to guide long-term decision-making regarding land use, circulation, public safety, and related issues. The General Plan applies to all properties within the City of Monrovia (see Figure 2-1). However, the proposed land use changes are concentrated into three “focus areas” that the City has identified as most suitable for increased development intensity: Station Square Transit Village, South Myrtle Avenue, and West Huntington Drive (see Figure 2-2).

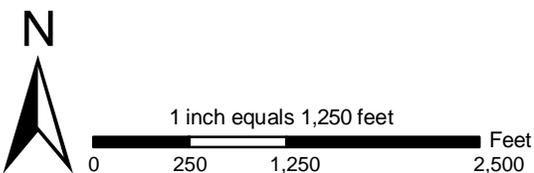
The Zoning Code is the primary tool for implementing land use plans and policies contained in the General Plan. The Zoning Code establishes zoning districts and regulations for each district with respect to permitted uses, allowable density, building height, development character, and development standards. The Zoning Code serves as the mechanism to achieve the goals, policies, and development expectations established in the General Plan. Under California law, the Zoning Code must be consistent with the General Plan.

## Regional Setting

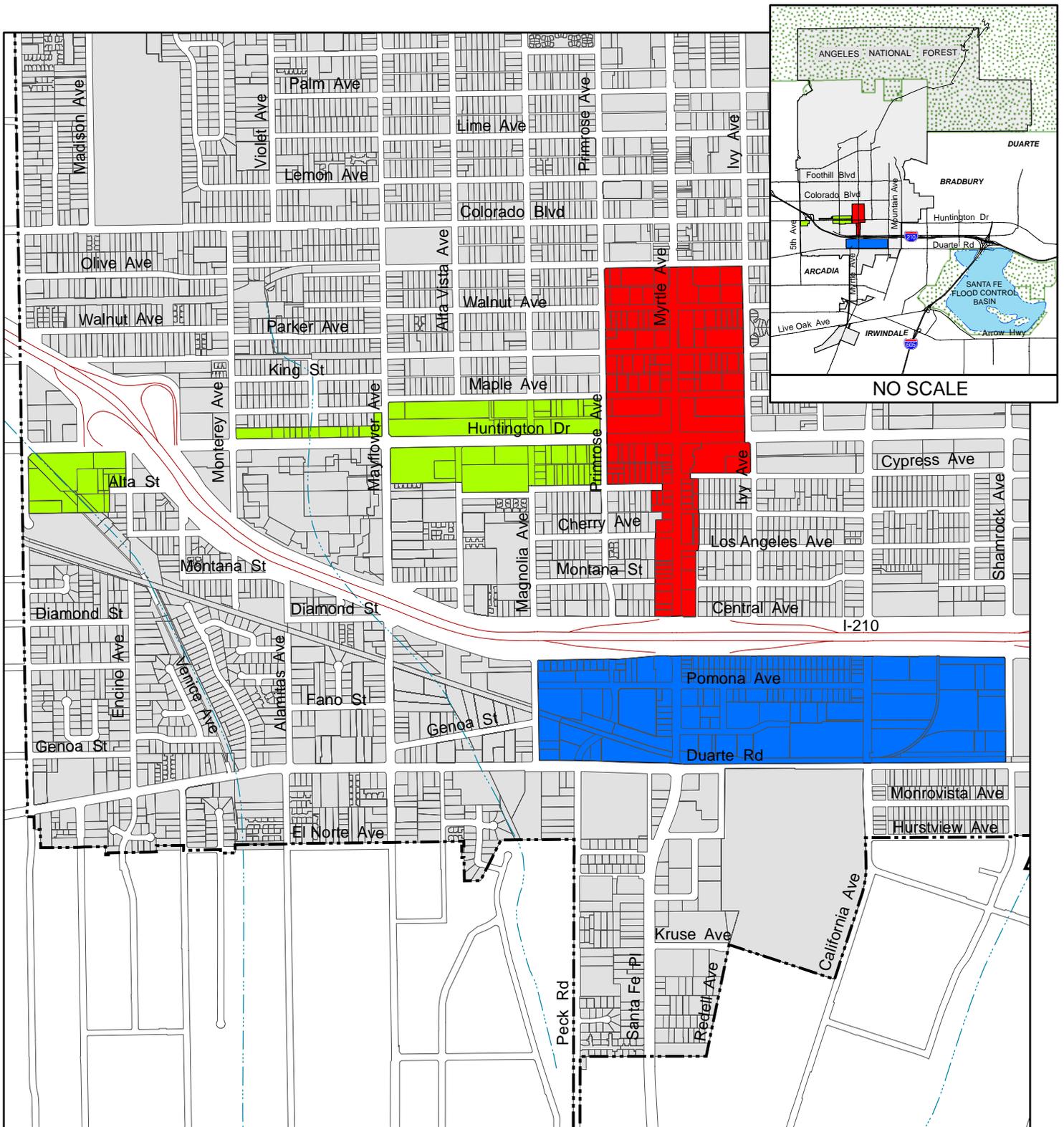
The City of Monrovia lies within the San Gabriel Valley in Los Angeles County, along the base of the San Gabriel Mountains. According to the City, the current population of Monrovia is approximately 39,147 persons. The City covers an area of approximately 14 square miles. Monrovia was incorporated in 1887. The City is bounded by Arcadia to the west, Angeles National Forest to the north, Bradbury and Duarte to the east, and unincorporated Los Angeles County and Irwindale to the south. Interstate 210 (I-210) passes through the lower third of the City, and Foothill Boulevard – a major east-west San Gabriel Valley arterial – traverses the upper third. Figure 2-1 shows the City in a regional context and outlines the General Plan Planning Area, which includes all properties within the City’s corporate limits. Figure 2-2 illustrates the focus areas in which new development will be concentrated.



Source: City of Monrovia, and Los Angeles County, GIS 2006.



**Figure 2-1  
Vicinity Map**



**FOCUS AREAS**

- West Huntington Drive Corridor
- South Myrtle Avenue Corridor
- Station Square Transit Village
- City Boundary



SCALE: 1 INCH = 1,250 FEET  
 UPDATED: EDAW, FEBRUARY 20, 2007.  
 SOURCE: CITY OF MONROVIA, AND LOS ANGELES COUNTY, GIS 2006.

**Figure 2-2**  
**Location of Focus Areas**

## Project Goals and Objectives

### Proposed Land Use Element

The following are City objectives stated in the proposed Land Use Element:

- To attain a balanced mix of land use within the City, thereby providing residents with ready access to housing, employment, and commercial services;
- To work toward regional jobs/housing balance goals;
- To encourage private investment in the City;
- To ensure that residents from all income levels have access to decent, affordable housing;
- To revitalize specific areas of the City which could benefit from public and private redevelopment efforts;
- To create a City environment which makes Monrovia a pleasant place to live, work, shop, and do business; and
- To ensure development in Monrovia is sensitive to the City's existing architectural and natural/open space resources.

### Proposed Circulation Element

The following are City goals stated in the proposed Circulation Element:

- Minimize traffic congestion on arterial and collector streets during peak hours in order to ensure a safe and efficient movement of people and goods within the City;
- Provide a system of streets and alleys that meets the needs of current and future residents, local and commuter traffic demands, and ensures the safe and efficient movement of vehicles, people, and goods throughout the City. Improve streets and alleys to their full design standards;
- Reduce the number of street accidents and maintain adequate traffic safety in the entire circulation system;
- Support the use of public transportation, including light rail transit, to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel;
- Ensure a truck circulation pattern through the City to provide efficient transportation of commodities while maintaining safety and harmony in its residential neighborhoods;
- Protect and encourage non-motorized transportation, such as bicycle and pedestrian travel;
- Develop and maintain a safe and efficient system of hillside streets and bike trails for movement of vehicles, people, and goods;
- Provide an adequate supply of convenient parking for all developments in the City, in a manner consistent with the goals of managing transportation demand and providing efficient arterial traffic flows; and

- Support the development of a network of regional roadway facilities which ensures the safe and efficient movement of people and goods from within the City to areas outside its boundaries, and that accommodates regional travel demands and maintains air quality standards.

## Project Background

In July 1993, the City adopted a comprehensive update of its Land Use and Circulation Elements to establish the overall policy direction for land use planning decisions in the City through the 2010. The existing Land Use Element provides development standards, including land use intensity/density for the City's six land use designations (residential, commercial, manufacturing, open space, planned development, and community facilities). Figure 2-2 shows the existing Land Use Element Policy Map. A major feature of the 1993 Land Use Element is the Planned Development (PD) designation. Areas designated PD are considered to have a unique character subject to special development guidelines and individual review by the City as development is proposed. There are 24 PD areas identified in the City. The 1993 Land Use Element establishes an individual set of development criteria to each PD area. As such, numerous amendments to the Land Use Element have been adopted since 1993 as specific development projects have been proposed in the PD areas. Figure 2-3 shows the City's existing General Plan Land Use Policy Map.

In addition, the Los Angeles County Metropolitan Transportation Authority (MTA) has since approved construction of extension of the Gold Line light rail service from its current terminus in Sierra Madre Villa Station in Pasadena. The light rail service will extend 24 miles east to the City of Montclair along the former Burlington Northern Santa Fe railroad right-of-way. The light rail line will run roughly parallel to I-210. The MTA identified a station in Monrovia located northwest of the intersection of West Duarte Road and South Myrtle Avenue. The City will revitalize the historic Santa Fe depot to create a new transit center that will jointly serve the Gold Line light rail service and Foothill Transit. The City has been working with a developer to facilitate transit-oriented development around the new light rail station. Further, the City is proposing land use changes to create a pedestrian-friendly connection between potential new development surrounding the new light rail station and the City's core located north of I-210. The specific components of the proposed Land Use and Circulation Elements are described below.

## Project Characteristics

### Proposed Land Use Element

In response to extension of light rail service, the City's desire to create broader circulation and land use connections to the planned station, and the anticipated economic benefits to be derived from transit service, the City has prepared a new land use plan that reflects land use changes in three areas: the Station Square Transit Village, West Huntington Drive, and South Myrtle Avenue corridors. The City has identified these existing developed areas as most suitable to accommodate a higher intensity of development necessitated by the Gold Line. The following overall changes to the 1993 Land Use Element are proposed:

- Establish land use policies and design performance criteria for the West Huntington Drive corridor, which extends from the western City limit east to Primrose Avenue.

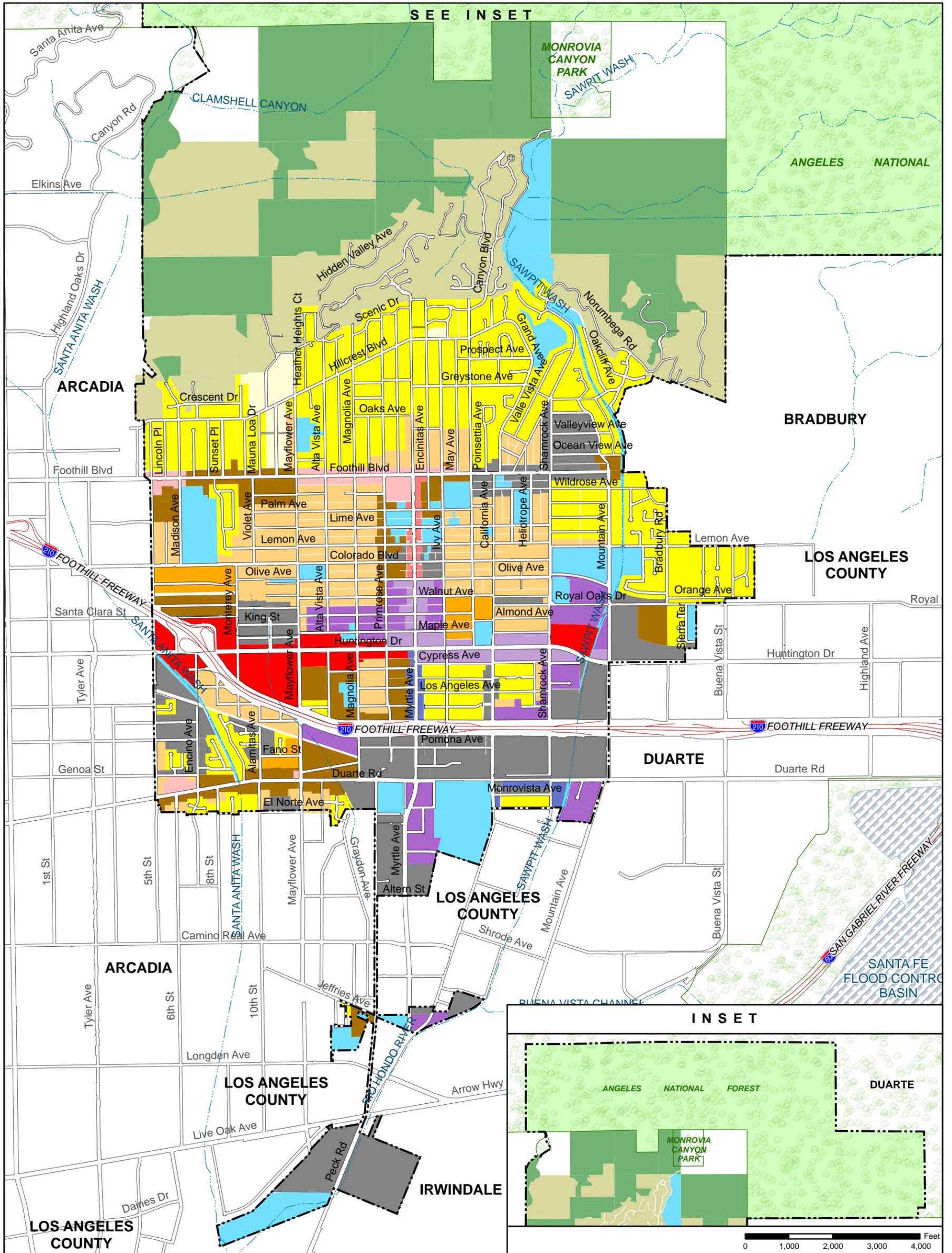
- Establish land use policies and design performance criteria for the South Myrtle Avenue corridor, which extends from I-210 north to Olive Avenue.
- Establish land use policies, design performance criteria, and development caps for the 80-acre Station Square Transit Village area, the limits of which include all properties bounded by I-210 on the north, Magnolia Avenue on the west, Duarte Road on the south, and Shamrock Avenue on the east.

A complete description of the proposed changes in the three focus areas is provided in detail below. Figure 2-4 shows the proposed General Plan Land Use Policy Map.

As shown on Figure 2-2, the Station Square Transit Village area is bound by I-210 to the north, Shamrock Avenue to the east, Duarte Road to the south, and Magnolia Avenue to the west. It is an approximately 80-acre area. It is currently developed with 1.24 million square feet of non-residential uses (consisting primarily of manufacturing and light industrial units) and 81 dwelling units.

The proposed Land Use Element includes modifications to the 1993 Land Use Element to establish the Station Square Transit Village Planned Development area. This PD designation will replace the current PD-12, PD-12A, and PD-13 designations in the 1993 Land Use Element. The land use policies will establish the following parameters for land uses and development approaches within the Station Square Transit Village PD (see Figure 2-5):

- Residential:** A minimum of 1,400 dwelling units to a maximum of 3,600 dwelling units. Residential units may be built as stand-alone product or as part of a horizontally or vertically integrated mixed-use development. Residential uses are not permitted immediately adjacent to I-210.
- Office:** Up to 850,000 square feet of office space. Office development may be built as stand-alone product or as part of a horizontally or vertically integrated mixed-use development.
- Retail/Dining:** A maximum of 151,200 square feet of retail/dining space, with a broad range of neighborhood-serving retail and restaurant uses permitted.
- Hospitality:** Up to 45,800 square feet of hotel facilities. Associated amenities may include a health club, recreation facilities, banquet and meeting facilities, and restaurants.
- Open Space:** A minimum of 4.35 acres of active park space within this portion of the City, with park space provided at a ratio of at least 3.0 acres of park space per 1,000 residents.
- Transit Station:** Transit station, bus transfer terminal, supporting parking facilities, a rider drop-off area, and other improvements supporting transit facilities.



**LEGEND**

**LAND USE DESIGNATION**

- |  |  |  |   |  |                          |
|--|--|--|---|--|--------------------------|
|  | Residential Foothill (1du/ac)          |  | Neighborhood Commercial                             |  | Business Enterprise      |
|  | Residential Estate (2du/ac)            |  | Historic Commercial Downtown                        |  | Public/Quasi-Public      |
|  | Residential Low (5.8 du/ac)            |  | Regional/Subregional Commercial                     |  | Hillside Wilderness Area |
|  | Residential Medium (5.8-17.4 du/ac)    |  | Office/Research and Development/Light Manufacturing |  | Angeles National Forest  |
|  | Residential Medium-High (5.8-54 du/ac) |  | Manufacturing                                       |  | Planned Development      |
|  | Residential High (54 du/ac)            |  |   |  |                          |

**BASE FEATURES**

- |  |                          |
|--|--------------------------|
|  | City Boundary            |
|  | Major Road               |
|  | Freeway                  |
|  | Stream or Channel        |
|  | Flood Control Basin      |
|  | Forest/Recreational Area |

Source: City of Monrovia, and Los Angeles County, GIS 2006.

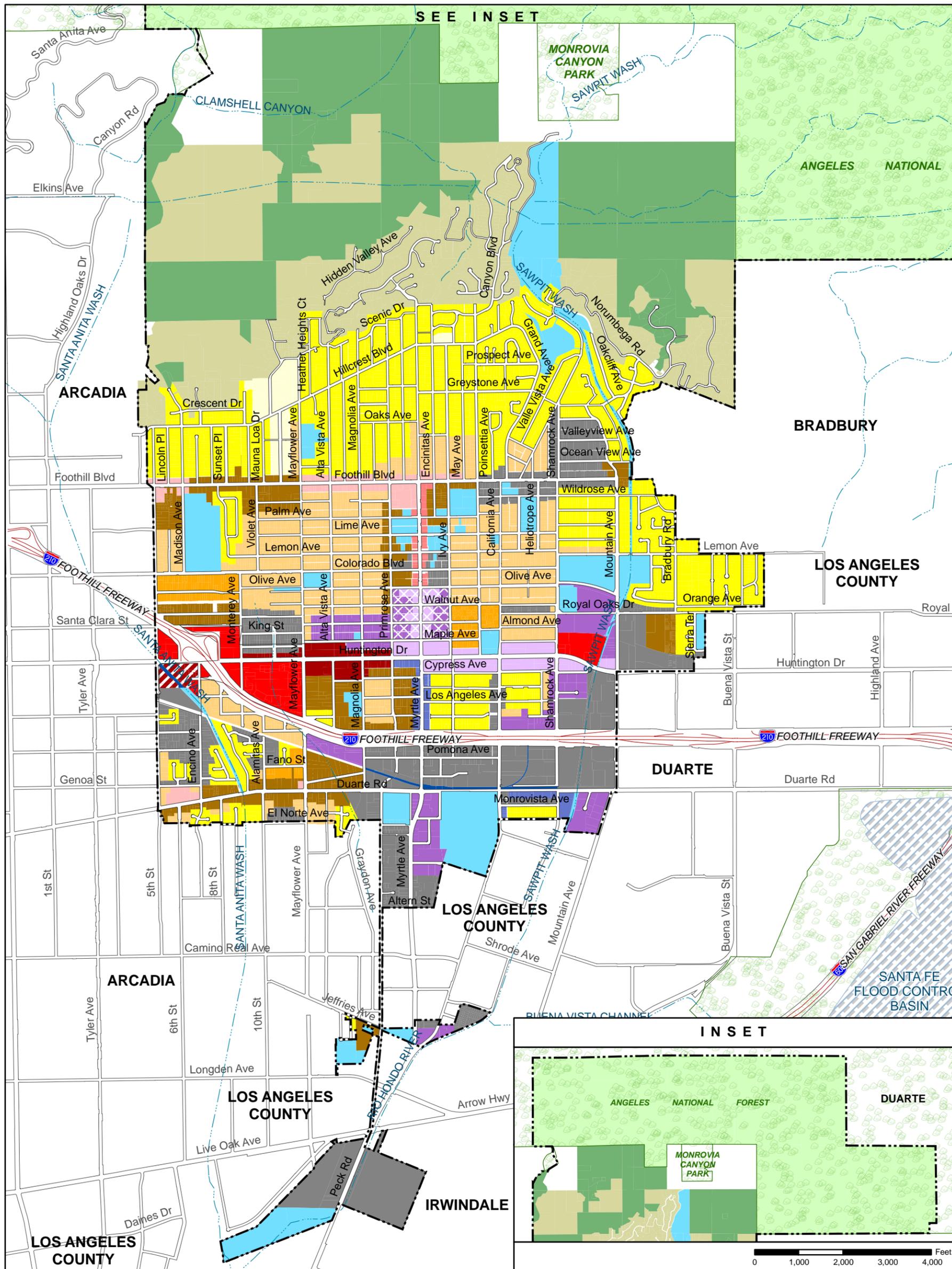


1 1/4 inch equals 1,250 feet  
 0 .25 .50 1 Miles

0 1,000 2,000 3,000 4,000 Feet

**Figure 2-3**  
**Existing Land Use Policy Map**

Back of Figure 2-3



**LEGEND**

**LAND USE DESIGNATION**

- |  |  |  |   |  |   |
|--|--|--|---|--|---|
|  | Residential Foothill (1du/ac)          |  | Neighborhood Commercial                             |  | Manufacturing                             |
|  | Residential Estate (2du/ac)            |  | Historic Commercial Downtown                        |  | Business Enterprise                       |
|  | Residential Low (5.8 du/ac)            |  | Regional/Subregional Commercial                     |  | Public/Quasi-Public                       |
|  | Residential Medium (5.8-17.4 du/ac)    |  | Retail Corridor Commercial                          |  | Hillside Wilderness Area                  |
|  | Residential Medium-High (5.8-54 du/ac) |  | Retail Corridor Mixed Use                           |  | Angeles National Forest                   |
|  | Residential High (54 du/ac)            |  | Office/Research and Development/Light Manufacturing |  | Planned Development                       |
|  |  |  |   |  | Specific Plan/Planned Development Overlay |

**BASE FEATURES**

- |  |                          |
|--|--------------------------|
|  | City Boundary            |
|  | Major Road               |
|  | Freeway                  |
|  | Stream or Channel        |
|  | Flood Control Basin      |
|  | Forest/Recreational Area |

Source: City of Monrovia, and Los Angeles County, GIS 2006.

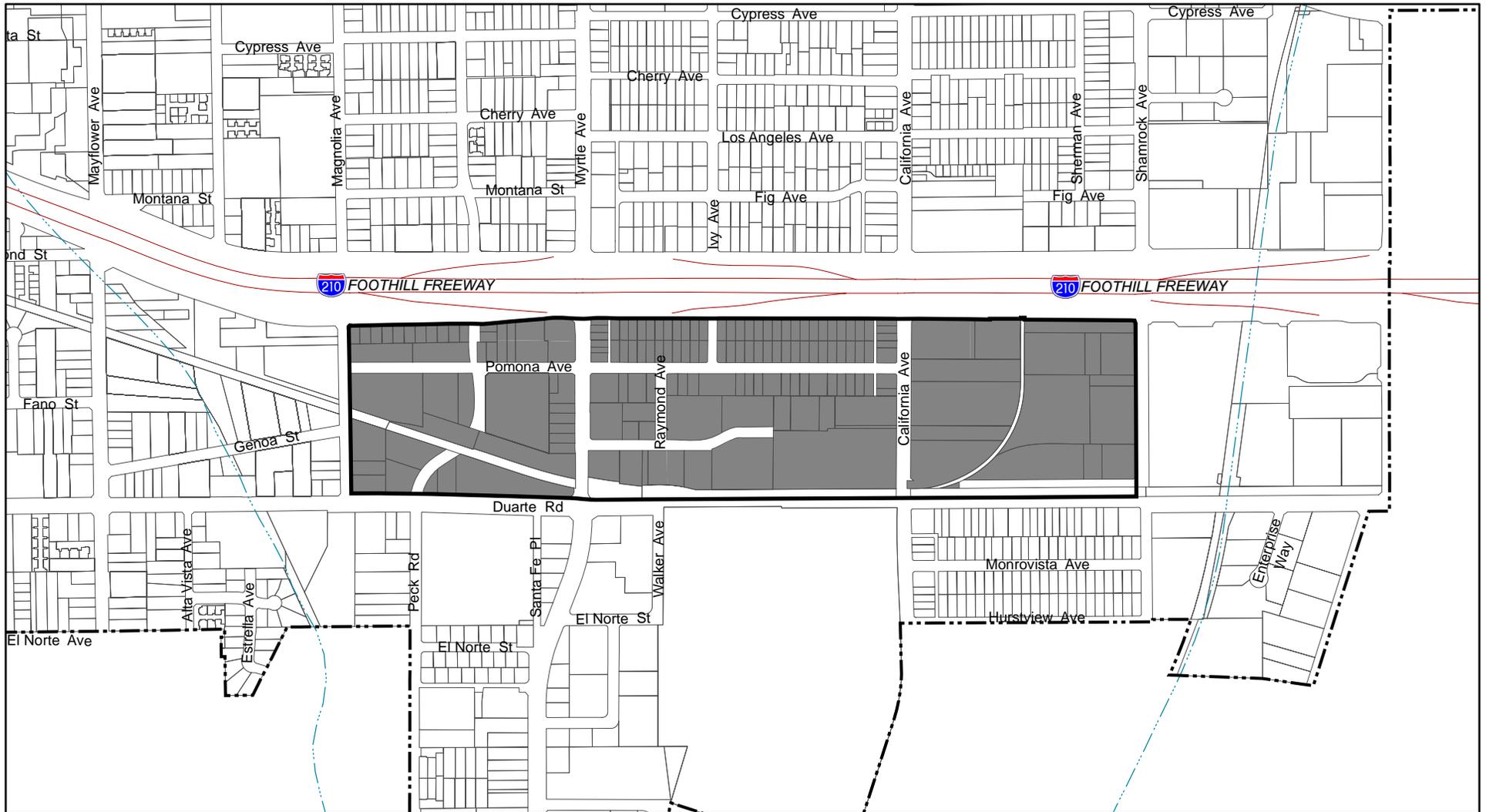


1 1/4 inch equals 1,250 feet  
 0 .25 .50 1 Miles

0 1,000 2,000 3,000 4,000 Feet

**Figure 2-4  
Proposed Land Use Policy Map**

Back of Figure 2-4



**PROPOSED LAND USE DESIGNATION**

 Planned Development - Station Square Transit Village

**BASE FEATURES**

 City Boundary  
 Transit Village Corridor



SCALE: 1 INCH = 800 FEET  
 UPDATED: EDAW, FEBRUARY 20, 2007.  
 SOURCE: CITY OF MONROVIA, AND LOS ANGELES COUNTY, GIS 2006.

Figure 2-5  
 Station Square Transit Village  
 Focus Area

**Parking:** A public parking structure of approximately 600 parking spaces to support the transit station and an approximate total of 8,652 parking spaces for adjoining commercial and/or residential uses, as well as public surface parking lots. Parking will be provided consistent with requirements set forth in the Monrovia Municipal Code, with shared parking arrangements encouraged to recognize the transit-oriented development.

Subsequent actions required to implement the proposed Land Use Element policies for this portion of the planning area will include the rezoning of properties with a land use designation of PD-Station Square Transit District. Pursuant to Title 17 (Zoning Code) of the Monrovia Municipal Code, appropriate zoning designations generally will be PD, which will allow unique development standards to be applied as part of each development application.

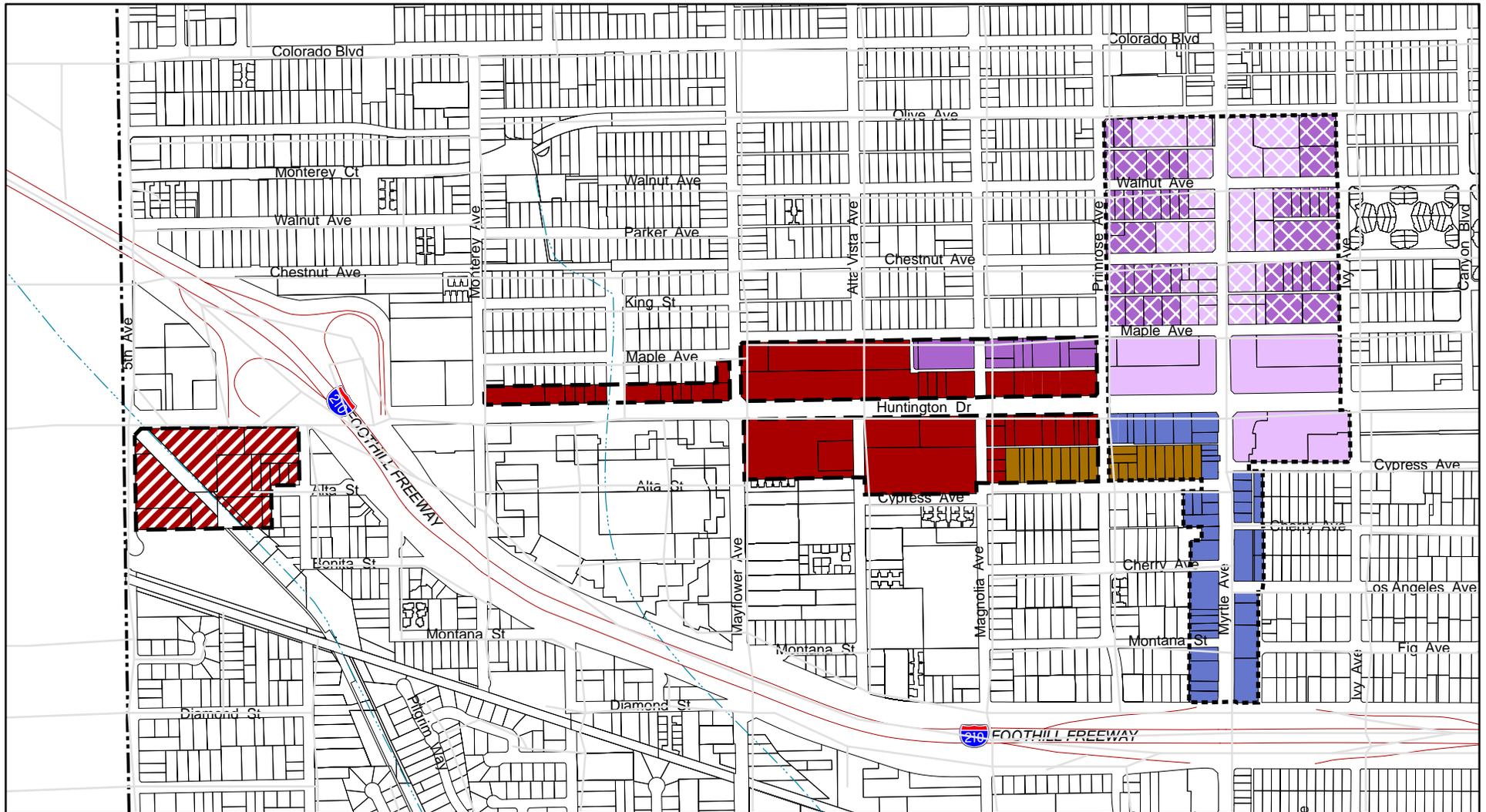
The main portion of the West Huntington Drive Corridor is generally bound by Maple Avenue to the north, Primrose Avenue to the east, Cypress Avenue and Huntington Drive to the south, and Monterey Avenue to the west. A detached portion of this focus area is located west of I-210 and is generally bound by Huntington Drive to the north, Encino Avenue to the east, the light rail tracks to the south, and 5<sup>th</sup> Avenue to the west (see Figure 2-2). This focus area currently consists of primarily of commercial uses with some office, light manufacturing, and manufacturing uses (approximately 1.07 million square feet of non-residential uses). There are approximately 32 existing residential dwelling units in this focus area.

The City proposes to redesignate properties along the West Huntington Drive Corridor to allow for the gradual transition of the corridor to a multi-function urban street. The proposed Land Use Element and subsequent zone changes will create: 1) two new commercial land use designations to accommodate diverse commercial uses, and 2) opportunities for mixed-use commercial and residential developments. The proposed Land Use Element will establish the following new land use designations within this area (see Figure 2-6):

- **Retail Corridor Commercial (RCC).** This designation is intended for large-scale retail, entertainment, and office facilities serving both the local and subregional markets. The uses along the ground-floor level fronting Huntington Drive will be limited to neighborhood commercial uses. The maximum intensity of development is a floor-area ratio of 2:1. New developments will be encouraged to implement shared parking or provide parking away from the street frontage (i.e., structure, subterranean, behind street-facing retail stores).
- **Retail Corridor Mixed Use (RCM).** This designation is intended for large-scale retail, entertainment, hotels, and office facilities serving both the local and subregional markets along West Huntington Boulevard. The uses along the ground-floor level fronting Huntington Drive will be limited to neighborhood commercial uses. Uses located above the ground-floor level along Huntington Drive may be uses other than residential. The maximum intensity of development is a floor-area ratio of 2:1. This land use designation will also accommodate residential developments at a maximum density of 50 units per acre in parcels facing existing residential units. Residential uses are not permitted along the parcels fronting Huntington Drive.

The following land use changes are proposed within this portion of the project site:

- **Between Mayflower Avenue and Primrose Avenue (north side):** Parcels located along the north side of Huntington Drive will be designated *Retail Corridor Commercial and Manufacturing*.



**PROPOSED LAND USE DESIGNATION**

-  Residential High (54 du/ac)
-  Retail Corridor Commercial
-  Retail Corridor Mixed Use
-  Office/Research and Development/Light Manufacturing

-  Manufacturing
-  Business Enterprise
-  Specific Plan/Planned Development Overlay

**BASE FEATURES**

-  City Boundary
-  West Huntington Drive Corridor
-  South Myrtle Avenue Corridor



SCALE: 1 INCH = 800 FEET  
 UPDATED: EDAW, FEBRUARY 20, 2007.  
 SOURCE: CITY OF MONROVIA, AND LOS ANGELES COUNTY, GIS 2006.

**Figure 2-6**  
**West Huntington Drive**  
**and South Myrtle Avenue**  
**Focus Areas**

- **Between Mayflower Avenue and Primrose Avenue (south side):** Parcels located along the south side of Huntington Drive will be designated *Retail Corridor Commercial*. Parcels north of Cypress Avenue will be designated *High-Density Residential (RH)*.
- **Between Monterey Avenue and Mayflower Avenue (north side):** Parcels facing Huntington Drive will be designated *Retail Corridor Commercial*.
- **Between Fifth Avenue and Encino Avenue (south side):** To match existing commercial land uses along Huntington Drive, the area west of the Santa Anita Wash will be designated *Retail Corridor Mixed Use*, including the area currently designated PD-8.

Land use policies will establish the following parameters for land uses and development approaches within this portion of the City:

**Residential:** A maximum of 128 dwelling units will be constructed within this portion of the City. Approximately 41 dwelling units with maximum density of 50 dwelling units per acre (du/ac) in the area designed *Retail Corridor Mixed Use* between Fifth Avenue and Encino Avenue will be constructed as stand-alone product located adjacent to existing adjacent land uses. Residential units may be built as stand-alone product or as part of a horizontally or vertically integrated mixed-use development. Residential uses are not permitted immediately adjacent to Huntington Drive, but are recommended in the areas adjacent to existing residential neighborhoods. Additionally, 87 dwelling units will be built in the mixed use area located north of Cypress Avenue.

**Commercial:** A maximum of 1,010,868 square feet of retail commercial and mixed use will be constructed facing Huntington Drive

**Manufacturing:** A maximum of 66,791 square feet of manufacturing uses will be permitted in this portion of the project site.

Subsequent actions required to implement proposed Land Use Element policies within this portion of the City will include the rezoning of properties with a General Plan land use designation of RCC-Retail Corridor Commercial and RCM-Retail Corridor Mixed Use. Pursuant to Title 17 (Zoning) of the Monrovia Municipal Code, the following new zoning districts will be created to implement unique development standards for each development application:

**General Plan Land Use Designation**

RCC – Retail Corridor Commercial  
RCM – Retail Corridor Mixed Use  
M – Manufacturing  
PD – Planning Development  
RH - Residential High Density

**Zoning Designation**

RCC – Retail Corridor Commercial  
RCM – Retail Corridor Mixed Use  
M – Manufacturing  
PD - Planned Development  
RH - Residential High Density

The South Myrtle Avenue focus area is generally bound by Olive Avenue to the north, Ivy Avenue to the east, I-210 to the south, and Primrose Avenue to the west. It encompasses approximately 51 acres. The existing uses are a mix of industrial, office, and retail uses (677,674 square feet of non-residential development). There are 33 residential dwelling units currently located in this focus area.

The proposed project will establish the following policies for land use and development approaches for this portion of the City (see Figure 2-6):

- Residential:** Residential uses at a maximum density of 54 dwelling units per acre.
- Office:** Office development may be built as stand-alone product or as part of a horizontally or vertically integrated mixed-use development.
- Retail/Dining:** A broad variety of retail/dining space. Drive-through businesses and any single retail space encompassing more than 40,000 square feet of gross floor area are expressly prohibited.
- Manufacturing:** Manufacturing and industrial space.

Subsequent actions required to implement proposed Land Use Element policies within this portion of the City will include the rezoning of properties. Pursuant to Title 17 (Zoning) of the Monrovia Municipal Code, the following new zoning designations will be used to implement unique development standards for each development application:

**General Plan Land Use Designation**

RCC – Retail Corridor Commercial  
 O/RD/LM – Office/Research and  
 Development/Light Manufacturing  
 BE - Business Enterprise  
 PD – Planning Development  
 M – Manufacturing  
 R – Recreation

**Zoning Designation**

C-R/S – Commercial Regional/Sub-regional  
 O/RD/LM – Office/Research and  
 Development/Light Manufacturing  
 BE - Business Enterprise  
 PD - Planned Development  
 M – Manufacturing  
 P/QP – Public/Quasi-Public

The proposed Land Use Element, through text and the proposed Land Use Policy Map (see Figure 2-4), establishes the distribution and intensity of land use within the City and identifies where growth and development efforts are to be focused through 2030. Growth in the City has been relatively static over the past 20 years. However, the proposed Land Use Element allows for concentrated growth in the three focus areas. Most of the City's growth is expected to occur within these focus areas. Table 2-1 shows a comparison between existing development and estimated potential total development at buildout in 2030 within the focus areas.

**Table 2-1 Existing and Future Projected Development**

Focus Area	Existing Development		Estimated Proposed New Development		Estimated Net New Development	
	Non-Residential Square Footage	Dwelling Units	Non-Residential Square Footage	Dwelling Units	Non-Residential Square Footage	Dwelling Units
South Myrtle Avenue	677,674	33	1,539,489	167	861,815	134
West Huntington Drive	1,076,258	32	1,079,938	128	3,680	96
Station Square Transit Village	1,244,227	84	1,371,851	3,600	127,624	3,516
Focus Area Total	2,998,159	149	3,991,278	3,895	993,119	3,746

As shown in Table 2-1, it is estimated that approximately 3,746 net new residential units and approximately 993,119 square feet of net new non-residential development will be constructed within the focus areas. This represents buildout in the focus areas pursuant to the proposed Land Use Element.

The total current population for the City of Monrovia in 2007 is approximately 39,147 persons. While the 1993 General Plan anticipated a population of 49,147 persons by 2013, total growth in Monrovia has been relatively static over the past 20 years. From a historic standpoint, Monrovia's population has grown approximately one percent per year since the 1980 census. This trend is expected to continue in the remainder of the City, outside of the focus areas. During the 23-year time period of the proposed Land Use and Circulation Elements, growth within the rest of the City will primarily occur from the reuse and redevelopment of existing parcels. As such, the average annual growth rate for the entire City will represent approximately 2.2 percent per year, or a 50 percent increase in population in 2030 over existing conditions. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon.

## Proposed Circulation Element

The proposed Circulation Element meets the requirements for a Circulation Element set forth in Section 65302(b) of Government Code. The intent of the Circulation Element is to provide the City a circulation system which is safe, sensible, and provides efficient movement of people and goods throughout Monrovia. The anticipated level of future development in Monrovia will generate increased levels of traffic and place additional demands on the City's circulation system. In an effort to alleviate traffic congestion and improve mobility, street improvements, travel demand management strategies, and additional transit opportunities have been identified. To help meet these demands and achieve balanced growth, the proposed Circulation Element provides specific goals and policies.

The proposed Circulation Element establishes the following functional changes to the City's classification of streets:

- Myrtle Avenue between Evergreen Avenue and Duarte Road will remain a primary arterial, but a new cross-section standard is proposed to enhance north-south traffic flow. The right-of-way will increase from 84 feet to 120 feet allowing for the provision of an additional lane in each direction on this roadway segment. The existing right-of-way south of Duarte Road is 100 feet and is configured for four through lanes. This portion of Myrtle Avenue could

ultimately be reconfigured to allow for six through lanes to providing additional capacity during peak periods and throughout the day.

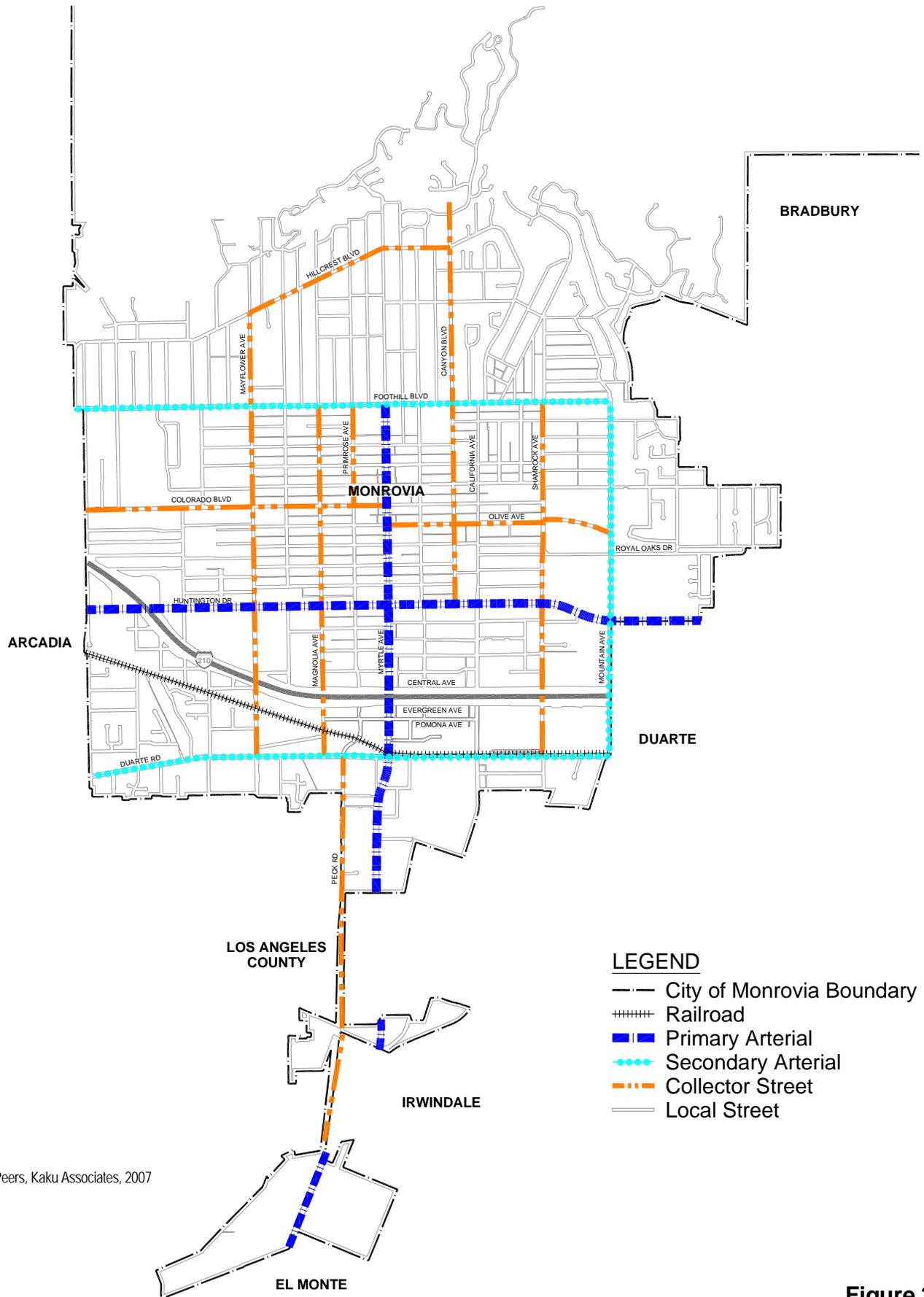
- Myrtle Avenue between Maple Avenue and Foothill Boulevard is proposed to be redesignated as a collector street (downgraded from a primary arterial street) to better reflect its character and function through Old Town Monrovia.
- California Avenue is proposed to be redesignated as a secondary arterial (from a local street) between Duarte Road and Huntington Drive to improve the north-south capacity through the City. This segment currently has a right-of-way of 80 feet, the minimum for a secondary arterial, and provides four through lanes. By reclassifying the segment of California Avenue south of Duarte Road from a local street to a secondary arterial, it will match the functional classification of the adjacent portion of California Avenue that lies within the jurisdiction of Los Angeles County.
- Reclassify Royal Oaks Drive between Shamrock Avenue and the eastern City limits to collector street (currently a local street).
- Upgrade and widen Central Avenue and Evergreen Avenue between Mayflower Avenue and the eastern City limits to collector streets (currently local streets).
- Reconfigure Huntington Drive to allow for 6 through lanes (currently 4 through lanes with 100-foot right-of-way) to provide additional capacity during peak periods and throughout the day.

In addition, the proposed Circulation Element allows for the following changes:

- Designation of Myrtle Avenue between Old Town Monrovia and the Station Square Transit Village area as an enhanced pedestrian route, with the goal of providing enhanced pedestrian access to the proposed Gold Line light rail station.
- Strengthening of policies related to the Gold Line.
- Addition of policies regarding local fixed-route transit.
- Addition of policies to improve non-motorized modes of transportation, including pedestrians and bicycles.

No changes are proposed in the West Huntington Drive and South Myrtle Avenue focus areas. However, the proposed Circulation Element allows for Railroad Avenue to be realigned to parallel Pomona Avenue and a new road will be created where Pomona Avenue and the realigned Railroad Avenue meet and continue east to California Avenue (see Figure 2-5). With the development of new park space, Pomona Avenue will no longer provide a continuous connection between Primrose Avenue and Magnolia Avenue. As part of individual development projects in the Station Square Transit Village area, new internal local roads will be constructed. The proposed Circulation Element does not propose, but would accommodate, the Gold Line station and terminal facilities that are to be constructed on the northwest corner of Myrtle Avenue and Duarte Road. This project was analyzed and approved by the Metro Gold Line Construction Authority in February 2007.<sup>1</sup> Figure 2-7 shows the City's existing circulation system and Figure 2-8 shows the City's proposed circulation system.

<sup>1</sup> Metro Gold Line Foothill Extension Construction Authority and U.S. Department of Transportation. *Gold Phase II Pasadena to Montclair – Foothill Extension Draft Environmental Impact Statement/Environmental Impact Report*. April 2004.

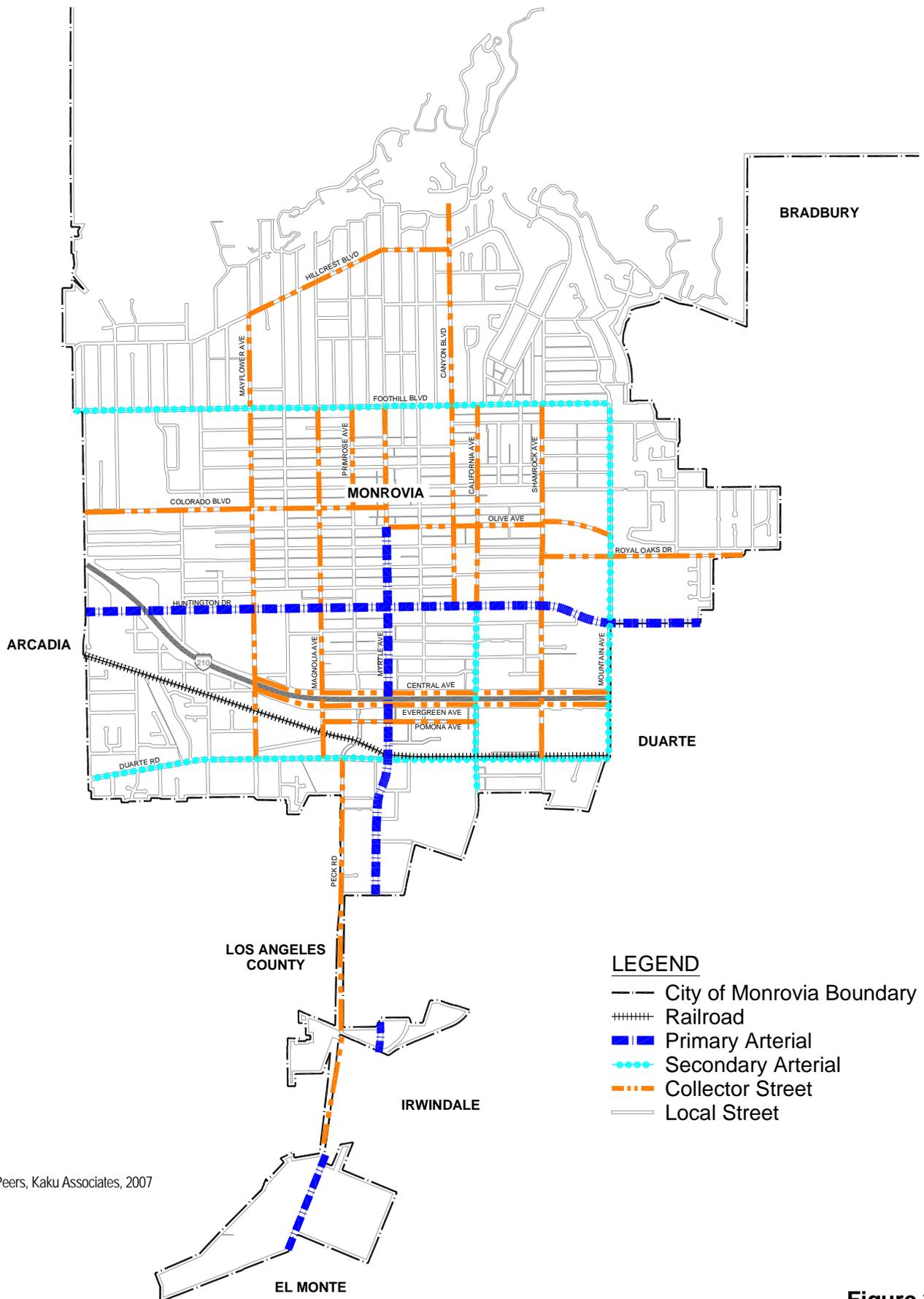


Source: Fehr & Peers, Kaku Associates, 2007



No Scale

**Figure 2-7**  
**Existing Circulation System**



**LEGEND**

- City of Monrovia Boundary
- ++++ Railroad
- Primary Arterial
- Secondary Arterial
- Collector Street
- Local Street

Source: Fehr & Peers, Kaku Associates, 2007



No Scale

**Figure 2-8  
Proposed Circulation System**

The proposed Circulation Element establishes specific level of service (LOS) criteria to identify maximum desirable daily level of traffic volume on different types of roadways. LOS is a qualitative measure used to describe the condition of traffic flow at an intersection and ranges from excellent condition at LOS A to overloaded conditions at LOS F. For the City of Monrovia, the following LOS designation is deemed suitable:

<u>Type of Street</u>	<u>Maximum Desirable Daily LOS (V/C)</u>
Primary Arterial	LOS D (V/C ≤ 0.90)
Secondary Arterial	LOS Mid-D (V/C ≤ 0.85)
Collector Street	LOS C (V/C ≤ 0.80)
Local Street	LOS A (V/C ≤ 0.60)

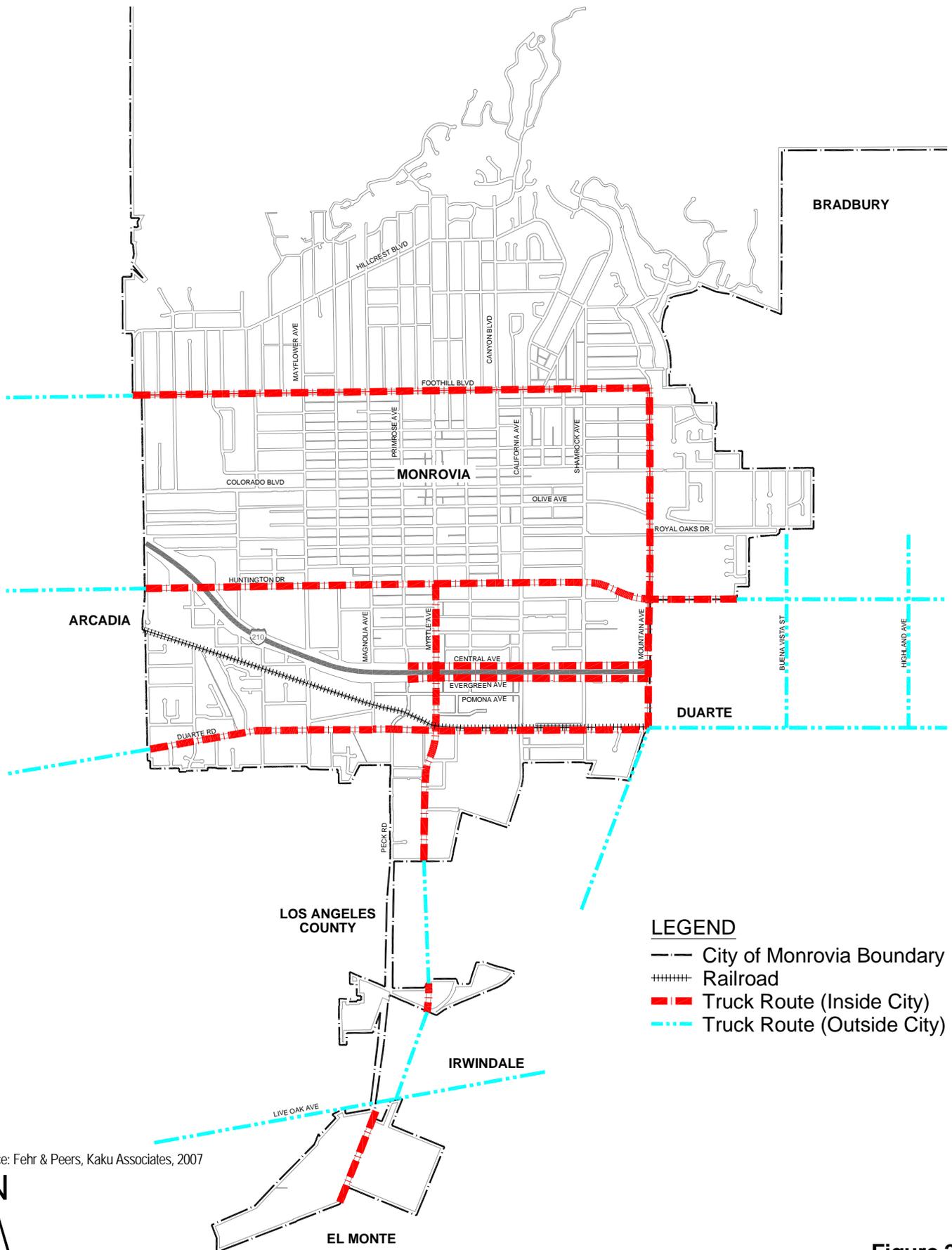
**Public Transportation Plan:** Regional public transportation will be improved with the completion of the proposed Gold Line light rail service connecting Monrovia with the City of Los Angeles and other cities in the region. The proposed Circulation Element calls for the City to coordinate improvements to the Monrovia Trolley routes with Metro and Foothill Transit to provide the most effective service for the public. All public transportation facilities must comply with the requirements of the Americans with Disabilities Act (ADA).

**Truck Route Plan:** There are five east-west and two north-south truck routes through the City (see Figure 2-9). The use of Foothill Boulevard as a truck route is retained because maintaining its use is considered vital for commercial truck circulation within the City. The City will periodically monitor the number of truck trips on the segment of Myrtle Avenue between Evergreen Avenue and Duarte Road. Further, the City will continue to enforce existing ordinances relating to the use of City streets by heavy vehicles.

**Bicycle Facilities Plan:** Class II bikeways (bike lanes) have been established on several of the City’s streets, including Colorado Boulevard and Olive Avenue. Class II bikeways (bike routes) have been established on Magnolia Avenue, Shamrock Avenue, and Greystone Avenue. Future expansion of the network is planned on Magnolia Avenue and Shamrock Avenue south of Lemon Avenue and on Duarte Road. Figure 2-10 shows the bike routes.

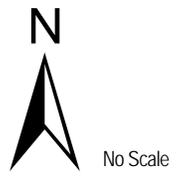
**Pedestrian Facilities Plan:** Pedestrian facilities include sidewalks, pedestrian street crossings, and walkways (e.g., pedestrian malls). These facilities also include pedestrian trails in hilly areas (with or without mounted hand rails), bus shelters, curb-cut ramps, and push button devices and pedestrian crossing indicators at signalized intersections. The proposed Circulation Element maintains the existing pedestrian facilities and encourages new developments to provide pedestrian routes to adjacent developments. The City will continue to install and maintain facilities that comply with the ADA requirements. To promote pedestrian trips, the proposed Circulation Element calls for the City to establish a Citywide Pedestrian Master Plan to identify existing gaps or other deficiencies, prioritize necessary improvements, and identify funding sources to implement those improvements.

**Parking Plan:** In order to maintain an adequate supply of convenient parking facilities, the proposed Circulation Element calls for the City to periodically review Zoning Code parking requirements and revise the Zoning Code as necessary. All new developments are required to comply with the City’s off-street parking standards. In the downtown business district or other areas where the on-site parking supplies are determined inadequate for existing uses, the proposed Circulation Element calls for the City to establish a parking assessment district or develop a mechanism to allow for cooperative covenanted parking agreements. The proposed

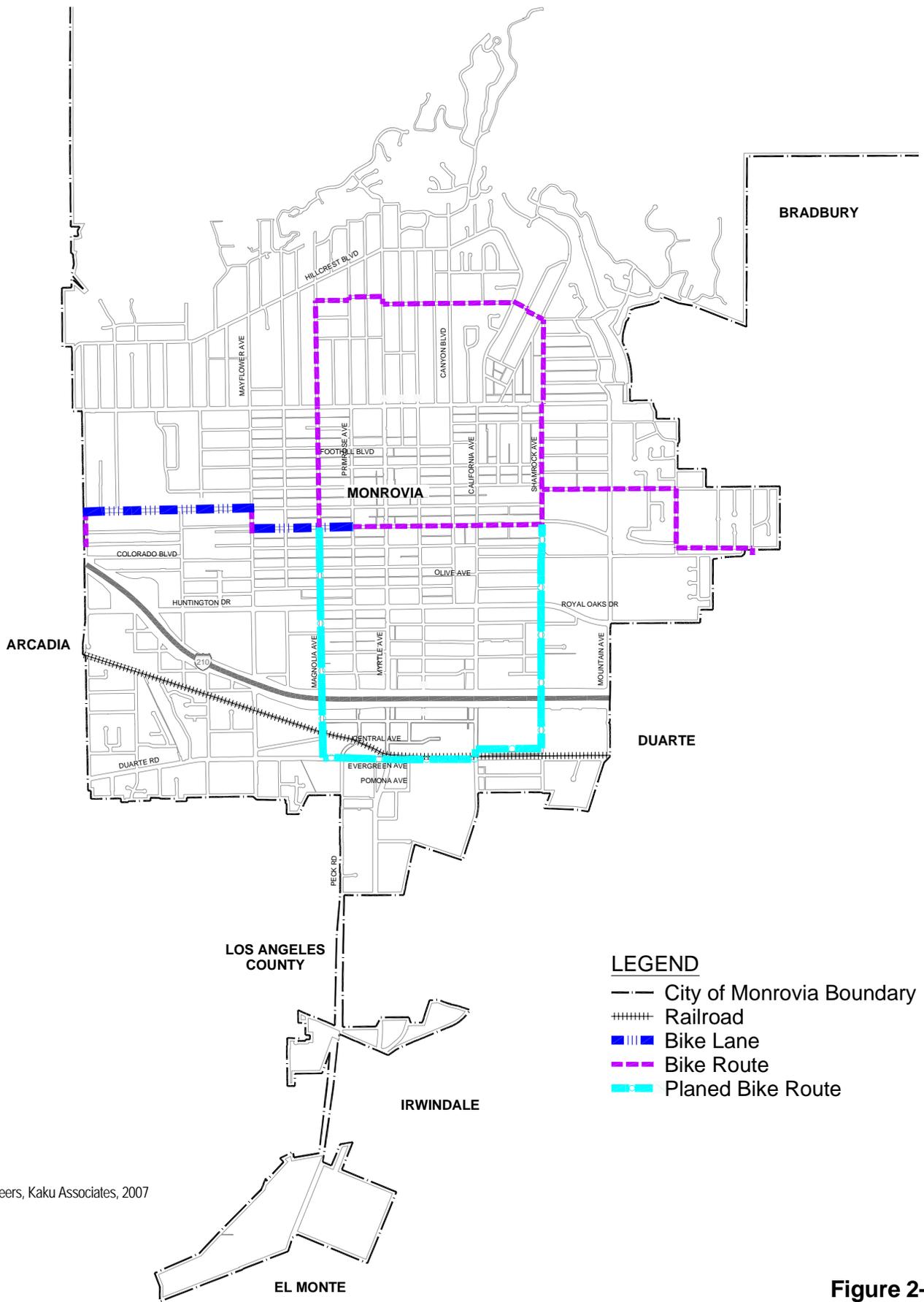


- LEGEND**
- City of Monrovia Boundary
  - +++++ Railroad
  - Truck Route (Inside City)
  - Truck Route (Outside City)

Source: Fehr & Peers, Kaku Associates, 2007



**Figure 2-9**  
**Truck Routes**



Source: Fehr & Peers, Kaku Associates, 2007



No Scale

**Figure 2-10  
Bike Routes**

Circulation Element maintains the City's existing policies of requiring new developments to submit Transportation Demand Management (TDM) plans to the City, potentially including the designation of preferentially-located parking for carpool vehicles and implementation of the "Cash-Out Program for Non-Owned Employer Parking." The City has developed a park-and-ride facility north of the Gold Line light rail station and an expanded park-and-ride facility south of the station.

## Intended Uses of the Program EIR

This Program EIR will be used by the City and other responsible agencies to provide information necessary for environmental review of discretionary actions related to adoption and long-term implementation of the proposed project. The EIR may be used by the following agencies for the following discretionary actions:

<b>Responsible Agency</b>	<b>Action</b>
Monrovia City Council	Adoption of the proposed project
	Adoption of amendments to Title 17 (Zoning) of the Monrovia Municipal Code
Monrovia Planning Commission	Recommendation to City Council to adopt the proposed project
	Recommendation to City Council to adopt amendments to Title 17 (Zoning) of the Monrovia Municipal Code
	Recommendation to City Council to adopt any ordinances, guidelines, programs, or other mechanisms that implement the proposed project
Other City Commissions and Boards	Recommendation to City Council to adopt specific ordinances, guidelines, programs, or other mechanisms that implement the proposed project, and amendments to Title 17 (Zoning) of the Monrovia Municipal Code
Others as necessary	Adoption of plans and programs tangential to the Monrovia General Plan

## Relationship to Local and Regional Plans

### City of Monrovia Zoning Ordinance

The Zoning Ordinance, Title 17 of the City's Municipal Code provides additional development and performance standards for development of land uses and related activities. The City intends to adopt a revised Title 17, following adoption of the proposed project. The revised

Zoning Ordinance will include the creation of additional zoning categories to correspond to the Land Use Element's land use designations. The revised Zoning Ordinance will serve as the primary implementation tool for the Land Use Element and the goals and policies it contains. A revised Zoning Map, consistent with the General Plan Land Use Policy Map, will also be adopted to identify the zoning categories applied to each parcel of land within the City. Together, the Zoning Ordinance and Map are used to identify the specific types of use, intensity, and development standards applicable to given parcels or areas of land.

## Southern California Association of Governments

The Southern California Association of Governments (SCAG) assists cities, counties, and other agencies by reviewing local government plans and individual projects for consistency with the regional plans, including the Regional Comprehensive Plan and Guide (RCPG), the Regional Mobility Element/Regional Transportation Plan (RTP), the Growth Management Plan, and the federally mandated Air Quality Management Plan (AQMP). The AQMP is submitted to the federal Environmental Protection Agency as the State's Implementation Plan (SIP) for attaining federal air quality standards. All regional plans are interrelated and work in tandem to manage Southern California's growth and development while meeting federal and state air quality standards. To be in conformance with regional growth and air quality plans, a plan should:

- Be consistent with the subregion's jobs/housing balance performance ratio (i.e., the ratio of employment to housing units within a subregion, as defined by SCAG).
- Reduce vehicle trips and vehicle miles traveled to the maximum extent feasible by implementing transportation demand management strategies or other measures.
- In the environmental document, include an air quality analysis which demonstrates that the project will not have a significant negative impact on air quality in the long term.

## SCAG Regional Comprehensive Plan and Guide

The RCPG was developed with active participation from local agencies, elected officials, the business community, community groups, private institutions, and private citizens to improve regional transportation services, minimize traffic congestion, improve air quality and quality of life, and protect environmental quality throughout the six-county SCAG region. The RCPG provides a framework for decision making by local governments, assisting them in working together through their subregional organizations to meet federal and State mandates consistent with regional goals. Monrovia is one of 30 member governments that form the San Gabriel Valley Council of Governments, a SCAG subregion.

## Air Quality Management Plan

The AQMP is prepared for any region designated as a non-attainment area. A non-attainment area is a geographic area identified by the U.S. Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB) as not meeting federal or state standards for a given pollutant. The AQMP, updated on a three-year cycle, contains policies and measures designed to achieve federal and state standards in the South Coast Air Basin (Basin) and portions of the surrounding area, which is a non-attainment area for ozone (O<sub>3</sub>), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). The most recent AQMP was adopted on June 1, 2007.

## Congestion Management Program

The County of Los Angeles prepares a Congestion Management Program (CMP) to address the impact of local growth on the regional transportation system and the County's mobility needs. The CMP is required by statute (Section 65089 of the California Government Code) to have the following six elements: (1) a system of highways and roadways with minimum level of service performance measurements; (2) a performance element that includes performance measures to evaluate multi-modal system; (3) a travel demand element promoting alternative transportation; (4) a program to analyze the impacts of local land use decisions on the regional transportation system, including an estimate of the cost of mitigating those impacts; (5) a 7-year capital improvement program of projects that benefit the CMP system; and (6) a deficiency plan.

The CMP is incorporated into a 20-year RTP, contained in SCAG's RCPG, to establish the magnitude of congestion problems that face the entire region and the types of solutions that will be necessary to maintain mobility. The CMP relates these long-term regional mobility goals to specific actions at the County and local level, defines implementation strategies, and establishes a system to monitor the effectiveness of transportation improvements. Under the County's CMP, local jurisdictions are required to evaluate impacts of development on the CMP routes and intersections, and mitigate adverse impacts of development within their jurisdictions through other physical and nonphysical improvements, including transportation demand and system management programs and measures.

## Los Angeles County Solid Waste Management Plan

The County of Los Angeles prepares and administers solid waste management plans to project the capacity of the County landfills and other facilities to accommodate future demand generated by countywide growth. Local jurisdictions, including the City of Monrovia, need to assess the effect of new development on County facilities and in response, and must develop and implement programs to reduce the amount of solid waste within their boundaries to be disposed of at these facilities.

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# 3.0 *Environmental Impacts and Mitigation Measures*

This section examines potentially significant environmental effects associated with adoption and implementation of the proposed Land Use and Circulation Elements and identifies mitigation measures to reduce impacts found to be potentially significant in the EIR analysis. Each environmental issue for which the Initial Study (see Appendix A) identified a potentially significant impact is discussed in the following manner:

**Environmental Setting** describes the existing environmental conditions in the City to provide a foundation for comparing “before the project” and “after the project” environmental conditions.

**Thresholds Used to Determine Level of Impact** defines and lists specific criteria used to determine whether an impact is considered to be potentially significant. Appendix G of the CEQA Guidelines; local, state, federal or other standards applicable to that impact area; and officially established thresholds of significance are the major sources used in crafting criteria appropriate to the specifics of a project, since “. . . an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting” (CEQA Guidelines Section 15064 [b]). Principally, “. . . a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382).

**Environmental Impact** presents evidence, based to the extent possible on scientific and factual data, about the cause and effect relationship between the project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained to the extent possible to provide facts in support of finding the impact to be or not to be significant. In determining whether impacts may be significant, all of the potential effects, including direct effects, reasonably foreseeable indirect effects, and considerable contributions to cumulative effects, are considered. If, after thorough investigation, a particular impact is too speculative for evaluation, that conclusion is noted (CEQA Guidelines Section 15145). Such may be the case for a number of issue areas given that the project is a multiple year plan, and inherent uncertainties arise in predicting land use activities so far in the future. The project was prepared through a process which considered possible environmental impacts, allowing mitigation to be addressed by plan policies. When a specific feature of the project, whether it be a policy, standard, or guideline, avoids or reduces an environmental impact, that feature is identified.

**Mitigation Measures** identify means to reduce or avoid the potentially significant impact in cases where the EIR analysis determines impacts to be potentially significant. Standard existing regulations, requirements, and procedures that are applied to all similar projects are taken into account in identifying what additional project-specific mitigation may be needed to reduce significant impacts. Mitigation, in addition to measures that the lead agency will implement, can also include measures that are within the responsibility and jurisdiction of another public agency (CEQA Guidelines Section 15091[a][2]).

**Level of Impact after Mitigation** indicates what effects will remain after application of mitigation measures, and whether the remaining effects are considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “unavoidable significant impacts.” In order to approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines Section 15093 [a]).

# 3.1 Aesthetics

The Initial Study identified light and glare as a potentially adverse aesthetic impact associated with adoption and implementation of the proposed Land Use Element. This chapter does not address specific components of the proposed Circulation Element. Transportation improvements and components included in the proposed Circulation Element promote the development of an efficient transportation system and protect residential neighborhoods from through traffic. Streetscape improvements are addressed in the proposed Land Use Element and are not covered in the proposed Circulation Element. As such, the discussion in this chapter focuses on the proposed Land Use Element.

## Environmental Setting

The City of Monrovia is located in the San Gabriel Valley. The northern portion of the City extends into the foothills of the San Gabriel Mountains and abuts the Angeles National Forest. The terrain in the City slopes gently south from the foothills. The San Gabriel Mountains are the most dominant visual feature in the City and serve as a backdrop of views to the north. The mountains are visible from most parts of the City and are most notable along north-south arterial roadways, such as Myrtle Avenue. Beyond the landforms, Monrovia contains a rich architectural heritage that defines the scenic character within many neighborhoods. For example, Old Town Monrovia attracts visitors throughout the region to peruse its historic main street.

The majority of the City is largely urbanized, with the exception of the portion of the City that abuts the foothills. The main sources of nighttime light and glare currently come from the building interiors, security lighting for surface parking lots, headlights along roadways, and street lights. Daytime glare is produced by the use of reflective materials, such as reflective glass and metals, in building exteriors.

## Regulatory Framework

### Monrovia Zoning Code

Section 17.32.080 of the Monrovia Zoning Code requires that lighting, where provided to illuminate private property, must be arranged so as to reflect away from adjoining property or any public way and to be arranged so as not to cause a nuisance either to highway traffic or to the living environment.

Section 17.32.090 of the Zoning Code relates to glare. Specifically, no direct or reflected glare, whether produced by floodlight, high temperature processes such as combustion or welding, or other processes, so as to be visible from the boundary line of property on which the same is produced, is permitted. Sky-reflected glare from buildings or game courts must be controlled by such reasonable means as are practical to the end that the sky-reflected glare will not inconvenience or annoy persons or interfere with the use and enjoyment of property in and about the area where it occurs.

## Threshold for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not have an adverse effect on a scenic vista, damage scenic resources, and degrade the City's existing visual character. Accordingly, these issues are not further analyzed in this EIR.

The proposed project will result in a significant impact if it will create a new source of light and glare which will adversely affect day or nighttime views in the area.

## Environmental Impact

**AES-1:** *Individual development projects pursuant to implementation of the proposed Land Use Element will create significant light and glare impacts at the localized level in the three focus areas. With implementation of mitigation, the impacts will be reduced to a less than significant level.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses.

Nighttime illumination of outdoor areas can affect people in several ways. For example, where intense lighting is viewed against a dark background, the contrast attracts the attention of the viewer and could be considered a nuisance. Under low-light conditions, the human eye adjusts to the brightest light within the field of view. If the range of light intensity to which the eye is exposed is large, the eye will be relatively insensitive to the more dimly lighted areas within the field of view. In addition, increased illumination can affect the suitability of sleeping areas, use of outdoor areas at natural light levels, and privacy. The degree of impacts may be related to the degree of change from the illumination levels to which people have become accustomed. Typical light sources include street lights, lights to illuminate large surface parking lots, light emitted from the interiors of buildings and residences, and headlights on roadways.

Glare is the discomfort or impairment of vision experienced when the image is excessively bright in relation to the general surroundings. Glare created by lighting systems can be measured for impairment of view. A typical example of the effects of glare is automobile headlights. When viewed directly in front of a vehicle with the headlights on full beam, vision is impaired, resulting in disabling glare. However, when viewed from behind the light source, the same headlights would not impair vision. Glare is also produced by large glass structures or other reflective building materials. Glare can affect both day and nighttime views.

The majority of the City is already fully urbanized, with the exception of the foothills where development is more closely restricted and lot sizes are larger. Monrovia consists of a mix of residential, office, commercial, and manufacturing uses. These uses currently produce light from building interiors, security lighting, parking lot lighting, street lights, and vehicle headlights.

Glare is produced when metallic or reflective glass surfaces are used in building exteriors. Monrovia is already highly developed, particularly within the three focus areas. New development associated with the proposed Land Use Element will primarily replace existing buildings with new structures within the Station Square Transit Village, West Huntington Drive, and South Myrtle Avenue corridors. These new structures will produce light from building interiors, security lighting, parking lot lighting, street lights, and vehicle headlights. The City will continue to enforce Title 17 (Zoning Code) provisions to regulate light and glare in new structures as development projects are proposed pursuant to the proposed Land Use and Circulation Elements. As required under Section 17.32.080 of the Zoning Code, all new development projects will be reviewed to ensure that new lighting is focused into the site so as not to reflect onto an adjoining property or any public way. Buffers, particularly between residential and non-residential uses will be required within the site to prevent new sources of light from spilling onto existing and new residential uses. Thus, light levels within the planning area will not substantially increase with implementation of the proposed Land Use and Circulation Elements. However, new structures could create glare effects if they incorporate reflective building materials into project design. Therefore, depending on the location and scope of development, the impact will be significant at a localized level. Mitigation measures will be required to reduce light and glare of individual development projects to a less than significant level.

## Mitigation Measures

The following mitigation measures will be applied at the individual project level to avoid potential new light and glare effects:

- AES-A** For development proposals subject to environmental review and/or design review, the City will examine potential light and glare effects associated with structures and on-site activities, and will ensure that features are incorporated into projects to avoid any adverse light and glare impacts.
- AES-B** Title 17 (Zoning Code) shall be revised to prohibit the use of reflective glass, metallic, and other highly reflective and glare producing materials in new building construction.

## Level of Impact after Mitigation

With implementation of mitigation measures AES-A and AES-B, impacts of light and glare at the programmatic level will be less than significant. Individual projects may be subject to additional review and analysis under the CEQA.

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## 3.2 Air Quality

The Initial Study identified the following potentially significant air quality impacts requiring analysis in this EIR: conflict with or obstruct implementation of an air quality management plan; violate an air quality standard or contribute substantially to an existing or projected air quality violation; result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard; and expose sensitive receptors to substantial pollutant concentrations.

### Environmental Setting

Monrovia lies within the South Coast Air Basin (Basin), a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

### Climate and Meteorological Conditions

Area climatological conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate onshore daytime breezes, and moderate humidity. All seasons generally exhibit onshore wind flows during the day and offshore flows at night, after the land cools below the temperature of the ocean. The likelihood of strong offshore flows, including Santa Ana winds, is greater during winter than during summer.

The topography and climate of Southern California combine to produce unhealthful air quality in the Basin. Low temperature inversion, light winds, shallow vertical mixing, and extensive sunlight, in conjunction with topographical features such as adjacent mountain ranges that hinder dispersion of air pollutants, combine to create degraded air quality, especially in inland valleys of the basin.

### Regulatory Framework

#### **Federal Clean Air Act**

The federal Clean Air Act (CAA) is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. This law authorizes the EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The CAA was passed in 1963 and has since undergone five major amendment cycles. The latest major amendment cycle was completed in 1990, with prior major amendments having occurred in 1965, 1967, 1970, and 1977.

NAAQS were originally established in 1971 for six criteria pollutants, with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. These six criteria pollutants are carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), suspended particulate matter (PM<sub>10</sub>), and lead (Pb). In 1997, standards for fine particulate matter (PM<sub>2.5</sub>) were added to the NAAQS. The standards

are updated periodically based on scientific studies; the current standards are shown in Table 3.2-1.

Geographical areas or regions are classified as attainment or nonattainment, based upon data that shows whether the ambient air quality meets the NAAQS. The Basin is a federal nonattainment area for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The CAA specifies future dates for achieving compliance with the NAAQS and mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

### **California Clean Air Act**

In 1988, the state legislature passed the California Clean Air Act, which established California's air quality goals, planning mechanisms, regulatory strategies, and standards for progress for the first time. The California Clean Air Act provides the state with a comprehensive framework for air quality planning regulation and sets state air quality standards. The California Ambient Air Quality Standards (CAAQS) incorporate additional standards for most of the criteria pollutants and has set standards for other pollutants recognized in the state (see Table 3.2-1). In general, the state standards are more health protective than the federal standards. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particulates.

CARB is the state agency responsible for protecting public health and the environment from the harmful effects of air pollution. CARB oversees all air pollution control efforts in California, including the activities of 35 independent local air districts. State law vests CARB with direct authority to regulate pollution from motor vehicles, fuels, and consumer products. Primary responsibility for controlling pollution from business and industry lies with the local air districts. The federal government retains the exclusive authority to regulate interstate trucks registered outside California, certain new farm and construction equipment, new locomotives, ships, and aircraft. CARB works in cooperation with the districts and the EPA on strategies to attain state and federal ambient air quality standards and reduce air toxics emissions.

Similar to the EPA, the CARB classifies regions as attainment or nonattainment, indicating how the air quality compares with the CAAQS. The Basin is a state nonattainment area for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

### **South Coast Air Quality Management District**

The SCAQMD is the agency responsible for attaining state and federal clean air standards in the Basin and in portions of the Salton Sea Air Basin and the Mojave Desert Air Basin. The SCAQMD establishes air quality management plans and programs within the Basin and works to improve regional air quality to achieve federal and state standards. The SCAQMD is also responsible for regulating emissions from stationary sources of air pollution. These can include anything from large power plants and refineries to the corner gas station. Monrovia has continued to work with the SCAQMD and in accordance with the applicable AQMP to improve the regional transportation system and regional air quality. Regulation is achieved by the issuing and enforcement of rules and regulations and a process that requires construction and operating permits for any equipment or operations with the potential to emit air pollutants.

Table 3.2-1 National and California Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS <sup>1</sup>		CAAQS <sup>2</sup>
		Primary <sup>3</sup>	Secondary <sup>4</sup>	Concentration <sup>5</sup>
Ozone (O <sub>3</sub> ) <sup>6</sup>	1-Hour	-	Same as Primary Standard	0.09 ppm (180 µg/m <sup>3</sup> )
	8-Hour	0.08 ppm (157 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> ) <sup>9</sup>
Carbon Monoxide (CO)	8-Hour	9 ppm (10 mg/m <sup>3</sup> )	None	9.0 ppm (10 mg/m <sup>3</sup> )
	1-Hour	35 ppm (40 mg/m <sup>3</sup> )		20 ppm (23 mg/m <sup>3</sup> )
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	0.030 ppm (56 µg/m <sup>3</sup> ) <sup>10</sup>
	1-Hour	-		0.18 ppm (338 µg/m <sup>3</sup> ) <sup>10</sup>
Sulfur Dioxide (SO <sub>2</sub> )	Annual Average	0.03 ppm (80 µg/m <sup>3</sup> )	-	-
	24-Hour	0.14 ppm (365 µg/m <sup>3</sup> )	-	0.04 ppm (105 µg/m <sup>3</sup> )
	3-Hour	-	0.5 ppm (1300 µg/m <sup>3</sup> )	-
	1-Hour	-	-	0.25 ppm (655 µg/m <sup>3</sup> )
Suspended Particulate Matter (PM <sub>10</sub> ) <sup>7</sup>	24-Hour	150 µg/m <sup>3</sup>	Same as Primary Standard	50 µg/m <sup>3</sup>
	Annual Arithmetic Mean	Revoked		20 µg/m <sup>3</sup>
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>8</sup>	24-Hour	35 µg/m <sup>3</sup>	Same as Primary Standard	-
	Annual Arithmetic Mean	15 µg/m <sup>3</sup>		12 µg/m <sup>3</sup>
Lead (Pb)	30-Day Average	-	-	1.5 µg/m <sup>3</sup>
	Calendar Quarter	1.5 µg/m <sup>3</sup>	Same as Primary Standard	-
Hydrogen Sulfide (H <sub>2</sub> S)	1-Hour	No Federal Standards		0.03 ppm (42 µg/m <sup>3</sup> )
Sulfates (SO <sub>4</sub> )	24-Hour			25 µg/m <sup>3</sup>
Visibility Reducing Particles	8-Hour (10 am to 6 pm, Pacific Standard Time)			In sufficient amount to produce an extinction coefficient of 0.23 per km due to particles when the relative humidity is less than 70 percent.
Vinyl chloride <sup>9</sup>	24 Hour			0.01 ppm (26 µg/m <sup>3</sup> )

<sup>1</sup> NAAQS (other than O<sub>3</sub>, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when

99 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.

<sup>2</sup> California Ambient Air Quality Standards for O<sub>3</sub>, CO (except Lake Tahoe), SO<sub>2</sub> (1- and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

<sup>3</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

<sup>4</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>5</sup> Concentration expressed first in units in which it was promulgated. Ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

<sup>6</sup> On June 15, 2005 the 1-hour ozone standard was revoked for all areas except the 8-hour ozone nonattainment Early Action Compact Areas (those areas do not yet have an effective date for their 8-hour designations). Additional information on federal ozone standards is available at <http://www.epa.gov/oar/oaqps/greenbk/index.html>.

<sup>7</sup> Due to a lack of evidence linking health problems to long-term exposure to coarse particle pollution, the USEPA revoked the annual PM<sub>10</sub> standard on December 17, 2006.

<sup>8</sup> Effective, December 17, 2006, the USEPA lowered the PM<sub>2.5</sub> 24-hour standard from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup>.

<sup>9</sup> The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

<sup>10</sup> The Nitrogen Dioxide ambient air quality standard was amended on February 22, 2007, to lower the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes become effective after regulatory changes are submitted and approved by the Office of Administrative Law, expected later this year.

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter

Source: CARB. *California Ambient Air Quality Standards*. February 7, 2007. website <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

The SCAQMD and SCAG are responsible for preparing the AQMP, which addresses federal and state air quality requirements for attainment and maintenance of AAQS. The AQMP details goals, policies, and programs for improving air quality, and establishes thresholds for daily operation emissions. The most recent update of the AQMP is the 2007 AQMP, which was adopted by the SCAQMD board on June 1, 2007. The AQMP was forwarded to the CARB for their approval and subsequent submittal to the EPA.

The 2007 AQMP focuses on the air pollution control measures needed to meet federal health-based standards for PM<sub>2.5</sub> and O<sub>3</sub>. Attainment of the PM<sub>2.5</sub> standard is required by 2014. Attainment of the 8-hour O<sub>3</sub> standard is required by 2021; however, the 2007 AQMP requests a reclassification and extension of the attainment date to 2024.<sup>1</sup>

The SCAQMD is responsible for CEQA environmental review of individual projects within the region, and has promulgated standards for significant impact and guidance for evaluating the air quality impacts of projects.

## Existing Air Quality Conditions

Air quality is determined primarily by the type and amount of contaminants emitted into the atmosphere, the size and topography of a basin, and a basin's meteorological conditions. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollution emissions and air quality.

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 Monrovia is identified as the East San Gabriel Valley 1 Station (Station #060) by SCAQMD, and Azusa by CARB. The station is located less than four miles to the east of the Monrovia's boundary and monitors CO, O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. This monitoring station represents the best approximation of the air quality conditions within the City. Table 3.2-2 summarizes the published monitoring data from East San Gabriel Valley 1/Azusa monitoring stations from 2002 to 2006. Table 3.2-2 shows that air quality standards at this location have been exceeded for PM<sub>2.5</sub>, PM<sub>10</sub>, and O<sub>3</sub>. This is consistent with the entire Basin's classification as non-attainment for PM<sub>2.5</sub>, PM<sub>10</sub>, and O<sub>3</sub>. The following paragraphs summarize the information in the table.

**Ozone (O<sub>3</sub>).** During the 2002 to 2006 monitoring period, the state one-hour O<sub>3</sub> standard was exceed between 20 and 40 times annually at the East San Gabriel Valley 1/Azusa monitoring stations. The highest recorded one-hour concentration of O<sub>3</sub> was 0.165 parts per million (ppm) in 2006.

**Carbon Monoxide (CO).** The East San Gabriel Valley 1/Azusa monitoring stations did not record any levels exceeding the national or state one-hour or eight-hour CO standards from 2001 to 2005. The highest recorded eight-hour concentration was 2.6 ppm in 2003.

**Nitrogen Dioxide (NO<sub>2</sub>).** The East San Gabriel Valley 1/Azusa monitoring stations did not record any levels exceeding the federal or state NO<sub>2</sub> standards between 2002 and 2006. The highest recorded one-hour concentration was 0.12 ppm in 2002 and 2003.

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<sup>1</sup> SCAQMD. *Draft 2007 Air Quality Management Plan*. May 2007. website <http://www.aqmd.gov/ceqa/hdbok.html>.

**Table 3.2-2 Pollutant Standards and  
East San Gabriel Valley 1/Azusa Monitoring Ambient Air Quality Data<sup>1</sup>**

	2002	2003	2004	2005	2006
<b>Ozone (O<sub>3</sub>)</b>					
<i>California Standard (1-hr avg. &gt; 0.09 ppm)</i>					
<i>National Standard (1-hr avg. &gt; 0.12 ppm)<sup>2</sup></i>					
Maximum Concentration 1-hr period (ppm)	0.136	0.150	0.134	0.145	0.165
Days California 1-hr standard exceeded	26	40	28	20	23
Days National 1-hr standard exceeded	5	11	2	4	7
<i>California Standard (8-hr avg. &gt; 0.07 ppm)</i>					
<i>National Standard (8-hr avg. &gt; 0.08 ppm)</i>					
Maximum Concentration 8-hr period (ppm)	0.102	0.124	0.104	0.122	0.120
Days National 8-hr standard exceeded	12	21	10	6	10
<b>Carbon Monoxide (CO)</b>					
<i>California Standard (1-hr avg. &gt; 20 ppm)</i>					
<i>National Standard (1-hr avg. &gt; 35 ppm)</i>					
Maximum concentration 1-hr period (ppm)	3	5	5	3	2
Days California 1-hr standard exceeded	0	0	0	0	0
Days National 1-hr standard exceeded	0	0	0	0	0
<i>California Standard (8-hr avg. &gt; 9 ppm)</i>					
<i>National Standard (8-hr avg. &gt; 9 ppm)</i>					
Maximum concentration 8-hr period (ppm)	2.4	2.6	2.0	1.7	1.7
Days California 8-hr standard exceeded	0	0	0	0	0
Days National 8-hr standard exceeded	0	0	0	0	0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>					
<i>California Standard (1-hr avg. &gt; 0.25/0.18 ppm)<sup>3</sup></i>					
Maximum 1-hr concentration (ppm)	0.12	0.12	0.10	0.09	0.11
Days California standard exceeded	0	0	0	0	0
<i>California Standard (Annual &gt; 0.030 ppm)</i>					
<i>National Standard (Annual &gt; 0.053 ppm)</i>					
Annual Average (AAM) (ppm)	0.033	0.029	0.020	0.025	0.026
<b>Particulate Matter (PM<sub>10</sub>)</b>					
<i>California standard (24-hr avg. &gt; 50 µg/m<sup>3</sup>)</i>					
<i>National standard (24-hr avg. &gt; 150 µg/m<sup>3</sup>)</i>					
Maximum 24-hr concentration (µg/m <sup>3</sup> )	91	119	83	76	81
Days exceeding California standard	22	20	7	10	7
Days exceeding National standard	0	0	0	0	0
<i>California standard (AAM &gt; 20 µg/m<sup>3</sup>)</i>					
<i>National standard (AAM &gt; 50 µg/m<sup>3</sup>)<sup>4</sup></i>					
Annual Average (AAM)	45.8	44.4	31.8	32.1	32.6
<b>Particulate Matter (PM<sub>2.5</sub>)<sup>1</sup></b>					
<i>National standard (24-hr avg. &gt; 65/35 µg/m<sup>3</sup>)<sup>5</sup></i>					
Maximum 24-hr concentration (µg/m <sup>3</sup> )	72.4	121.2	75.6	132.6	52.7*
Days exceeding National standard	1	3	1	1	0/8 <sup>6</sup>
<i>California standard (AAM &gt; 12 µg/m<sup>3</sup>)</i>					
<i>National standard (AAM &gt; 15 µg/m<sup>3</sup>)<sup>4</sup></i>					
Annual Average (AAM) (µg/m <sup>3</sup> )	20.8	19.2	18.4	17.0*	15.5*

AAM = Annual Arithmetic Mean ppm = parts per million    µg/m<sup>3</sup> = micrograms per cubic meter    N/A = not available

\* Less than 12 full months of data. May not be representative.

1 Monitoring data from the East San Gabriel Valley 1 monitoring station (#60) located at 803 N. Loren Avenue in Azusa.

2 National 1-hour O<sub>3</sub> standard has been revoked; data is still collected for information

3 California NO<sub>2</sub> standard reduced from 0.25 ppm to 0.18 ppm in 2007

4 National PM<sub>10</sub> annual standard was revoked in 2006

5 National PM<sub>2.5</sub> 24-hour standard reduced from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup> in 2006

6 Days exceeding old/revised standard

Source: CARB. *Historical Air Quality Data*. 2007. website <http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4bw/start>.

**Particulate Matter (PM<sub>10</sub>).** The East San Gabriel Valley 1/Azusa monitoring stations recorded multiple days exceeding the state 24-hour PM<sub>10</sub> standard, but levels have not exceeded the federal standard in the last five years. The highest recorded 24-hour concentration was 119 micrograms per cubic meter (µg/m<sup>3</sup>) in 2003, and the state 24-hour standard was exceeded between 7 and 22 times annually. The California annual PM<sub>10</sub> standard was exceeded each year from 2002 through 2006.

**Particulate Matter (PM<sub>2.5</sub>).** East San Gabriel Valley 1/Azusa monitoring stations recorded exceedances of the 65 µg/m<sup>3</sup> federal 24-hour PM<sub>2.5</sub> standard in each year from 2002 through 2005. That standard was not exceeded in 2006; however, the standard was reduced to 35 µg/m<sup>3</sup> at the end of 2006, and the air quality at the station would have exceeded the new standard on eight days. The highest recorded 24-hour concentration was 132.6 µg/m<sup>3</sup> in 2005. Annual average PM<sub>2.5</sub> concentrations exceeded the national and state annual standards each year from 2002 through 2006.

## Sensitive Receptors

The SCAQMD identifies sensitive receptors as populations more susceptible to the effects of air pollution than the general population. Sensitive receptors include asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Sensitive receptors located in or near the vicinity of known air emissions sources, including freeways and heavily traveled intersections, are of particular concern.

## Toxic Air Pollutants

Toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are pollutants that may be expected to result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts may not be expected to occur. This contrasts with the criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established. Most TACs originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Toxic air pollutants, such as asbestos, can be emitted during the demolition of buildings that contain toxic contaminants and during the operation of certain industrial processes that utilize toxic substances.

Federal and state governments have implemented a number of programs to control toxic air emissions. For example, the federal Clean Air Act provides a program for the control of hazardous air pollutants. In addition, the California legislature has enacted programs such as the Tanner Toxics Act (Assembly Bill [AB] 1807), the Air Toxics Hot Spot Assessment Program (AB 2588), the Toxics Emissions Near Schools Program (AB 3205) and the Disposal Site Air Monitoring Program (AB 3374). AB 1807 sets forth a formal procedure for CARB to designate

substances as TACs. To date, CARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. In 1998, diesel particulate matter (diesel PM) was added to the CARB list of TACs. The most recently identified (January 2006) TAC is environmental tobacco smoke.

CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public transit bus fleet rule and emission standards for new urban buses. These new rules and standards provide for: (1) more stringent emission standards for some new urban bus engines beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements with which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Additional milestones include the low sulfur diesel fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially less TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade and will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of CARB's Risk Reduction Plan, it is expected that diesel PM concentrations will be reduced by 75 percent in 2010 and 85 percent in 2020 from the estimated year 2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions also will be reduced.

In 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides guidance concerning land use compatibility with TAC sources.<sup>2</sup> Although not a law or adopted policy, the handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way.

## Greenhouse Gases

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 directs the California Environmental Protection Agency (Cal/EPA) to implement regulations for a cap on stationary sources of atmospheric greenhouse gas (GHG) emissions. GHG emissions are further discussed in Chapter 4.0, Impact Overview, of this EIR.

## Thresholds for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not create objectionable odors. Accordingly, this issue is not further analyzed in the EIR.

For the purposes of this EIR, a significant impact will occur if implementation of the proposed Land Use and Circulation Elements will:

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<sup>2</sup> CARB. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

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

The SCAQMD has established air pollution emission thresholds to assist lead agencies in determining whether or not the construction or operation of a project would result in significant air quality impacts. These thresholds are shown in Table 3.2-3. If the project is found to exceed these thresholds, it will result in a significant impact on air quality.

**Table 3.2-3 SCAQMD Air Quality Significance Thresholds**

<b>Mass Daily Thresholds<sup>a</sup></b>		
<b>Pollutant</b>	<b>Construction<sup>b</sup></b>	<b>Operation<sup>c</sup></b>
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
<b>Toxic Air Contaminants (TACs) and Odor Thresholds</b>		
TACs (including carcinogens and noncarcinogens)	Maximum Incremental Cancer Risk $\geq$ 10 in 1 million Hazard Index $\geq$ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
<b>Ambient Air Quality for Criteria Pollutants<sup>d</sup></b>		
NO <sub>2</sub>	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
1-hour average annual average		
PM <sub>10</sub> 24-hour average annual geometric average annual arithmetic mean	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$ 20 $\mu\text{g}/\text{m}^3$	
PM <sub>2.5</sub> 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) <sup>e</sup> & 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
Sulfate 24-hour average	25 $\mu\text{g}/\text{m}^3$	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

<sup>a</sup> Source: SCAQMD. *SCAQMD Air Quality Significance Thresholds*. 2006. website <http://www.acqmd.gov/ceqa/hdbk.html>.

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

<sup>d</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

<sup>e</sup> Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter  $\geq$  greater than or equal to

## Environmental Impact

**AIR-1:** *The proposed project will not conflict with or obstruct implementation of the applicable air quality management plan. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. The proposed Land Use and Circulation Elements are being revised for the purposes of amending land uses to take advantage of potential pedestrian-oriented and mass transit connections between the Gold Line light rail service and existing residential, commercial, and office uses. The West Huntington Drive corridor is intended to accommodate mixed use and higher density land use designations and integrate gathering areas with retail and commercial uses in close proximity to the light rail station. Similarly, the South Myrtle Avenue is intended to provide a pedestrian-oriented office commercial corridor connected to the light rail station. The Station Square Transit Village will provide a mix of commercial, office, residential, hospitality, and park uses surrounding the planned Metro Gold Line Foothill Extension light rail station by providing transit-oriented development. The proposed Land Use and Circulation Elements are intended to encourage pedestrian and transit connections within the City such that residents will rely less on their automobiles.

The SCAQMD typically deems a project inconsistent with air quality plans if it results in population and/or employment growth that exceeds estimates in the applicable air quality plan or generates unusually large emissions. Although the proposed Land Use and Circulation Elements include new residential housing and employment which would result in population and employment growth, this growth is within regional growth projections established by SCAG, as discussed in Chapter 3.8, Population and Housing. Furthermore, the proposed Land Use Element accommodates and encourages mixed-use development as a means of creating more compact land use patterns for walking, biking, and using public transit. Finally, the proposed Land Use and Circulation Elements fully support extension of Gold Line Light Rail service to Monrovia to reduce commuter vehicle trips. Therefore, the intent of the proposed Land Use and Circulation Elements is consistent with the AQMP. The impact will be less significant at the programmatic level.

**AIR-2:** *The proposed project will cause exceedances of SCAQMD significance thresholds and contribute to existing air quality standard violations such that the proposed project will contribute to a cumulatively considerable net increase in ROG, PM<sub>10</sub>, and PM<sub>2.5</sub>. The impact will be significant.*

### Short-Term Impacts

Construction-related air pollutant emissions will occur periodically throughout implementation of the proposed Land Use and Circulation Elements. Development projects pursuant to the

proposed Land Use and Circulation Elements will generate emissions from the following sources during construction: 1) construction equipment exhaust; 2) worker vehicles traveling to and from construction sites; 3) dust from grading and earth-moving operations; and 4) ROG emissions from the application of architectural coatings, paving, and use of solvents.

The proposed Land Use Element identifies future land uses, but does not describe specific development projects that will be undertaken during the 23-year planning horizon. Thus, estimating construction-related emissions would involve speculation. Assuming relatively robust economic conditions through 2030, construction activity will be a constant throughout the City, but the rate of development cannot be anticipated. Thus, per Section 15145 of the CEQA Guidelines, no quantitative analysis of construction emissions is provided. With respect to SCAQMD emissions thresholds, the principal concern for construction emissions is NO<sub>x</sub>, which is a product of diesel engine exhaust. A secondary concern is PM<sub>10</sub> and PM<sub>2.5</sub> emissions from grading activities. Controls inherent in SCAQMD Rule 403 will reduce particulate and dust emissions on all future projects and additional mitigation may be required on a project-by-project basis. While project emissions will be addressed in detail at the individual project level, mitigation measures applicable to all projects are required to reduce impacts at the programmatic level. Individual development projects will be required assess potential impacts at the project level and implement mitigation measures AIR-A and AIR-B. Until the project level analyses are completed, pollutant emissions associated with construction activity will be significant at the programmatic level.

### **Long-Term Regional Impacts**

New development pursuant to the proposed Land Use and Circulation Elements will produce emissions from stationary, area, and mobile sources. At a regional level, emissions will be added to those produced throughout the Basin, which currently is classified as a nonattainment area relative to O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards. At the local level, concentrations of pollutants could occur due to poor traffic conditions at intersections, thereby possibly exposing sensitive receptors to excessive concentrations of pollution.

In terms of regional emissions, the major sources associated with the implementation of the General Plan Amendments will be: 1) vehicles traveling to, from, and within Monrovia; 2) area sources, including use of natural gas for heating, cooking, and water heating; emissions from fireplaces and wood stoves; ROG emissions from consumer products and paints used in periodic repainting of buildings; and exhaust from landscape maintenance equipment; 3) combustion of fossil fuels at regional power plants that produce electricity; and 4) stationary source emissions from industrial and commercial uses.

Pollutant emissions from vehicular trips and area sources are estimated using the URBEMIS2007 software package, version 9.2 (Rimpo and Associates 2007). The emissions factors and calculation methodologies contained in the URBEMIS2007 program have been approved for use by SCAQMD. URBEMIS is a calculation tool designed to estimate air emissions from land use development projects based on development type and size. The model contains data that are specific for the SCAQMD and Los Angeles County. Inputs include each land use type and size, in terms of building area, number of dwelling units, number of hotel rooms, etc., and the vehicle trip generation for each land use. Appendix B contains the worksheets documenting the input and output for this analysis.

URBEMIS is not used to calculate the emissions from regional power plants for additional electricity that may be consumed in future developments. Electric supply may or may not be

from power plants in the region, and may not even come from fossil fuel generation. Therefore, the source of new electrical power is not known. URBEMIS is not used to calculate the emissions from stationary sources. At the program level, these sources have not been defined. When these sources are proposed, the applicant is required to obtain construction and operating permits from SCAQMD. The permitting process will include an evaluation of potential emissions and conditions to assure that the emissions will not conflict with the SCAQMD air quality plans. Therefore, stationary source emissions will be less than significant at the programmatic level.

### Maximum Daily Emissions

Table 3.2-4 reports estimated air pollution emissions associated with baseline conditions within the planning area and emissions associated with buildout conditions of the proposed Land Use and Circulation Elements under the worst-case emissions scenario. All emissions are reported in pounds per day. URBEMIS calculates emissions for both summer and winter seasons. The data in Table 3.2-4 are the higher of summer or winter for each pollutant.

An important factor affecting emissions in the future years is the anticipated continuing change in vehicle exhaust emissions. Emission factors for ROG, NO<sub>x</sub>, and CO in 2026 are forecast to be 22 to 35 percent of the 2007 values.<sup>3,4</sup> SO<sub>2</sub> emissions will be relatively unchanged. PM<sub>10</sub> and PM<sub>2.5</sub> emissions for trucks will also be greatly reduced, but PM<sub>10</sub> and PM<sub>2.5</sub> emissions for passenger cars will increase by approximately 15 and 22 percent, respectively. The proposed Land Use and Circulation Elements will result in an increase of approximately 38,000 trips per day, an increase of about 86 percent compared to the trips generated in the 2007 baseline year. Even with this increase in trips, there will be a reduction in vehicle ROG, NO<sub>x</sub>, and CO emissions. The increase in vehicle trips is the principal contributor to the increases in PM<sub>10</sub> and PM<sub>2.5</sub> emissions.

For the proposed project, the two major sources of increased maximum day ROG emissions will be fireplace use and consumer products. It is assumed that all residences have fireplaces, and that 10 percent will be wood stoves, 5 percent will be wood-burning fireplaces, and that 85 percent will be natural gas fireplaces. On a winter day, the increased number of residences will contribute 587 pounds per day of ROG. Fireplace use will add more than 240 pounds per day of PM<sub>10</sub> and PM<sub>2.5</sub>. Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development. The increase in residences included in the proposed Land Use and Circulation Elements will result in an increase in ROG emissions of approximately 192 pounds per day of ROG.

<sup>3</sup> SCAQMD published EMFAC2007 emission rates do not extend beyond 2026.

<sup>4</sup> CARB. *Historical Air Quality Data*. 2007. website <http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4bw/start>.

**Table 3.2-4 Estimated Baseline and Future Maximum Daily Air Pollutant Emissions (pounds/day)**

	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Huntington Drive</b>						
2007 Baseline	283	400	3,028	2	386	77
General Plan 2030	157	155	1,309	4	676	137
Increase (Decrease)	(126)	(244)	(1,719)	2	291	61
<b>Myrtle Avenue</b>						
2007 Baseline	83	104	793	1	100	21
General Plan 2030	81	50	416	1	195	46
Increase (Decrease)	(2)	(54)	(377)	1	95	25
<b>Station Square</b>						
2007 Baseline	133	155	1,189	1	152	34
General Plan 2030	862	189	2,482	7	725	327
Increase (Decrease)	730	34	1,293	6	573	293
<b>Total</b>						
2007 Baseline	499	658	5,010	4	638	132
General Plan 2030	1,100	394	4,208	12	1,596	510
<b>Increase (Decrease)</b>	<b>602</b>	<b>(264)</b>	<b>(802)</b>	<b>8</b>	<b>958</b>	<b>379</b>
<i>SCAQMD threshold</i>	55	55	550	150	150	55
Exceed threshold?	Yes	No	No	No	Yes	Yes

Table 3.2-4 shows that over the approximately 23-year planning horizon, maximum daily emissions for ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> will increase and for each of these pollutants, the increase will exceed the SCAQMD significance threshold that is used for evaluation of project impacts. Maximum daily emissions of NO<sub>x</sub> and CO will decrease; SO<sub>2</sub> emissions will increase but the increase will be less than the SCAQMD threshold.

### Average Daily Emissions

Because the maximum daily emissions are heavily influenced by fireplace emissions that will be limited to some winter days, it is appropriate to show the average daily emissions that will be attributed to implementation of the proposed Land Use and Circulation Elements. Table 3.2-5 shows the average daily emission rates. These emissions are calculated by converting the estimated annual emissions into daily rates. With respect to the SCAQMD thresholds used for evaluation of projects, the results are similar to those for the maximum daily emissions. That is, average daily emissions for ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> will increase and for each of these pollutants, the increase will exceed the SCAQMD threshold. Average daily emissions of NO<sub>x</sub> and CO will decrease; SO<sub>2</sub> emissions will increase, but the increase will be less than the SCAQMD threshold. With the reduced influence of fireplace emissions on an annual basis, the ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> exceedances are reduced. Consumer product emissions do not change with the season; the average daily emissions include summer emissions from the use of small engines for landscape maintenance.

**Table 3.2-5 Estimated Baseline and Future Average Daily Air Pollutant Emissions (pounds/day)**

	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
<b>Huntington Drive</b>							
2007 Baseline	258	353	2,994	2	384	75	229,578
General Plan 2030	130	138	1,286	4	668	130	400,072
Increase (Decrease)	(128)	(215)	(1,708)	2	285	55	170,494
<b>Myrtle Avenue</b>							
2007 Baseline	75	92	785	1	98	19	61,006
General Plan 2030	56	43	371	1	185	36	117,121
Increase (Decrease)	(19)	(48)	(415)	0	86	17	56,115
<b>Station Square</b>							
2007 Baseline	118	136	1,179	1	147	29	90,360
General Plan 2030	336	137	1,080	3	499	109	338,531
Increase (Decrease)	218	0	(99)	2	352	81	248,171
<b>Total</b>							
2007 Baseline	452	582	4,958	3	629	123	380,945
General Plan 2030	522	318	2,736	8	1,352	276	855,724
<b>Increase (Decrease)</b>	<b>70</b>	<b>(264)</b>	<b>(2,222)</b>	<b>5</b>	<b>723</b>	<b>153</b>	<b>474,779</b>
SCAQMD threshold	55	55	550	150	150	55	None
Exceed threshold?	Yes	No	No	No	Yes	Yes	NA

Table 3.2-5 includes data for CO<sub>2</sub> emissions. Although CO<sub>2</sub> is not currently regulated by SCAQMD or CARB for development projects, these emissions are the principal contributor to atmospheric GHGs and global warming. The 474,779 pounds per day shown in Table 3.2-5 translates to 86,647 tons per year of CO<sub>2</sub> emitted in 2030. Please refer to Chapter 4.0, Impact Overview, of this EIR for a more detailed discussion on GHGs and global warming.

As shown in Tables 3.2-4 and 3.2-5, emissions of ROG, PM<sub>10</sub>, and PM<sub>2.5</sub> resulting from implementation of the proposed Land Use and Circulation Elements will be significant at the programmatic level. Implementation of mitigation measures AIR-C is required.

**AIR-3:** *The proposed project will expose sensitive receptors to substantial pollutant concentrations. The impact will be significant.*

### CO Hot Spots

CO hotspots may occur on major roadways at severely congested intersections. The potential for a significant local impact is very low in the Monrovia because of low ambient CO background levels. The traffic analyses of the proposed Land Use and Circulation Elements (see Appendix D) does not include the analyses of local impacts; these must be addressed on a project level.

For project-level analysis, procedures and guidelines for use in evaluating the potential local level CO impacts are contained in Transportation Project-Level Carbon Monoxide Protocol (CO Protocol).<sup>5</sup> The CO Protocol provides a methodology for determining the level of analysis, if any, required on a project. The guidelines comply with the CAA, federal and state conformity rules, and CEQA. Where the CO Protocol indicates quantitative analysis is required, note that

<sup>5</sup> University of California, Davis, Institute of Transportation Studies. *Transportation Project-Level Carbon Monoxide Protocol*. December 2007.

the screening methodology in the CO Protocol is outdated. Project analysis should use screening methods promulgated by the Sacramento Metropolitan AQMD, the Bay Area AQMD, or similar agency. Alternatively, detailed analysis may be conducted using the CALINE4 model. Whichever method is used, local background data and current emission factors must be used as input.

The proposed Land Use and Circulation Elements will result in increased vehicle trips on area roadways that could create CO hot spots at some intersections. As such, the impact will be significant at the programmatic level. Individual development projects will be required assess potential impacts at the project level and mitigation measures may be required to reduce the level of impact.

### **Exposure to Toxic and Other Pollutants from I-210**

There is a considerable body of data linking adverse health effects with traffic-generated pollutants. These studies have resulted in the publication of generalized and specific guidelines relative to the location of certain land uses near freeways and major roadways with high volumes of traffic. The Air Quality and Land Use Handbook: A Community Health Perspective makes the following recommendation: avoid siting new sensitive land uses within 500 feet of a freeway.<sup>6</sup> This is a general recommendation, without reference to specific traffic, site, or land use characteristics. A state law passed in 2003 prohibits the siting of a school within 500 feet of a freeway unless, “the school district determines, through analysis based on appropriate air dispersion modeling, that the air quality at the proposed site is such that neither short-term nor long-term exposure poses significant health risks to pupils” (Public Resources Code Section 21151.8).

The proposed Land Use Element allows for more concentrated development in the West Huntington Drive and Station Square Transit Village focus areas that could place residential uses within 500 feet of I-210. The health effects and related pollutants may each be generally characterized in two groups. The first group, cancer risks and chronic unspecified non-cancer risks from on-road traffic, has been associated principally with PM<sub>2.5</sub>, diesel PM, benzene, and 1,3-butadiene. The risk from diesel PM represents approximately 70 percent of the known statewide cancer risk from outdoor air toxics. SCAQMD has established significance criteria for TAC exposure, as shown in Table 3.2-3, above. The second category of adverse effects relates to respiratory health, including reduced lung function and increased incidence of asthma. The studies of respiratory effects related to highway pollutants have focused on children. The pollutants causing adverse respiratory effects in children are less known. While PM<sub>2.5</sub> and diesel PM have been considered, NO<sub>2</sub>, NO<sub>x</sub>, and elemental carbon have also been identified as possible causes.

For federal highway projects, the Federal Highway Administration (FHWA) has established the following interim policy for the impact analysis of TACs, which are called Mobile Source Air Toxics (MSATs) by the FHWA:<sup>7</sup>

Given the emerging state of the science and of project-level analysis techniques, there are no established criteria for determining when MSAT emissions should be considered a significant issue in the NEPA context. Therefore, a range of responses may be appropriate for addressing this issue in NEPA documentation.

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<sup>6</sup> CARB. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

<sup>7</sup> Federal Highway Administration. *Interim Guidance on Air Toxic Analysis in NEPA Documents*. February 3, 2006.

The response may involve quantitative analysis of emissions to compare or differentiate among proposed project alternatives, qualitative analysis to explore the general nature of the project and inform interested parties, or no analysis depending on the circumstances as set out in this interim guidance. For projects warranting MSAT analysis, the six priority MSATs should be analyzed.

The FHWA has developed a tiered approach for analyzing MSATs in National Environmental Policy Act (NEPA) documents. Depending on the specific project circumstances, FHWA has identified three levels of analysis:

- No analysis for projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.”<sup>8</sup>

The FHWA criteria defining projects with a higher potential for MSAT effects are those projects where the average daily traffic is projected to be in the range of 140,000 to 150,000 or greater and the project is in a populated area. The existing daily traffic volume on I-210 in Monrovia at the Myrtle Avenue interchange is approximately 265,000 average daily trips.

The California Office of Environmental Health Hazard Assessment (OEHHA) has established protocols and methods for performing health risk assessments (HRAs) for stationary sources and some area sources. SCAQMD has issued supplementary instructions for HRAs within their jurisdiction. These methods have not been modified by the issuing agencies for specific application to roadway sources, but have been used by air quality professionals to estimate excess cancer risk at land uses near freeways.

A growing body of scientific evidence shows that living or going to school near roadways with heavy traffic volumes is associated with a number of adverse effects. These include increased respiratory symptoms, increased risk of heart and lung disease, and elevated mortality rates. A number of research projects conducted in the United States and California are finding similar results. For example, as of 2005, the Children’s Health Study, a 10-year study conducted by the USC School of Medicine, found strong evidence that exposure to pollutants related to vehicle emissions such as nitrogen dioxide and elemental carbon (or soot) is linked to slowing of lung function growth. The researchers concluded that the resulting deficits in lung function are likely permanent and may increase the risk for respiratory and other diseases later in life. The study also showed that the children who lived the closest to roadways with heavy traffic, such as freeways, showed increased risk for having asthma.<sup>9</sup>

There are no protocols, computer models, or guidance documents for assessing the respiratory function impacts of highway-generated pollutants to proposed development projects near the roadway. The level of this exposure can only be determined through project-level analysis when specific land use proposals are submitted. Therefore, project-level analysis will be required to consider the following factors: distance, meteorology, exposure time near the freeway, anticipated changes in emissions sources, and barriers.

<sup>8</sup> *Ibid.*

<sup>9</sup> CARB. *The East Bay Children’s Respiratory Health Study of Traffic-Related Air Pollution Near Busy Roads.* January 27, 2005. website <http://www.arb.ca.gov/research/eb-kids/eb-kids.htm>.

Because the proposed Land Use Element will allow for concentrated residential development within 500 feet of I-210, the proposed project could expose sensitive receptors to toxic air emissions and an increased cancer risk or to adverse impacts to children's respiratory health. As such, the impact will be significant at the programmatic level. Implementation of mitigation measures AIR-D and AIR-E will reduce the level of impact at the programmatic level. Further study will be required at the project level and additional mitigation measures may be required.

## Mitigation Measures

**AIR-A** If project-level analysis demonstrates that NO<sub>x</sub> emissions would be significant, the project shall provide a plan, for approval by the City, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve will utilize all feasible measures to reduce the emissions to a less than significant level. Acceptable options for reducing emissions may include use of late model low-emission diesel engines, alternative fuels, engine retrofit technology, and/or other options as they become available. The SCAQMD web site provides specific information on mitigation options for off-road and on-road construction equipment.

**AIR-B** The following measure shall be incorporated into all project specifications to reduce diesel engine emissions of O<sub>3</sub> precursors including ROG and NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and diesel PM:

**Idling Restrictions.** Idling of diesel-powered vehicles and equipment shall not be permitted during periods of nonactive vehicle use. Diesel-powered engines shall not be allowed to idle for more than 5 consecutive minutes in a 60-minute period when the equipment is not in use, occupied by an operator, or otherwise in motion, except as follows:

- When equipment is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- When it is necessary to operate auxiliary systems installed on the equipment, only when such system operation is necessary to accomplish the intended use of the equipment;
- To bring the equipment to the manufacturer's recommended operating temperature;
- When the ambient temperature is below 40 degrees F or above 85 degrees F; or
- When equipment is being repaired.

**AIR-C** The City shall require that all new residential fireplaces shall be fueled by natural gas. Wood stoves and wood burning fireplaces shall be prohibited.

**AIR-D** The City shall require applicants to complete a Health Risk Assessment (HRA) to determine the cancer risk to sensitive receptors for all residential projects located within 500 feet of Interstate 210 (I-210).

**AIR-E** The City shall require applicants to assess the potential impacts to children’s respiratory health for all residential projects located within 500 feet of I-210.

## Level of Impact after Mitigation

The proposed Land Use Element accommodates and encourages mixed-use development, and fully supports extension of Gold Line Light Rail service to Monrovia to reduce commuter vehicle trips. Therefore, the intent of the proposed Land Use and Circulation Elements is consistent with the AQMP. The impact will be less than significant at the programmatic level.

As described in AIR-2, on cumulative basis over the next 23 years, pollutant emissions associated with construction activity will be significant at the programmatic level. Even with implementation of mitigation at the project-level, the impact will remain significant and unavoidable at the programmatic level.

Implementation of mitigation measure AIR-D would reduce estimated maximum daily and average daily 2030 emissions of ROG to less than the SCAQMD threshold of significance, as shown in Tables 3.2-6 and 3.2-7.

**Table 3.2-6 Estimated Baseline and Future Maximum Daily Air Pollutant Emissions Without and With Mitigation (pounds/day)**

	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<i>Without Mitigation – from Table 4.2-4</i>						
2007 Baseline	499	658	5,010	4	638	132
General Plan 2030	1,100	394	4,208	12	1,596	510
<b>Increase (Decrease)</b>	<b>602</b>	<b>(264)</b>	<b>(802)</b>	<b>8</b>	<b>958</b>	<b>379</b>
<i>With Mitigation Measure AIR-D</i>						
2007 Baseline	499	658	5,010	4	638	132
General Plan 2030	538	371	2,721	8	1,356	279
<b>Increase (Decrease)</b>	<b>39</b>	<b>(287)</b>	<b>(2,289)</b>	<b>4</b>	<b>718</b>	<b>147</b>
<i>SCAQMD threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Exceed threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>
Emission Reduction from Mitigation	563	23	1,487	4	241	232

**Table 3.2-7 Estimated Baseline and Future Average  
Daily Air Pollutant Emissions Without and With Mitigation (pounds/day)**

	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>CO<sub>2</sub></b>
<i>Without Mitigation – from Table 4.2-5</i>							
2007 Baseline	452	582	4,958	3	629	123	380,945
General Plan 2030	522	318	2,736	8	1,352	276	855,724
<b>Increase (Decrease)</b>	<b>70</b>	<b>(264)</b>	<b>(2,222)</b>	<b>5</b>	<b>723</b>	<b>153</b>	<b>474,779</b>
<i>With Mitigation Measure AIR-D</i>							
2007 Baseline	452	582	4,958	3	629	123	380,945
General Plan 2030	484	316	2,629	8	1,335	260	853,262
<b>Increase (Decrease)</b>	<b>32</b>	<b>(265)</b>	<b>(2,329)</b>	<b>4</b>	<b>707</b>	<b>137</b>	<b>472,317</b>
<i>SCAQMD threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>	<i>None</i>
<b>Exceed threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>NA</b>
Emission Reduction from Mitigation	39	2	107	0	16	16	2,462

Emission rates for PM<sub>10</sub> and PM<sub>2.5</sub> would be reduced, but would continue to exceed the SCAQMD significance criteria. Emissions of PM<sub>10</sub> and PM<sub>2.5</sub> would remain significant and unavoidable at the programmatic level.

With implementation of mitigation, the programmatic level impacts to sensitive receptors from CO hotspots will be significant at the programmatic level. With implementation of mitigation, the impacts to sensitive receptors from TACs will be reduced to less than significant at the programmatic level. The level of impact to sensitive receptors resulting from specific future development projects will be determined on a project-by-project basis.

# 3.3 Cultural Resources

The Initial Study identified impacts to historic resources, archaeological resources, paleontological resources, and disturbance of human remains as potentially significant impacts. This section evaluates the potential effects of implementation of the proposed Land Use and Circulation Elements on cultural resources.

## Environmental Setting

Monrovia's establishment was the product of the real estate boom of the 1880s that set the stage for enormous growth patterns for the Los Angeles area. Incorporated in 1887, Monrovia is the fourth oldest city in the county. Numerous historic residences are located in Monrovia. Three structures are listed on the National Register of Historic Places (NRHP): the Aztec Hotel located at 311 West Foothill Boulevard, the Oaks located at 250 North Primrose Avenue, and the Upton Sinclair House located at 464 North Myrtle Avenue.<sup>1</sup> In addition, the Santa Fe Railroad Depot located at 1709 South Myrtle Avenue is potentially eligible for listing on the NRHP. There are no State Historic Landmarks designated in Monrovia.<sup>2</sup> However, numerous structures within the City are 45 years of age or older. Further, the existing and proposed General Plan Land Use Policy Maps (see Figures 2-3 and 2-4) designate the portion of Old Town Monrovia on Myrtle Avenue between Olive Avenue and Foothill Boulevard as Historic Commercial Downtown.

An archival records search was conducted by the South Central Coastal Information Center at California State University, Fullerton to identify previously recorded prehistoric resources within the City. According to the records search, no archaeological sites have been identified.<sup>3</sup> However, Monrovia lies within the territorial boundaries of the Gabrieliño Indians, who were historically affiliated with the San Gabriel Mission.

## Regulatory Framework

### National Historic Preservation Act

The criteria for evaluation of cultural resources for inclusion in the NRHP are set forth in 36 CFR 60.4:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- That are associated with events that have made a significant contribution to the broad patterns of our history; or

<sup>1</sup> National Register of Historic Places. National Register Information System. website <http://nr.nps.gov/>, accessed June 14, 2007.

<sup>2</sup> State of California Office of Historic Preservation. California Historical Landmarks, Los Angeles County. website [http://ohp.parks.ca.gov/default.asp?page\\_id=21427](http://ohp.parks.ca.gov/default.asp?page_id=21427), accessed June 14, 2007.

<sup>3</sup> EDAW, Inc. Cultural Resources Records Review. May 2007.

- That are associated with the lives of persons significant in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That have yielded, or may be likely to yield, information important in prehistory or history.

### **California Environmental Quality Act**

A cultural resource is considered “historically significant” under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852). A resource is considered significant if it:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or
- Is associated with the lives of persons important in our past; or
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

### **Monrovia Zoning Code**

Section 17.40 of the Monrovia Zoning Code establishes the City’s Historic Preservation Ordinance. The intent of the Historic Preservation Ordinance is to protect the City’s cultural heritage as embodied and reflected in the City’s architectural history and patterns of development. The Historic Preservation Ordinance gives the Historic Preservation Commission the authority to review and designate local historical landmarks and historic districts. All potentially eligible historic resources are reviewed by the Historic Preservation Commission as part of the City’s development review process. No demolition or alteration to a historic landmark or historic district may occur without obtaining a Certificate of Appropriateness from the Historic Preservation Commission.

## **Thresholds for Determining Significance**

The proposed project will result in a significant impact if it will:

- Cause a substantial adverse change in the significance of a historical resources as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

## Environmental Impact

**CUL-1:** *The proposed project will not cause an adverse change in the significance of a historical resource at the programmatic level. The impact will be less than significant.*

The proposed Land Use Element contains the following goals and policies to protect and preserve historic resources:

**Goal 9: Preserve the character of existing neighborhood and historic residences.**

Policy 9.2 Facilitate the use of state and federal funds for the preservation of historic buildings by seeking to qualify as a certified historic local government.

Policy 9.9 Conduct a citywide survey and prepare a citywide inventory of potentially historic structures. Consult with interested local organizations and individuals to identify sites and structures of historic significance.

Policy 9.10 Assist and encourage other public agencies or private organizations in the purchase and/or relocation of sites, buildings, and structure that have been identified as historically significant that are in danger of demolition or alterations that could jeopardize their status as historic resources.

Policy 9.11 Consider the adoption of special development standards for properties surrounding identified historic sites and structures to ensure compatibility of new development with the old. Such development standards could include requirement of a Conditional Use Permit for development of properties surrounding identified historic sites and structures.

Policy 9.12 Consider providing restoration assistance to owners of historic sites and/or structures in return for agreements or deed restrictions prohibiting their destruction or alteration inconsistent with their historic character.

At the programmatic level, the City has policies and practices in places to protect historic resources, including the City's Historic Preservation Ordinance. All potentially eligible historic resources are reviewed by the Historic Preservation Commission as part of the City's development review process. No demolition or alteration to a historic landmark or historic district may occur without obtaining a Certificate of Appropriateness from the Historic Preservation Commission. The intent of this review is to allow the City the opportunity to explore alternatives with the applicant, such as relocation and adaptive reuse, and possible mitigation to reduce adverse impacts from demolition. Continued application of existing regulations will avoid significant adverse impacts on historic resources from implementation of the proposed Land Use and Circulation Elements at the programmatic level. The significance of impacts to historic resources resulting from specific future development projects, including the impacts to the Santa Fe Depot in the Station Square Transit Village area, will be determined on a project-by-project basis. CEQA review will be required for all projects involving potential historic resources. If project-level impacts are identified, specific mitigation measures will be required per CEQA. Individual development projects could result in significant impacts to specific historic resources.

**CUL-2:** *The proposed project could cause an adverse change in the significance of an archaeological or paleontological resource at the programmatic level. The impact will be less than significant with implementation of mitigation.*

No known archaeological or paleontological sites are known to exist within the City. Nevertheless, unknown archaeological sites, structures, or fossils may be unearthed during excavation and grading activities for specific projects. Infill development in already developed area is not anticipated to result in the uncovering of additional resources. However, deep excavations for parking facilities could unearth artifacts. Development of previously undeveloped sites, such as those located in the foothills, could disturb artifacts given the former presence of indigenous people in the region. Prior discoveries of archaeological and paleontological resources in the region have been limited to projects located within two sensitive geologic formations: Topanga Formation and Late Miocene Marine Monterey Formation. The potential for discovery of new resources has not been ruled out by the City. The impact will be significant. Implementation of mitigation measure CUL-A is required to reduce the level of impact to less than significant at the programmatic level. However, the significance of impacts to archaeological and paleontological resources resulting from specific future development projects will be determined on a project-by-project basis. Individual development projects could result in significant impacts to archaeological and paleontological resources. If project-level impacts are identified, specific mitigation measures will be required per CEQA.

**CUL-3:** *The proposed project will not disturb human remains, including those interred outside of a formal cemetery, at the programmatic level. The impact will be less than significant.*

The project site does not contain any formal cemeteries. Archival research and archaeological surveys in the project vicinity did not indicate the presence of any known human remains in the project area. As such, the impact to the programmatic level will be less than significant. However, formal surveys in the area are limited and previously unknown human remains could be encountered during construction of individual projects. Thus, the significance of impacts to archaeological and paleontological resources resulting from specific future development projects will be determined on a project-by-project basis. Individual development projects could result in significant impacts to human remains interred outside of formal cemeteries. If project-level impacts are identified, specific mitigation measures will be required per CEQA.

## Mitigation Measures

**CUL-A** Project proponents proposing substantial grading or earthmoving in areas that might contain important paleontological and/or archaeological resources, including work within the Topanga Formation and Late Miocene Marine Monterey Formation, shall conduct a pre-excavation field assessment and literature search to determine the potential for disturbance of paleontological and/or archaeological resources. If warranted, grading and other earthmoving shall be monitored by a qualified professional.

## Level of Impact after Mitigation

With implementation of mitigation, the programmatic level impacts to cultural resources will be reduced to a less than significant. The level of impact to cultural resources resulting from specific future development projects will be determined on a project-by-project basis.

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## 3.4 Hazards and Hazardous Materials

The Initial Study (see Appendix A) identified the following potential hazard and hazardous resource impacts to be considered in this EIR: create a significant hazard to the public or the environment through the routine transportation, use, or disposal of hazardous materials; 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; and emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

### Environmental Setting

Industrial uses in Monrovia generally consist of light manufacturing and manufacturing uses. Some industrial businesses use hazardous materials for manufacturing processes and can generate large quantities of hazardous waste. The (EPA) defines hazardous materials as materials that may be dangerous or potentially harmful to human health, or the environment. Hazardous materials are often by-products of manufacturing uses or waste from commercial products such as cleaning fluids or pesticides. The EPA and other federal, state, and county regulatory agencies closely monitor manufacturing and commercial uses, and the disposition of hazardous materials. Hazardous materials require special methods of storage and treatment that common sewage and drainage systems are not capable of handling. Improper disposal can harm the environment and people who work in the waste management industry. Commercial businesses that typically handle hazardous materials and generate small quantities of hazardous waste include dry cleaners, auto repair shops, medical facilities, and photo processing centers. Generators of large quantities of hazardous waste include chemical manufacturers, large electroplating facilities, and petroleum refineries.

According to the Department of Toxic Substances Control (DTSC), there are three hazardous waste sites in the City of Monrovia, one of which has satisfied the requirements for cleanup.<sup>1</sup> The remaining two sites are currently undergoing cleanup. Three archive sites and one active site in Monrovia have been identified as Superfund sites under the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).<sup>2</sup> Archive status indicates that to the best of the knowledge of the EPA, no immediate or long-term risks to human health or the environment are associated with these sites. Active status are sites at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted under the Superfund program.<sup>3</sup> The State Water Resources Control Board lists all leaking underground storage tanks (LUSTs) identified throughout California. Forty-four LUSTs have been reported in Monrovia, of which ten of the sites are still

<sup>1</sup> California Department of Toxic Substances Control. *Envirostar Database*. website <http://www.envirostor.dtsc.ca.gov/public/default.asp>, accessed June 25, 2007.

<sup>2</sup> A superfund site is a site where toxic wastes have been dumped and the EPA has designated them to be cleaned up.

<sup>3</sup> EPA. *Superfund Information Systems*. website <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>, accessed June 25, 2007.

considered active.<sup>4</sup> In addition, hazardous materials are routinely used and transported throughout the City of Monrovia, particularly along I-210.

## Regulatory Framework

### Federal

#### **Comprehensive Environmental Response, Compensation, and Liability Act of 1980**

CERCLA, commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste at these sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified.

#### **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act (RCRA) provides 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 sets forth a framework for the management of non-hazardous wastes.

### State

#### **Title 22 of the California Code of Regulations**

Title 22 of the California Code of Regulations includes state hazardous waste regulations enforced by the DTSC and local Certified Unified Program Agencies (CUPAs). Authority from the state was delegated to local CUPAs to establish a unified hazardous waste and hazardous materials management program for hazardous waste generators, treatment of hazardous waste subject to tiered permitting, facilities with underground storage tanks (USTs) and LUSTs, risk management and prevention plans, and hazardous materials management plans and inventory statements required by the Uniform Fire Code.

#### **California Health and Safety Code**

State hazardous waste control laws enforced by the DTSC are included in the California Health and Safety Code. These regulations identify standards for the classification, management, and disposal of hazardous waste.

#### **Occupational Safety**

Federal and state occupational safety and health regulations also contain provisions on hazardous materials management as it relates to worker safety, worker training, and worker right-to-know. The applicable federal law is the Occupational Health and Safety Act (OSHA). Under OSHA, authority to administer the Act is delegated to states that have developed a plan

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<sup>4</sup> State Water Resources Control Board. Geotracker. website <http://www.geotracker.swrcb.ca.gov/search/luft.asp>, accessed June 25, 2007.

with provisions that are at least as stringent as those provided by OSHA. California is a delegated state for federal OSHA purposes. The California Occupational Safety and Health Act and regulations and programs authorized are commonly referred to as Cal/OSHA.

## Local

The current regulatory environment provides a high level of protection from the hazardous materials manufactured, transported to businesses, and used and stored within Monrovia. Federal, state, and county agencies enforce regulations applicable to hazardous waste generators and users. The Los Angeles County Fire Department, Health Hazardous Materials Division tracks and inspects hazardous materials handlers to ensure appropriate reporting and compliance. County inspections reduce risks associated with exposure to hazardous materials and adverse effects on the environment. The federal government and the State of California require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to submit a business plan to its local Certified Unified Program Agency (CUPA). The Monrovia Fire Department is the local CUPA.

## Thresholds for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not be located on a site which is included on a list of hazardous materials sites; be located within airport land use plan or private airstrip, impair implementation or physically interfere with an emergency response plan; and expose people or structures to significant risk or loss involving wildland fires. Accordingly, these issues are not further analyzed in this EIR.

The proposed project will result in a significant impact if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

## Environmental Impact

**HAZ-1:** *The proposed project will not create a significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials; create upset or accident conditions involving the release of hazardous materials; or emit hazardous materials or handle hazardous materials. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the

South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses that will not significantly increase the amount of hazardous materials that will be used within the City. The proposed Mobility Element will allow for improvements in the City's roadway system to allow for more efficient flow of traffic and protection of residential neighborhoods from through traffic.

The proposed Land Use Element allows the development of light industrial uses in some areas. In recognition of the risks from hazardous materials, the proposed Land Use Element includes the following goals and policies, which would limit potential impacts to hazardous materials:

**Goal 5: Encourage new development that is compatible with and complements existing land uses.**

Policy 5.3 Provide land use categories that distinguish adequately between commercial and industrial uses with different functions and impacts in order to provide adequate separation of these uses.

Policy 7.8 Encourage the location of clean industrial uses in the City and more aesthetic design solutions to traditional industrial uses.

The proposed Circulation Elements provides a map of truck routes through the City. The truck routes have been identified to minimize potential upsets in residential neighborhoods and provide for the safest and most efficient transport of materials through the City. Further, the current regulatory environment provides a high level of protection from the hazardous materials manufactured within, transported to, and stored at commercial, industrial, and educational facilities within the City. The City will continue to enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport, and to notify the appropriate city, county, state, and federal agencies in the event of a violation. By recognizing these hazards and ensuring that an educated public can work with City officials to minimize risks associated with hazardous materials in the urban environment, Monrovia can maintain safe conditions area-wide.

Any new development facilitated by City planning policies and zoning regulations that involves contaminated property will involve the clean up and/or remediation of the property in accordance with federal, state, and local requirements and regulations. No construction will occur at such locations until a "no further action" or similar determination is issued by the County Fire Department, DTSC, the Regional Water Quality Control Board, and/or other responsible agencies. Individual development proposals will continue to comply with existing City standards and practices regarding hazardous waste. If contamination is encountered at a given site, project-specific mitigation measures may be required under CEQA. The combined effect of proposed Land Use and Circulation Elements and ongoing City practices will ensure a less than significant impact at the programmatic-level. No mitigation is required.

## Mitigation Measures

No mitigation is required as impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

No mitigation is required since impact will be less than significant at the programmatic level. Individual projects may be subject to additional review and analysis under the CEQA.

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## 3.5 Hydrology and Water Quality

The Initial Study (see Appendix A) identified the following potential hydrology and water quality impacts to be considered in this EIR: substantially deplete groundwater supplies or interfere substantially with groundwater recharge; substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site; substantially alter the existing drainage pattern of the site or area, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of the existing or planned storm water drainage system or provide substantial additional sources of polluted runoff.

The proposed Circulation Element guides the continuing development of a multi-modal circulation system that supports planned growth and does not contain policies that could potentially affect groundwater resources or storm water runoff. Thus, the proposed Circulation Element is not directly addressed in this chapter.

### Environmental Setting

#### Groundwater Supply

The City of Monrovia delivers potable water supplies through its pressurized distribution system, which consists of 87 miles of piping from 4 to 30 inches in diameter. The city's water supply system consists of 5 active wells with a combined capacity of approximately 27 million gallons per day, 6 booster pumps, and 11 reservoirs with a combined storage capacity of approximately 25.08 million gallons. The City has 6 booster pump stations. In addition, the City recently drilled a sixth well with a capacity of 3,500 gallons per minute. The City maintains a standby connection to Metropolitan Water District of Southern California (Metropolitan), which is capable of delivering up to 14 million gallons per day of potable water. In addition, the City maintains a manually operated 12-inch emergency connection to the City of Arcadia and a 4-inch emergency connection to California American Water Company – Duarte District, to either buy or sell water. Reclaimed water is not currently available within a close proximity to Monrovia to be a cost-effective alternative source of supply.<sup>1</sup>

The City obtains approximately 8,200 acre-feet per year (af/yr) from five wells pumping from an average depth of 140 feet from the San Gabriel Groundwater Basin. The Main San Gabriel Groundwater Basin was adjudicated in 1973. The Main Basin Judgment does not restrict the quantity of water that may be extracted from the Basin. However, it provides a means of replacing with supplement water all annual extractions in excess of a party's annual right to extract water. The City of Monrovia is entitled to extract 7,214 af/yr annually and holds surface diversion rights for an additional 1,098 af/yr. Although the surface diversion is no longer used as a supply source, the City retains the right to produce from groundwater an equivalent amount, for a total of 8,214 af/yr. In years of plentiful rainfall (when the operating safe yield is increased above 190,000 af/yr), Monrovia is entitled to a pumper's share of 3.09472 percent of that increase, thereby enabling the City to extract additional water without incurring replacement

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<sup>1</sup> City of Monrovia Utilities Division. *Urban Water Management Plan*. December 2005.

water charges. The City has experienced no supply deficiencies in the past 25 years, even during periods of drought.<sup>2</sup>

To conserve water resources, including groundwater, and prepare for possible shortages, the City adopted Assembly Bill 325 (The California State Landscape Efficiency Law), which continually stresses to consumers the value of water conservation, and aggressively prevents “water waste” wherever observed or reported. In times of prolonged drought, the City is prepared to implement strict water conservation ordinances to reduce demand for available water and reduce the amount of water extraction from the Main San Gabriel Groundwater Basin.<sup>3</sup>

## Surface Hydrology

Average yearly precipitation in Monrovia is approximately 21 inches. Two major flood control facilities are located in Monrovia: Santa Anita Wash and Sawpit Wash. Sawpit Wash is located in the eastern section of the City; Santa Anita Wash is located along the City’s western boundary. These major drainage courses generally flow in a southerly direction and converge at a point south of Live Oak Avenue. Both drainages are maintained by the Los Angeles County Flood Control District (LACFCD). The combined capacity of Sawpit and Santa Anita dams is 1,852 acre-feet (af). The Sawpit Debris Basin, located in the foothills at the northern portion of the City, has a capacity of 476 af. If the debris basin failed at capacity, it would require a drainage area of 3 square miles. The ensuing flood will last approximately 25 minutes and will be confined largely to the area bounded by Santa Anita Wash and the Santa Fe Flood Control Basin. It would inundate portions of Monrovia, Duarte, and Bradbury. Santa Anita Dam was built in 1927 and is located northwest of downtown Monrovia. It has a capacity of 1,376 af. If the Santa Anita Dam failed at capacity, it would require a drainage area of 11 square miles. Most of the flooding will occur in Sawpit Canyon between Myrtle Avenue and Santa Anita Wash north of I-210. Other LACFCD facilities include two temporary debris basin in Buena Vista Canyon at the north end of Norumbega Drive and three debris basins: Ruby Canyon Debris Basin, Oak Glade Debris Basin, and Sawpit Debris Basin. Because the City has appropriate flood control facilities operated by LACFCD, the flood insurance maps for Monrovia were rescinded in 2000.<sup>4</sup>

The City of Monrovia is a member of the Los Angeles County Storm Water Program, which regulates and controls storm water and urban runoff into the Los Angeles River, San Gabriel River, tributaries to these rivers, and ultimately the Pacific Ocean. The Los Angeles County Storm Water Program is the local enforcement mechanism of the National Pollutant Discharge Elimination System (NPDES), which controls water pollution by regulating point sources that discharge pollutants into waters of the United States. NPDES permits are filed with the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB).

## Thresholds for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not violate any water quality standards or waste discharge requirements, otherwise substantially degrade water quality; place housing within a 100-year flood hazard area; place within a flood

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<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> City of Monrovia. *City of Monrovia General Plan Safety Element*. Adopted June 12, 2002.

hazard area structures that would impede or redirect flood flows; expose people or structures to a significant risk of loss, injury, or death involving flooding; or inundation by seiche, tsunami, or mudflow. Accordingly, these issues are not further analyzed in this EIR.

The proposed project will result in a significant impact if it will:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site
- Substantially alter the existing drainage pattern of the site or the area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

## Environmental Impact

**HYDRO-1:** *The proposed project will not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The average annual growth rate for the entire City will represent approximately 2.2 percent per year, or a 50 percent increase in population in 2030 over existing conditions. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. This new development and population growth will increase demand for potable water.

In 2005, the existing City land uses (single-family residential, multi-family residential, commercial, industrial, public, and landscape) consumed approximately 8,108 af of potable water. Annual growth for new connections in the City is less than 1 percent per year. For planning purposes, the City of Monrovia Utilities Services Division has projected water consumption through 2025 based on an average growth rate of approximately 2 percent per year. The 2 percent per year growth rate encompasses the proposed land use changes in the focus areas as well as general growth in the rest of the City. In 2025, the land uses in Monrovia are expected to consume 8,734 af/yr with continued enforcement by the City of new plumbing

efficiency standards, landscape guidelines, and other water conservation programs. The City anticipates that it can pump approximately 8,900 af/year from the Main San Gabriel Groundwater Basin in 2025 in accordance with its adjudicated rights. As such, the City does not project a shortage in water supply nor will it need to pump more water from the Basin than it is allowed. Because the City can only pump water in accordance with its adjudicated rights, there will no adverse impacts to groundwater supply. The impact will be less than significant at the programmatic level. As new development projects are proposed, the City will reassess its water supply through the environmental review process to ensure that sufficient supplies will be available before approving the project.

**HYDRO-2:** *The proposed project will not substantially alter drainage patterns in a manner which would result in erosion or siltation on- or off-site, result in flooding on- or off-site, or exceed the capacity of existing or planned storm water drainage. The impact will be less than significant.*

The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses within the three focus areas: Station Square Transit Village, West Huntington Drive, and South Myrtle Avenue. The proposed Land Use Element allows for the replacement of older single-family residences with multiple-unit type residences on a limited basis. Construction of new homes on previously undeveloped lots will also be limited given the built out nature of the City and the residents' desire to preserve the hillside areas as open space. New development will be targeted in the three focus areas. It will allow for the recycling of existing uses.

The General Plan Safety Element incorporates the following goals, objectives, and policies to minimize flooding and erosion from new development:

**Goal 2: Minimize the potential for flooding in Monrovia.**

Objective 2.1 Development standards shall include flood control measures.

Policy 2.1.1 Graded slopes, other than those constructed in rock, shall be planted or otherwise protected from the effects of storm water runoff erosion and shall be benched or terraced as required to provide adequate drainage. Planting shall be designed to blend with the surrounding terrain and development. Graded slopes in rock shall be provided with soil pockets to contain landscaping where appropriate. Irrigation facilities shall be provided where necessary for proper establishment and maintenance of planted areas.

Policy 2.1.2 Provision shall be made to prevent surface waters from eroding natural and graded slopes.

Policy 2.1.3 Within six months, or such other period established by the Director of Public Works, after the commencement of grading activities, graded areas shall be stabilized as approved by the City Engineer. Slope planting shall not lag grading completion by more than six months.

Policy 2.1.5 Graded slopes over three feet in vertical height and all graded slopes to be maintained by a Landscape Maintenance District, or other City approved maintenance agreement, shall be planted to protect against erosion. Planting shall be in the ratio of at least one tree per three hundred square feet of slope

and one shrub per one hundred fifty square feet, with ground cover sufficient to cover the bank within one year of planting.

- Policy 2.1.6 For all projects that require grading, a soils engineering report shall be required to include data regarding the nature, distribution and strengths of existing soils, conclusions and recommendations for grading procedures, design criteria for and identified corrective measures, and opinions and recommendations regarding existing conditions and proposed grading. This investigation and report shall be performed by a professional soil engineer experienced in the practice of soil mechanics and registered with the State of California.
- Policy 2.1.7 For lots greater than 7,500 square feet, a hydrology report shall be submitted at the time a grading plan is submitted to the City. The hydrology report shall identify areas of possible inundation, downstream effects, natural drainage courses, conclusions and recommendations regarding the effects of hydrologic conditions on the proposed development, opinions and recommendations regarding the adequacy of facilities proposed for the site, and design criteria to mitigate identified hydrologic hazards. This report shall account for runoff and debris from tributary areas and shall provide consideration for each lot or dwelling unit site in a development. Runoff and debris volumes shall be computed using Los Angeles County Flood Control District criteria. This investigation and report shall be prepared by a registered civil engineer experienced in hydrologic investigation.
- Policy 2.1.9 Hillside development shall provide all necessary sewers, storm drains, debris basins, and other flood control measures as specified in specific plans.

In accordance with existing City requirements, all new development is required to pay an impact fee, part of which will be used for street improvements, including storm drains. In addition, major developments that impact the capacity of downstream lines are required to upgrade adjacent system components to mitigate impacts at the developer's expense. The City will continue to work with LACFCD to maintain culverts, storm drains, and debris basins to prevent the accumulation of debris or other obstructions that could hamper the effectiveness of the system during periods of rain.

Implementation of the City's Safety Element policies related to ground disturbance and revegetation will limit erosion caused during site clearing. Further, as described in the Environmental Setting, Monrovia is a participant in the Los Angeles County Storm Water Program, which regulates and controls storm water runoff and enforces NPDES requirements. Under the County's NPDES storm water permit requirements, development construction projects must implement at a minimum, Best Management Practices (BMPs) to reduce pollutants to the maximum extent practicable (MEP) for water quality protection. This includes sediment control, construction materials control, and erosion control to prevent storm water pollutants from leaving construction sites. Implementation of a Storm Water Pollution Prevention Plan (SWPPP) is required for projects with one acre or greater of soil disturbance. The SWPPP must be prepared before the project owner, developer, or contractor receives a grading or building permit and must be implemented year-round throughout construction. In the event soil is disturbed during the rainy season, generally defined as October 1 through April 15, construction projects must implement a Wet Weather Erosion Control Plan (WWECP). A WWECP must be prepared prior to each rainy season, and must be implemented throughout that rainy season. Projects, including those with construction of parking lots with 25 or more

spaces, are also subject to post-construction storm water requirements of the Standard Urban Storm water Mitigation Plan (SUSMP). The SUSMP identifies applicable, required, or suggested treatment and source control storm water BMPs based on the operational-specific nature of the project.<sup>5</sup>

The increase in impervious surfaces as a result of the proposed Land Use Element will be limited because new development will primarily occur as redevelopment of currently paved and developed sites. Although the amount and velocity of storm water runoff would be expected to increase, compliance with existing City policies and development review procedures would ensure that runoff from new development projects will not exceed the capacity of the storm water drainage system. Erosion control measures specified in the City's Safety Element and compliance with NPDES permit requirements will ensure that erosion and sedimentation is limited. The impact of storm water runoff on drainage, flooding, and erosion will be less than significant.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact will be less than significant at the programmatic level. Individual projects may be subject to additional review and analysis under the CEQA.

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<sup>5</sup> Los Angeles County Department of Public Works. *Stormwater Quality*. website <http://ladpw.org/WMD/npdes/>, accessed February 16, 2007.

## 3.6 Land Use

This section of the EIR examines the primary, or direct, land use impacts associated with long-term implementation of the proposed Land Use and Circulation Elements. The key issue addressed is the potential for the growth and development projected in the Land Use Element to conflict with existing land use or with other local or regional land use plans. Secondary, or indirect impacts, such as traffic, noise, air quality, utilities, aesthetics, and others are discussed in detail in the subsequent sections of this EIR.

This chapter addressed the proposed Circulation Element only in the context of its consistency with regional plans and programs. At the local level, policies in the proposed Circulation Element do not directly relate to land use issues.

### Environmental Setting

#### Existing Land Uses

As one of the older cities in Los Angeles County, Monrovia has very little vacant land. The City is approximately 14 square miles, or 8,960 acres in size. The City is bounded by Arcadia to the west, Los Angeles National Forest to the north, Bradbury and Duarte to the east, and unincorporated Los Angeles County and Irwindale to the south.

Established in 1886, Monrovia is largely a residential community that experienced most of its residential growth in the 1960s. Some vacant land exists in the hillside areas. However, Monrovia residents voted overwhelmingly in July 2000 to preserve open space and tax them to help buy hillside land from private owners to keep it from further residential development. As such, new development would either require intensifying or recycling existing land uses. .

The 1993 Land Use Element currently provides for 16 land use designations. Five of these designations are established for residential development, and range from very low-density to high-density development. Low density residential areas are primarily located in the hillsides north of Foothill Boulevard. Higher density single-family residential uses and multi-family residential uses are generally located in the central part of the City to the east and west of Myrtle Drive. Some residential uses are located south of I-210 east of Magnolia Boulevard.

Regional commercial uses are located along Huntington Drive west of Myrtle Avenue. Office uses are located on Huntington Drive east of Myrtle Avenue and along Myrtle Avenue south of Olive Avenue. A portion of Foothill Boulevard between Mayflower and May Avenue provides neighborhood commercial, as well as the portion of Myrtle Avenue north of Olive Avenue (Historic Commercial Downtown). Development along Myrtle Avenue north of Olive Avenue has additional restrictions placed on it as part of the Historic Commercial Downtown land use designation. Development under this designation must complement and contribute to the character of Old Town Monrovia.

Manufacturing uses are located along Primrose Avenue between Huntington Drive and Olive Avenue, on Royal Oaks Drive between Shamrock Avenue and Mountain Avenue, and south of I-210. Although the area south of I-210 between Magnolia Boulevard on the east and the City limits on the west is designated, this area is primarily light industrial. There are currently 24 PD

areas in the City. Each of the areas receiving the PD designation is unique in character and development in these areas is subject to city review and approval in order to preserve the orderly development of the area and promote needed area improvements. Each PD area has special development guidelines that apply to new development.

The portion of the City north of Hidden Valley Avenue and south of the Angeles National Forest is designated as Hillside Wilderness Area and development in these areas is restricted. In addition, Monrovia residents are currently served by seven City parks, which have a combined land area of approximately 123 acres. Figure 2-2 shows the existing Land Use Policy Map.

## Regulatory Framework

A number of plans, policies, and regulations have been adopted by agencies with jurisdiction over properties within Monrovia. These plans and programs have been adopted to guide growth and development, protect resources, and guard against creation of land use conflicts.

### City of Monrovia Zoning Ordinance

The City's Zoning Ordinance is the primary implementation tool for the General Plan. The Code regulates permitted uses, density and intensity of uses, building height, and other standards of development and activity. Per state law, the provisions of the Zoning Code must be consistent with the land use and development policies of the General Plan Land Use Element.

### Regional Comprehensive Plan and Guide

SCAG is responsible for most regional planning in Southern California. SCAG has been preparing long-range growth and development plans for the Southern California region since the early 1970s as part of the ongoing Development Guide Program. This program provides a framework to coordinate local and regional decisions regarding future growth forecasts at intervals ranging from three to five years. The adopted growth forecasts become the basis for SCAG's functional plans (transportation, housing, air and water) for the region. The population totals and growth distribution are used to plan the future capacity of highways and transit systems, quantity and location of housing, water supply, and siting and sizing of sewage treatment systems.

Monrovia is a member of the San Gabriel Valley Council of Governments (SGVCOG), a subregion of SCAG, made up of the 30 cities in the San Gabriel Valley. SGVCOG's mission is to "ensure our Valley's 'fair share' of scarce federal, State, and local resources by fostering consensus among cities in the San Gabriel Valley regarding policies and programs that address issues relating to land use, air quality, transportation, solid waste and other matters deemed essential to our cities." SCVCOG's current priorities include: ensure that SCAG's RTP update and MTA's Long Range Plan update include SGVCOG adopted high priority projects; support the Alameda Corridor-East (ACE) Construction Authority's efforts to implement the ACE Project and work with local, State and federal officials to obtain needed funding; coordinate and support Metro Gold Line Foothill Extension to Montclair; ensure adoption of the Governor's Congestion Management Program; and work towards the completion of the Interstate 710 (I-710).

**Growth Management:** The Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) contains goals designed to improve the regional standard of living, regional

quality of life, and provide social, political and cultural equity. The following Growth Management goals are related to improving the regional standard of living:

- 3.05 Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.
- 3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.
- 3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

Growth Management goals to improve the regional quality of life include the following:

- 3.11 Support provisions and incentives created by local jurisdictions to attract housing growth in job-rich subregions and job growth in housing-rich subregions.
- 3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.
- 3.13 Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.
- 3.14 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.
- 3.15 Support local jurisdictions strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.
- 3.16 Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.
- 3.18 Encourage planned development in locations least likely to cause environmental impact.
- 3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.
- 3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.
- 3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazard.
- 3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

Growth Management goals to provide social, political, and cultural equity include the following:

- 3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.
- 3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

**Air Quality Chapter Core Actions:** The Air Quality Chapter Core Actions are air quality goals for the region, including the following:

- 5.07 Determine specific programs and associated actions needed (e.g. indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.
- 5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, County, subregional, and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

**Open Space Chapter Ancillary Policies:** RCPG goals for regional open space goals include the following:

Outdoor Recreation:

- 9.01 Provide adequate land resource to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.
- 9.02 Increase the accessibility to open space lands for outdoor recreation.
- 9.03 Promote self-sustaining regional recreation resources and facilities.

Public Health and Safety:

- 9.04 Maintain open space for adequate protection of lives and properties against natural and man-made hazards.
- 9.05 Minimize potentially hazardous development in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.
- 9.06 Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.

Resource Production:

9.07 Maintain adequate viable resource production lands, particularly lands devoted to commercial agriculture and mining operations.

9.08 Develop well-managed viable eco-systems or known habitats of rare, threatened and endangered species, including wetlands.

**Water Quality Chapter Recommendations and Policy Options:** SCAG core water quality policies include the following:

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

**Regional Transportation Plan (RTP):** The Regional Transportation Plan links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Transportation investments shall be based on SCAG's adopted Regional Performance Indicators:

Mobility – Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient, and economical movements of people and goods.

Accessibility – Transportation Systems should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.

Environment – Transportation Systems should sustain development and preservation of the existing system and environment.

Reliability – Transportation system should have reasonable and dependable levels of service by mode.

Safety – Transportation Systems should provide minimal risk, accident, death, and injury.

Equity/Environmental Justice – The benefits of transportation investments should be equitably distributed among all ethnic, age, and income groups.

Cost effectiveness – Maximize return on transportation investment.

## Growth Visioning

The fundamental goal of the SCAG's Growth Visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class.

Principle 1: Improve *mobility* for all residents

- Encourage transportation investments and land use decisions that are mutually supportive.

- Locate new housing near existing jobs and new jobs near existing housing.
- Encourage transit-oriented development.
- Promote a variety of travel choices.

Principle 2: Foster *livability* in all communities.

- Promote infill development and redevelopment to revitalize existing communities.
- Promote developments which provide a mix of uses.
- Promote “people scaled,” walkable communities.
- Support the preservation of stable, single-family neighborhoods.

Principle 4: Promote *sustainability* for future generations.

- Preserve rural, agricultural, recreational, and environmentally sensitive areas.
- Focus development in urban centers and existing cities.
- Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution, and significantly reduce waste.
- Utilize “green” development techniques.

## Threshold for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not physically divide an established community or conflict with an applicable habitat conservation plan or natural community conservation plan. Accordingly, these issues are not further analyzed in this EIR.

Land use impacts will be significant if implementation of the proposed Land Use Element will create incompatible land uses or result in conflicts with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

## Environmental Impact

**LU-1:** *The proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The impact will be less than significant.*

## Land Use Compatibility

The proposed Land Use Element, through text and maps, describes the location and intensity of development to be permitted in Monrovia through 2030. Figure 2-3 shows the Proposed Land Use Policy Map. Because Monrovia is largely built out, development pursuant to the proposed Land Use Element will involve the recycling of underutilized parcels and the redevelopment of existing sites. In response to extension of light rail service, the City’s desire to create broader circulation and land use connections to the planned station, and the anticipated economic benefits to be derived from transit service, the City has prepared new land use plans for three focus areas: the Station Square Transit Village, West Huntington Drive, and South Myrtle Avenue corridors. The following changes would occur as part of the proposed Land Use Element:

- Establish land use policies and design performance criteria for the West Huntington Drive corridor, which extends from the western City limit east to Primrose Avenue.
- Establish land use policies and design performance criteria for the South Myrtle Avenue corridor, which extends from I-210 north to Olive Avenue.
- Establish land use policies, design performance criteria, and development caps for the 80-acre Station Square Transit Village area, the limits of which include all properties bounded by I-210 on the north, Magnolia Avenue on the west, Duarte Road on the south, and Shamrock Avenue on the east.

The proposed Land Use Element will establish the Station Square Transit Village Planned Development area. This PD designation will replace the current PD-12, PD-12A, and PD-13 designations in the 1993 Land Use Element. The proposed Land Use Element will allow for a minimum of 1,400 dwelling units to a maximum of 3,600 dwelling units, up to 850,000 square feet of office space, a maximum of 151,200 square feet of retail/dining space, up to 45,800 square feet of hotel facilities, a transit station, a public parking structure of approximately 600 parking spaces to support the transit station, and an approximate total of 8,652 parking spaces for adjoining commercial and/or residential uses

In the proposed Land Use Element, the City will redesignate properties along the West Huntington Drive Corridor to allow for the gradual transition of the corridor to a multi-function urban street. The proposed Land Use Element will create: 1) two new commercial land use designations to accommodate diverse commercial uses, and 2) opportunities for mixed-use commercial and residential developments. A maximum of 128 dwelling units will be permitted within this focus area. A maximum of 1,010,868 square feet of retail commercial and mixed use will be permitted facing Huntington Drive. A maximum of 66,791 square feet of manufacturing uses will be permitted in the West Huntington Drive corridor.

The proposed Land Use Element will allow residential uses at a maximum density of 54 dwelling units per acre and office development may be built as stand-alone product or as part of a horizontally or vertically integrated mixed-use development. Retail/dining and manufacturing uses will also be permitted in the South Myrtle Avenue corridor.

Policies continue to define the total amount of development allowed within each area. It is estimated that approximately 3,746 net new residential units and approximately 993,119 square feet of net new non-residential development will be constructed within the focus areas in the next approximately 23 years pursuant to the proposed Land Use and Circulation Elements. The average annual growth rate for the entire City will represent approximately 2.2 percent per year, or a 50 percent increase in population in 2030 over existing conditions. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. This rate is considered modest relative to the 8 percent per year growth rate SCAG projects for the region during this same time period.

Land use policies are focused on providing long-term land use compatibility. The proposed Land Use Element provides for the preservation of established single-family residential neighborhoods and protection of the local commercial uses in Old Town Monrovia. Growth and development is targeted around the proposed Gold Line station south of I-210. This growth will consist of high-density residential and office uses that will take advantage of the Gold Line for transportation purposes. Retail and hospitality uses will provide new jobs and attract tax

revenue while minimizing the intrusion of traffic into established residential neighborhoods. The proposed Land Use Element connects existing office and residential development by fostering a pedestrian friendly mix of retail/commercial, office, and residential uses between the proposed Gold Line station and Old Town Monrovia. New regional commercial, office, and manufacturing uses are directed to Huntington Drive, which already serves as the City's regional-serving commercial corridor.

Overall, the proposed land use policies promote land use compatibility and reduce potential conflicts between existing and future uses. The Zoning Ordinance, Title 17 of the City's Municipal Code provides additional development and performance standards for development of land uses and related activities. The City intends to adopt a revised Title 17, following adoption of the proposed project. The revised Zoning Ordinance will include the creation of additional zoning categories to correspond to the Land Use Element's land use designations. The revised Zoning Ordinance will serve as the primary implementation tool for the proposed Land Use Element and the goals and policies it contains. A revised Zoning Map, consistent with the proposed General Plan Land Use Policy Map, will also be adopted to identify the zoning categories applied to each parcel of land within the City. Therefore, the proposed Land Use Element and the Zoning Ordinance will be consistent. No conflicts with the City's land use plans, policies, or regulations will occur.

SCAG's RCPG sets forth regional growth forecasts, transportation policies, and quality of life goals applicable to Monrovia. SCAG's transportation goals call for improving mobility for all persons and encouraging investment in smart, environmentally friendly traffic solutions. With regard to quality of life goals articulated in the RCPG, SCAG emphasizes the need to encourage the use of transit and reduce vehicle trips overall; to facilitate infill development; to establish mixed-use clusters; and to adopt programs that enhance and protect environmental quality.

The proposed land use policies that implement SCAG's goals are as follows:

Policy 1.4 Encourage the location of new high density residential development in close proximity (i.e., within walking distance) of the downtown, other major retail commercial areas, and/or transit facilities.

Policy 1.9 Develop higher density residential areas in close proximity to employment centers.

The proposed Circulation Element policies that implement SCAG's goals are as follows:

Policy 1.12 Promote ridesharing through publicity and provision of information to the public.

Policy 1.13 Encourage employers to reduce vehicular trips by offering employees incentives such as reduced-rate transit passes, preferentially-located parking for carpool and vanpool vehicles, and flexible work hours.

Policy 4.1 Comply with the requirements of ADA to ensure accessibility of elderly and disabled person to public transportation. Continue to support Access Services, which provides ADA-compliant paratransit services (dial-a-ride service) within the City.

Policy 4.2 Continue to engage Foothill Transit, Metro, and the Metro Gold Line Construction Authority to coordinate connections to the planned light rail line running through Monrovia between Montclair and Los Angeles.

- Policy 4.3 Continue to coordinate with Metro and Foothill Transit to identify improvements to local and express bus service to Monrovia. Coordinate with these agencies to develop common standards for transit stops in the City, including seating, lighting, shelters, and signage. Identify funding sources to implement improvements determined to be necessary.
- Policy 4.4 Continue to provide local fixed-route transit service (the Monrovia Trolley) that was established in 2002. Prepare a study to evaluate potential revisions to existing routes and the development of new routes of the City-operated public transit system, including service to the planned light rail station. Identify and pursue available external funding opportunities for any improvements that may be identified.
- Policy 4.7 Plan for the provision of a mixed-use “Transportation Center” with a mix of uses including those that provide services for the commuter such as a park-and-ride facility to serve regional freeways (high occupancy vehicle lanes) and bus and light rail services.
- Policy 4.10 Coordinate the location of future transit routes with high demand areas. Encourage development of mixed-use Planned Development projects (e.g., joint parking structures) surrounding the light rail transit station.
- Policy 4.12 Consider amending the City’s parking requirements to establish a reduction in parking requirements for new developments within a defined distance from the planned light rail station.
- Policy 9.3 Provide adequate terminal facilities (parking, bike racks, security, etc.) for inter-city and regional travel for users of both public and private transportation modes.
- Policy 9.4 Continue to support the regional light rail and bus system to provide inter-city service to major employment centers, and connection to regional transfer points.
- Policy 9.5 Require that proposals for major new developments (as defined in the City’s Transportation Demand Management [TDM] ordinance) include submission of a TDM plan to the City, including monitoring and enforcement provisions. Also, require that a regional impact assessment be included in traffic impact reports for all new major development projects.

The proposed Land Use and Circulation Element policies support SCAG’s regional transportation and quality of life goals. As such, the proposed project will not be incompatible with regional plans. The impact will be less than significant.

## Mitigation Measures

The impact will be less than significant, and no mitigation is required.

## Level of Impact after Mitigation

The impact related to the proposed Land Use Element's consistency with land use plans, policies, and regulations will be less than significant.

# 3.7 Noise

This section of the EIR examines whether long-term implementation of the proposed Land Use and Circulation Element will generate or expose persons to noise levels in excess of City standards; generate or expose persons to excessive levels of vibration or groundborne noise; or create a substantial permanent or temporary increase in ambient noise within the City. This chapter is based on the Noise Impact Report prepared by Terry A. Hayes Associates in August 2007 (see Appendix C).<sup>1</sup>

## Environmental Setting

### Noise

#### Characteristics of Sound

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The “A-weighted scale,” abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately three to 140 dBA. Figure 3.7-1 provides examples of A-weighted noise levels from common sounds.

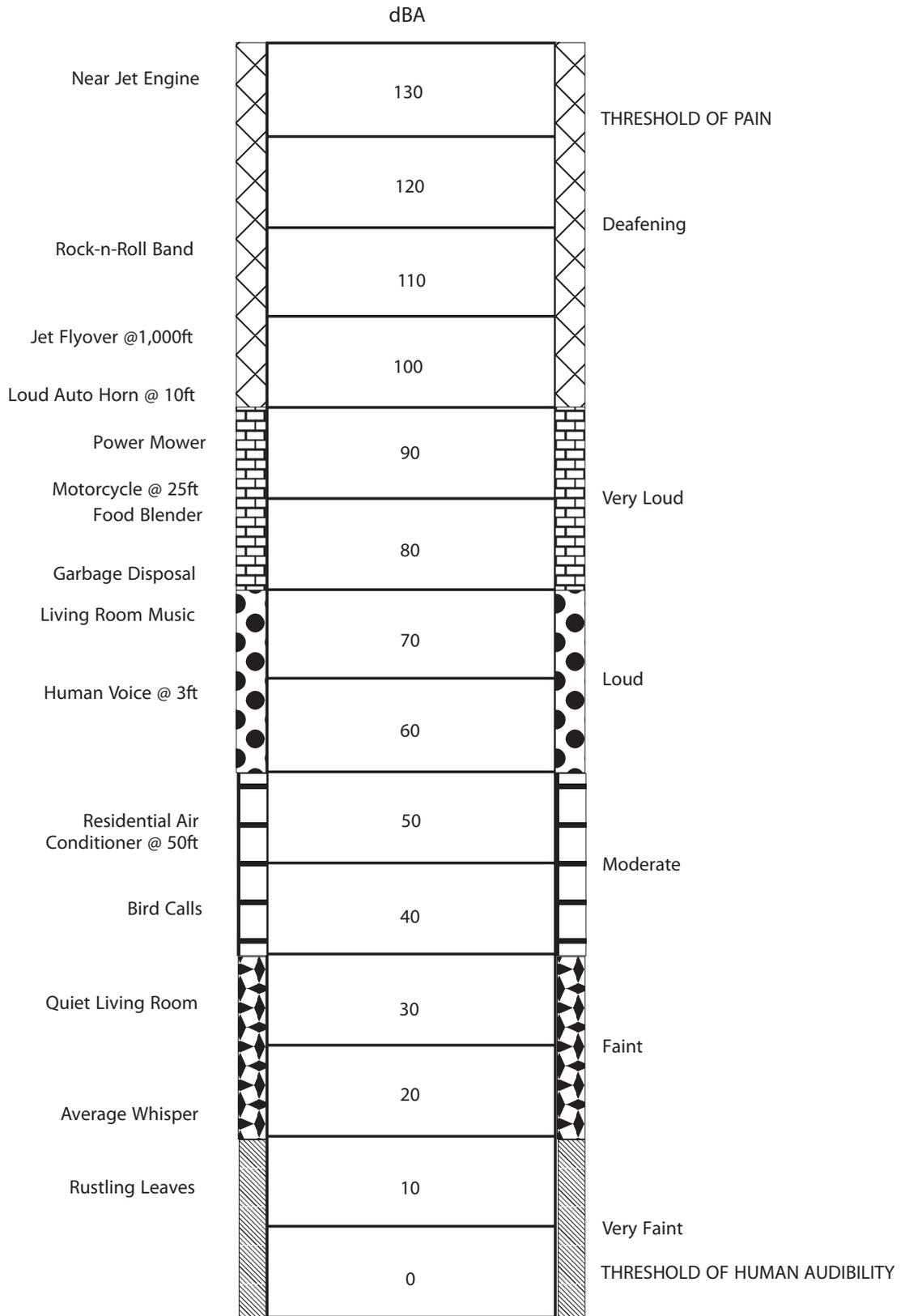
#### Noise Definitions

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL) and Equivalent Noise Level ( $L_{eq}$ ).

**Community Noise Equivalent Level.** CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. In certain circumstances, human perception to sound between 7:00 p.m. and 10:00 p.m. can be as if the sound were actually five decibels higher than if it occurred from 7:00 a.m. to 7:00 p.m. in areas where the ambient (background) noise environment is very quiet. From 10:00 p.m. to 7:00 a.m., humans sometimes perceive sound as if it were ten dBA higher due to the lower background level where the existing ambient noise environment is considered very quiet. The CNEL is obtained by adding an additional five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten dBA to sound levels in the night before 7:00 a.m. and after 10:00 p.m. to more accurately simulate these extreme noise situations. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

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<sup>1</sup> Terry A. Hayes Associates. *Monrovia General Plan Amendments to the Land Use and Circulation Elements Noise Impact Report*. August 2007.



**Figure 3.7-1**  
**A-Weighted Decibel Scale**

**Day-Night Sound Level ( $L_{dn}$ ).**  $L_{dn}$  is basically a 24-hour  $L_{eq}$  with an adjustment to reflect the greater sensitivity of most people to nighttime noise. The adjustment is a 10 dBA penalty for all sound that occurs in the nighttime hours of 10:00 p.m. to 7:00 a.m. The effect of the penalty is that in the calculation of  $L_{dn}$ , any event that occurs during the nighttime hours is equivalent to 10 of the same event during the daytime hours.  $L_{dn}$  is the most common measure of total community noise over a 24-hour period and is used by the Federal Transit Administration (FTA) to evaluate residential noise impacts from proposed transit projects.

**Equivalent Noise Level.**  $L_{eq}$  is the average noise level on an energy basis for any specific time period. The  $L_{eq}$  for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound.  $L_{eq}$  can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

### Effects of Noise

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment range from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

### Audible Noise Changes

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely evoke a community reaction. A 10 dBA increase is subjectively heard as a doubling in loudness and would most certainly cause a community response.

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or “point source,” will decrease by approximately 6 dBA over hard surfaces and 7.5 dBA over soft surfaces for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on.

Generally, noise is most audible when traveling by direct line-of-sight.<sup>2</sup> Barriers such as walls, berms, or buildings that break the line-of-sight between the source and the receiver greatly reduces noise levels from the source since sound can only reach the receiver by bending over the top of the barrier (diffraction). Sound barriers can reduce sound levels by up to 20 dBA. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced. In situations where the source or the receiver is located 3 meters (approximately 9.84 feet) above the ground, or whenever the line-of-sight averages more than three meters above the ground, sound levels would be reduced by approximately 3 dBA for each doubling of distance.

<sup>2</sup> Line-of-sight is defined as an unobstructed visual path between the noise source and the noise receptor.

## Vibration

### Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

### Vibration Definitions

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.<sup>3</sup>

### Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, groundborne vibration levels rarely affect human health. Instead, most people consider groundborne vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of ground-borne vibration may damage fragile buildings or interfere with equipment that is highly sensitive to ground-borne vibration (e.g., electron microscopes).

To counter the effects of ground-borne vibration, the Federal Railway Administration (FRA) and the FTA have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage.<sup>4</sup> The FTA has identified the human annoyance response to vibration levels as 80 RMS. The FTA has also published comprehensive guidance on ground-borne vibration levels from transportation sources.<sup>5</sup> According to the FTA, residential land uses that experience frequent vibration events should not be exposed to ground-borne vibration levels that exceed 72 VdB.<sup>6</sup>

### Perceptible Vibration Changes

In contrast to noise, ground-borne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower, well below the threshold of perception for humans which is around 65 RMS. Most perceptible indoor vibration is caused by sources within buildings, such as operation of

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<sup>3</sup> Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*. April 1995.

<sup>4</sup> Federal Railway Administration. *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. December 1998.

<sup>5</sup> Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*. April 1995.

<sup>6</sup> Frequent events are defined as more than 70 vibration events per day.

mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, vibration from traffic is rarely perceptible.

## Existing Noise

The existing noise environment of the three project areas is characterized by vehicular traffic and noises typical to a dense urban area (e.g., landscaping activities and people conversing). Vehicular traffic, particularly from I-210, is the primary source of noise in the project vicinity.

Sound measurements were taken between 8:30 a.m. and 1:00 p.m. on August 1, 2007 to ascertain existing ambient daytime noise levels in the project vicinity. These readings were used to establish existing ambient noise conditions. The noise monitoring locations are shown in Figure 3.7-2 and the sound levels at the noise monitoring locations are shown in Table 3.7-1. Existing ambient sound levels range between 69.5 and 72.4 dBA ( $L_{eq}$ ). Figure 3.7-3 shows the existing noise contours.

**Table 3.7-1 Existing Noise Levels**

Location No.	Location	Sound Level (dBA $L_{eq}$ )
1	Light industrial use on Myrtle Avenue between Walnut Avenue & Chestnut Avenue	67.2
2	Light industrial/office use on Huntington Drive between Myrtle Avenue & Ivy Avenue	69.5
3	Retail/commercial use on Huntington Drive between Mayflower Avenue & Alta Vista Avenue	69.9
4	Heavy industrial use on Myrtle Avenue between Montana Street and Central Ave	72.1
5	Industrial use on Evergreen Avenue between California Avenue & Shamrock Avenue	72.4
6	Commercial use on California Avenue between Evergreen Avenue and Duarte Road	66.9
7	Commercial use on Myrtle Avenue between Evergreen Avenue and Duarte Road	71.6
8	Residential use on Evergreen Avenue between Magnolia Avenue and Myrtle Avenue	70.0

## Existing Vibration

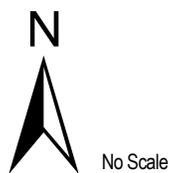
Similar to the environmental setting for noise, the vibration environment is dominated by traffic from nearby roadways. Heavy trucks can generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on major streets, existing ground-borne vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network. Vibration levels from adjacent roadways are not perceptible at the project sites.



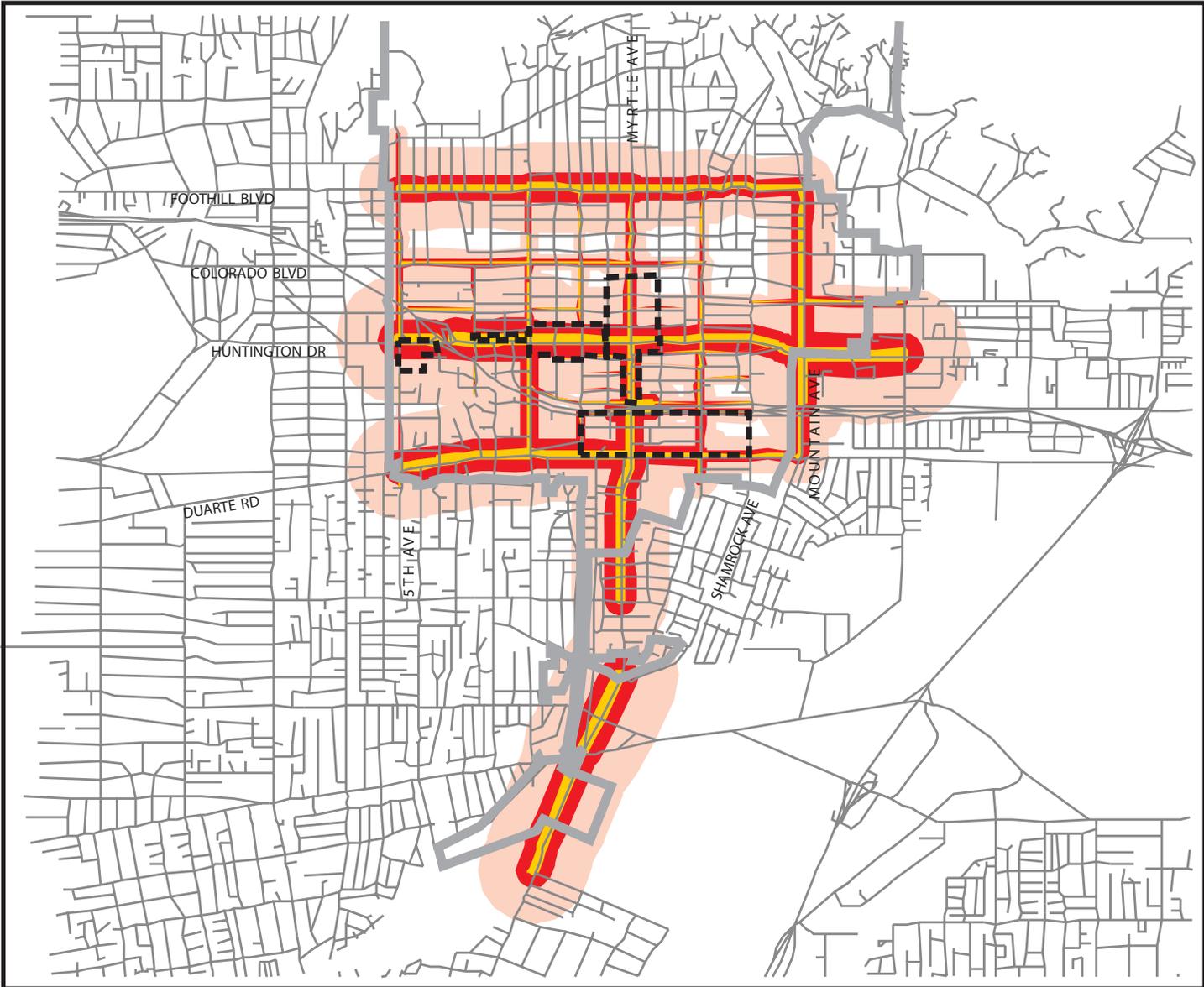
Source: TAHA, 2007

LEGEND:

- Project Corridors
- # Noise Monitoring Locations



**Figure 3.7-2  
Noise Monitoring Locations**



Source: TAHA, 2007

LEGEND:

-  Project Corridors
-  City Boundary
-  70 CNEL (2007)
-  65 CNEL (2007)
-  60 CNEL (2007)



**Figure 3.7-3**  
**Existing Noise Contours**

## Sensitive Land Uses

Certain land uses are considered to be more sensitive to noise impacts than others. Noise sensitive land uses include residences, schools, libraries, hospitals, and other care facilities. Noise sensitive uses that surround the project areas include residential uses, schools, and parks. Figure 3.7-4 identifies noise sensitive land uses within and adjacent to the three project areas. These uses will be most susceptible to changes in the noise environment brought on by future land use patterns in the project areas and, thus, are identified here to prevent incompatibility issues from arising both during and after the planning process.

## Regulatory Framework

The City of Monrovia Noise Element has identified several noise control programs.<sup>7</sup> These programs aim to protect the City from adverse effects of noise and include the control of noise at its source, as well as the attenuation of noise between the source and the receiver.

In addition to the Noise Element, the City's Noise Ordinance also controls unnecessary and unwanted noise. The City noise regulations are found in Title 9 (Public Peace, Morals and Welfare), Chapter 9.44 (Noise) of the City's Municipal Code. Section 9.44.080 of the Noise Ordinance prohibits construction or demolition activities between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 6:00 p.m. and 9:00 a.m. on weekends and holidays.

Because the project areas would include residential land uses, it is important to note that the United States Department of Housing and Urban Development (HUD) has set a goal of 45 dBA  $L_{dn}$  as a desirable maximum interior noise standard for HUD-assisted residential units.

The City does not have adopted groundborne vibration standards.

## Thresholds for Determining Significance

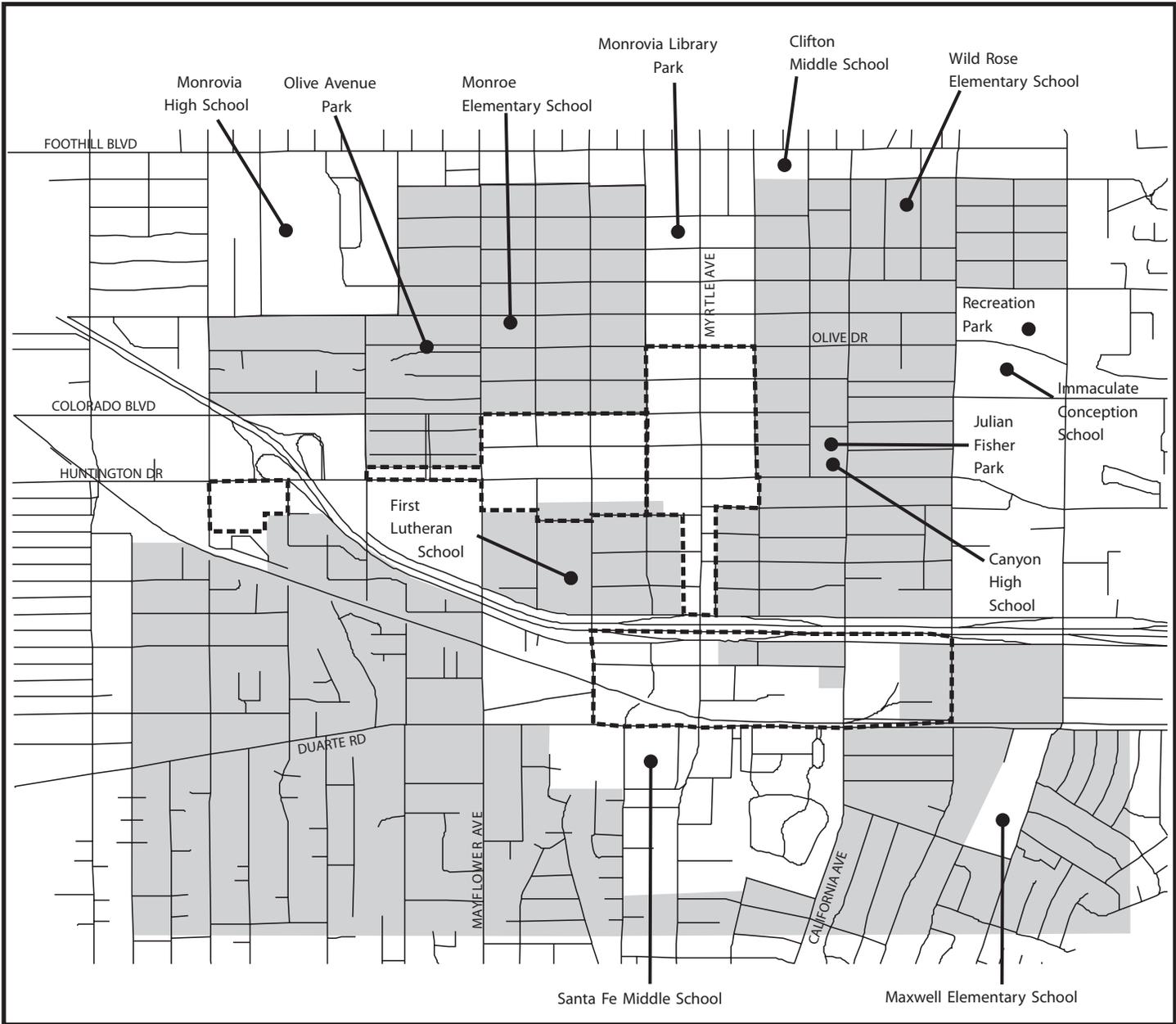
As part of the Initial Study (see Appendix A), it was determined that the proposed project will not expose people residing or working in the project area to excessive airport noise levels. Accordingly, these issues are not further analyzed in the EIR.

Noise impacts will be significant if implementation of the proposed Land Use and Circulation Elements will:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure persons to or generate excessive groundborne vibration or groundborne noise levels;
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

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<sup>7</sup> City of Monrovia. *City of Monrovia General Plan Noise Element*. September 2002.



Source: TAHA, 2007

LEGEND:

 Residential Areas

 Project Corridors



No Scale

**Figure 3.7-4**  
**Noise Sensitive Receptors**

Based on the City of Monrovia Noise Ordinance and the state Land Use Compatibility Matrix (see Table 3.7-2), the proposed project will result in significant noise impacts if it would generate noise levels in excess of the following thresholds:

- A significant construction noise impact will result if construction activity would occur outside of the hours permitted by the City's Noise Ordinance (i.e., between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 6:00 p.m. and 9:00 a.m. on weekends and holidays).
- A significant operational noise impact will result if the proposed project causes the ambient noise level measured at the property line of the affected uses to increase by three dBA (CNEL) to or within the "normally unacceptable" or "clearly unacceptable" category (see Table 3.7-2) or any 5 dBA or more increase in noise level. A significant operational noise impact will also result if the proposed project will expose new sensitive receptors to interior noise levels greater than 45 dBA  $L_{dn}$ .

The State of California and the City of Monrovia do not have adopted ground-borne vibration standards. Based on federal guidelines, the proposed project will result in a significant construction or operational vibration impact if:

- The proposed project would expose buildings to the Federal Railroad Administration (FRA) building damage threshold level of 0.5 PPV.
- The proposed project would expose sensitive individuals to the FTA human annoyance response threshold level of 80 RMS.
- Construction activity would occur outside of the hours permitted by the City's Noise Ordinance (i.e., between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 6:00 p.m. and 9:00 a.m. on weekends and holidays).
- New sensitive receptors associated with the proposed project would be exposed to light rail groundborne vibration levels that exceed the FTA threshold of 72 VdB.

## Environmental Impact

**NOISE-1:** *The proposed project will result in a permanent increase in ambient noise levels and expose persons to noise levels in excess of established standards adjacent to commercial uses. These impacts will be reduced to a less than significant level with implementation of mitigation measures.*

## Vehicular Noise

The predominant noise source in Monrovia is vehicular traffic. The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses that

**Table 3.7-2 Land Use Compatibility for Community Noise Environments**

Land Use Category	Community Noise Exposure (dBA, CNEL)					
	55	60	65	70	75	80
Residential - Low Density Single-Family, Duplex, Mobile Homes	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Residential - Multi-Family	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Transient Lodging - Motels Hotels	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Auditoriums, Concert Halls, Amphitheaters	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Sports Arena, Outdoor Spectator Sports	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Playgrounds, Neighborhood Parks	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Office Buildings, Business Commercial and Professional	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable

 **Normally Acceptable** - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

 **Conditionally Acceptable** - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.

 **Normally Unacceptable** - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

 **Clearly Unacceptable** - New construction or development should generally not be undertaken.

**SOURCE:** California Office of Noise Control, Department of Health Services

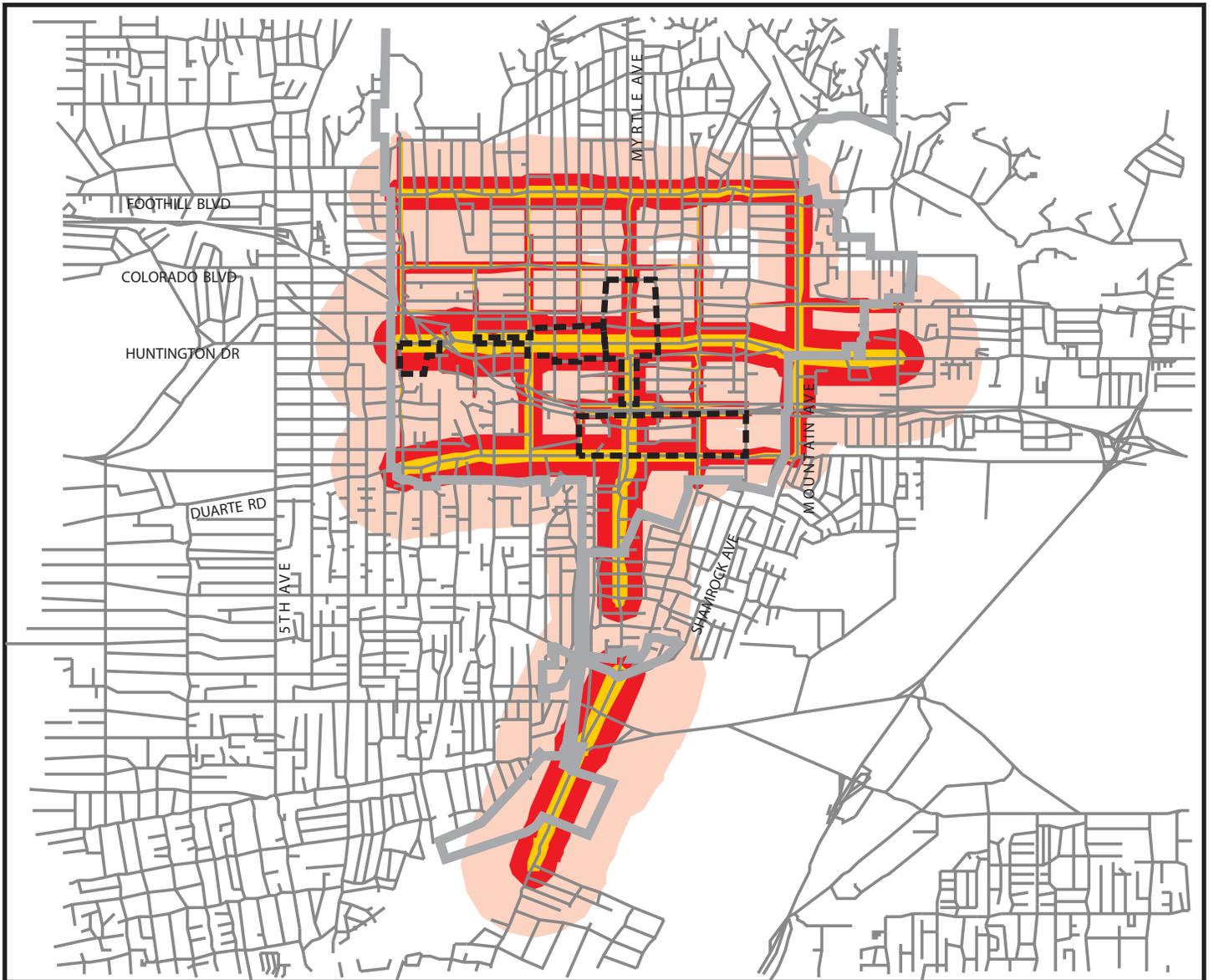
will not increase the amount of hazardous materials that will be used within the City. The proposed Mobility Element will allow for improvements in the City's roadway system to allow for more efficient flow of traffic and protection of residential neighborhoods from through traffic. The proposed Land Use and Circulation Elements are expected to increase vehicle traffic in Monrovia, as well as increases in vehicle traffic associated with regional growth. The increase in traffic will increase noise levels in Monrovia.

The greatest noise impacts associated with vehicular traffic are anticipated to occur at sensitive receptor locations along high-traffic roadway segments. Using the Federal Highway Administration RD-77-108 noise calculation formulas, noise impacts associated with project-related traffic were predicted. Based on traffic volumes provided by the traffic report for the proposed project, CNEL was calculated at roadway segments for both existing and future conditions, as shown in Table 3.7-3. Noise levels were calculated at 100 feet from the centerline of I-210 and 50 feet from the centerline of all other analyzed roadway segments. Figure 3.7-5 shows the future noise contours.

As shown in Table 3.7-3, increases in noise levels at most of the affected roadways will not be perceptible to the human ear (i.e., a less than 3 decibel increase). Increases in noise levels due to more vehicles on the road will be perceptible along Huntington Drive between Mayflower Avenue and Myrtle Avenue (3 dBA) and along Central Avenue between I-210 westbound on-ramp and Myrtle Avenue (4 dBA). No sensitive receptors are located adjacent to Huntington Drive between Mayflower Avenue and Myrtle Avenue, and the proposed Land Use Element does not propose any sensitive receptor uses along this roadway segment. Multi-family residential uses are located just north of the Central Avenue, between I-210 westbound on-ramp and Myrtle Avenue. Under the proposed Land Use Policy Map, these multi-family residential uses would be within the "conditionally acceptable" category of the Land Use Compatibility Matrix (see Table 3.7-2), and the proposed Land Use Element will not cause the ambient noise level at residential uses to incrementally increase by 3 decibels (CNEL) or to within the "normally unacceptable" or "clearly unacceptable" category. Thus, the impact will be less than significant at the programmatic level, and no mitigation measures are required.

## Noise Related to Non-Residential Development

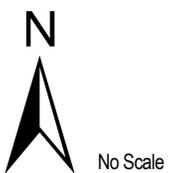
Noise associated with non-residential uses, such as truck deliveries and parking lot activities, has the potential to increase ambient noise levels at nearby residential uses, as well as the residential uses that could also be developed as part of mixed-use projects under the proposed Land Use Element. Activities associated with future commercial development in the City have the potential to affect future residential uses within the areas, as well as existing sensitive receptors. The programs within the Noise Element of the General Plan will assist in the reduction of noise levels at sensitive receptors. However, the impact will be significant. Implementation of mitigation measure NOISE-A will reduce noise levels experienced at nearby sensitive receptors. The impact will be less than significant with implementation of mitigation.



Source: TAHA, 2007

LEGEND:

-  Project Corridors
-  City Boundary
-  70 CNEL (2007)
-  65 CNEL (2007)
-  60 CNEL (2007)



**Figure 3.7-5  
Future Noise Contours**

**Table 3.7-3 Existing and Future Estimated Community Noise Equivalent Levels**

Roadway	Segment	Scenario (dBA, CNEL)			
		Existing	Future	Change (dBA)	
<i>North/South Streets</i>					
5 <sup>th</sup> Avenue	North of Colorado Boulevard	67	68	+1	
	South of Colorado Boulevard	68	69	+1	
	South of Huntington Drive	62	63	+1	
Monterey Avenue	South of Colorado Boulevard	65	67	+2	
	South of Huntington Drive	63	64	+1	
Highway Esplanade	North of Huntington Drive	60	61	+1	
Mayflower Avenue	Foothill Boulevard to Colorado Boulevard	67	68	+1	
	Colorado Boulevard to Huntington Drive	68	70	+2	
	Huntington Drive to Duarte Road	72	73	+1	
Magnolia Avenue	Foothill Boulevard to Colorado Boulevard	65	66	+1	
	Colorado Boulevard to Huntington Drive	67	68	+1	
	Evergreen Avenue to Duarte Road	68	70	+2	
Myrtle Avenue	Foothill Boulevard to Colorado Boulevard	69	70	+1	
	Colorado Boulevard to Huntington Drive	70	72	+2	
	Huntington Drive to Central Avenue	73	74	+1	
	Evergreen Avenue to Duarte Road	74	75	+1	
	South of Duarte Road	74	76	+2	
	North of Camino Real Street	74	76	+2	
	South of California Avenue	75	77	+2	
California Avenue	South of Live Oak Avenue	75	76	+1	
	Foothill Boulevard to Colorado Boulevard	65	67	+2	
	Colorado Boulevard to Huntington Drive	67	69	+2	
	Huntington Drive to Duarte Road	69	71	+2	
Mountain Avenue	South of Duarte Road	70	71	+1	
	Foothill Boulevard to Royal Oaks Drive	72	73	+1	
	Royal Oaks Drive to Huntington Drive	73	74	+1	
	Huntington Drive to Central Avenue	74	75	+1	
Chestnut Avenue	Evergreen Avenue to Duarte Road	72	72	0	
	<i>East/West Streets</i>				
	Foothill Boulevard	5 <sup>th</sup> Avenue to Mayflower Avenue	73	74	+1
		Mayflower Avenue to Myrtle Avenue	74	75	+1
Myrtle Avenue to California Avenue		73	74	+1	
California Avenue to Mountain Avenue		72	73	+1	
Colorado Boulevard	5 <sup>th</sup> Avenue to Mayflower Avenue	69	70	+1	
	Mayflower Avenue to Myrtle Avenue	67	68	+1	
	Myrtle Avenue to California Avenue	65	67	+1	
Royal Oaks Drive	Shamrock Avenue to Mountain Avenue	65	66	+1	
	East of Mountain Avenue	69	70	+1	
Chestnut Avenue	5 <sup>th</sup> Avenue to Monterey Avenue	65	66	+1	
	Mayflower Avenue to Magnolia Avenue	63	64	+1	
	Myrtle Avenue to Canyon Boulevard	58	60	+2	

**Table 3.7-3 Existing and Future Estimated Community Noise Equivalent Levels (Cont)**

Roadway	Segment	Scenario (dBA, CNEL)		
		Existing	Roadway	Segment
Huntington Drive	5 <sup>th</sup> Avenue to I-210 Eastbound Ramps	75	77	+2
	I-210 Westbound Ramps to Mayflower Ave	75	77	+2
	Mayflower Avenue to Myrtle Avenue	74	77	+3
	Myrtle Avenue to California Avenue	74	75	+1
	California Avenue to Mountain Avenue	74	75	+1
	East of Mountain Avenue	75	77	+2
Cypress Avenue	West of Myrtle Avenue	58	58	0
	East of Myrtle Avenue	59	60	+1
Cherry Avenue	West of Myrtle Avenue	58	59	+1
	East of Myrtle Avenue	55	56	+1
Los Angeles Ave	East of Myrtle Avenue	57	58	+1
Montana Avenue	West of Myrtle Avenue	57	58	+1
Central Avenue	Mayflower Avenue to Magnolia Avenue	64	66	+2
	I-210 Westbound On-Ramp to Myrtle Ave	65	69	+4
	Myrtle Ave to I-210 Westbound Off-Ramp	71	73	+2
	I-210 Westbound Off-Ramp to California Ave	66	68	+2
	California Avenue to Shamrock Avenue	65	67	+2
Evergreen Avenue	Magnolia Ave to I-210 Eastbound Off-Ramp	65	67	+2
	I-210 Westbound Off-Ramp to Myrtle Ave	73	74	+1
	Myrtle Ave to I-210 Eastbound Off-Ramp	71	73	+2
	California Avenue to Shamrock Avenue	67	68	+1
Duarte Road	5 <sup>th</sup> Avenue to Mayflower Avenue	74	76	+2
	Mayflower Avenue to Myrtle Avenue	74	76	+2
	Myrtle Avenue to California Avenue	72	74	+2
	California Avenue to Mountain Avenue	70	72	+2
I-210	West of I-605	84	85	+1

Source: Terry A. Hayes Associates, *Noise Impact Report*, August 2007.

## Rail Noise

A portion of the Planning Area is located along the proposed Gold Line light rail service tracks, including the Station Square Transit Village area in which approximately 3,516 new residential could be developed under the proposed Land Use Element. As such, there is the potential for rail noise to expose new sensitive receptors to incompatible noise levels. The Metro Gold Line Draft Environmental Impact Statement (EIS) /Draft Environmental Impact Report (EIR) comprehensively analyzed rail noise level along the proposed route. The noise analysis assumed that rail cars traveling at 55 miles per hour will generate a noise level of approximately 65 L<sub>dn</sub> at 50 feet.<sup>8</sup>

Newly constructed buildings typically provide exterior to interior noise attenuation of at least 25 dBA. As such, an exterior noise level of 65 dbA L<sub>dn</sub> will be reduced to 40 dBA L<sub>dn</sub>. This noise level will be below the interior noise level of 45 dBA L<sub>dn</sub> recommended by HUD. In addition,

<sup>8</sup> Metro Gold Line Foothill Extension Construction Authority and U.S. Department of Transportation. *Gold Phase II Pasadena to Montclair – Foothill Extension Draft Environmental Impact Statement/Environmental Impact Report*. April 2004.

individual development projects proposed pursuant to the proposed Land Use Element will be required to prepare project-specific noise analyses to ensure that interior noise levels will meet HUD standards. Compliance with existing regulations will ensure a less than significant impact.

**NOISE-2:** *The proposed project will expose people to or generate excessive groundborne vibration associated with the Gold Line light rail service. The impact will be less than significant with implementation of mitigation measures.*

## Construction Phase Groundborne Vibration

As shown in Table 3.7-4, use of heavy equipment (e.g., a large bulldozer) generates vibration levels of 0.089 PPV or 87 RMS at a distance of 25 feet. Residential uses located within the Planning Area would experience vibration levels that would not exceed the potential building damage threshold of 0.5 PPV. However, vibration levels would occasionally exceed the annoyance threshold of 80 RMS when construction occurs in adjacent areas. Ground-borne vibration attenuates quickly with distance and the RMS level from heavy equipment would be approximately 79 RMS at 60 feet. Construction activity associated with future development pursuant to the proposed Land Use Element will be required to comply with the standards established in the Noise Ordinance. Construction activity would be prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 6:00 p.m. and 9:00 a.m. on weekends and holidays. Further, individual development project proposed pursuant to adoption of the proposed Land Use Element will be required to analyze the project-specific vibration levels. No construction is proposed as part of the proposed project. As such, the impact will be less than significant at the programmatic level. Future development projects will be required to determine the project-specific vibration levels and mitigation measures will be applied as necessary to reduce impacts.

**Table 3.7-4 Vibration Velocities from Construction Equipment**

Equipment	PPV at 25 feet (inches/second)	RMS at 25 feet (VdB)
Large bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, April 1995.

## Operational Phase Groundborne Vibration

The proposed project would not include significant stationary sources of ground-borne vibration, such as heavy equipment operations. Operational groundborne vibration in the project vicinity would be generated by vehicular travel on the local roadways. However, similar to existing conditions, traffic-related vibration levels will not be perceptible by sensitive receptors. Thus, the impact from operational vibration will be less than significant.

Rail activity associated with the Gold Line would generate groundborne vibration. The Metro Gold Line Draft EIS/Draft EIR comprehensively analyzed future groundborne levels at existing sensitive receptors. The Draft EIS/Draft EIR concluded that rail vibration will exceed the FTA residential vibration threshold of 72 VdB at residential land uses located within 240 feet of the rail line.<sup>9</sup> The proposed Land Use Element allows for a substantial increase in residential

<sup>9</sup> *Ibid.*

development in the Station Square Transit Village area around the Gold Line tracks. As such, the proposed project will allow sensitive receptors to locate within 50 feet of the rail line. Rail activity would expose new sensitive receptors to incompatible vibration levels. The impact would be significant. Mitigation measures included in the Metro Gold Line Draft EIS/Draft EIR to alleviate rail vibration focused on construction of the rail line. It is not feasible for the proposed project to impose source based mitigation measures on construction of the rail line. As such, the City will be required to implement a receptor-based mitigation measure (mitigation measure NOISE-B) to reduce the impact of vibration to a less than significant level.

**NOISE-3:** *The proposed project will cause a substantial temporary or periodic increase in ambient noise levels during construction. The impact will be less than significant with implementation of mitigation measures.*

Construction of future development projects pursuant to implementation of the proposed Land Use and Circulation Elements will result in temporary increases in ambient noise levels within the project vicinity on an intermittent basis. The increase in noise levels will result in a temporary annoyance to nearby residents during construction. Noise levels will fluctuate depending on construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. The impact will be significant.

The City regulates noise associated with construction activities through the enforcement of noise ordinance standards (e.g., days of the week and hours of operation). Strict enforcement of the City Noise Ordinance and other applicable regulations and limitation of construction hours will reduce any construction noise levels. However, implementation of mitigation measures NOISE-C through NOISE-F are required to reduce construction noise to a less than significant at the programmatic level. Future development projects will be required to determine the project-specific vibration levels and mitigation measures will be applied as necessary to reduce impacts.

## Mitigation Measures

The following mitigation measures will be applied at the individual project level to reduce construction noise levels:

**NOISE-A** Stationary noise sources associated with future non-residential uses (e.g., mechanical equipment and loading docks) within the project areas shall not have a direct line-of-sight to noise sensitive uses. The line-of-sight between the noise source and noise sensitive receptor shall be blocked through the orientation of the non-residential land use and/or by using noise barriers, such as a concrete block wall or enclosing the noise source.

**NOISE-B** Project-specific vibration studies shall be prepared prior to the approval of residential land uses within 300 feet of the Gold Line rail tracks. The studies shall quantify vibration levels based on measurements of existing light rail activity, vibration propagation tests of the soil at project sites, and Gold Line travel speed. If necessary, the studies shall include mitigation to reduce vibration levels at proposed residential land uses to below the 72 VdB FTA significance threshold. Mitigation measures may include, but are not limited to, supporting the building foundation on elastomer pads similar to bridge bearing pads.

- NOISE-C** All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices.
- NOISE-D** Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment).
- NOISE-E** All residential units located within 500 feet of the construction site shall be sent a notice regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints.
- NOISE-F** A “noise disturbance coordinator” shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.

## Level of Impact after Mitigation

Noise and vibration impacts will be less than significant at a programmatic level.

# 3.8 Population and Housing

This section of the EIR examines whether implementation of the proposed Land Use and Element will induce substantial population growth, displace substantial numbers of existing housing, or displace substantial numbers of people requiring the construction of housing elsewhere. This chapter does not address the proposed Circulation Element directly because at the local level its policies do not directly relate to population, housing, or employment

## Environmental Setting

### Population

Monrovia did not experience substantial population and housing growth between 1990 and 2000. According to the U.S. Census Bureau, the City's population was 35,761 in 1990 and grew by 3.3 percent to 36,929 in 2000. Between 2000 and 2005, according to the California Department of Finance (DOF), Monrovia's population had increased 5.4 percent, from 36,929 to 38,915 persons. This five year span indicates a 1,986 net population increase. However, between the ten-year span of 1990 and 2000, population only increased by 1,158 persons. This reflects the overall economic improvement seen after 2000, compared to the sluggish economy in the early 1990s. According to DOF estimates, Monrovia's population in 2006 was 39,006 people.<sup>1</sup> According to the City, the current population of Monrovia is approximately 39,147 persons. While the 1993 General Plan anticipated a population of 49,417 persons by 2013, total growth in Monrovia has been relatively static over the past 20 years. From a historic standpoint, Monrovia's population has grown approximately one percent per year since the 1980 census.

### Housing

According to DOF estimates, Monrovia had 14,082 housing units as of year 2006. Between 2000 and 2005, the housing inventory in Monrovia increased by 107 units (with a net increase of 111 single-family units and a loss of 4 multi-family units), or by approximately 0.77 percent.<sup>2</sup> Because Monrovia is mostly built out, new residential development opportunities consist of the conversion of one or two-lot home lots into planned unit developments of up to 12 unit residential developments.

### Employment

According to State of California Employment Development Department data, existing commercial, industrial, and institutional uses in Monrovia account for approximately 20,000 jobs

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<sup>1</sup> California Department of Finance. *Demographic, Economic, and Financial Research*. website <http://www.dof.ca.gov/Research/Research.asp>, accessed July 24, 2007.

<sup>2</sup> California Department of Finance. *Population and Housing Estimates, for Cities, Counties, and the State, 2001–2006*. website <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E5/E5-06/documents/E-5a.xls>, accessed July 24, 2007.

in the City.<sup>3</sup> This indicates a jobs/housing ratio of 1.42 jobs per housing unit. This ratio reflects the City's character as an employment center. From a regional perspective, the San Gabriel Valley subregion had a balance between jobs and housing at 1.35 jobs per housing unit in the year 2005. Los Angeles County had a jobs/housing ratio of 1.39 jobs per housing unit.<sup>4</sup>

## Thresholds for Determining Significance

Population and housing impacts will be significant if implementation of the proposed Land Use Element will:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

## Environmental Impact

**POP-1:** *The proposed project will not induce substantial population growth in the area, either directly or indirectly, or displace substantial numbers of housing units or people necessitating replacement housing elsewhere. The impact will be less than significant.*

## Population

Land use objectives in the proposed Land Use Element will allow for growth in both the housing and non-residential sectors of the community. As discussed in detail in Chapter 2, Project Description, the proposed Land Use Element is expected to generate new development such that Monrovia's population would increase by 9,004 persons in the focus areas. The total population within the City is expected to increase by approximately 2.2 percent per year over the 23-year planning horizon. Total population in 2030 is expected to be 58,805 persons in 2030, or an increase of 19,658 persons. This growth rate reflects a continuance of the existing growth rate patterns of the last three decades and the largely built-out character of Monrovia.

SCAG's estimates that the population within Monrovia will increase by 2,471 persons between 2005 and 2030. This represents a total growth rate of 0.002 percent per year over 25 years and is not consistent with Monrovia's current and historic growth rate of approximately one percent per year. SCAG estimates that the San Gabriel Valley subregion will increase by 474,061 persons between 2005 and 2030. This represents a growth rate of 24 percent between 2005

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<sup>3</sup> State of California Employment Development Department. *Labor Force and Unemployment Rate for Cities*. website <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PAGEID=4&SUBID=133>, accessed July 24, 2007.

<sup>4</sup> California Department of Finance. *Demographic, Economic, and Financial Research*. website <http://www.dof.ca.gov/Research/Research.asp>, accessed July 24, 2007.

and 2030, or just below one percent per year.<sup>5</sup> As such, the City's growth project growth rate exceeds SCAG's projections for Monrovia and the San Gabriel Valley subregion.

The proposed Land Use and Circulation Elements estimated increase to 19,658 persons by the year 2030 is based on planned land uses (specifically new housing units) in response to the extension of Gold Line light rail service to Monrovia. By definition, these units, along with all planned development and additional amenities described in the proposed Land Use Element, will accommodate the population growth. Additionally, land designated for housing will in many places be developed at a higher density than what was typical in the past in the focus areas, thus providing housing for a greater number of people per acre and providing transit-oriented development opportunities. Thus, the proposed Land Use and Circulation Elements include policies and programs designed to accommodate City and regional population growth forecast to occur within the City by the year 2030. Considering these factors, Monrovia's future population appears to be better represented by estimates derived from the land capacity established within the proposed Land Use and Circulation Elements. Given the growth management policies contained within the proposed Land Use and Circulation Elements, implementation of the proposed project will not substantially increase population beyond that which can be accommodated by the City. The capacity to accommodate the expected population is sufficient and consistent with growth management policies contained in SCAG's Regional RCPG, as described in Section 3.6, Land Use and Planning. The impact will be less than significant.

## Housing

The proposed Land Use Element will result in a steady increase in housing over the 23-year planning horizon. Proposed land use element policies focus new development primarily around the proposed new transit station where densities will be increased to take advantage of the proposed Gold Line light rail service through Monrovia. Residential buildout pursuant to proposed Land Use Element will result in an estimated 3,746 net new dwelling units over the next 23 years. The State of California requires cities and counties to develop plans to accommodate a "fair-share" of regional housing needs. The provision of new housing opportunities in Monrovia supports SCAG's goals for housing throughout the six-county SCAG region, as identified in SCAG's Regional Housing Needs Assessment (RHNA) model. In the 2000-2005 planning period, Monrovia's RHNA indicated a need for 304 new dwelling units.

SCAG anticipates that Monrovia will have 14,961 dwelling units by 2030. In comparison, buildout estimates provide for more units than projected by SCAG (18,707 versus 14,961), since the SCAG estimate does not account for the extension of the Gold Line light rail service through Monrovia and anticipated development around the station. Although the next RHNA planning period estimates are currently being calculated, the City will have to accommodate its fair-share of regional housing growth in the future. It is anticipated that the proposed increase in new housing development in the City will more than accommodate the Monrovia's share of the region's housing stock.

Some existing housing units may be displaced by redevelopment in the focus areas and other parts of the City. It is anticipated that new development will occur as redevelopment and recycling of existing residential and non-residential lots. Although some housing may temporarily be displaced by new development, the City's overall housing stock will increase as a

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<sup>5</sup> Southern California Association of Governments. *City Projections*. website <http://www.scag.ca.gov/forecast/>, accessed July 24, 2007.

result of the proposed Land Use Element. It will not be necessary to construct replacement housing. The impact to housing will be less than significant at the programmatic level. Individual development projects will be required to analyze the impacts of redeveloping existing housing as part of the development review process.

## Employment

Implementation of proposed Land Use Element has the potential to result in a net increase of 993,119 square feet of non-residential square footage. For 2006, the California Employment Development Department estimates approximately 20,000 jobs in Monrovia. New development could provide approximately 1,986 net new jobs based on a factor of 2 jobs per 1,000 square feet of non-residential development. In 2030, Monrovia will support approximately 21,986 jobs. This will result in a ratio of 1.18 jobs per housing unit in 2030. The City will continue to have more jobs than housing units; however, the proposed Land Use Element will bring the City closer to a balance where people live and can work in Monrovia. As such, the proposed project would not induce substantial population growth in Monrovia or the region. The impact will be less than significant.

## Mitigation Measures

No mitigation measures are required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact to population and housing will be less than significant at the programmatic level.

## 3.9 Public Services, Recreation, and Utilities

The Initial Study identified the following potential impacts to public services, recreation, and utilities to be considered in this EIR: adverse physical impacts associated with new construction or expansion of existing public facilities related to police and fire protection services, schools, and other public facilities; increase the use of existing neighborhood and regional parks or other recreational facilities; include recreational facilities or require the construction of new recreational facilities; the need for construction or expansion of water supply infrastructure or wastewater treatment facilities; service by a landfill with sufficient capacity; and non-compliance with local, state, and federal regulations related to solid waste. See Section 3.5, Hydrology and Water Quality, for a discussion of water supply and storm water drainage. The proposed Circulation Element is discussed only with respect to emergency services. The proposed Circulation element does not contain policies that could potentially affect public facilities, recreation, water resources, or utilities. The proposed Circulation Element is therefore not address in these sections.

### Emergency Services

#### Environmental Setting

##### **Police Protection**

The Monrovia Police Department provides full police protection services within the planning area. The Police Department headquarters building is located at 140 East Lime Avenue. The department has 59 sworn officers, 31 non-sworn personnel, and 40 volunteers. The department has a fleet of 23 vehicles, which are used for community policing, detective work, and tactical response. Each of the department's Tactical Response Teams is made up of 8 personnel. The residents' volunteer support personnel help the department with services including citizen patrol and crowd control.

The Police Department's responsibility is to:

- Receive and disseminate warning information. The department operates a community notification system capable of generating 48 calls per minute through programming systems utilizing geo-mapping, city personnel directories, or community-wide (resident's) needs. Also, in the advent of a failure of normal communications systems, a four member volunteer amateur radio system (Ham radio operators) is maintained.
- Direct evacuation of citizens through approved evacuation routes.
- Enforce laws and temporary rules.
- Control traffic.
- Provide security.
- Coordinate with other law enforcement agencies.

The department houses a patrol division, adult and juvenile investigations, narcotics and vice, traffic, enforcement, identifications, and planning and research. The Crime Prevention Bureau provides building security inspections and coordinates the Neighborhood Watch Program. The Police Department currently maintains a ratio of approximately 1.38 sworn police officers to 1,000 residents. In an average month the Communications Center will handle approximately 2,100 telephone calls, dispatch 1,500 calls for service and process 27,900 radio requests.

The Monrovia Police Department is a member of Area-D (with headquarters in Covina) in providing mutual aid with thirteen nearby cities: Arcadia, Azusa, Baldwin Park, Claremont, Covina, El Monte, Glendora, Irwindale, La Verne, Pomona, San Marino, Sierra Madre, and West Covina. In March 2000, Monrovia, together with the cities of Arcadia, Azusa, Covina, West Covina, and Pasadena, approved the established of the Foothill Air Support Team (F.A.S.T) to maintain and operate one helicopter to provide air support for the F.A.S.T member communities.

## **Fire Protection**

The City of Monrovia maintains its own Fire Department for both emergency prevention and response services. The Fire Department furnishes 24-hour protection to life and property through programs of fire suppression, prevention, and communications. The Fire Department includes the following divisions: Fire Suppression, Fire Prevention, Emergency Medical Services, and Emergency Preparedness. There are two fire stations in the City: Fire Station 101, located at 141 East Lemon Avenue; and Fire Station 102, located at 2055 South Myrtle Avenue.

The Fire Department's responsibility is to:

- Prevent, control, and suppress fires.
- Conduct rescue operations.
- Provide and coordinate medical aid efforts, including triage.
- Provide and coordinate radiological monitoring, as needed.

The Monrovia Fire Department is staffed by 41 full-time safety personnel, of which 10 are constantly on duty, and one clerical person. Major fire-fighting equipment includes three major engines and an aerial unit in reserve, and two paramedical rescue squads, plus one reserve unit. The two Monrovia Paramedic Squads of 12 paramedics work under a written mutual aid agreement with the Arcadia Paramedic Squad of two rescue ambulances. Both cities share their combined four squads working out of three service hospitals: Arcadia Methodist Hospital, Santa Teresita Hospital in Duarte, and Huntington Memorial Hospital in Pasadena. Over the past two decades, emergency calls average approximately 3,000 per year.

The Fire Department is in Area C for automatic aid resource assistance. Area C fire response is coordinated through the Glendale Fire Department and is comprised of nine communities including Monrovia, Arcadia, San Marino, Sierra Madre, Monterey Park, South Pasadena, Glendale, and Burbank. Since 1990 the U.S. Forest Service (USFS), the Los Angeles County Fire Department, and the cities of Arcadia, Sierra Madre, and El Monte provide fire fighting assistance to the City through a Cooperation fire Protection Agreement, and are referred to as the Foothill Fire Departments. These fire fighting departments have defined jurisdiction areas and boundaries, initial response resources for wildfire protection, Initial Action Zones (IAZ) where fire would pose a threat to adjoining jurisdictions, and special areas assistance such as wilderness, roadless, or other modified suppression action areas.

A Memorandum of Understanding (MOU) has been established between the fire departments of Arcadia and Monrovia. The MOU provides for fire protection, emergency medical services, and rescue services through automatic aid dispatch between the two cities. Another MOU, first established in 1985, exists between the Consolidated Fire Protection District of Los Angeles County and the City of Monrovia. This MOU outlines the procedures for carrying out an automatic aid/initial action response between the district and the City.

## Threshold for Determining Significance

Implementation of the proposed Land Use and Circulation Elements will result in a significant impact if the provision of new or physically altered government facilities will be necessary to maintain acceptable police and fire service levels, the construction of which will result in adverse environmental impacts.

## Environmental Impact

**PS-1:** *The proposed project will not require the construction of new or expansion of existing police and fire facilities to meet service demands. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. New development in Monrovia will increase calls for police and fire protection services.

Individual development projects are subject to standard pre-development review by several City departments, including the Police and Fire Departments. This review process ensures that the necessary and appropriate ingress/egress points, fire protection systems such as alarms and automatic sprinklers, and minimum fire flow requirements are incorporated into all project plans. The City will continue to enforce access standards for adequate turning radii, Class A roofing standards for fire resistive construction, fire management plans for projects within areas subject to wildland fires, and weed abatement programs in high fire risk areas.

The adopted General Plan Safety Element includes the following goals and policies related to emergency services:

**Objective 3.1:** **Hillside development policies and standards shall include fire prevention measures.**

Policy 3.1.1: Fire suppression access to natural chaparral areas shall be provided and maintained.

- Policy 3.1.2: Landscape materials for the coverage and stabilization of graded slopes shall be selected to be compatible with surrounding natural vegetation and shall recognize climatic, soil, exposure, and ecological characteristics of the site. Plant materials that require substantial water after becoming established shall be avoided. Native dry climate grasses and other serophytic materials shall be selected wherever feasible. (Fire Department approval required).
- Policy 3.1.3: Cantilevered construction, including stairs, balconies, porches, open structure under buildings shall be fire retardant construction and shall be protected by fire sprinklers, when applicable, which have been reviewed and approved by the Fire Department.
- Policy 3.1.4: Eaves shall be fully boxed in with exterior stucco or its equivalent. Vents shall be covered with one-quarter inch mesh or its equivalent.
- Policy 3.1.5: New roofs shall be class "All non-flammable materials."
- Policy 3.1.6: Flammable chaparral, excluding mature trees, on a lot within 200 feet of a home, shall be cleared, maintained, and replaced with vegetation to minimize fire hazard.
- Policy 3.1.7: Fire hydrants shall be provided and located within 300 feet of structures except where a greater distance is allowed by the Fire Chief in conjunction with the installation of automatic fire sprinklers. All water main installations will be "looped" with no dead-end main allowed
- Policy 3.1.8: To provide adequate Fire Department access, foothill neighborhoods shall be linked with a continuous circulation system. Segments of that system may consist of emergency access roads.

**Objective 3.2: Adopt and enforce ordinances promoting fire prevention.**

- Policy 3.2.1: Enforce installation of fire alarm systems and or sprinklers to provide protection to life and property.
- Policy 3.2.2: Enforce regulations requiring smoke detectors in all structures.
- Policy 3.2.3: Enforce installation of chimney spark arrestors.
- Policy 3.2.4: Prohibit the use of flammable roofing materials.
- Policy 3.2.5: Continue to adopt and implement the most recent uniform fire codes and supplements.
- Policy 3.2.6: To prevent life hazard and to protect the hillsides and residential, industrial and commercial areas, enforce ban on use of all fireworks.

**Objective 3.3: Control hazardous or potentially dangerous operations or land uses.**

Policy 3.3.1: Require a conditional use permit for industrial operations involving the compounding of radioactive materials, petroleum refining, manufacturing of explosives, or any other operation of a dangerous nature.

Policy 3.3.2: Enforce ordinances prohibiting the igniting or burning of flammable materials on public or private property.

Policy 3.3.3: Restrict and regulate devices or equipment that could create fire, explosion, or bodily injury.

Policy 3.3.4: Restrict storage of flammable liquids and explosives to manufacturing zones.

**Objective 3.4: Establish fire prevention programs to educate citizens.**

Policy 3.4.1: Provide programs for Monrovia's citizens to educate them in fire safety.

**Objective 3.5: Support legislation that encourages fire prevention.**

These policies will continue to be applied in conjunction with development approvals. In addition, the City will continue to monitor police and fire response needs and demands on its service capabilities. Development fees will be charged to individual development projects to pay for the increased demand on the City's infrastructure and public services. No roadway improvements are proposed that would decrease response times. Instead, the proposed Circulation Element aims to improve traffic flow throughout the City.

The proposed Land Use and Circulation Elements concentrate new development into previously developed areas of the City at a higher density to take advantage of the proposed Gold Line light rail service. Although the number of calls for police and fire protection services will increase, the City does not anticipate a decrease in response times or the need to construct new or expanded police and fire stations. The impact will be less than significant at the programmatic level.

## Mitigation Measures

No mitigation is required as impacts will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact to police and fire protection services and facilities will be less than significant at the programmatic level.

## Schools

### Environmental Setting

Monrovia Unified School District (MUSD) provides public school services within the planning area. MUSD operates 12 schools, which also includes an early learning center and an adult school. All of the schools are located within Monrovia city limits. The enrollment information for MUSD's early education through high school are shown in Table 3.9-1.

Table 3.9-1 Monrovia Unified School District Schools

School	Location	Enrollment 2005-2006
Canyon Early Learning Center	1000 South Canyon Boulevard Monrovia, CA 91016	170
Bradoaks Elementary School	930 East Lemon Avenue Monrovia, CA 91016	615
Mayflower Elementary School	210 North Mayflower Avenue Monrovia, CA 91016	603
Monroe Elementary School	402 West Colorado Boulevard Monrovia, CA 91016	451
Plymouth Elementary School	1300 Boley Street Monrovia, CA 91016	545
Wild Rose Elementary School	232 Jasmine Avenue Monrovia, CA 91016	516
Clifton Middle School	226 South Ivy Avenue Monrovia, CA 91016	764
Santa Fe Middle School	148 West Duarte Road Monrovia, CA 91016	1,253
Monrovia High School	845 West Colorado Boulevard Monrovia, CA 91016	1,787
Canyon Oaks High School	930 Royal Oaks Drive Monrovia, CA 91016	158
Mountain Park School	950 South Mountain Avenue Monrovia, CA 91016	85
<b>Total</b>		<b>6,947</b>

MUSD also operates Monrovia Community Adult School, located at 920 South Mountain Avenue. In addition, there are three private schools located in Monrovia: Carden of the Foothills School located at 429 Wildrose Avenue serving grades kindergarten through eight; First Lutheran School located at 1323 South Magnolia Avenue; and Immaculate Conception School located at 726 South Shamrock Avenue serving grades kindergarten through eight. Approximately 20 percent of Monrovia's total population is school age.

### Threshold for Determining Significance

Implementation of the proposed Land Use Element will have a significant impact on schools if the addition of new students results in the need to construct new or expand existing school facilities, the construction of which will result in adverse environmental impacts.

## Environmental Impact

**PS-2:** *The proposed project will not require the construction of new or expansion of existing school facilities to meet population demands. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. Approximately 20 percent of Monrovia's current population is school age. Using the same percentage, in 2030 Monrovia will need to accommodate approximately 11,761 school age children, or approximately 3,932 net new school children.

While the City acknowledges that new development will increase demand on school facilities, the City is precluded by Senate Bill 50 (SB 50, also known as proposition 1A, codified in Government Code Section 65995) from considering this a significant impact for the purposes of CEQA. SB 50 was enacted in 1988 to address how schools are financed and how development projects may be assessed for associated school impacts. SB 50 provides three ways to determine funding levels for school districts. The default method allows school districts to levy development fees to support school construction necessitated by that development and receive a 50 percent match from state bond money. The payment of development fees will be used to offset the cost to MUSD of providing education facilities to future students. The environmental impacts of construction and operation of additional school facilities will be evaluated by MUSD when planning for the construction of new or expanded school facilities. The impact to school facilities will be less than significant at the programmatic level.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact to schools will be less than significant at the programmatic level.

## Libraries

### Environmental Setting

The Monrovia Public Library is located at 321 South Myrtle Avenue. The library houses a collection of over 120,000 volumes. However, this facility was designed to accommodate only 50,000 volumes. As such, in December 2006, the Monrovia City Council approved a parcel tax to finance the construction of a new Monrovia Public Library. The tax, set at \$62 per year for 30 years on each residential property in the City, will finance construction of an approximately 28,000 square foot library, double the size of the City's current library. The new library will continue to be located in Library Park on South Myrtle Avenue. The plans call for increased book shelf space, more computer stations, more seating, a community room, and added computer capabilities. It is estimated that the new library will be able to hold double the City's existing library collection. In addition, Monrovia has reciprocal agreements with other library facilities in the area to share collections.

### Threshold for Determining Significance

Implementation of the proposed Land Use Element will have a significant impact on libraries if the addition of new residents results in the need to construct new or expand existing library facilities, the construction of which will result in adverse environmental impacts.

### Environmental Impact

**PS-3:**        *The proposed project will not require the construction of new or expansion of existing library facilities. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. This increase in development and population will increase demand on the City's library services.

The City has already identified a need for increased library space. A separate environmental evaluation of the proposed new library has been conducted by the City. The new library will provide double the resources as the current library and accommodate the additional residents. Further, all new residential development that occurs pursuant to the proposed Land Use Element will be required to pay the City's annual parcel tax to finance the new library. No new library facilities beyond that which is already planned will be required. The impact will be less than significant at the programmatic level.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact to libraries will be less than significant at the programmatic level.

## Recreation

### Environmental Setting

#### Park Classifications

The types of parks, recreation, and open space in the Monrovia are classified by the following park types:

**Pocket Park** is a small neighborhood-oriented facility that meets limited or isolated recreational needs. Such parks usually range in size from 2,500 square feet to under one acre. Pocket parks can be built on small, challenged properties, and fill a localized park niche. Rotary Park, Olive Avenue Park, and Julian D. Fischer Park are small pocket parks.

**Neighborhood Park** by definition, are specifically oriented toward residents living within a one-half-mile radius of the park. These parks encompass one to ten acres, with some sports fields and facilities usually geared toward the recreation needs of children. Neighborhood parks include Grand Avenue Park and Monrovia Library Park.

**Community Park** varies from ten to sixty acres in size and serves residents within a three-mile radius of their homes. These parks usually serve a broader demographic and include a variety of recreational amenities. Recreation Park and Monrovia Canyon Park serve the entire community.

#### Parks and Recreation Facilities

Monrovia maintains recreational facilities, including sport fields, a racquetball court, swimming pool, a skate park, a community center, a youth center, and other community facilities. The Monrovia Recreation Division maintains facilities and offers recreation classes and programs for residents of all ages. The following facilities are managed by the Recreation Division: Monrovia Community Center, Monrovia Historical Museum, Mary Wilcox Youth Center, Monrovia Skate Park, and Monrovia Canyon Park Nature Center and Cabin Conference Center. Monrovia residents are currently served by seven City parks, which have a combined land area of approximately 123 acres. The Monrovia public park system consists of neighborhood, community, and small pocket parks. As of 2007, the City owns, and maintains parks designed and used for both passive and active recreation. Table 3.9-2 lists recreation facilities in Monrovia.

**Table 3.9-2 Monrovia Park and Recreation Facilities**

No.	Park Name	Acres	Passive Area	Sports Facility	Play Areas	Specialized Facilities
<b>Community Parks</b>						
1	Monrovia Canyon Park	80.0	X		X	Nature Center, Cabin Conference Facility (available for rental)
	<i>Subtotal</i>	80				
<b>Neighborhood Parks</b>						
2	Recreation Park	22.0	X	X	X	Baseball field, tennis courts, hardcourt (basketball, roller hockey and skateboarding), sand volleyball court.
3	Grand Avenue Park	3.5	X		X	
4	Monrovia Library Park	13.0	X		X	
	<i>Subtotal</i>	38.5				
<b>Small Parks/Pocket Park</b>						
5	Rotary Park	0.87	X		X	
6	Olive Avenue Park	1.5	X		X	
7	Julian D. Fischer Park	1.8	X		X	
	<i>Subtotal</i>	4.17				
	<b>Grand total</b>	<b>122.67</b>				

The city currently maintains a ratio of 3.14 acres of parkland per 1,000 residents. The national park standard is 3 acres of parkland per 1,000 residents.<sup>1</sup>

### Other Recreational Facilities

Other recreational facilities near Monrovia, such as the Angeles National Forest and the Santa Fe Dam Recreation Area, also respond to community and regional recreational needs. Located east of Monrovia in the City of Irwindale, the Santa Fe Dam Recreation Area includes a 70-acre lake, picnic areas, mountain biking and hiking trails, and campsites. The Angeles National Forest, north of Monrovia, covers over 650,000 acres and includes trails for hiking, mountain biking, off-highway vehicle enthusiasts, and equestrian use. The Angeles National Forest also includes developed picnic areas and campgrounds.

### Regulatory Framework

The 1975 Quimby Act (California Government Code Section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay park fees for park improvements.

<sup>1</sup> This national standard established by the National Recreation and Parks Association (NRPA) dates to 1983 and only includes traditional park lands in its definition. The NRPA has since suggested a broader-based definition of parks and open space and has revised its standard to 10 acres per 1,000 residents, but suggests that each city look critically at its own resources and needs and open space definitions in establishing a local standard.

## Thresholds for Determining Significance

Implementation of proposed Land Use Element will result in a significant impact if it will:

- 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
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

## Environmental Impact

**PS-4:** *The proposed project will require the construction of new or expansion of existing park and recreation facilities. The impact will be less than significant at the programmatic level with implementation of mitigation.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Any new development in the Station Square Transit Village area will be required to provide active and passive park space and public plazas at a ratio of 3 acres per 1,000 residents. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon, which will lead to increased demand for and use of recreation resources in the City.

New open space development in the Station Square Transit Village area will increase the City's parks and open space inventory by approximately 4 acres to a total of 127 acres of open space citywide. Development in other parts of the City will be required to dedicate parkland in accordance with City standard or pay in-lieu fees. To contribute to parkland acquisition, consistent with Quimby Act regulations, Monrovia's dwelling unit tax (Monrovia Municipal Code Title 3, Chapter 3.32) may be collected to satisfy park provision requirements. The City's dwelling unit tax is determined at the time of the issuance of the building permits and all proceeds from the tax collected shall be paid into the Project Resource Fund. The Project Resource Fund is used by the City for the purposes of municipal projects, including improving and expanding public parks and recreational facilities. All residential projects, including those developed subsequent to the proposed Land Use and Circulation Elements, will be required to pay the dwelling unit tax.

Since no specific park projects have been identified other than the dedication required for development in the Station Square Transit Village area, the increased population at buildout of the proposed Land Use Element will reduce the City's parkland ratio from 3.14 acres of parkland per 1,000 residents to 2.1 acres of parkland per 1,000 residents, assuming no additional park space is added. Applying the National Recreation and Parks Service parkland standard of 3 acres of parkland per 1,000 residents indicates that the City would have a net deficit of 49 acres of parkland. As such, new development pursuant to the proposed Land Use Element will result

in increased use of existing neighborhood and regional parks, other recreational facilities, and trails that may cause or accelerate substantial physical deterioration. The impact will be significant and mitigation measures PS-A and PS-B are required to reduce the level of impact.

## Mitigation Measures

**PS-A** The City shall identify potential sites for additional parkland, monitor demand for parkland and recreational facilities concurrent with development approvals, and prioritize potential parkland acquisitions, expansions, and improvements within its Capital Improvement Program.

**PS-B** The City shall require developers of projects greater than 200 residential units to dedicate land based on the standard of 3 acres per 1,000 residents.

## Level of Impact after Mitigation

With implementation of mitigation, the impact to parks and recreation facilities will be reduced to less than significant at the programmatic level.

## Water Service and Facilities

The following discussion focuses on water service and facilities. An analysis of impacts to groundwater supply is provided in Section 3.5, Hydrology and Water Quality.

## Environmental Setting

The City of Monrovia's Utility Division is the retail supplier of water for the City. The San Gabriel Ground Water Basin, which is administered by the Upper San Gabriel Valley Municipal Water District (Upper District), is the City's groundwater source. The City of Monrovia delivers potable water supplies through its pressurized distribution system, which consists of 87 miles of piping from 4 to 30 inches in diameter. The city's waster supply system consists of 5 active wells with a combined capacity of approximately 27 million gallons per day, 6 booster pumps, and 11 reservoirs with a combined storage capacity of approximately 25.08 million gallons. The City has 6 booster pump stations. In addition, the City recently drilled a sixth well with a capacity of 3,500 gallons per minute. The City maintains a standby connection to Metropolitan Water District of Southern California (Metropolitan), which is capable of delivering up to 14 million gallons per day of potable water. In addition, the City maintains a manually operated 12-inch emergency connection to the City of Arcadia and a 4-inch emergency connection to California American Water Company – Duarte District, to either buy or sell water. Reclaimed water is not currently available within a close proximity to Monrovia to be a cost-effective alternative source of supply.<sup>2</sup>

The City obtains approximately 8,200 acre-feet per year (af/yr) from five wells pumping from an average depth of 140 feet from the San Gabriel Groundwater Basin. The Main San Gabriel Groundwater Basin was adjudicated in 1973. The Main Basin Judgment does not restrict the quantity of water that may be extracted from the Basin. However, it provide a means of replacing with supplement water all annual extractions in excess of a party's annual right to

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<sup>2</sup> City of Monrovia Utilities Division. *Urban Water Management Plan*. December 2005.

extract water. The City of Monrovia is entitled to extract 7,214 af/yr annually and holds surface diversion rights for an additional 1,098 af/yr. Although the surface diversion is no longer used as a supply source, the City retains the right to produce from groundwater an equivalent amount, for a total of 8,214 af/yr. In years of plentiful rainfall (when the operating safe yield is increased above 190,000 af/yr), Monrovia is entitled to a pumper's share of 3.09472 percent of that increase, thereby enabling the City to extract additional water without incurring replacement water charges. The City has experienced no supply deficiencies in the past 25 years, even during periods of drought.<sup>3</sup>

Table 3.9-3 shows the existing and projected water use for the city. In 2005, the existing City land uses (single-family residential, multi-family residential, commercial, industrial, public, and landscape) consumed approximately 8,108 af of potable water. Annual growth for new connections in the City is less than one percent per year.

## Thresholds for Determining Significance

Implementation of proposed Land Use Element will result in a significant impact if it will:

- Result in a demand for water service that exceed the capacity of the existing distribution system; or
- Require the construction of major new water infrastructure where such facilities presently do not exist.

## Environmental Impact

**PS-5:** *Project-related future water demand will not exceed supply and major new infrastructure where such facilities do not presently exist will not be required. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. New development pursuant to the proposed Land Use and Circulation Elements will increase the demand for water service. Table 3.9-3 shows the City's current and projected water use.

<sup>3</sup> *Ibid.*

**Table 3.9-3 Current and Projected Water Use (af/yr)**

Customer Type	2005	2010	2015	2020	2025
Single-Family Residential	5,838	5,955	6,074	6,195	6,319
Multi-Family Residential	1,454	1,483	1,513	1,543	1,574
Commercial	632	645	658	670	684
Industrial	24	25	26	27	28
Public	68	69	71	72	74
Landscape	97	99	101	103	105
<b>TOTAL</b>	<b>8,108</b>	<b>8,276</b>	<b>8,443</b>	<b>8,610</b>	<b>8,734</b>

Source: City of Monrovia Utilities Services Division, *Urban Water Management Plan*, December 2005.

For planning purposes, the City of Monrovia Utilities Services Division has projected water consumption through 2025 based on an average growth rate of approximately 2 percent per year. The 2 percent per year growth rate encompasses the proposed land use changes in the focus areas as well as general growth in the rest of the City. In 2025, the land uses in Monrovia are expected to consume 8,734 af/yr with continued enforcement by the City of new plumbing efficiency standards, landscape guidelines, and other water conservation programs. Table 3.9-4 shows the City's projected current and projected water supply.

**Table 3.9-4 Current and Projected Water Supply (af/yr)**

Sources of Supply	2005	2010	2015	2020	2025
Groundwater	8,108	8,300	8,500	8,700	8,900
Imported Water	0	0	0	0	0
Water Transfers	0	0	0	0	0
<b>TOTAL</b>	<b>8,108</b>	<b>8,276</b>	<b>8,443</b>	<b>8,610</b>	<b>8,734</b>

Source: City of Monrovia Utilities Services Division, *Urban Water Management Plan*, December 2005.

As shown in Table 3.9-4, the City anticipates that it can pump approximately 8,900 af/yr from the Main San Gabriel Groundwater Basin in 2025 in accordance with its adjudicated rights. As such, the City does not project a shortage in water supply. The impact to water supply will be less than significant.

New development pursuant to the proposed Land Use and Circulation Elements will undergo pre-development review to determine if sufficient water supply infrastructure exists to support new development. Individual development projects will be required to pay connection fees for new water supply hook-ups. Further, if the City determines the supply infrastructure to be undersized to support the proposed new development, the developer will be required to pay the City to upgrade the system. In this way the City will ensure that water supply infrastructure is not adversely impacted by new development pursuant to the proposed Land Use and Circulation Elements. The impact to water infrastructure will be less than significant at the programmatic level.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at a programmatic level.

## Level of Impact after Mitigation

The impact to water supply and infrastructure will be less than significant at the programmatic level.

## Wastewater Service

### Environmental Setting

The local wastewater collection and treatment system owned and operated by the City. The City's location in the foothills allows the sewer system to operate primarily via gravity flow. The City's wastewater infrastructure consists of 8-inch mains. Wastewater generated in Monrovia is carried by the local pipe system to trunk sewers operated by the County Sanitation Districts of Los Angeles County (Sanitation Districts).

The Sanitation Districts own, operate, and maintain the large trunk sewers that form the backbone of the regional wastewater conveyance system. The design capacities of the Sanitation Districts' wastewater treatment facilities are based on the regional growth forecast adopted by SCAG. All expansions of the Sanitation Districts' facilities must be sized and service phased in a manner which is consistent with the SCAG regional growth forecast. The available capacities of the Sanitation Districts' facilities will therefore be limited to levels associated with the approved growth identified by SCAG.

Based on a conservative factor of 90 percent of water used becoming wastewater, Monrovia generated approximately 7,297 af of wastewater in 2005 (or 6.5 million gpd), which was treated at the Whittier Narrows Reclamation Plant, the San Jose Creek Water Reclamation Plant, and the Los Coyotes Water Reclamation Plant. Whittier Narrows, located near the City of South El Monte, has a design capacity of 15 million gallons per day (gpd) of wastewater and processes an average flow of 7.6 million gpd. San Jose Creek, located adjacent to the City of Industry, has a design capacity of 100 million gpd and processes an average flow of 89.1 million gpd. Los Coyotes, located in the City of Cerritos, has a design capacity of 37.5 million gpd and processes an average flow of 31.6 million gpd.<sup>4</sup>

### Thresholds for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not exceed the wastewater treatment requirements of the Regional Water Quality Control Board. Accordingly, this issue is not further analyzed in this EIR.

Implementation of proposed Land Use Element will result in a significant impact if it will:

- Exceed the wastewater treatment requirements beyond the regulatory structure of the applicable Regional Water Quality Control Board;
- Require the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

<sup>4</sup> County Sanitation Districts of Los Angeles County. *Wastewater Facilities*. website [http://www.lacsd.org/about/wastewater\\_facilities/default.asp](http://www.lacsd.org/about/wastewater_facilities/default.asp), accessed August 2, 2007.

- 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.

## Environmental Impact

**PS-6:** *Project-related future wastewater demand will not exceed the capacity of the wastewater treatment provider and major new infrastructure facilities will not be required. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon.

New development pursuant to the proposed Land Use and Circulation Elements will increase wastewater generation. Approximately 90 percent of water consumed within the City becomes wastewater. Using this conservative factor, Monrovia is expected to generate approximately 7,860 af of wastewater in 2025 (7 million gpd), an increase of 563 af (or 0.5 million gpd) of wastewater as a result of the proposed project. The Whittier Narrows, San Jose Creek, and Los Coyotes Water Reclamation Plants, which treat the City's wastewater, process a total of approximately 128.3 million gpd. Monrovia is expected to account for no more than 0.3 percent of the reclamation plants' daily treated wastewater, provided the Sanitation Districts do not make any capacity improvements over their current treatment capacity. The impact to the regional wastewater treatment system will be less than significant.

The increase in wastewater will not result in a burden on the City's sewer system. The City continually monitors its wastewater transmission lines and has been in a process of upgrading and replacing lines for years, having outgrown the City's original 1932-era infrastructure. The City charges a connection fee for new development and requires that new development projects pay to upgrade the wastewater transmission system if deficiencies are expected. As such, the City's sewer system will continue to be repaired and updated on an as needed basis. No expansion is anticipated as a result of the project; therefore, the impact to the City's wastewater transmission system will be less than significant at the programmatic level.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

The impact to wastewater will be less than significant at the programmatic level.

## Solid Waste

### Environmental Setting

All solid waste generated within the City of Monrovia's residential areas are collected by Athens Services. The City maintains a list of approved solid waste collection companies for solid waste for commercial and industrial users. Monrovia offers residential and commercial recycling programs, yard waste programs, hazardous household waste recycling, used oil collection programs, and bulky item pickups.

All of the solid waste collected in the City is transferred to one of the following landfills: Bakersfield Metropolitan (BENA) Sanitary Landfill, Chiquita Canyon Sanitary Landfill, El Sobrante Landfill, Fontana Reuse Disposal Site, Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, Puente Hills Landfill No. 6, Simi Valley Landfill – Recycling Center, Sunshine Canyon Sanitary Landfill County Extension, Sunshine Canyon/North Valley Landfill, and Waste Management of Lancaster Sanitary Landfill. Some refuse is transported to the Commerce Refuse-to-Energy Facility. In 2005, the City generated approximately 140,362 tons of solid waste and approximately 57,268 tons of solid waste was buried in the above mentioned landfills. Approximately 1,683 tons was burned and converted to energy. No trash from the City was transported to out-of-state landfills. The City disposed of 58,952 tons of trash in 2005.<sup>5</sup>

Throughout California and in urban areas in particular, diminishing landfill space is a continuing concern. In response, the California Integrated Waste Management Act of 1989 (AB 939) was passed, mandating local governments to develop a long-term strategy for the management and diversion of solid waste, and requiring cities and counties to divert 50 percent of their solid waste (relative to the baseline year). Approximately 58 percent of the City's total trash created was diverted from landfills through recycling and composting.<sup>6</sup>

### Threshold for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will comply with federal, state, and local statutes and regulations related to solid waste. Accordingly, this issue is not further analyzed in this EIR.

Implementation of the proposed Land Use Element will have a significant impact on solid waste if the City will not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

### Environmental Impact

**PS-7:** *Projected future solid waste demand will not exceed the permitted capacity of the landfills that serve the City. The impact will be less than significant.*

The proposed Land Use Element will convert the Station Square Transit Village area from primarily light industrial and manufacturing uses to a mix of multi-family residential, office, retail/dining, hospitality, and transit station uses. Similarly, the West Huntington Drive corridor

<sup>5</sup> California Integrated Waste Management Board. *Jurisdiction Profile for City of Monrovia*. website <http://www.ciwmb.ca.gov/profiles/juris/>, accessed August 1, 2007.

<sup>6</sup> *Ibid.*

will be designated as a retail commercial corridor and mixed-use area. More emphasis will be placed on commercial and office uses, although manufacturing will still be permitted. Along the South Myrtle Avenue corridor, emphasis will be placed on pedestrian-oriented retail, office, and residential uses. Manufacturing and industrial space will still be permitted in this area. The proposed Land Use Element will result in the development of new residential, commercial, and mixed-use uses. The total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons over the 23-year planning horizon. Implementation of the proposed Land Use Element will result in an increase of development in the City and a related increase in solid waste generation.

Based on the California Integrated Waste Management Board's (CIWMB) profile for Monrovia, 5 pounds of waste are generated per resident per day. With an estimated population increase of approximately 19,658 residents in 2030, the City can be expected to produce an additional 98,290 pounds of waste per day (17,938 tons per year) as a result of the proposed project for a total of 53,660 tons per year in 2030. Based on the City's existing diversion rate of 58 percent, approximately 22,537 tons of solid waste will be disposed at area landfills in 2030 by the City. This estimate assumes no increase in diversion by the City.

The regional solid waste facilities where Monrovia currently disposes of its trash have a combined daily capacity of 65,000 tons (130 million pounds). Monrovia's is anticipated to send approximately 61.7 tons per day (123,400 pounds per day) to area landfills. Monrovia's daily trash generation would account for approximately 0.09 percent of these landfills' daily capacity in 2030. As such, the anticipated increase in solid waste generated by the City pursuant to the proposed Land Use Element will not exceed the capacity of area landfills. The impact to solid waste will be less than significant at the programmatic level.

### Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

### Level of Impact after Mitigation

The impact to solid waste will be less than significant at the programmatic level.

# 3.10 Transportation/Traffic

The Initial Study identified the following potential impacts to transportation and traffic to be considered in this EIR: cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; exceed, either individually or cumulatively, a level of service standard established by the congestion management agency; substantially increase hazards due to design feature or incompatible uses; or conflict with adopted policies, plans, or programs supporting alternative transportation. The information and analysis in this section is based on the Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan.<sup>1</sup> Detailed information is provided in the traffic study contained in Appendix D.

## Environmental Setting

### Regional Transportation

The City of Monrovia is located in the San Gabriel Valley. The City is connected to the regional transportation network by I-210, which crosses the southern portion of the City in an east-west direction. I-210 runs between eastern and northern San Fernando Valley and San Bernardino County. I-210 has five lanes in each direction in the portion through Monrovia. A full interchange is located near the western edge of the City at Huntington Drive. Full interchanges are also located at Myrtle Avenue and at Mountain Avenue, and are connected by the one-way frontage roads of Evergreen Avenue and Central Avenue.

Interstate 605 (I-605) is a north-south freeway approximately 1.5 miles east of the City. This freeway runs between the northeastern San Gabriel Valley (Duarte) and Long Beach in southeast Los Angeles County. The segment of I-605 closest to Monrovia has four lanes in each direction. This freeway has a northern terminus at Huntington Drive and full connections to the eastbound and westbound I-210. A partial interchange is located at Live Oak Avenue and Arrow Highway.

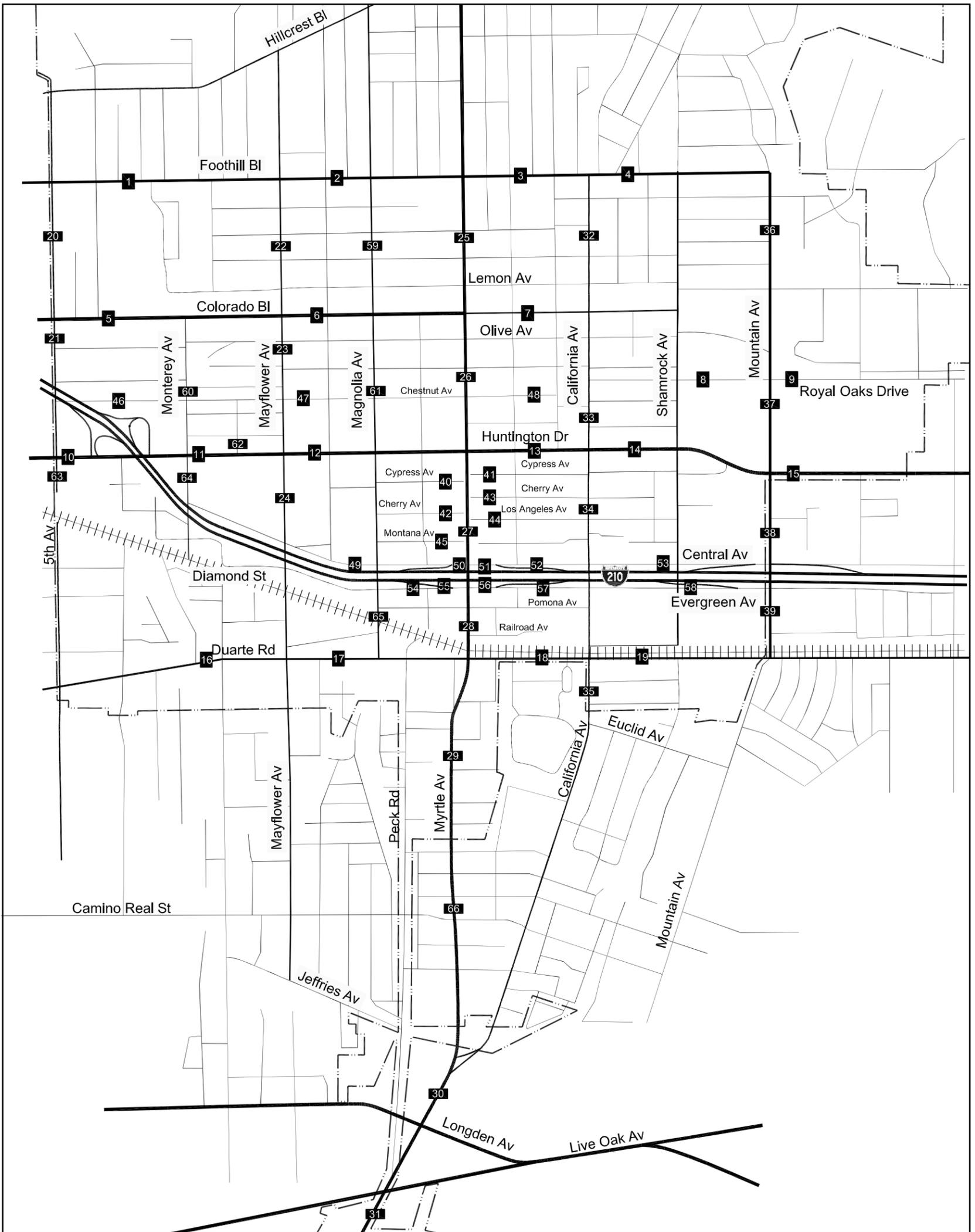
### Local Roads

The street system in Monrovia is generally laid out as a grid pattern and is designed with a hierarchy of streets. Figure 3.10-1 shows the location of the study street segments. A description of the local roadway network is provided below.

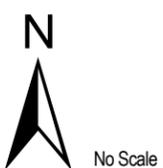
5<sup>th</sup> Avenue is a collector street that runs from Hillcrest Boulevard to the southern City limits, with a gap at the railroad crossing south of Huntington Drive. 5<sup>th</sup> Avenue has one full lane of through traffic in each direction. Most of the intersections along this street are stop-controlled with no separate left-turn lanes. Left-turn lanes are located at the signalized intersections. Parking is permitted on both sides of 5<sup>th</sup> Avenue.

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<sup>1</sup> Fehr & Peers/Kaku Associates. *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan*. October 2007.



Source: Fehr & Peers/Kaku Associates, September 2007



**Figure 3.10-1**  
**Analyzed Street Segments**

Monterey Avenue is a local street that runs from Colorado Boulevard to the railroad tracks south of Montana Street. Monterey Avenue has one lane of through traffic in each direction. Most of the intersections along this street are stop-controlled with no separate left-turn lanes. Left-turn lanes are provided at the signalized intersection of Huntington Drive and Monterey Avenue. Parking is permitted on both sides of Monterey Avenue.

Highway Esplanade is a local street that runs between Huntington Drive and Chestnut Avenue. Highway Esplanade has one lane of through traffic in each direction and intersections on this street are stop-controlled. Parking is permitted on both sides of the street.

Mayflower Avenue is a collector street that runs the length of the City. It has one through lane in each direction from Hillcrest Boulevard to Duarte Road. Left-turn lanes are not provided at most intersections. Parking is generally available on both sides of Magnolia Avenue.

Myrtle Avenue is a primary arterial that runs the length of the city. Myrtle Avenue has one through lane in each direction north of Maple Avenue. It has two through lanes in each direction south of Maple Avenue. Left-turn lanes are provided at most intersections. Parking is generally available on both sides of Myrtle Avenue. Parking is prohibited on Myrtle Avenue between Cypress Avenue and Olive Avenue on both sides of the street.

California Avenue is a secondary arterial that runs the length of the City. It has one through lane in each direction, except between Huntington Drive and Duarte Road where two lanes are provided in each direction. Parking is generally available on the west side of California Avenue and is generally prohibited on the east side of California Avenue north of Huntington Drive.

Mountain Avenue is currently classified as a secondary arterial that runs along the eastern boundary of the City. It has two through lanes in each direction. Parking is generally not permitted on either side of Mountain Avenue.

Foothill Boulevard is classified as a secondary arterial and runs most of the width of the City from just west of the boundary with the City of Bradbury west to the City of Arcadia. Foothill Boulevard has two through lanes in each direction and dedicated left-turn lanes at most intersections. Parking is permitted on both sides of Foothill Boulevard.

Colorado Boulevard is classified as a collector street from the City's western boundary to Myrtle Avenue and as a local street between Myrtle Avenue and Shamrock Avenue. Colorado Boulevard has one through lane in each direction. Dedicated left-turn lanes are not provided at most intersections. A bicycle lane runs along Colorado Boulevard from 5<sup>th</sup> Avenue to Mayflower Avenue. Parking is permitted on both sides of the street.

Royal Oaks Drive is a local street that runs through Shamrock Avenue into the Cities of Bradbury and Duarte. It has one through lane in each direction. Dedicated left-turn lanes are not provided at most intersections. Parking is generally permitted on both sides of Royal Oaks Drive.

Chestnut Avenue is a local street located north of Huntington Drive. It extends west from Canyon Avenue to the western border of the City. It has one through lane in each direction. Most intersections along Chestnut Avenue are stop-controlled. Dedicated left-turn lanes are not provided at most intersections. Parking is permitted on both sides of Chestnut Avenue between Canyon Avenue and Highway Esplanade. Parking is not available on the south side of Chestnut Avenue between Canyon Avenue and Highway Esplanade.

Huntington Drive is the City's primary east-west arterial. It has two through lanes in each direction and has dedicated left-turn lanes at most intersections. Parking is generally allowed between Monterey Avenue and Magnolia Avenue.

Cypress Avenue is a local street that runs between Alta Vista Avenue and Shamrock Avenue. Intersections along Cypress Avenue are stop-controlled with no separate left-turn lanes. Parking is permitted on both sides of Cypress Avenue.

Cherry Avenue is a local street that runs between Magnolia Avenue and Sherman Avenue. Intersections along Cherry Avenue are stop-controlled with no separate left-turn lanes. Parking is permitted on both sides of Cherry Avenue.

Los Angeles Avenue is a local street that runs between Myrtle Avenue and Shamrock Avenue. Intersections along Los Angeles Avenue are stop-controlled with no separate left-turn lanes. Parking is permitted on both sides of Los Angeles Avenue.

Montana Avenue is a local street that runs between Magnolia Avenue and Myrtle Avenue. Intersections along this street are stop-controlled with no separate left-turn lanes. Parking is permitted on both sides of Montana Avenue.

Central Avenue is a local street that runs along the north side of I-210 between Mountain Avenue and Mayflower Avenue. It provides two lanes of one-way westbound travel. On- and off-ramps of I-210 intersect with Central Avenue near Mountain Avenue and Myrtle Avenue. Parking is generally permitted on the north side of Central and is prohibited on the south side.

Evergreen Avenue is a local street that runs along the south side of I-210 between Mountain Avenue and Mayflower Avenue. It provides one-way eastbound travel east of Magnolia Avenue and two-way travel west of Magnolia Avenue with one lane in each direction. Evergreen Avenue has two lanes of travel from Magnolia Avenue to California Avenue and three lanes of travel from California Avenue to Mountain Avenue. On- and off-ramps of eastbound I-210 intersect with Evergreen Avenue near Myrtle Avenue and Mountain Avenue. Parking is generally permitted on the south side of Evergreen Avenue west of California Avenue. Parking is prohibited on the north side of Evergreen Avenue and on both sides of the street east of California Avenue.

Duarte Road is a secondary arterial that extends across Monrovia from Arcadia to Duarte. It has two through lanes in each direction and dedicated left-turn lanes at most intersections. Parking is permitted on both sides of Duarte Road only between 10<sup>th</sup> Avenue and Myrtle Avenue.

## Existing Transit Service

The City of Monrovia is served by local transit agencies with several bus service routes, including the Monrovia Trolley, MTA, and Foothill Transit. In addition, bus service operated by the City of Duarte travels along the eastern edge of the City boundaries. A more complete description of fixed route transit service in Monrovia is provided below.

Monrovia Trolley is operated by the City of Monrovia. The trolley circulates along the east side of the City along Huntington Drive and Myrtle Avenue. Services are provided Monday through Friday.

MTA Line 78/378 provides service between downtown Los Angeles and southern Monrovia. Line 378 operates along the same route as Line 78 and provides express service between downtown Los Angeles and southern Monrovia. These routes connect the communities of Lincoln Heights, El Sereno, Alhambra, San Gabriel, Temple City, and Arcadia. The route terminus is near the intersection of Myrtle Avenue and Live Oak Avenue. On weekdays, these routes provide service every 20 minutes during the morning and evening peak hour. Line 78 operates seven days per week and Line 378 operates only during the weekday morning and evening peak hours.

MTA Line 264 provides service between the cities of Altadena and Duarte. This route connects the cities of Pasadena, Arcadia, and Monrovia. In Monrovia, this line operates along Duarte Road. This route provides hourly service on weekdays from 5:00 a.m. to 8:00 p.m. seven days per week.

MTA Line 270 provides service between the eastern Terminus of the Metro Green Line in the City of Norwalk and Monrovia. This route connects the cities of Santa Fe Springs, Whittier, El Monte, and Irwindale. In Monrovia, the line operates along Myrtle Avenue south of Huntington Drive and along Primrose Avenue between Huntington Drive and Foothill Boulevard. This route provides hourly service during the weekday peak hours. Line 270 operates on weekdays and Saturdays.

Foothill Transit Line 184 is a limited circulator line that provides stops in the cities of Arcadia, Monrovia, and Duarte. In Monrovia, the route operates along Colorado Boulevard between 5<sup>th</sup> Avenue and Magnolia Avenue, Olive Avenue between Magnolia Avenue and Shamrock Avenue, Lemon Avenue between Shamrock Avenue and Mountain Avenue, and Mountain Avenue between Lemon Avenue the City boundaries. This route provides hourly service from 6:00 a.m. to 6:00 p.m. on weekdays. It operates Monday through Friday only.

Foothill Transit Line 187 provides service between the cities of Pasadena and Montclair. This route connects the cities of Arcadia, Monrovia, Duarte, Azusa, Glendora, La Verne, and Montclair. In Monrovia, this line operates along Huntington Drive. It provides service every 20 minutes during peak hours and operates seven days per week.

Foothill Transit Line 492 provides service between the El Monte Transit Center and the Montclair Transit Center. This route connects the cities of Arcadia, Monrovia, Baldwin Park, Irwindale, Azusa, Covina, San Dimas, La Verne, Claremont, and Montclair. This line crosses the southern portion of Monrovia along Live Oak Avenue at Myrtle Avenue. It provides service every half hour during peak weekday hours. Line 492 operates seven days per week.

Foothill Transit Line 494 connects the cities of Arcadia, Monrovia, Duarte, Azusa, Glendora, El Monte, and San Dimas. In Monrovia, this line operates along Myrtle Avenue south of Huntington Drive and along Huntington Drive between Myrtle Avenue and the eastern City boundary. This route operates only during peak weekday hours: westbound during the morning peak hours and eastbound during the evening peak hours. Buses on this line operate every 30 minutes.

Foothill Transit Line 690 provides express service between the cities of Montclair and Pasadena. At present this route does not have any stops in the City of Monrovia and instead operates on I-210 from Azusa to Pasadena. This route operates only during peak weekday hours: westbound during the morning peak hours and eastbound during the evening peak hours. Buses on this line operate with 30-minute headways.

Duarte Transit Blue and Green Lines are circulator routes operated by the City of Duarte. Both routes follow the same general path with the Blue Line circulating through the City in a clockwise pattern and the Green Line operating in a counter-clockwise pattern. These bus lines enter the City along Mountain Avenue where they run between Huntington Drive and Beckville Street. Both lines provide hourly service Monday through Saturday.

## Existing Area Traffic Conditions

### Study Methodology

Both new and available weekday baseline traffic count data was used as part of the traffic analysis. New weekday counts were taken in spring 2007 for 22 analyzed street segments. Recent traffic count data was provided by the City for 44 analyzed street segments. Data collected prior to the 2007 base year was increased by 0.82 percent per year to reflect increases in ambient traffic growth in the vicinity.

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions (LOS A) to overloaded conditions (LOS F). LOS definitions for street segments are summarized in Table 3.10-1.

**Table 3.10-1 Street Segment LOS Definitions**

LOS	Definition	Description
A	$V/C \leq 0.6$	Describes primarily free flow operations at average travel speeds usually about 90 percent of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal
B	$0.6 < V/C \leq 0.7$	Represents reasonably unimpeded operations at average travel speeds usually about 70 percent of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome.
C	$0.7 < V/C \leq 0.8$	Represents stable operations. However, the ability to maneuver and change lanes in mid-block locations may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50 percent of the average free flow speed for the arterial class.
D	$0.8 < V/C \leq 0.9$	Borders on a range on which small increases in flow may cause substantial increases in approach delay, and hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free flow speed.
E	$0.9 < V/C \leq 1.0$	Is characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	$V/C > 1.0$	Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersections congestion is likely at critical signalized intersections, with high approach delays resulting. Adverse progression is frequently a contributor to this condition.

Source: Transportation Research Board. *Highway Capacity Manual*. 1985.

Development proposals that involve large areas and are not expected to be fully implemented until 2030 or beyond (such as the proposed project) are not analyzed effectively by detailed intersection volume-to-capacity (V/C) ratio analyses. In this case, roadway segment analysis is a better predictor of the service capacity of the roadway network over the 23 year planning horizon. A V/C method was used to establish a baseline LOS for all street segments. LOS was determined by dividing demand volume by capacity. The segment capacity values for the analyzed roadway segments were obtained by multiplying the per lane capacity by facility type shown below by the number of mid-block through lanes along the study street segments:

- Primary Arterials – 800 vehicles per hour per lane
- Secondary Arterials – 750 vehicles per hour per lane
- Collector Streets – 675 vehicles per hour per lane
- Local Streets – 450 vehicles per hour per lane

A daily capacity of 9,000 vehicles per lane was used for all street types to determine daily LOS, except on local streets where a daily capacity of 2,500 vehicles per lane was used. Certain streets appear to be functioning at different levels from their current functional roadway classification. These include Duarte Road west of Myrtle Avenue and Foothill Boulevard, which are classified as secondary arterials but function as primary arterials. Evergreen Avenue and Central Avenue are classified as local streets, but function as secondary arterials because their location and one-way configuration. Royal Oaks Drive and California Avenue south of Huntington Drive are classified as local streets, but function as collector streets. Myrtle Avenue through the Central Business District in Old Town Monrovia is classified as a primary arterial, but is functioning as a collector street.

During peak hours of traffic (between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m.), the City seeks to maintain LOS D (V/C ratio less than or equal to 0.90) on all street segments. For daily LOS, the City has established the following minimum desirable daily LOS on each type of street:

- Primary Arterials – LOS D (V/C less than or equal to 0.90)
- Secondary Arterials – Mid-LOS D (V/C less than or equal to 0.85)
- Collector Streets – LOS C (V/C less than or equal to 0.80)
- Local Streets – LOS A (V/C less than or equal to 0.60)

### **Existing Street Segment Levels of Service**

A comparison of the existing daily traffic volumes to roadway capacities is provided in Table 3.10-2. Of the 66 analyzed two-way street segments, 5 street segments (8 percent) are operating at an undesirable LOS. These include the following:

- Monterey Avenue south of Colorado Boulevard
- California Avenue between Colorado Boulevard and Huntington Drive
- Chestnut Avenue between 5<sup>th</sup> Avenue and Monterey Avenue
- Huntington Drive between 5<sup>th</sup> Avenue and I-210 eastbound ramps
- Huntington Drive between I-210 westbound ramps and Mayflower Avenue

Table 3.10-2 Existing (2007) Daily LOS

Segment No.	Roadway	Segment	Roadway Type	Daily Volume	Daily V/C	Daily LOS	Meets Target V/C?
<b>North-South Streets</b>							
20	5 <sup>th</sup> Ave	North of Colorado Blvd	Collector	5,098	0.283	A	Yes
21	5 <sup>th</sup> Ave	South of Colorado Blvd	Collector	6,545	0.364	A	Yes
63	5 <sup>th</sup> Ave	South of Huntington Dr	Collector	1,535	0.085	A	Yes
60	Monterey Ave	South of Colorado Blvd	Local	4,394	0.987	E	<b>No</b>
64	Monterey Ave	South of Huntington Dr	Local	2,715	0.543	A	Yes
62	Highway Esplanade	North of Huntington Dr	Local	1,342	0.268	A	Yes
22	Mayflower Ave	B/W Foothill & Colorado	Collector	4,870	0.271	A	Yes
23	Mayflower Ave	B/W Colorado & Huntington	Collector	7,286	0.405	A	Yes
24	Mayflower Ave	B/W Huntington & Duarte	Collector	15,578	0.433	A	Yes
59	Magnolia Ave	B/W Foothill & Colorado	Collector	3,282	0.182	A	Yes
61	Magnolia Ave	B/W Colorado & Huntington	Collector	4,778	0.265	A	Yes
65	Magnolia Ave	B/W Evergreen & Duarte	Collector	7,446	0.414	A	Yes
25	Myrtle Ave	B/W Foothill & Colorado	Collector	11,473	0.637	B	Yes
26	Myrtle Ave	B/W Colorado & Huntington	Collector	15,485	0.430	A	Yes
27	Myrtle Ave	B/W Huntington & Central	Collector	25,887	0.719	C	Yes
28	Myrtle Ave	B/W Evergreen & Duarte	Primary	25,137	0.698	B	Yes
29	Myrtle Ave	South of Duarte Rd	Primary	22,411	0.623	B	Yes
66	Myrtle Ave	North of Camino Real St	Primary	22,411	0.623	B	Yes
30	Myrtle Ave	South of California Ave	Primary	27,481	0.763	C	Yes
31	Myrtle Ave	South of Live Oak Ave	Primary	25,127	0.698	B	Yes
32	California Ave	B/W Foothill & Colorado	Local	3,607	0.721	C	Yes
33	California Ave	B/W Colorado & Huntington	Local	5,864	1.173	F	<b>No</b>
34	California Ave	B/W Huntington & Duarte	Collector	8,800	0.244	A	Yes
35	California Ave	South of Duarte Rd	Collector	10,730	0.298	A	Yes
36	Mountain Ave	B/W Foothill & Royal Oaks	Secondary	15,551	0.432	A	Yes
37	Mountain Ave	B/W Royal Oaks & Huntington	Secondary	16,662	0.463	A	Yes
38	Mountain Ave	B/W Huntington & Central	Secondary	25,448	0.707	C	Yes
39	Mountain Ave	B/W Evergreen & Duarte	Secondary	15,353	0.426	A	Yes
<b>East-West Streets</b>							
1	Foothill Blvd	B/W 5 <sup>th</sup> Ave & Mayflower Ave	Primary	22,293	0.637	B	Yes
2	Foothill Blvd	B/W 5 <sup>th</sup> Ave & Myrtle Ave	Primary	25,716	0.714	C	Yes
3	Foothill Blvd	B/W Myrtle Ave & California Ave	Primary	21,202	0.589	A	Yes
4	Foothill Blvd	B/W California & Mountain	Primary	16,965	0.471	A	Yes
5	Colorado Blvd	B/W 5 <sup>th</sup> Ave & Mayflower Ave	Collector	7,686	0.427	A	Yes
6	Colorado Blvd	B/W Mayflower & Myrtle Ave	Collector	4,926	0.274	A	Yes
7	Colorado Blvd	B/W Myrtle & California Ave	Local	3,489	0.194	A	Yes
8	Royal Oaks Dr	B/W Shamrock & Mountain	Collector	3,568	0.198	A	Yes
9	Royal Oaks Dr	East of Mountain Ave	Collector	8,801	0.489	A	Yes
46	Chestnut Ave	B/W 5 <sup>th</sup> Ave & Monterey Ave	Local	4,782	0.956	E	<b>No</b>
47	Chestnut Ave	B/W Mayflower & Magnolia	Local	3,242	0.648	B	Yes
48	Chestnut Ave	B/W Myrtle & Canyon	Local	960	0.192	A	Yes
10	Huntington Dr	B/W 5 <sup>th</sup> & I-210 EB Ramps	Primary	35,124	0.976	E	<b>No</b>
11	Huntington Dr	B/W I-210 WB Ramps & Mayflower	Primary	38,099	1.058	F	<b>No</b>

Segment No.	Roadway	Segment	Roadway Type	Daily Volume	Daily V/C	Daily LOS	Meets Target V/C?
12	Huntington Dr	B/W Mayflower & Myrtle Ave	Primary	29,768	0.827	D	Yes
13	Huntington Dr	B/W Myrtle Ave & California	Primary	24,847	0.690	B	Yes
14	Huntington Dr	B/W California & Mountain	Primary	25,448	0.708	C	Yes
15	Huntington Dr	East of Mountain Ave	Primary	31,131	0.865	D	Yes
40	Cypress Ave	West of Myrtle Ave	Local	849	0.170	A	Yes
41	Cypress Ave	East of Myrtle Ave	Local	1,203	0.241	A	Yes
42	Cherry Ave	West of Myrtle Ave	Local	852	0.170	A	Yes
43	Cherry Ave	East of Myrtle Ave	Local	480	0.096	A	Yes
44	Los Angeles Ave	East of Myrtle Ave	Local	816	0.163	A	Yes
45	Montana Ave	West of Myrtle Ave	Local	778	0.156	A	Yes
49	Central Ave	B/W Mayflower & Magnolia	Secondary	2,465	0.137	A	Yes
50	Central Ave	B/W I-210 WB On-Ramp & Myrtle	Secondary	12,220	0.453	A	Yes
51	Central Ave	B/W Myrtle & I-210 WB Off-Ramp	Secondary	15,088	0.559	A	Yes
52	Central Ave	B/W I-210 WB Off-Ramp & California	Secondary	3,951	0.220	A	Yes
53	Central Ave	B/W California & Shamrock	Secondary	3,684	0.205	A	Yes
54	Evergreen Ave	B/W Magnolia & I-210 EB Off-Ramp	Secondary	3,251	0.181	A	Yes
55	Evergreen Ave	B/W I-210 EB Off-Ramp & Myrtle	Secondary	20,856	0.772	C	Yes
56	Evergreen Ave	B/W Myrtle & I-210 EB On-Ramp	Secondary	15,061	0.558	A	Yes
57	Evergreen Ave	B/W I-210 EB On-Ramp & California	Secondary	5,299	0.294	A	Yes
58	Evergreen Ave	B/W California & Mountain	Secondary	6,438	0.238	A	Yes
16	Duarte Rd	B/W 5 <sup>th</sup> & Mayflower	Primary	23,975	0.666	B	Yes
17	Duarte Rd	B/W Mayflower & Myrtle	Primary	21,317	0.592	A	Yes
18	Duarte Rd	B/W Myrtle & California	Secondary	14,447	0.401	A	Yes
19	Duarte Rd	B/W California & Mountain	Secondary	8,267	0.240	A	Yes

Source: Fehr & Peers/Kaku Associates. *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan*. October 2007.

Huntington Drive west of I-210 ramps and west of Mayflower Avenue carries over 35,000 vehicles per day and these segments have a daily LOS of E and F, respectively. In addition, three local street segments are operating at LOS E or F based on a capacity of 5,000 vehicles per day. During the morning peak hour, 7 of the 122 analyzed directional street segments (approximately 6 percent) are presently operating at an undesirable LOS E or F. During the evening peak hours, 8 of the 122 analyzed directional street segments (approximately 7 percent) are currently operating at LOS E or F. Each of these street segments are east-west streets that accommodate both local and through traffic, which is heavier westbound in the morning and eastbound in the evening.

## Regulatory Framework

### Congestion Management Program

New projects within the County of Los Angeles must comply with the CMP for Los Angeles County, which was first adopted by the MTA in November 1995 pursuant to state law and

periodically updated since then.<sup>2</sup> The CMP involves monitoring traffic conditions and performance measures on the designated transportation network, analysis of the impact of land use decisions on the transportation network, and mitigation to reduce impacts on the transportation network.

Appendix D of the CMP includes Transportation Impact Assessment (TIA) guidelines.<sup>3</sup> The TIA guidelines require analysis at monitored street intersections and segments, including freeway on- and off-ramp intersections where a project is expected to add 50 or more peak hour vehicle trips and mainline freeway or ramp monitoring locations where a project is expected to add 150 or more peak hour trips.

None of the streets in Monrovia, including Huntington Drive and Myrtle Avenue, are CMP arterial monitoring locations. The nearest CMP monitoring intersections are located outside of Monrovia, including Rosemead Boulevard & Foothill Boulevard in Pasadena, and Azusa Avenue & Foothill Boulevard in Azusa. There are seven mainline freeway segments within and near Monrovia. These include the following:

- I-210 west of Santa Anita Avenue
- I-210 west of I-605
- I-210 east of I-605
- I-605 south of I-210
- I-605 north of SR-60
- I-10 east of Peck Road
- I-10 east of I-605

## Thresholds for Determining Significance

As part of the Initial Study (see Appendix A), it was determined that the proposed project will not result in a change in air traffic patterns; result in inadequate emergency access; or result in inadequate parking capacity. Accordingly, these issues are not further analyzed in the EIR.

Implementation of the proposed Land Use and Circulation Elements will result in a significant impact if it will:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- Substantially increase hazards due to design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Table 3.10-3 shows the City of Monrovia's significance threshold for street segments. According to these criteria, a project impact will be significant if the street segment under consideration is projected to have an increase in daily traffic of 2.5 percent or more and is

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<sup>2</sup> MTA. *Congestion Management Program (CMP) for Los Angeles County, Appendix B.* adopted July 22, 2004.

<sup>3</sup> *Ibid.*

projected to operate worse than its desired LOS under “future with project” conditions based on the functional classification of the street segment: LOS D on primary arterials ( $V/C < 0.90$ ), mid-D on secondary arterials ( $V/C < 0.85$ ), LOS C on collector streets ( $V/C < 0.80$ ), and LOS A on local streets ( $V/C < 0.60$ ). For daily increases of more than 5 percent, physical mitigation measures may be required.

**Table 3.10-3 Significant Impact Criteria for Street Segments**

Traffic Growth over Total Projected Future Daily Volumes	Required Mitigation Measures
0.0 – 2.4 percent daily traffic growth	<ul style="list-style-type: none"> <li>• Staff review and conditions</li> </ul>
2.5 – 4.9 percent daily traffic growth	<ul style="list-style-type: none"> <li>• Initial Study required if existing count is greater than 2,000 vehicles per day</li> <li>• Soft mitigation required<sup>4</sup></li> </ul>
5.0 – 7.4 percent daily traffic growth	<ul style="list-style-type: none"> <li>• Initial Study required</li> <li>• Soft mitigation required</li> <li>• Physical mitigation may be required<sup>5</sup></li> </ul>
≥ 7.5 percent daily traffic growth	<ul style="list-style-type: none"> <li>• Initial Study required</li> <li>• Soft mitigation required</li> <li>• Physical mitigation may be required</li> <li>• Project alternative may be considered</li> </ul>

The CMP traffic impact analysis guidelines indicate that a project impact on the regional transportation system will be significant when the following threshold is exceeded:

- The proposed project increases traffic demand on a CMP facility by 2 percent of capacity ( $V/C \geq 0.02$ ), causing LOS F ( $V/C > 1.00$ )
- If the facility is already operating at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2 percent of capacity ( $V/C \geq 0.02$ ).

## Environmental Impact

**TRANS-1:** *The proposed project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. The impact will be significant.*

In order to evaluate the potential impact of the proposed project on the local street system, it was necessary to develop estimates of future traffic conditions both with and without the project. Forecasts of future traffic conditions reflect traffic increases due to general regional growth and development and traffic increases generated by specific developments in the vicinity of the project site. In addition, changes in land use designations in the three focus areas were included in the forecasts of future with project traffic conditions. The difference between future without project conditions and future with project conditions represents the incremental traffic impact due to the proposed Land Use and Circulation Elements.

In the West Huntington Drive and South Myrtle Avenue corridors, no changes in the existing street system are proposed. However, roadway changes in the Station Square Transit Village

<sup>4</sup> Soft mitigation measures include reducing the amount of daily trips coming to/from the site, such as through transportation demand management techniques.

<sup>5</sup> Physical mitigation measures, or operational transportation system management measures, increase the capacity of the impacted segments by adding lanes and/or implementing traffic signal synchronization.

area are assumed as part of the proposed project. Railroad Avenue will be realigned to parallel Pomona Avenue and a new road will be created where Pomona Avenue and the realigned Railroad Avenue meet and continue east to California Avenue. With the new development of new park space, Pomona Avenue will no longer provide a continuous connection between Primrose Avenue and Magnolia Avenue. The project does not propose, but would accommodate, the Gold Line station and terminal facilities that will be constructed on the northwest corner of Myrtle Avenue and Duarte Road.

In addition, the Circulation Element calls for the changes to the City's functional street classification system:

- Myrtle Avenue between Evergreen Avenue and Duarte Road will remain a primary arterial, but a new cross-section standard is proposed to enhance north-south traffic flow. The right-of-way will increase from 84 feet to 120 feet allowing for the provision of an additional lane in each direction on this roadway segment. The existing right-of-way south of Duarte Road is 100 feet and is configured for four through lanes. This portion of Myrtle Avenue could ultimately be reconfigured to allow for six through lanes to provide additional capacity during peak periods and throughout the day.
- Myrtle Avenue between Maple Avenue and Foothill Boulevard is proposed to be redesignated as a collector street (downgraded from a primary arterial street) to better reflect its character and function through Old Town Monrovia.
- California Avenue is proposed to be redesignated as a secondary arterial (from a local street) between Duarte Road and Huntington Drive to improve the north-south capacity through the City. This segment currently has a right-of-way of 80 feet, the minimum for a secondary arterial, and provides four through lanes. By reclassifying the segment of California Avenue south of Duarte Road from a local street to a secondary arterial, it will match the functional classification of the adjacent portion of California Avenue that lies within the jurisdiction of Los Angeles County.
- Reclassify Royal Oaks Drive between Shamrock Avenue and the eastern City limits to collector street (currently a local street).
- Upgrade and widen Central Avenue and Evergreen Avenue between Mayflower Avenue and the eastern City limits to collector streets (currently local streets).
- Reconfigure Huntington Drive to allow for 6 through lanes (currently 4 through lanes within a 100-foot right-of-way) to provide additional capacity during peak periods and throughout the day.

Further, the following key improvements to the City's transportation system are planned that will result in capacity changes at several locations and circulation changes in the City:

- ITS Improvements – The City and surrounding jurisdictions have been working with Los Angeles County to make Intelligent Transportation System (ITS) improvements on key arterial streets in the San Gabriel Valley. These improvements will result in increased lane capacities by improving signal coordination. With the implementation of these improvements, segment capacities of 900 vehicles per hour per lane on Huntington Drive and Myrtle Avenue south of Huntington Drive are anticipated (study locations 10-15, 25-31, and 66).
- Gold Line Foothill Extension – The Metro Gold Line Foothill Extension Construction Authority is planning an eastward extension of the existing Gold Line light rail service that currently runs between downtown Los Angeles and eastern Pasadena. Service is

planned to open in 2012 with peak period headways of 10 minutes (6 trains per hour in each direction). The Monrovia station will be located immediately west of Myrtle Avenue. This analysis assumes that the Gold Line project and associated transit enhancements will result in a decrease of 0.175 percent in traffic volumes in the vicinity. The estimated increase in traffic in the immediate vicinity of the station is included in the related project traffic growth.

These improvements will occur independently of and are not directly associated with the proposed project. While additional improvements are planned at numerous intersections in the City, they will not affect the capacities of the analyzed street segments.

## Future Traffic Projections

The future traffic projections involve three components. The first component is growth in the existing background (or ambient) traffic volumes reflecting the overall regional growth and development in and around the study area. The second component is traffic generated by specific related projects in or near the study area. The third component is the additional traffic generated by the proposed project.

### Ambient Traffic Growth

An annual growth rate of 0.82 percent, consistent with the growth projections for this area in the CMP, was determined to adequately account for ambient traffic growth. Accordingly, the 2007 existing traffic volumes data was increased by a total of 18.86 percent through 2030.

### Related Projects Traffic Growth

A total of 22 related (or cumulative) projects were identified in Monrovia and the surrounding jurisdictions. As summarized in Table 3.10-4, the related projects are expected to generate a total of approximately 48,000 daily trips, including almost 1,750 trips during the weekday morning peak hours and almost 5,000 trips during the weekday evening peak hours. These estimates are conservative in that they do not in every case account for the existing uses to be removed or the potential use of non-motorized travel modes (i.e., public transit, walking, biking, etc.). Trips from the related projects were assigned to the roadway system based on distribution patterns from their respective studies, where available, and on the type and location of the projects in the local street network.

**Table 3.10-4 Trip Generation Estimates for the Related Projects**

No.	Project Name	Location	Land Use	Size	Daily	Weekday AM			Weekday PM		
						In	Out	Total	In	Out	Total
1	Colorado Commons	505 South Myrtle Ave, Monrovia	Condominiums Retail	68 du 4,400 sf	398 195	5 N/A	25 N/A	30 N/A	24 5	12 7	35 12
2	Barratt American	Southeast corner of Myrtle Ave & Olive Ave, Monrovia	Condominiums	147 du	861	11	54	65	51	25	76
3	Monrovista Homes	Duarte Rd & California Ave, Monrovia	Single-family homes	34 du	325	6	19	26	22	13	34
4	Huntington & Myrtle Office Building and Restaurant	Huntington Dr & Myrtle Ave, Monrovia	Office Restaurant	34,000 sf 2,500 sf	374 318	46 15	6 14	53 29	9 17	42 11	51 27
5	Monrovia Public Library	321 Myrtle Ave, Monrovia	Institutional	45,000 sf	1,332	34	13	48	204	98	106
6	Foothill Transit	5640 Peck Rd, Arcadia	Maintenance building	7,050 sf	112	13	8	21	12	12	24
7		4035 Live Oak Ave, Arcadia	Condominiums	40 du	234	3	15	18	14	7	21
8a	Westfield Santa Anita Phase 1B	Huntington Dr & Baldwin Ave, Arcadia	Shopping center		1,823	N/A	N/A	N/A	85	91	176
8b	Westfield Santa Anita Phase 2	Huntington Dr & Baldwin Ave, Arcadia	Shopping center		5,620	N/A	N/A	N/A	263	234	497
9	The Parks at Santa Anita	Huntington Dr & Baldwin Ave, Irwindale	Shopping center		30,226	456	259	715	1,436	1,454	2,890
10		5200 Rivergrade Rd, Irwindale	Restaurant Convenience store Gas station	2,315 sf 2,572 sf 12 pumps	294 1,898 2,023	14 86 72	13 86 72	27 172 145	15 69 83	10 66 83	25 135 166
11	Hallett Boats	4600 Rivergrade Rd, Irwindale	Office Warehouse Sales Manufacturing	3,300 sf 13,000 sf 22,229 sf 30,471 sf	481	56	8	64	8	59	68
12	Los Angeles Engineering	201 East Longden Ave, Irwindale	Office & truck maintenance	19,350 sf	358	28	8	36	20	26	44
13	City of Hope Transfusion Medical Bldg	1500 East Duarte Rd, Duarte	Medical office Research	11,173 sf 38,972 sf	123 316	15 40	2 8	17 48	3 6	14 36	17 42
14	Ohio/Capri Motels Redevelopment	2435 Huntington Dr, Duarte	Single family homes Condominiums	45 du 6 du	431 35	8 0	25 2	34 3	29 2	17 1	45 3
15	Atalla Ranch	North of Sunnydale, East of Las Lomas, Duarte	Single family homes	15 du	144	3	8	11	10	6	15
16	First Wok Site Redevelopment	1569 Huntington Dr, Duarte	Single family homes Condominiums	13 du 4 du	124 23	2 0	7 1	10 2	8 1	5 1	13 2
17	Lerner's Gas Station Site	Northeast corner of Huntington Dr & Bradbourne Ave, Duarte	Retail Restaurant	5,753 sf 1,394 sf	255 177	N/A 8	N/A 8	N/A 16	7 9	9 6	16 15
18	Maryvale	2502 Huntington Dr, Duarte	Community Center	35,000 sf	801	35	22	57	17	40	57

No.	Project Name	Location	Land Use	Size	Daily	Weekday AM			Weekday PM			
						In	Out	Total	In	Out	Total	
19		2061 Mountain Ave, Duarte	Apartments	17 du	114	2	7	9	7	4	11	
20		2555 Mountain Ave, Duart	Condominiums	7 du	41	1	3	3	2	1	4	
21		70-86 Esperanza, Sierra Madre	Affordable Senior Housing	46 du	160	2	2	4	3	2	5	
22	Gold Line Light Rail Station	Northwest corner of Myrtle Ave & Duarte Rd, Monrovia	Light rail station									
			600-space parking lot									
			Light Industrial	-8,279 sf	N/A	105	51	156	57	371	428	
			Heavy Industrial	-13,260 sf	(58)	(7)	(1)	(8)	(1)	(7)	(8)	
			Car Wash	-6,400 sf	(20)	(4)	(3)	(7)	(2)	(1)	(3)	
Restaurant	-612 sf	(610)	(22)	(23)	(45)	(22)	(23)	(45)				
					(219)	(8)	(5)	(13)	(4)	(4)	(8)	

Source: Fehr & Peers/Kaku Associates. *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan*. October 2007.

## Project Traffic Estimates

The Institute of Transportation Engineers (ITE) Trip Generation, 7<sup>th</sup> Edition was used to estimate the number of trips for the existing and proposed uses in the three focus areas. The focus areas were divided into approximately 50 zones for the purposes of estimating traffic and assigning it to the surrounding street system. Table 3.10-5 shows the trip generation for the focus areas. The trip generation estimates include reductions to some uses to account for pass-by trips (up to 20 percent), transit trips (between 3.5 and 11 percent), and in the Station Square Transit Village area for internal trips within the multi-use development (between 2 and 25 percent of peak hour trips and between 6 and 40 percent of daily trips for specific uses).

**Table 3.10-5 Trip Generation Estimates for the Proposed Project**

Project Name	Daily	Weekday AM			Weekday PM		
		In	Out	Total	In	Out	Total
Huntington Drive Focus Area	18,398	145	111	256	727	824	1,551
Myrtle Avenue Focus Area	6,175	905	206	1,111	99	751	850
Station Square Transit Village	19,621	553	1,108	1,660	1,054	895	1,950

Source: Fehr & Peers/Kaku Associates. *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan*. October 2007.

New development that could occur by 2030 under the proposed project will generate an estimated total net increase of approximately 44,194 weekday trips, including approximately 3,027 during the weekday morning peak hours and 4,351 during the weekday evening peak hours. The geographic trip distribution pattern for project traffic was based on directional distribution data obtained from the SCAG travel demand forecasting model for the City of Monrovia. Approximately 15 percent of trips would be distributed to/from the north, 10 percent would be distributed to/from the south, 40 percent would be distributed to/from the west, and 35 percent would be distributed to/from the east. Using the trip distribution estimates and the overall distribution patterns, the traffic generated by the proposed project was assigned to the surrounding street network. The trip assignments close to each focus area were modified to reflect their specific location within the overall street network, including the location of freeway interchanges.

## Future Plus Project Traffic Conditions

Table 3.10-6 shows the projected future daily traffic volumes and the corresponding operating conditions with the proposed project. According to the City of Monrovia's impact criteria, which are based on the project-related change in daily traffic from existing conditions, the increases that could occur with the proposed project will result in significant daily impacts on 23 of the 66 analyzed street segments. As such, the proposed project will create significant impacts at the programmatic level to the following street segments:

- Monterey Avenue south of Colorado Boulevard
- Monterey Avenue south of Huntington Drive
- Myrtle Avenue between Foothill Boulevard and Colorado Boulevard
- Myrtle Avenue between Huntington Drive and Central Avenue
- Myrtle Avenue south of Duarte Road
- Myrtle Avenue north of Camino Real Street
- Myrtle Avenue south of California Avenue
- Myrtle Avenue south of Live Oak Avenue

Table 3.10-6 Comparison of Existing (2007) and Future (2030) Daily LOS

Segment No.	Roadway	Segment	Existing				Future With Project					
			Daily Volume	Daily V/C	Daily LOS	Meets Target V/C?	Total Daily Volume	Daily V/C	Daily LOS	Project Traffic	Percent Increase	Impact?
20	5 <sup>th</sup> Ave	North of Colorado Blvd	5,098	0.283	A	Yes	6,096	0.339	A	38	0.7	No
21	5 <sup>th</sup> Ave	South of Colorado Blvd	6,545	0.364	A	Yes	7,850	0.436	A	72	1.1	No
63	5 <sup>th</sup> Ave	South of Huntington Dr	1,535	0.085	A	Yes	1,924	0.107	A	100	6.5	No
60	Monterey Ave	South of Colorado Blvd	4,394	0.987	E	No	6,650	1.330	F	764	15.5	Yes
64	Monterey Ave	South of Huntington Dr	2,715	0.543	A	Yes	3,477	0.695	B	250	9.2	Yes
62	Highway Esplanade	North of Huntington Dr	1,342	0.268	A	Yes	1,895	0.379	A	300	22.4	No
22	Mayflower Ave	B/W Foothill & Colorado	4,870	0.271	A	Yes	6,253	0.347	A	466	9.6	No
23	Mayflower Ave	B/W Colorado & Huntington	7,286	0.405	A	Yes	9,603	0.534	A	828	11.4	No
24	Mayflower Ave	B/W Huntington & Duarte	15,578	0.433	A	Yes	22,246	0.618	B	3,754	24.1	No
59	Magnolia Ave	B/W Foothill & Colorado	3,282	0.182	A	Yes	4,384	0.244	A	494	15.1	No
61	Magnolia Ave	B/W Colorado & Huntington	4,778	0.265	A	Yes	6,487	0.360	A	596	12.5	No
65	Magnolia Ave	B/W Evergreen & Duarte	7,446	0.414	A	Yes	10,452	0.581	A	2,049	27.5	No
25	Myrtle Ave	B/W Foothill & Colorado	11,473	0.637	B	Yes	15,694	0.887	D	654	5.7	Yes
26	Myrtle Ave	B/W Colorado & Huntington	15,485	0.430	A	Yes	21,379	0.594	A	1,518	9.8	No
27	Myrtle Ave	B/W Huntington & Central	25,887	0.719	C	Yes	39,999	1.111	F	7,908	30.5	Yes
28	Myrtle Ave	B/W Evergreen & Duarte	25,137	0.698	B	Yes	37,208	0.689	B	5,916	23.5	No
29	Myrtle Ave	South of Duarte Rd	22,411	0.623	B	Yes	33,452	0.929	E	4,442	19.8	Yes
66	Myrtle Ave	North of Camino Real St	22,411	0.623	B	Yes	33,257	0.924	E	4,166	18.6	Yes
30	Myrtle Ave	South of California Ave	27,481	0.763	C	Yes	39,962	1.110	F	4,900	17.8	Yes
31	Myrtle Ave	South of Live Oak Ave	25,127	0.698	B	Yes	33,610	0.934	E	2,458	9.8	Yes
32	California Ave	B/W Foothill & Colorado	3,607	0.721	C	Yes	4,847	0.969	E	82	2.3	No
33	California Ave	B/W Colorado & Huntington	5,864	1.173	F	No	8,173	1.365	F	360	6.1	Yes
34	California Ave	B/W Huntington & Duarte	8,800	0.244	A	Yes	12,398	0.344	A	1,316	15.0	No
35	California Ave	South of Duarte Rd	10,730	0.298	A	Yes	14,528	0.404	A	836	7.8	No
36	Mountain Ave	B/W Foothill & Royal Oaks	15,551	0.432	A	Yes	18,615	0.517	A	40	0.3	No
37	Mountain Ave	B/W Royal Oaks & Huntington	16,662	0.463	A	Yes	20,314	0.564	A	512	3.1	No
38	Mountain Ave	B/W Huntington & Central	25,448	0.707	C	Yes	31,075	0.863	D	832	3.3	Yes
39	Mountain Ave	B/W Evergreen & Duarte	15,353	0.426	A	Yes	18,486	0.514	A	241	1.6	No
1	Foothill Blvd	B/W 5 <sup>th</sup> Ave & Mayflower Ave	22,293	0.637	B	Yes	29,034	0.807	D	1,010	4.4	No
2	Foothill Blvd	B/W 5 <sup>th</sup> Ave & Myrtle Ave	25,716	0.714	C	Yes	32,110	0.892	D	652	2.5	Yes
3	Foothill Blvd	B/W Myrtle Ave & California Ave	21,202	0.589	A	Yes	26,505	0.736	C	456	2.2	No
4	Foothill Blvd	B/W California & Mountain	16,965	0.471	A	Yes	21,375	0.594	A	370	2.2	No
5	Colorado Blvd	B/W 5 <sup>th</sup> Ave & Mayflower Ave	7,686	0.427	A	Yes	10,329	0.569	A	864	11.2	No

Segment No.	Roadway	Segment	Existing				Future With Project					
			Daily Volume	Daily V/C	Daily LOS	Meets Target V/C?	Total Daily Volume	Daily V/C	Daily LOS	Project Traffic	Percent Increase	Impact?
6	Colorado Blvd	B/W Mayflower & Myrtle Ave	4,926	0.274	A	Yes	6,560	0.364	A	310	6.3	No
7	Colorado Blvd	B/W Myrtle & California Ave	3,489	0.194	A	Yes	4,816	0.963	E	626	17.9	Yes
8	Royal Oaks Dr	B/W Shamrock & Mountain	3,568	0.198	A	Yes	4,587	0.255	A	326	9.1	No
9	Royal Oaks Dr	East of Mountain Ave	8,801	0.489	A	Yes	11,075	0.615	B	454	5.2	No
46	Chestnut Ave	B/W 5 <sup>th</sup> Ave & Monterey Ave	4,782	0.956	E	No	5,683	1.137	F	6	0.1	No
47	Chestnut Ave	B/W Mayflower & Magnolia	3,242	0.648	B	Yes	3,877	0.775	C	24	0.7	No
48	Chestnut Ave	B/W Myrtle & Canyon	960	0.192	A	Yes	1,399	0.280	A	258	26.9	No
10	Huntington Dr	B/W 5 <sup>th</sup> & I-210 EB Ramps	35,124	0.976	E	No	47,844	1.330	F	4,376	12.5	Yes
11	Huntington Dr	B/W I-210 WB Ramps & Mayflower	38,099	1.058	F	No	59,696	1.658	F	12,556	33.0	Yes
12	Huntington Dr	B/W Mayflower & Myrtle Ave	29,768	0.827	D	Yes	48,911	1.359	F	12,012	40.4	Yes
13	Huntington Dr	B/W Myrtle Ave & California	24,847	0.690	B	Yes	34,757	0.965	E	4,209	16.9	Yes
14	Huntington Dr	B/W California & Mountain	25,448	0.708	C	Yes	34,873	0.969	E	3,940	15.5	Yes
15	Huntington Dr	East of Mountain Ave	31,131	0.865	D	Yes	40,439	1.123	F	2,716	8.7	Yes
40	Cypress Ave	West of Myrtle Ave	849	0.170	A	Yes	1,023	0.205	A	14	1.6	No
41	Cypress Ave	East of Myrtle Ave	1,203	0.241	A	Yes	1,463	0.293	A	34	2.8	No
42	Cherry Ave	West of Myrtle Ave	852	0.170	A	Yes	1,047	0.209	A	34	4.0	No
43	Cherry Ave	East of Myrtle Ave	480	0.096	A	Yes	605	0.121	A	34	7.1	No
44	Los Angeles Ave	East of Myrtle Ave	816	0.163	A	Yes	1,003	0.201	A	34	4.2	No
45	Montana Ave	West of Myrtle Ave	778	0.156	A	Yes	966	0.193	A	41	5.3	No
49	Central Ave	B/W Mayflower & Magnolia	2,465	0.137	A	Yes	3,993	0.222	A	1,087	44.1	No
50	Central Ave	B/W I-210 WB On-Ramp & Myrtle	12,220	0.453	A	Yes	18,631	0.690	B	4,040	33.1	No
51	Central Ave	B/W Myrtle & I-210 WB Off-Ramp	15,088	0.559	A	Yes	23,284	0.862	D	5,171	34.3	Yes
52	Central Ave	B/W I-210 WB Off-Ramp & California	3,951	0.220	A	Yes	6,884	0.382	A	2,084	52.7	No
53	Central Ave	B/W California & Shamrock	3,684	0.205	A	Yes	5,274	0.293	A	768	20.8	No
54	Evergreen Ave	B/W Magnolia & I-210 EB Off-Ramp	3,251	0.181	A	Yes	5,624	0.312	A	1,905	58.6	No
55	Evergreen Ave	B/W I-210 EB Off-Ramp & Myrtle	20,856	0.772	C	Yes	28,489	1.055	F	3,634	17.4	Yes
56	Evergreen Ave	B/W Myrtle & I-210 EB On-Ramp	15,061	0.558	A	Yes	23,575	0.873	D	5,493	36.5	Yes

Segment No.	Roadway	Segment	Existing				Future With Project					
			Daily Volume	Daily V/C	Daily LOS	Meets Target V/C?	Total Daily Volume	Daily V/C	Daily LOS	Project Traffic	Percent Increase	Impact?
57	Evergreen Ave	B/W I-210 EB On-Ramp & California	5,299	0.294	A	Yes	8,808	0.489	A	2,405	45.4	No
58	Evergreen Ave	B/W California & Mountain	6,438	0.238	A	Yes	8,554	0.317	A	776	12.1	No
16	Duarte Rd	B/W 5 <sup>th</sup> & Mayflower	23,975	0.666	B	Yes	33,048	0.918	E	2,040	8.5	<b>Yes</b>
17	Duarte Rd	B/W Mayflower & Myrtle	21,317	0.592	A	Yes	31,483	0.875	D	3,807	17.9	<b>Yes</b>
18	Duarte Rd	B/W Myrtle & California	14,447	0.401	A	Yes	22,092	0.614	B	2,402	16.6	No
19	Duarte Rd	B/W California & Mountain	8,267	0.240	A	Yes	12,656	0.352	A	1,135	13.2	No

Source: Fehr & Peers/Kaku Associates. *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan.* October 2007.

- California Avenue between Colorado Boulevard and Huntington Drive
- Mountain Avenue between Huntington Drive and Central Avenue
- Foothill Boulevard between 5<sup>th</sup> Avenue and Myrtle Avenue
- Colorado Boulevard between Myrtle Avenue and California Avenue
- Huntington Drive between 5<sup>th</sup> Avenue and I-210 eastbound ramps
- Huntington Drive between I-210 westbound ramps and Mayflower Avenue
- Huntington Drive between Mayflower Avenue and Myrtle Avenue
- Huntington Drive between Myrtle Avenue and California Avenue
- Huntington Drive between California Avenue and Mountain Avenue
- Huntington Drive east of Mountain Avenue
- Central Avenue between I-210 westbound off-ramp and Myrtle Avenue
- Evergreen Avenue between I-210 eastbound off-ramp and Myrtle Avenue
- Evergreen Avenue between Myrtle Avenue and I-210 eastbound on-ramp
- Duarte Road between 5<sup>th</sup> Avenue and Mayflower Avenue
- Duarte Road between Mayflower Avenue and Myrtle Avenue

Mitigation measure TRANS-A will allow the City to consider modifications and improvements to the City’s circulation system that will ultimately improve traffic flow throughout the City and would mitigate the identified impacts on 11 street segments. However, TRANS-A does not identify specific improvements that will reduce the level of impact at the other 12 significantly impacted street segments. As such, those impacts will remain significant at the programmatic level.

**TRANS-2:** *The proposed project will exceed the level of service standard established by the county congestion management agency for designated roads or highways. The impact will be significant.*

The analysis of freeway mainline segments includes study of seven segments. Freeway mainline LOS was determined based on V/C ratios and the definitions shown in Table 3.10-7. In accordance with the Highway Capacity Manual, an LOS E service capacity of approximately 2,200 vehicles per lane per hour was used for freeway mixed-flow lanes. For the purposes of this analysis, auxiliary and high-occupancy vehicle (HOV) lanes were analyzed as the equivalent of half of a mixed-flow lane. A regional growth factor of 0.82 percent per year was applied to forecast future freeway volumes in the year 2030.

**Table 3.10-7 LOS Definitions for Freeway Mainline Segments**

LOS	V/C Ratio
A	0.00 – 0.35
B	>0.035 – 0.54
C	>0.54 – 0.77
D	>0.77 – 0.93
E	>0.93 – 1.00
F(0)	>1.00 – 1.25
F(1)	>1.25 – 1.35
F(2)	>1.35 – 1.45
F(3)	>1.45

Source: MTA. 2004 Congestion Management Program for Los Angeles County. 2004.

Table 3.10-8 summarizes the significant impact analysis for the analyzed freeway mainline segments with the proposed project. As described in Table 3.10-8, implementation of the proposed Land Use and Circulation Elements will result in significant impacts on the following four freeway mainline segments:

- I-210 west of Santa Anita Avenue: westbound in the morning and evening peak hours and eastbound in the evening peak hours.
- I-210 west of I-605: westbound in the morning and evening peak hours and eastbound in the evening peak hours.
- I-210 west of Irwindale Avenue: westbound in the morning and evening peak hours and eastbound in the evening peak hours.
- I-605 north of SR-60: northbound in the evening peak hours.

The California Department of Transportation (Caltrans) has no plans to provide additional capacity on the impacted segments of I-210 or I-605. A program of this type cannot develop and implement mitigation measures of the magnitude required (i.e., widening of freeways), and therefore, the proposed project's incremental impacts on poor cumulative conditions on these segments will be significant at the programmatic level.

**TRANS-3:** *The proposed project will not increase hazards due to design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The impact will be less than significant.*

The proposed project will not increase hazards due to design features or incompatible uses. The proposed project provides for improvements to modify irregular intersections and alter the existing street network in the Station Square Transit Village area to improve traffic flow and to accommodate new development. In addition, the Circulation Element includes the following goals and policies designed to ensure the safe and efficient movement of vehicles, pedestrians, and bicyclists on City streets:

Policy 1.2 Limit direct private property access to arterials, where dual access is possible, to minimize interference with through traffic.

Policy 2.12 Improve skewed and offset intersections, wherever possible.

**Goal 3:** Reduce the number of street accidents and maintain adequate traffic safety in the entire circulation system.

Policy 3.1 Use the "3 Es" (engineering, education, and enforcement) approach to improving traffic safety in the City. Engineering strategies typically consist of physical measures to control speeds or improve safety. Education strategies provide drivers, pedestrians, and cyclists with information on the most appropriate ways to share the roads. Enforcement strategies include observance of speed limits, traffic signals, and stops signs and other violations, such as failing to yield to pedestrians.

Policy 3.2 Provide for safe operations of rail service, motorized traffic, pedestrians, bicycles, and other modes by adhering to state and national standards and uniform practices.

**Table 3.10-8 Year 2030 Freeway Impact Analysis**

CMP Location	Peak Hour	Direction	Lanes	Capacity	Existing			Future Without Project			Future With Project			Increase in V/C	Significant Impact?	
					Volumes	V/C	LOS	Volumes	V/C	LOS	Added Trips	Volumes	V/C			LOS
I-210 West of Santa Anita	AM	EB	4.5	9,900	3,386	0.342	A	4,019	0.406	B	325	4,344	0.439	B	0.033	No
		WB	4.5	9,900	9,188	0.928	D	10,906	1.102	F(0)	320	11,226	1.134	F(0)	0.032	Yes
	PM	EB	4.5	9,900	9,839	0.994	E	11,680	1.180	F(0)	390	12,070	1.219	F(0)	0.039	Yes
		WB	4.5	9,900	8,419	0.850	D	9,994	1.009	F(0)	515	10,509	1.062	F(0)	0.052	Yes
I-210 West of I-605	AM	EB	4.5	9,900	3,466	0.350	B	4,115	0.146	B	355	4,470	0.452	B	0.036	No
		WB	4.5	9,900	9,404	0.950	E	11,164	1.128	F(0)	395	11,559	1.168	F(0)	0.040	Yes
	PM	EB	4.5	9,900	10,072	1.017	F(0)	11,956	1.208	F(0)	600	12,556	1.268	F(1)	0.061	Yes
		WB	4.5	9,900	8,618	0.871	D	10,230	1.033	F(0)	445	10,675	1.078	F(0)	0.045	Yes
I-210 West of Irwindale Ave	AM	EB	5	11,000	3,306	0.301	A	3,924	0.396	B	220	4,144	0.419	B	0.022	No
		WB	5	11,000	8,971	0.816	D	10,649	1.076	F(0)	221	10,870	1.098	F(0)	0.022	Yes
	PM	EB	5	11,000	9,607	0.873	D	11,404	1.152	F(0)	468	11,872	1.199	F(0)	0.047	Yes
		WB	5	11,000	8,220	0.747	C	9,758	0.986	E	223	9,981	1.008	F(0)	0.023	Yes
I-605 South of Arrow Highway	AM	EB	3	6,600	4,732	0.717	C	5,618	0.567	C	174	5,792	0.585	C	0.018	No
		WB	4	8,800	6,031	0.685	C	7,159	0.723	C	135	7,294	0.737	C	0.014	No
	PM	EB	3	6,600	5,525	0.837	D	6,558	0.662	C	223	6,781	0.685	C	0.023	No
		WB	4	8,800	5,056	0.575	C	6,002	0.606	C	132	6,134	0.620	C	0.013	No
I-605 North of SR-60	AM	EB	4.5	9,900	7,366	0.744	C	8,744	0.883	D	151	8,895	0.898	D	0.015	No
		WB	4.5	9,900	9,385	0.948	E	11,141	1.125	F(0)	122	11,263	1.138	F(0)	0.012	No
	PM	EB	4.5	9,900	8,822	0.891	D	10,472	1.058	F(0)	210	10,682	1.079	F(0)	0.021	Yes
		WB	4.5	9,900	8,072	0.815	D	9,582	0.968	E	127	9,709	0.981	E	0.013	No
I-10 East of Peck Road	AM	EB	4.5	9,900	8,206	0.829	D	9,741	0.984	E	16	9,757	0.986	E	0.002	No
		WB	4.5	9,900	7,205	0.728	C	8,552	0.864	D	4	8,556	0.864	D	0.000	No
	PM	EB	4.5	9,900	8,577	0.866	D	10,181	1.028	F(0)	9	10,190	1.029	F(0)	0.001	No
		WB	4.5	9,900	7,201	0.727	C	8,548	0.863	D	3	8,551	0.864	D	0.000	No
I-10 East of Baldwin Park Boulevard	AM	EB	4	8,800	8,206	0.932	E	9,741	0.984	E	9	9,750	0.985	E	0.001	No
		WB	4	8,800	7,205	0.819	D	8,552	0.864	D	7	8,559	0.865	D	0.001	No
	PM	EB	4	8,800	8,577	0.975	E	10,181	1.028	F(0)	3	10,184	1.029	F(0)	0.000	No
		WB	4	8,800	7,201	0.818	D	8,548	0.863	D	4	8,552	0.864	D	0.000	No

Source: Fehr & Peers/Kaku Associates. Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan. October 2007.

- Policy 3.3 Develop and implement safe and efficient designs to minimize the impact of at-grade arterial railroad crossings. These efforts should be coordinated with the planning for the Gold Line Foothill Extension light rail project, which will affect every grade crossing in the City.
- Policy 3.4 Continue the traffic accident monitoring program. Develop an annual traffic safety review of traffic collision data to identify any particular “hot spots” for automobiles, bicycles, and pedestrians, and develop appropriate countermeasures.
- Policy 3.8 Expand the crosswalk safety monitoring system in school zones. Coordinate efforts with the Monrovia Unified School District and the Monrovia Police Department.

As such, the proposed project will not create or increase safety hazards due to design features or incompatible uses. The impact will be less than significant at the programmatic level, and no mitigation measures are required. Future development projects will be required to determine the project-specific safety impacts due to design features and mitigation measures will be applied as necessary to reduce impacts.

**TRANS-4:** *The proposed project will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). The impact will be less than significant.*

The proposed Land Use and Circulation Elements are intended to increase density around the proposed light rail station and promote pedestrian-friendly and public transit connects within Monrovia and to the adjacent communities. The Circulation Element contains the following goals and policies in support of alternative transportation:

**Goal 4:** Support the use of public transportation, including light rail transit, to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel.

- Policy 4.2 Continue to engage Foothill Transit, MTA, and the Metro Gold Line Construction Authority to coordinate connections to the planned light rail running through Monrovia between Montclair and Los Angeles.
- Policy 4.4 Continue to provide local fixed-route transit service (the Monrovia Trolley) established in 2002. Prepare a study to evaluate potential revisions to existing routes and the development of new routes of the City-operated public transit system, including service to the planned light rail station. Identify and pursue available external funding opportunities for any improvements that may be identified.
- Policy 4.5 Require new development along arterial streets to provide transit facilities, such as bus shelters and turn-outs designed to established standards and specifications, where deemed necessary.

**Goal 6:** Protect and encourage non-motorized transportation such as bicycle and pedestrian travel.

- Policy 6.2      Develop a City-Wide Pedestrian Master Plan and a Bicycle Master Plan. These may include preparing Geographic Information System-based inventories of existing pedestrian and bicycle facilities within the City and at its perimeter (including all handicapped-accessible ramps, marked crosswalks, paved sidewalks, and bicycle facilities) and key activity generators and locations (such as schools, retail districts, parks, public buildings, downtown, higher density areas, and transit corridors), identifying existing gaps or other deficiencies, developing and prioritizing necessary improvements, and identifying funding sources to implement those improvements.
- Policy 6.3      Maintain existing pedestrian facilities (sidewalks and trails) and encourage new development to provide pedestrian routes to adjacent developments. Respond in a timely manner to citizen requests regarding maintenance concerns on all public pedestrian facilities.
- Policy 6.5      Encourage provision of bicycle racks or storage facilities at public gathering places.

As such, the policies in the proposed Circulation Element and the increased density in support of the planned Gold Line light rail service in the Station Square Transit Village area encourage the use of alternative transportation modes. The impact will be less than significant at the programmatic level.

## Mitigation Measures

- TRANS-A**      The City Department of Public Works shall develop an implementation plan for the Proposed Circulation Element. The implementation plan shall identify the lead City department responsible for implementation and the time frame for implementing the action. The implementation plan shall include the following:
- Develop a City-wide traffic impact fee program to address development traffic impacts throughout the City. The traffic impact fee program shall provide funding for mitigation measures for the Master Traffic Impact Mitigation Project list, which is City-wide. All currently sought after improvements are contained in the proposed Circulation Element.
  - Expand the Monrovia Trolley to increase access in the City by connecting the community with activity centers such as schools, public buildings (e.g., Main Library and Monrovia Community Center), parks, commercial centers, and the Monrovia Gold Line light rail station. A detailed study shall be undertaken to review the utilization of the existing routes and evaluate variations or new routes to serve the community better. This service shall be assessed periodically, and changes shall be made in response to future conditions.
  - Continue to coordinate with the Metro Gold Line Foothill Construction Authority as the final plans for the light rail transit system are developed and implemented.
  - Coordinate with the MTA and the surrounding communities in the periodic Transit Restructuring Studies undertaken to improve public transit service in and through the City.

- Coordinate with the MTA and Foothill Transit to develop common standards for transit stops in the City, including seating, lighting, shelters, and signage.
- Encourage incorporation of new technologies supporting telecommuting (e.g., broadband and teleconferencing equipment) into new office and residential developments. Telecommuting measures could be used by non-residential developers toward compliance with the Citywide Transportation Demand Management Ordinance (Municipal Code Section 17.24.170), which requires several measures to be taken by non-residential developments in excess of 25,000 square feet to reduce vehicle trips.
- Develop a City-Wide Pedestrian Master Plan and a Bicycle Master Plan. These could include preparing a Geographic Information System-based inventory of existing pedestrian facilities within the City (including handicapped-accessible ramps) and key activity generators and locations (such as schools, retail districts, parks, public buildings, downtown, higher density areas, transit corridors), identifying existing gaps or other deficiencies, developing and prioritizing necessary improvements and identifying funding sources to implement those improvements.
- Maintain the existing bicycle facilities in the City and periodically review the Bicycle Master Plan to identify additional facilities that may be considered. The City shall pursue the “Three Es” approach (engineering, education, and enforcement) to promoting bicycle use in the City.
- Partner with the Monrovia Unified School District to develop and implement programs for bicycle safety education and the benefits of bicycle transportation.
- Establish a landmark signage program for significant points of interest with implementation as developments are constructed.
- Coordinate with adjacent jurisdictions to revise, as appropriate, the existing network of designated truck routes in the City, with consideration of the impact of changes on alternate routes.
- Identify and implement localized intersection improvements (e.g., channelization, turn lanes, signal modifications, pedestrian improvements, and safety improvements) as warranted and as feasible in the City.
- Implement intersection improvements identified as mitigation measures for specific development projects as necessary.
- The City shall continue to implement existing Site Plan Review procedures to ensure that access to specific development projects does not unnecessarily interfere with the movement of through traffic.
- Prepare a master Right-of-Way Plan for future mitigation measures associated with specific development projects.
- As conditions warrant, implement protective/permissive left-turn phasing as a mitigation measure to reduce left-turn delays at intersections.
- Investigate the feasibility of implementing advanced Intelligent Transportation System signal coordination on Foothill Boulevard and on Duarte Road west of Myrtle Avenue to improve the capacity of these streets. These improvements

could be integrated with the infrastructure that will be in place on Myrtle Avenue south of Huntington Drive. This would serve as mitigation for segment impacts on Foothill Boulevard and on Duarte Road (segments 2 and 16-17).

- As part of individual development projects, develop new internal local streets in the Station Square Transit Village Area.
- Implement feasible interchange capacity improvements at the I-210/Mountain Avenue interchange.
- Implement feasible capacity improvements at the I-210/Myrtle Avenue interchange. This may include determining the effectiveness of extending left-turn lanes north on Central Avenue and south of Evergreen Avenue to provide extended “capture” lanes for vehicle storage, removing freeway traffic from the through movements on Myrtle Avenue. In addition, it is not feasible at this time to develop a Single Point Urban Interchange (SPUI) at this location; however, this improvement shall be considered by the City if development alternatives permit it.
- To the extent possible, construct dedicated right-turn lanes on the Huntington Drive and Myrtle Avenue corridors, as traffic conditions warrant, to reduce delays to through traffic associated with pedestrian movements that occur where right-turn movements are made from shared through/right-turn lanes.
- Construct dedicated bus pull-outs along the Huntington Drive and Myrtle Avenue corridors in coordination with local transit providers and, as traffic conditions warrant, to reduce delays associated with bus stops currently located in travel lanes.
- As appropriate, the City shall require new developments to integrate kiosks and/or information counters/displays to provide information regarding access to public transit (bus, light rail, bike, and pedestrian).

## Level of Impact after Mitigation

Even with implementation of mitigation measure TRANS-A, impacts to 12 of 23 significantly impacted street segments will remain significant and unavoidable at the programmatic level. These include the following street segments:

- Monterey Avenue south of Colorado Boulevard
- Monterey Avenue south of Huntington Drive
- Myrtle Avenue between Foothill Boulevard and Colorado Boulevard
- Myrtle Avenue between Huntington Drive and Central Avenue
- California Avenue between Colorado Boulevard and Huntington Drive
- Mountain Avenue between Huntington Drive and Central Avenue
- Colorado Boulevard between Myrtle Avenue and California Avenue
- Huntington Drive between I-210 westbound ramps and Mayflower Avenue
- Huntington Drive between Mayflower Avenue and Myrtle Avenue
- Central Avenue between I-210 westbound off-ramp and Myrtle Avenue
- Evergreen Avenue between I-210 eastbound off-ramp and Myrtle Avenue
- Evergreen Avenue between Myrtle Avenue and I-210 eastbound on-ramp

Caltrans has no plans to provide additional capacity on the impacted segments of I-210 or I-605. A program of this type cannot develop and implement mitigation measures of the magnitude required (i.e., widening of freeways), and therefore, the proposed project's incremental impacts on poor cumulative conditions on these CMP mainline freeway segments will remain significant and unavoidable at the programmatic level.

As described in TRANS-3 above, the proposed project will not increase hazards due to design and incompatible uses. The impact will be less than significant at the programmatic level.

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# 4.0 Impact Overview

This chapter provides an overview of the environmental effects of the proposed project, including significant unavoidable adverse impacts, impacts not found to be significant, cumulative impacts, significant irreversible environmental changes, and growth-inducing impacts. Cross-references are made throughout this chapter to other sections in this EIR where more detailed discussions of impacts of the proposed project can be found.

## Significant Unavoidable Adverse Impacts

This section is prepared in accordance with Section 15126.2(b) of the CEQA Guidelines, which requires the discussion of any significant environmental effects that cannot be avoided if a project is implemented. These include impacts that can be mitigated but cannot be reduced to a less than significant level. An analysis of environmental impacts caused by the proposed Land Use and Circulation Elements has been conducted and is contained in this EIR. Twelve issue areas were analyzed in detail in Chapter 3. Two issues have been found to result in significant unavoidable adverse impacts – Air Quality and Transportation/Traffic.

## Effects Not Found To Be Significant

Sections 15128 and 15143 of the CEQA Guidelines require the identification of impacts of a proposed project that were determined not to be significant and that were not discussed in detail in the impact section of the EIR. For this project, it was determined that significant impacts would not occur in the following resource categories: Agricultural Resources, Biological Resources, Geology and Soils, and Mineral Resources. An Initial Study (Appendix A) was prepared which outlines the reasons why these effects were found to be not significant. The following discussion summarizes these findings.

### Agricultural Resources

The City of Monrovia is an urban environment with no remaining agricultural uses. Historically, the San Gabriel Valley supported citrus groves, but the building boom of the 1940s through 1970s eliminated virtually all agricultural activities. The proposed Land Use and Circulation Elements will not convert farmland, designated prime farmland, or other farmland to non-agricultural use because the City has not designated any farmland within the planning Area. The California Division of Land Resource Protection describes the project area as an Urban and Built-up Land.<sup>1</sup> There are no Williamson Act contracts applicable to the planning Area. As such, the proposed project will not involve changes that could result in the conversion of farmland to non-agricultural use. No significant impact will result.

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<sup>1</sup> California Division of Land Resource Protection. *Farmland Mapping and Monitoring Program, FMMP Survey Area*. website [http://www.consrv.ca.gov/DLRP/fmmp/overview/survey\\_area\\_map.htm](http://www.consrv.ca.gov/DLRP/fmmp/overview/survey_area_map.htm), accessed: December 20, 2006.

## Biological Resources

The City of Monrovia is primarily an urbanized area. No native habitat remains in the central portion of the City where land use changes are permitted as part of the proposed Land Use and Circulation Elements. No changes are contemplated for the hillside areas of the City that potentially contain sensitive habitat. No development projects are specifically proposed as part of the proposed Land Use and Circulation Elements. Thus, no direct impact to sensitive habitat, plants, or wildlife species, or wildlife corridors will occur from implementation of the proposed Land Use and Circulation Elements. The proposed project concentrates new development into previously developed areas of the City to take advantage of the proposed Gold Line light rail service. Development pursuant to the proposed Land Use and Circulation Elements will occur as the recycling and redevelopment of previously developed parcels. All new development, regardless of location, will be required to assess its individual impact on sensitive habitat and wildlife species. Further, development pursuant to the proposed Land Use and Circulation Element will be subject to Monrovia's Oak Tree Preservation Ordinance (Municipal Code Section 17.20.040). No habitat conservation plans (HCP) or natural community conservation plans (NCCP) apply within the City. Thus, no conflict will occur with either an HCP or NCCP. The impact to biological resources will be less than significant.

## Geology and Soils

According to maps published by the California Geological Survey, the Raymond Hill Fault zone is an Alquist-Priolo Earthquake Fault Zone, located in the northern part of Monrovia.<sup>2</sup> As noted in the Safety Element of the General Plan, Segment D of the Sierra Madre Fault zone, known as the Duarte fault, is a segment from that regional fault located near Monrovia.<sup>3</sup> Because Monrovia is located in a seismically active area, projects developed pursuant to current and proposed Land Use and Circulation Element will expose additional people and structures to groundshaking hazards associated with earthquakes. Any groundshaking that will occur is expected to be similar throughout the City and is not considered an unusual or unique risk. Per City and State building codes, all new development will be required to incorporate appropriate design and construction measures to guard against groundshaking hazards. The City requires geological and geotechnical investigations of all new development in seismic and geologic hazard areas. Compliance with existing standards will ensure a less than significant impact.

## Mineral Resources

Adoption of the proposed Land Use and Circulation Elements and any development pursuant thereto will not result in the loss of known mineral resources, as no mineral resource areas have been designated in the City of Monrovia.<sup>4</sup> No impact will result.

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<sup>2</sup> California Geological Survey. *Special Study Zones (Alquist-Priolo Map), Mt. Wilson Quadrangle*. January 1, 1977.

<sup>3</sup> City of Monrovia. *City of Monrovia General Plan Safety Element*. Adopted June 12, 2002.

<sup>4</sup> California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification of the Greater Los Angeles Area – San Gabriel Valley Production – Consumption Region*. Updated 1994.

## Cumulative Impacts

According to Section 15355 of the CEQA Guidelines, cumulative impacts refer to:

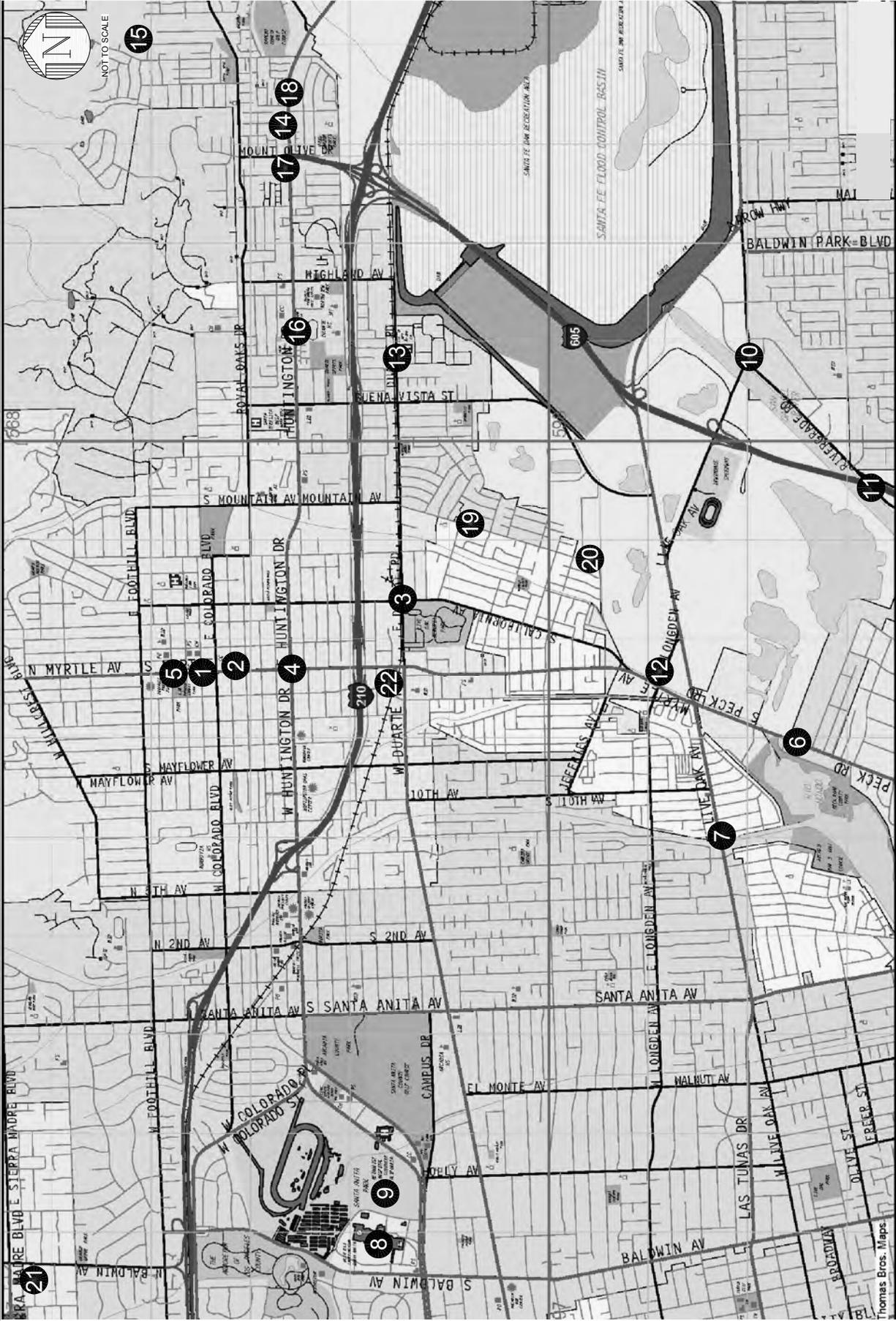
“Two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change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

Sections 15130(a) and 15130(a)(3) of the CEQA Guidelines state that:

“An EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in section 15065(c). Where a lead agency is examining a project with an incremental effect that is not “cumulatively considerable,” a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An EIR may determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.”

According to Section 15130 (b)(1)(A) of the CEQA Guidelines, a list of past, present, and probable future projects producing related or cumulative impacts may be used as the basis of the cumulative impacts analysis. The “list” approach was used for the cumulative impacts discussion in this EIR. Table 4-1 provides a list of related projects. Figure 4-1 shows the locations of the related projects. Cumulative citywide impacts have been addressed in the preceding analysis in this EIR. A broader examination of cumulative impacts in this section involves considering development beyond horizon year 2030 pursuant to the proposed Land Use and Circulation Elements together with ambient growth in neighboring jurisdictions.



Source: Fehr & Peers, Kaku Associates, 2007.

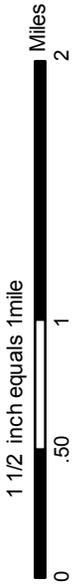


Figure 4-1  
Related Projects

Table 4-1 Related Projects

No.	Name	Location	City	Land Use	Size
1	Colorado Commons	505 South Myrtle Ave	Monrovia	Condominiums Retail	68 du 4,000 sf
2	Barratt American	Southeast corner of Myrtle Ave & Olive Ave	Monrovia	Condominiums	147 du
3	Monrovista Homes	Duarte Rd & California Ave	Monrovia	Single-family homes	34 du
4	Huntington & Myrtle Office Building	Huntington Dr & Myrtle Ave	Monrovia	Office Restaurant	34,000 sf 2,500 sf
5	Monrovia Public Library	321 Myrtle Ave	Monrovia	Institutional	45,000 sf
6	Foothill Transit	5640 Peck Rd	Arcadia	Maintenance building	7,050 sf
7		4035 Live Oak Ave	Arcadia	Condominiums	40 du
8	Westfield Santa Anita Phase 1B	Huntington Dr & Baldwin Ave	Arcadia	Shopping center	
	Westfield Santa Anita Phase 2	Huntington Dr & Baldwin Ave	Arcadia	Shopping center	
9	The Parks at Santa Anita	Huntington Dr & Baldwin Ave	Arcadia	Shopping center	
10		5200 Rivergrade Rd	Irwindale	Restaurant Convenience store Gas station	2,315 sf 2,572 sf 12 pumps
11		4600 Rivergrade Road	Irwindale	Office Warehouse Sales Manufacturing	3,300 sf 13,000 sf 22,229 sf 30,471 sf
12	Los Angeles Engineering	201 East Longden Ave	Irwindale	Office & truck maintenance	19,350 sf
13	City of Hope Transfusion Medical Bldg	1500 East Duarte Rd	Irwindale	Medical office Research	11,173 sf 38,972 sf
14	Ohio/Capri Motels Redevelopment	2435 Huntington Drive	Duarte	Single family homes Condominiums	45 du 6 du
15	Atalla Ranch	North of Sunnydale, East of Las Lomas	Duarte	Single family homes	15 du
16	First Wok Site Redevelopment	1569 Huntington Drive	Duarte	Single family homes Condominiums	13 du 4 du
17	Lerner's Gas Station Site	Northeast corner of Huntington Dr & Bradbourne Ave	Duarte	Retail Restaurant	5,753 sf 1,394 sf
18	Maryvale	2502 Huntington Dr	Duarte	Community Center	35,000 sf
19		2061 Mountain Ave	Duarte	Apartments	17 du
20		2555 Mountain Ave	Duarte	Condominiums	7 du
21		70-86 Esperanza	Sierra Madre	Affordable senior housing	46 du
22	Gold Line Light Rail Station	Northwest corner of Myrtle Ave & Duarte Rd	Monrovia	Light rail station 600-space parking lot	

Source: Fehr & Peers/Kaku Associates, *Traffic Study for the Proposed Amendments to the Land Use and Circulation Elements of the Monrovia General Plan*, September 2007.

## Aesthetics

The City of Monrovia does not have any identified scenic vista, scenic resources, or scenic highways within the planning area. Future development pursuant to the proposed Land Use and Circulation Elements will be required to comply with the goals, policies, and design guidelines provided as part of the proposed Land Use Element to ensure that future development projects are designed to complement and blend in with existing visual character of the neighborhood. All new development projects will be reviewed to ensure that new lighting is focused into the site so as not to reflect onto an adjoining property or any public way. Buffers, particularly between residential and non-residential uses will be required by the City within the site to prevent new sources of light from spilling onto existing and new residential uses. As such, the proposed project would not contribute to a significant cumulative aesthetic impact.

## Air Quality and Greenhouse Gas Emissions

Monrovia is located in the San Gabriel Valley, which is part of the Basin, where pollutants regularly exceed state and federal air quality standards. The Basin is identified as a non-attainment area with regarding to meeting federal standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Future development in Monrovia and throughout the San Gabriel Valley will continue to add pollutants to the atmosphere from both transportation and stationary sources. The combined emissions from development in Monrovia and other cities in the San Gabriel Valley subregion will continue to exceed state and federal standards. As such, cumulative air quality impacts will be significant and unavoidable.

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters the Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back to space, but the properties of the radiation have changed from high-frequency solar radiation, to lower-frequency infrared radiation. GHGs, which were transparent to solar radiation, are effective in absorbing infrared radiation. This radiation that would have otherwise escaped back to space is now "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Without the Greenhouse Effect, Earth would not be able to support life, as we now know it.

Prominent GHGs contributing to the Greenhouse Effect include CO<sub>2</sub>, methane (CH<sub>4</sub>), O<sub>3</sub>, water vapor, nitrous oxide (N<sub>2</sub>O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for an enhancement of the Greenhouse Effect, which have led to a trend of unnatural warming of the Earth's climate, known as global warming or global climate change.<sup>5</sup> Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with industrial/manufacturing, utility, transportation, residential, and agricultural sectors.<sup>6</sup> Emissions of CO<sub>2</sub> are byproducts of fossil fuel combustion. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and landfills. Processes that absorb CO<sub>2</sub>, often referred to as sinks, include uptake by vegetation and dissolution into the ocean.

<sup>5</sup> Ahrens, D.C. *Meteorology Today; an Introduction to Weather, Climate, & the Environment*. Brooks Cole, Inc., Pacific Grove, CA. 2003.

<sup>6</sup> California Energy Commission. *Inventory of California Greenhouse Gas Emissions and Sinks:1990 to 2004*. (Staff Final Report), Publication CEC-600-2006-013-SF. 2006.

Carbon dioxide-equivalent is a value used to account for different GHGs having different potential to retain infrared radiation in the atmosphere and contribute to the Greenhouse Effect. This is known as the Global Warming Potential (GWP) of a GHG, and is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix C, "Calculation Referenced," of the General Reporting Protocol of the California Climate Action Registry, one ton of CH<sub>4</sub> has the same contribution to the Greenhouse Effect as approximately 21 tons of CO<sub>2</sub>. Therefore, CH<sub>4</sub> is a much more potent GHG than CO<sub>2</sub>. Expressing emissions in carbon-dioxide equivalents takes the Greenhouse Effect contribution of all GHG emissions and converts them to a single unit equivalent to the affect if all emissions were CO<sub>2</sub>.<sup>7</sup>

Climate change is a global problem, and GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, respectively. The strong majority of the scientific community concurs that global warming will lead to adverse climate change effects around the globe and that the phenomenon is anthropogenic, i.e., caused by humans. Various local and statewide initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way and there is a real potential for severe adverse environmental, social, and economic effects over the long term. Because every nation is an emitter of GHGs, and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help slow or stop human-caused increase in average global temperatures and associated changes in climatic conditions.

No air district in California, including the SCAQMD has identified a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to GHG emissions. The state has identified 1990 emissions levels as a goal through adoption of AB 32. To meet this goal, California would need to generate lower levels of GHG emissions than current levels. However, no standards have yet been adopted quantifying 1990 emission targets. Emitting CO<sub>2</sub> into the atmosphere is not itself an adverse environmental affect. It is the increased concentration of CO<sub>2</sub> into the atmosphere resulting in global climate change and the associated consequences of climate change that result in adverse environmental effects (e.g., sea levels rise, loss of snowpack, severe weather events). Although it is possible to generally estimate a project's incremental contribution to CO<sub>2</sub> into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment.

Development pursuant to the proposed Land Use and Circulation Elements is expected to result in a net increase in GHG emissions generated by net new vehicle trips and stationary sources. In the absence of specific methodology and thresholds of significance, the proposed project's CO<sub>2</sub> emissions have not been quantified. Further, it is not possible to quantify the cumulative projects that would contribute to this impact because GHG emissions are a world-wide concern. However, emissions generated in Monrovia and the San Gabriel Valley adds to emissions produced around the world to increase total GHG in the atmosphere. The cumulative impact will be significant and unavoidable.

<sup>7</sup> California Climate Action Registry. *General Reporting Protocol*. Version 2.1, Los Angeles, CA. June 2006. website <http://www.climateregistry.org/docs/PROTOCOLS/GRP%20V2.1.pdf>.

## Cultural Resources

As discussed in Chapter 3.2, Cultural Resources, Monrovia contains many historic buildings. The proposed project, in conjunction with other cumulative projects in the area, could result in the disturbance of archaeological and/or historic resources in the area. However, each cumulative project will be responsible for implementing the necessary measures to protect any existing cultural resources in the area and significant impacts could occur at the project-level. No significant cumulative impacts will occur to these resources at the programmatic level.

## Hazards and Hazardous Materials

The proposed project and other cumulative projects within one-mile of the project are not expected to use large quantities of hazardous materials that would create a potential risk to public health and safety. Implementation of the General Plan Safety Element goals and policies regarding hazardous materials, enforcement of the zoning regulations applicable to businesses that use or manufacture hazardous materials and wastes, and compliance with existing federal, state, and local regulations will provide a level of protection to current safety standards. The cumulative projects may use small quantities of commonly used hazardous materials, such as cleaning solvents, paint, fertilizers, etc., which pose no unwarranted risks to public health and safety with proper handling and storage. Therefore, no significant cumulative impacts to public health related to hazardous and hazardous materials will occur.

## Hydrology and Water Quality

The projected increase in water usage as a result of the proposed Land Use and Circulation Elements is within the projected water supply documented in the City's Urban Water Management Plan. Future development in Monrovia will not create a significant impact to groundwater supply. The amount of water consumed by Monrovia will remain within the City's adjudicated rights to draw water for the San Gabriel Groundwater Basin. Development pursuant to the proposed Land Use and Circulation Elements and the cumulative projects will be required to comply with existing federal, state, and local water quality requirements. Implementation of standards plans, including SUSMP and BMPs, which will ensure that future developments will not significantly impact water quality. No significant cumulative impacts to hydrology and water quality will occur.

## Land Use and Planning

The proposed Land Use and Circulation Element will not divide an established community. Instead, it will connect potential new development opportunities located around the proposed Gold Line light rail station to the rest of the City. Further, the proposed Land Use and Circulation Element are consistent with the SCAG regional growth management goals. No HCP, NCCP, or other approved local, regional, or state HCP applies to the properties within Monrovia. As such, the proposed Land Use and Circulation Elements will not conflict with an adopted HCP or NCCP. Development pursuant to the proposed Land Use and Circulation Elements will occur in accordance with the land use designation and development intensities identified in the proposed Land Use Element. These land use policies focus development primarily in to three focus areas: South Myrtle Avenue, West Huntington Drive, and the Station Square Transit Village area. The purpose of the changes to the Land Use and Circulation Elements is to allow for higher densities and mixed-use developments around the proposed Gold Line light rail station in Monrovia to encourage transit-oriented development and

pedestrian-friendly connections to Old Town Monrovia and existing residential neighborhoods. The proposed land use policies focus development in the specific areas where development is most appropriate, work towards a regional jobs/housing balance, revitalize specific areas of the City that could benefit from development, and create an environment that makes Monrovia a pleasant place to live, work, shop, and do business. Land use policies will continue to allow for the recycling of existing uses and redevelopment of underutilized sites. Each cumulative project is subject to independent environmental review, which would include land use conformity analyses, to ensure that no significant cumulative impacts related to land use compatibility and consistency would occur. The proposed project would not contribute to cumulative land use impacts.

## Noise

Development pursuant the proposed Land Use and Circulation Element, along with the cumulative projects, will generate short-term noise during construction. Because the proposed project is programmatic in nature and no specific development projects are proposed, significant cumulative noise impacts will not occur. The cumulative projects and individual development projects pursuant to the proposed Land Use and Circulation Elements will be required to determine their individual and cumulative noise contributions. Since operational noise impacts are generated directly from the traffic analysis results, future project noise impacts described in this EIR already reflect cumulative impacts. As discussed in Chapter 3.7, Noise, the proposed Land Use and Circulation Elements will not cause the ambient noise level at sensitive receptors to incrementally increase by more than 3 decibels or to within the “normally unacceptable” or “clearly unacceptable” category. The predominant vibration source in Monrovia is heavy trucks traveling on the local roadways. Neither the proposed Land Use and Circulation Elements nor related projects would substantially increase heavy-duty vehicle traffic within the City and would not cause a substantial increase in heavy-duty trucks on local roadways. As such, the proposed project would not contribute to a cumulative noise or vibration impact. However, significant impacts could occur at the project-level and mitigation measures may be required to reduce these impacts. Further, cumulative noise impacts will need to be evaluated at the project level as specific projects are carried forward.

## Population and Housing

The proposed Land Use and Circulation Elements and the associated development yield correlates to regional growth estimates made by SCAG. SCAG estimates anticipated growth for the six-County SCAG region for the purposes of allocating growth to specific areas and identifying regional transportation infrastructure needed to support growth. Monrovia will be able to accommodate its share of regional growth and the proposed project is consistent with the regional growth projections (see Chapter 3.8, Population and Housing). The cumulative projects will be required to demonstrate consistency with local and regional growth projects. As such, the proposed project will not contribute to a cumulative population and housing impact.

## Public Services

Future growth will increase demand for law enforcement services, fire protection and emergency services, schools, and libraries. New development pursuant to the proposed Land Use and Circulation Elements will not result in the need to construction new police and fire stations, libraries, or schools, the construction of which will result in a significant environmental impact. Service providers will continue to evaluate the levels of service desired and the funding

sources available to meet increases in demand. Development projects pursuant to the proposed Land Use and Circulation Elements and the cumulative projects will be required to pay development fees to their respective jurisdictions to fund the expansion of public services. No significant cumulative impact to public services will occur.

## Recreation

Implementation of the proposed Land Use and Circulation Elements will result in a shortage of parkland per the National Recreation and Parks Service standard of 3 acres per 1,000 residents. Development projects pursuant to the proposed Land Use and Circulation Elements and the cumulative projects will be required to pay development fees to their respective jurisdictions to fund the expansion of open space and recreational opportunities. No significant cumulative impact to public services will occur.

## Transportation/Traffic

As development occurs within Monrovia and the San Gabriel Valley, traffic volumes will increase. The analysis of the proposed project's impact on traffic includes the contribution of the related projects. Thus, the future traffic volume already accounts for the cumulative impacts from these other projects. As discussed in Chapter 3.10, Transportation/Traffic, the proposed project will contribute to cumulative traffic impacts on 12 street segments and four mainline freeway segments. Even with implementation of mitigation, the cumulative impact will be significant and unavoidable.

## Utilities and Service Systems

New development will increase the demand for water in the City and the region. The projected increase in water usage as a result of the proposed Land Use and Circulation Elements is within the projected water supply documented in the City's Urban Water Management Plan. The amount of water consumed by Monrovia will remain within the City's adjudicated rights to draw water for the San Gabriel Groundwater Basin. No significant cumulative impact to water supply will occur.

The proposed project will not significantly impact the ability of the County Sanitation Districts of Los Angeles County to treat City sewage. All individual development projects pursuant to the proposed Land Use and Circulation Element and the related projects will be charged a sanitation connection fee to connect to the regional sewer system. The connection fee is based on the cost of incremental expansion of the regional sewer system to accommodate growth. No significant cumulative impact to wastewater will occur.

Future development in the City and the San Gabriel Valley will contribute additional solid waste to the region's solid waste disposal facilities. In accordance with California Waste Management Act of 1989 (AB 939), the City of Monrovia and other cities in the region are required to reduce waste within their boundaries through source reduction, recycling, and composting. New development pursuant to the proposed Land Use and Circulation Elements will be required to comply with the City's waste reduction programs. As such, no significant cumulative impact to solid waste will occur.

## Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impacts of the proposed project. Growth inducement includes “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. Included in this are projects which could remove obstacles to population growth (a major expansion of wastewater treatment plan might, for example, allow for more construction in the service area).

The proposed Land Use and Circulation Elements are specifically intended to provide for the orderly growth of Monrovia, accommodate higher development intensities around the proposed Gold Line light rail station, define the limits of that growth, and act as a mechanism to accommodate and control future growth. The proposed Circulation Element is intended to improve the operating efficiency of the existing traffic network and protect residential neighborhoods. The extension of urban infrastructure into previously undeveloped areas will not occur as a result of the proposed Circulation Element. Development pursuant to the proposed Land Use Element will provide needed housing, create compact and pedestrian-friendly urban development, create more employment opportunities, and recycle underutilized parcels within the focus areas to higher land uses within an already urbanized area. Overall, the anticipated population growth will continue the City’s relatively modest growth pattern, with an average of approximately one percent per year over the 23-year planning period. The proposed Land Use Element will both allow for and accommodate projected future growth.

## Significant Irreversible Environmental Changes

Section 21100(b)(2)(B) and Section 15126.2(c) of the *CEQA Guidelines* require that an EIR analyze the extent to which the proposed project’s primary and secondary effects would impact the environment and commit nonrenewable resources to uses that future generations will not be able to reverse.

Adoption and implementation of the proposed Land Use and Circulation Elements will result in impacts to the local government which will affect both short term uses and the maintenance and enhancement of long-term usage of land within the City. The proposed Land Use and Circulation Elements allow for infill development in three focus areas (South Myrtle Avenue, West Huntington Drive, and Station Square Transit Village) to take advantage of proposed Gold Line light rail service to Monrovia. In general, the irreversible land use changes resulting from adoption and implementation of the proposed Land Use and Circulation Elements will be beneficial rather than detrimental. The changes will allow Monrovia to:

- To attain a balanced mix of land use within the City, thereby providing residents with ready access to housing, employment, and commercial services;
- To work toward regional jobs/housing balance goals;
- To encourage private investment in the City;
- To ensure that residents from all income levels have access to decent, affordable housing;
- To revitalize specific areas of the City which could benefit from public and private redevelopment efforts;

- To create a City environment which makes Monrovia a pleasant place to live, work, shop, and do business; and
- To ensure development in Monrovia is sensitive to the City's existing architectural and natural/open space resources.

Irreversible commitments of limited resources include the use of lumber and other related forest products; sand, gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead, and other materials; and water consumption. Development of properties pursuant to the proposed Land Use and Circulation Elements will involve a long-term commitment to consumption of fossil fuel oil and natural gas. Increased energy demands will result from construction, lighting, heating, and cooling of residences and businesses, and transportation of people within, to, and from Monrovia.

# 5.0 Alternatives

## Rationale for Alternatives Selection

CEQA requires the consideration of alternative development scenarios and the analysis of impacts associated with the alternatives. Through comparison of these alternatives to the proposed project, the advantages of each can be weighed and analyzed. Section 15126.6 of the CEQA Guidelines requires that an EIR, "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 emphasis is added to stress that the alternatives analysis should look for ways to further mitigate the effects of the project. Thus, the selection and analysis of project alternatives presented in this section do not include any alternatives that assume intensification of development beyond that associated with the proposed General Plan.

Additionally, the CEQA Guidelines states:

- The specific alternative of "no project" shall also be evaluated along with its impact. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. [Section 15126.6(e)(1)(2)]
- An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly discuss the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii), infeasibility<sup>1</sup>, or (iii) inability to avoid significant environmental impacts. (Section 15126.6[a][c])

In addition to focusing on alternatives capable of either eliminating any significant environmental effects of the project or reducing them to a less than significant level, the following analysis examines variations of the proposed project that were considered during preparation of the proposed Land Use and Circulation Elements and that may be considered further during the public hearing process. The following project alternatives are examined:

- Alternative 1: No Project/Existing General Plan Land Use and Circulation Elements

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<sup>1</sup> Section 15364 of the CEQA Guidelines defines feasible as follows: "Feasible' means capable of being accomplished within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors."

- Alternative 2: Reduced Development Yield
- Alternative 3: Grid Pattern for the Station Square Transit Village

The alternatives analyzed in the EIR are general in nature, as is the proposed project. The degree of specificity used in the alternatives analysis is related to the programmatic approach used in the analysis of the proposed Land Use and Circulation Elements. Development across the entire planning area is addressed in the alternatives analysis, rather than specific development projects.

For reference purposes in consideration of project alternatives, the key objectives for the proposed Land Use Element are:

- To attain a balanced mix of land use within the City, thereby providing residents with ready access to housing, employment, and commercial services;
- To work toward regional jobs/housing balance goals;
- To encourage private investment in the City;
- To ensure that residents from all income levels have access to decent, affordable housing;
- To revitalize specific areas of the City which could benefit from public and private redevelopment efforts;
- To create a City environment which makes Monrovia a pleasant place to live, work, shop, and do business; and
- To ensure development in Monrovia is sensitive to the City's existing architectural and natural/open space resources.

The key objectives for the proposed Circulation Element are:

- Minimize traffic congestion on arterial and collector streets during peak hours in order to ensure a safe and efficient movement of people and goods within the City;
- Provide a system of streets and alleys that meets the needs of current and future residents, local and commuter traffic demands, and ensures the safe and efficient movement of vehicles, people, and goods throughout the City. Improve streets and alleys to their full design standards;
- Reduce the number of street accidents and maintain adequate traffic safety in the entire circulation system;
- Support the use of public transportation, including light rail transit, to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel;
- Ensure a truck circulation pattern through the City to provide efficient transportation of commodities while maintaining safety and harmony in its residential neighborhoods;
- Protect and encourage non-motorized transportation, such as bicycle and pedestrian travel;
- Develop and maintain a safe and efficient system of hillside streets and bike trails for movement of vehicles, people, and goods;

- Provide an adequate supply of convenient parking for all developments in the City, in a manner consistent with the goals of managing transportation demand and providing efficient arterial traffic flows; and
- Support the development of a network of regional roadway facilities which ensures the safe and efficient movement of people and goods from within the City to areas outside its boundaries, and that accommodates regional travel demands and maintains air quality standards.

## Alternatives Considered but Rejected

### Alternative Project Location

None of the above alternatives includes consideration of an alternate location. The CEQA Guidelines recommend considering an alternative location to reduce potential impacts of a proposed project. However, the goals and policies of the proposed Land Use and Circulation Elements are specific to the geographic context of the Monrovia planning area. Buildout pursuant to the proposed Land Use and Circulation Elements at another location does not make sense for a Plan that applies to all properties within the City's jurisdiction. Thus, this Program EIR does not examine the Alternate Location alternative.

### Alternative 1: No Project/Existing General Plan Land Use and Circulation Element

This alternative is analyzed within this Program EIR as it is required under CEQA Guidelines Section 15126.6(e). According to Section 15126.6(e)(2) of the CEQA Guidelines, the "no project" analysis shall discuss, ". . . what is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." This alternative assumes that the proposed Land Use and Circulation Elements would not be adopted and implemented because the proposed Metro Gold Line Foothill Extension would not be constructed. Instead, the Monrovia planning area would be developed according to the existing Land Use and Circulation Elements in accordance with the existing land use policy map. No changes to the City's roadway system would occur under the No Project Alternative. As such, the three focus areas would not be targeted for new development.

The West Huntington Drive focus area currently consists of primarily of commercial uses with some office, light manufacturing, and manufacturing uses (approximately 1.07 million square feet of non-residential uses). Under the existing Land Use and Circulation Elements, this area would continue to be developed with some office and business park uses with some detached single-family homes located across the street from residential neighborhoods.

There are approximately 32 existing residential dwelling units in this focus area. The Station Square Transit Village area is primarily industrial with some pockets of single-family homes. It is currently developed with 1.24 million square feet of non-residential uses (consisting primarily of manufacturing and light industrial units) and 81 dwelling units. The existing Land Use and Circulation Elements allow for mixed-use development in this area and a transition to regional commercial, office, and restaurant uses.

The South Myrtle Avenue corridor currently consists of a mix of industrial, office, and retail uses (677,674 square feet of non-residential development). There are 33 residential dwelling units currently located in this focus area. The existing Land Use and Circulation Elements allow for the continuation of these uses.

Based on the existing Land Use and Circulation Elements, Table 6-1 identifies the development capacity and projected population growth pursuant to buildout of the existing General Plan. Buildout according to the existing General Plan is compared to buildout of the proposed Land Use and Circulation Elements.

**Table 5-1 Development and Population in the Focus Areas– Existing General Plan and Proposed General Plan**

<b>Scenario</b>	<b>Dwelling Units</b>	<b>Population</b>	<b>Square Feet of Non-residential Uses</b>
No Project/Existing General Plan	367	1,010	3,044,719
Proposed General Plan Amendments	3,895	9,004	3,991,278
<b>Difference</b>	<b>3,528</b>	<b>7,994</b>	<b>946,559</b>

Under this alternative, it is estimated that approximately 3,528 fewer new residential units and approximately 946,559 square feet of non-residential uses would be constructed at buildout in 2030 in the focus areas. Population would be expected to continue growing at approximately one percent per year throughout the entire City as has occurred in Monrovia since the 1980 census. The reduced development potential under this alternative would result in a total population of 48,151 persons in 2030, approximately 10,564 fewer persons than the proposed project.

## Comparison of Environmental Impacts to the Proposed Project

### Aesthetics

As with the proposed project, the No Project Alternative would result in additional development throughout the City. Future development would create increased nighttime lighting impacts due to streetlights, automobile headlights, and security and outdoor lighting. As with the proposed project, development pursuant to the No Project Alternative would be required to comply with the Section 17.32.080 of the Zoning Code, which requires that new development projects be reviewed to ensure that new lighting is focused into the site so as not to reflect onto an adjoining property or any public way. Further, buffers, particularly between residential and non-residential uses would be required within the site to prevent new sources of light from spilling onto existing and new residential uses. Thus, light levels within the planning area would not substantially increase under the proposed project and the No Project Alternative. Relative to the proposed project, aesthetics impact associated with the existing General Plan would be reduced compared to the proposed project because of the decrease in total development.

### Air Quality

Implementation of this alternative would result in lower air pollutant emissions associated with vehicular and stationary sources due to a reduced level of development. The Gold Line Foothill

Extension would not be constructed and vehicle trips would remain high under this alternative. While pollutant emissions would be lower compared to the proposed project, emissions from vehicle trips would likely continue to exceed the SCAQMD daily air quality emissions thresholds. The overall impact would still be considered significant due to the current non-attainment status of the Basin.

### **Cultural Resources**

Implementation of this alternative would result in a similar impact to cultural resources as the proposed project. The City would continue to enforce its Historic Preservation Ordinance, which requires that all potentially eligible historic resources be reviewed by the Historic Preservation Commission as part of the City's development review process. The significance of impacts to historic resources resulting from specific future development projects would be determined on a project-by-project basis. Further, the historic Santa Fe Depot would remain undeveloped under this alternative.

### **Hazards and Hazardous Materials**

As with the proposed project, the No Project Alternative would involve the reuse of industrial and manufacturing sites, which would contain hazardous materials. Any new development facilitated by City planning policies and zoning regulations that involves contaminated property would involve the clean up and/or remediation of the property in accordance with federal, state, and local requirements and regulations. No construction would occur at such locations until a "no further action" or similar determination is issued by the County Fire Department, DTSC, the Regional Water Quality Control Board, and/or other responsible agencies. Individual development proposals would continue to comply with existing City standards and practices regarding hazardous waste.

### **Hydrology and Water Quality**

Under the No Project Alternative, population growth would be reduced compared to the proposed project. As discussed in Chapter 3.5, Hydrology and Water Quality, the City has projected that it would be able to provide more water and expected future demand pursuant to annual population growth consistent with the proposed project. As such, these water supplies would be more than sufficient to accommodate the reduced development potential anticipated as part of this alternative. The impacts to groundwater supply would be less than significant.

As with the proposed project, the increase in impervious surfaces as a result of the No Project Alternative will be limited because new development would primarily occur as redevelopment of currently developed sites. Although the amount and velocity of storm water runoff would be expected to increase, compliance with existing City policies and development review procedures would ensure that runoff from new development projects would not exceed the capacity of the storm water drainage system or result in adverse impacts to water quality.

### **Land Use and Planning**

The No Project Alternative would continue current development patterns, and therefore, would be consistent with the overarching goals set forth in local plans. However, the No Project Alternative assumes that Gold Line light rail service would not be extended to Monrovia, and as such, the City would not focus development around the proposed transit station. This

alternative would not provide for as much mixed-use development, which is intended to reduce vehicle trips in accordance with SCAG's RTP.

### **Noise**

Implementation of the No Project Alternative would result in lower overall development compared to the proposed project. Traffic volumes would be reduced on some streets. As such, the amount of noise associated with both stationary and vehicular sources generated by the No Project Alternative would be reduced compared to the proposed project.

### **Population and Housing**

The No Project Alternative would be expected to generate substantially less net new residential development than the proposed project because it does not involve the intensification of uses on South Myrtle Avenue, West Huntington Drive, and the Station Square Transit Village to the same extent as the proposed project. The No Project Alternative would be expected to result in approximately 10,654 fewer net new residents in Monrovia than the proposed project. Although this population growth would be within SCAG projections for the City and the region, Monrovia would continue to have more employment opportunities than housing units and may not be able to meet the City's share of regional housing goals.

### **Public Services**

The No Project Alternative would result in less overall residential and non-residential development than the proposed project. Overall, a moderately lower level of service and need for the expansion and construction of new facilities would be required under this alternative. As with the proposed project, new development would be required to pay development fees and in-lieu fees to fund public services, including police and fire protection services, schools, and library facilities.

### **Recreation**

As this alternative would result in a lower population, a comparatively reduced demand for parks and recreation services would result. Under the No Project Alternative, if no new parkland was developed, the City would have a ratio of 2.55 acres of parkland per 1,000 residents. The reduced development expected as part of the No Project Alternative would not allow the City to meet the national standard of providing 3 acres of parkland per 1,000 residents. As with the proposed project, the need for construction of new or expansion of existing park facilities would be required as part of the No Project Alternative.

### **Transportation/Traffic**

Under the No Project Alternative, the City would be expected to have a lower overall population compared to the proposed project. However, the No Project Alternative assumes that the Gold Line light rail service would not be extended to Monrovia and the traffic improvements outlined in the proposed Circulation Element would not be adopted. As such, traffic volumes on City streets would still increase. Alternative 1 would generate an estimated total net increase of approximately 28,876 daily trips, including approximately 1,547 during the morning peak hour and 2,615 during the evening peak hour. These estimates are approximately 50 percent of those for the proposed project during the morning peak hour and approximately 60 percent during the evening peak hour and on a daily basis. According to the City of Monrovia's impact

criteria, daily traffic increases under Alternative 1 would result in significant daily traffic impacts on 6 of 66 analyzed street segments compared to 12 street segments as a result of the proposed project. Although the impacts would be reduced compared to the proposed project, the No Project Alternative would still result in significant and unavoidable impacts to transportation/traffic.

### **Utilities and Service Systems**

Buildout in 2030 under the No Project Alternative would be expected to result in 10,654 fewer net new residents than the proposed project. The lower overall population would result in reduced demand for water supply, wastewater service, and landfill capacity.

### **Conclusion**

The No Project Alternative involves continuation of the existing General Plan and assumes that the Gold Line light rail service would not be extended to Monrovia. Continuation of existing General Plan policies would allow for a lower amount of overall development within the planning area compared to the proposed project. Compared to the proposed project, this alternative would result in similar environmental impacts with respect to hazards and hazardous materials, hydrology and water quality, and public services. This alternative would result in reduced impacts relative to aesthetics, air quality, cultural resources, noise, recreation, transportation/traffic, and utilities and service systems compared to the proposed project. This alternative would not fully achieve land use and jobs/housing balance consistent with regional plans. Similar to the proposed project, the No Project Alternative would still result in significant and unavoidable impacts to air quality and transportation/traffic.

The No Project Alternative would not implement the proposed Land Use and Circulation Elements. As such, the No Project Alternative would not achieve the following project objectives:

- Minimize traffic congestion on arterial and collector streets during peak hours in order to ensure a safe and efficient movement of people and goods within the City;
- Provide a system of streets and alleys that meets the needs of current and future residents, local and commuter traffic demands, and ensures the safe and efficient movement of vehicles, people, and goods throughout the City. Improve streets and alleys to their full design standards;
- Reduce the number of street accidents and maintain adequate traffic safety in the entire circulation system;
- Support the use of public transportation, including light rail transit, to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel;
- Ensure a truck circulation pattern through the City to provide efficient transportation of commodities while maintaining safety and harmony in its residential neighborhoods;
- Protect and encourage non-motorized transportation, such as bicycle and pedestrian travel;
- Develop and maintain a safe and efficient system of hillside streets and bike trails for movement of vehicles, people, and goods;

- Provide an adequate supply of convenient parking for all developments in the City, in a manner consistent with the goals of managing transportation demand and providing efficient arterial traffic flows; and
- Support the development of a network of regional roadway facilities which ensures the safe and efficient movement of people and goods from within the City to areas outside its boundaries, and that accommodates regional travel demands and maintains air quality standards.

Further, the No Project Alternative would not achieve the following City objectives to the same degree as the proposed project:

- Attain a balanced mix of land use within the City, thereby providing residents with ready access to housing, employment, and commercial services;
- Work toward regional jobs/housing balance goals; and
- Revitalize specific areas of the City which could benefit from public and private redevelopment efforts.

## Alternative 2: Reduced Development Yield

Alternative 2: Reduced Development Yield assumes an overall reduction in the City's development potential by four percent compared to the proposed project. As such, approximately 96 percent of the development projected as part of the proposed project is assumed to occur at buildout in 2030 under Alternative 2.

As with the proposed project, new development would be expected to occur through the recycling and reuse of existing parcels located throughout the City and through concentrated development in the three focus areas (South Myrtle Avenue, West Huntington Drive, and the Station Square Transit Village area). For the purpose of this analysis, it was assumed that the same amount of development would occur in the South Myrtle Avenue and West Huntington Drive Corridors as was considered under the proposed project. However, the development potential in the Station Square Transit Village was reduced by 65 percent overall. This development reduction is assumed to be equivalent to the amount of redevelopment that would occur in this area if the Gold Line light rail service is not extended to Monrovia. This alternative assumes an equal reduction among land use types within the Station Square Transit Village area. Table 5-2 provides a comparison of the development potential between Alternative 2 and the proposed project.

**Table 5-2 Development and Population in the Focus Areas –  
Reduced Development Yield and Proposed Project**

	<b>Dwelling Units</b>	<b>Population</b>	<b>Square Feet of Nonresidential</b>
Alternative 2 Reduced Development Yield	2,684	7,379	3,463,792
Proposed General Plan Amendments	3,895	9,004	3,991,278
<b>Difference</b>	<b>1,211</b>	<b>1,625</b>	<b>527,486</b>

As shown in Table 5-2, this alternative would allow approximately 1,211 fewer residential units and approximately 527,486 fewer square feet of non-residential uses in the focus areas at buildout. Total population elsewhere in the City would continue to grow at the historical rate of approximately one percent per year. Thus, total population in Monrovia at buildout under Alternative 2 would be approximately 55,530 residents, or approximately 3,275 fewer persons than the proposed project.

Alternative 2 assumes the Gold Line Foothill Extension would not be developed, but the provisions in the proposed Circulation Element would be implemented. As such, the transportation and roadway improvements described in the proposed Circulation Element would be implemented.

## Comparison of Environmental Impacts to the Proposed Project

### Aesthetics

As with the proposed project, Alternative 2 would result in additional development throughout the City. Future development would create increased nighttime lighting impacts due to streetlights, automobile headlights, and security and outdoor lighting. As with the proposed project, development pursuant to Alternative 2 would be required to comply with the Section 17.32.080 of the Zoning Code, which requires that new development projects be reviewed to ensure that new lighting is focused into the site so as not to reflect onto an adjoining property or any public way. Further, buffers, particularly between residential and non-residential uses would be required within the site to prevent new sources of light from spilling onto existing and new residential uses. Thus, light levels within the planning area would not substantially increase under the proposed project and Alternative 2.

### Air Quality

Implementation of this alternative would result in lower air pollutant emissions associated with vehicular and stationary sources due to a reduced level of development. The Gold Line Foothill Extension would not be constructed and vehicle trips would remain high under this alternative. While pollutant emissions would be lower compared to the proposed project, emissions from vehicle trips would likely continue to exceed the SCAQMD daily air quality emissions thresholds. The overall impact would still be considered significant due to the current non-attainment status of the Basin.

### Cultural Resources

Implementation of this alternative would result in a similar impact to cultural resources as the proposed project. The City would continue to enforce its Historic Preservation Ordinance, which requires that all potentially eligible historic resources be reviewed by the Historic Preservation Commission as part of the City's development review process. The significance of impacts to historic resources resulting from specific future development projects would be determined on a project-by-project basis.

## **Hazards and Hazardous Materials**

Alternative 2 would involve the reuse of industrial and manufacturing sites, which would contain hazardous materials. Any new development facilitated by City planning policies and zoning regulations that involves contaminated property would involve the clean up and/or remediation of the property in accordance with federal, state, and local requirements and regulations. No construction would occur at such locations until a “no further action” or similar determination is issued by the County Fire Department, DTSC, the Regional Water Quality Control Board, and/or other responsible agencies. Individual development proposals would continue to comply with existing City standards and practices regarding hazardous waste.

## **Hydrology and Water Quality**

Alternative 2 allows for a reduced overall population in 2030 compared to the proposed project. The City has projected that it would be able to provide more water and expected future demand pursuant to annual population growth consistent with the proposed project. As such, these water supplies would be more than sufficient to accommodate the reduced development potential anticipated as part of this alternative. The impacts to groundwater supply would be less than significant.

As with the proposed project, the increase in impervious surfaces as a result of Alternative 2 would be limited because new development would primarily occur as redevelopment of currently developed sites. Although the amount and velocity of storm water runoff would be expected to increase, compliance with existing City policies and development review procedures would ensure that runoff from new development projects would not exceed the capacity of the storm water drainage system or result in adverse impacts to water quality.

## **Land Use and Planning**

Alternative 2 would result in an overall development pattern similar to the proposed project. It would be consistent with the overarching goals set forth in local plans. Alternative 2 would allow for mixed-use development and concentrated development in the Station Square Transit Village area consistent with SCAG's RTP.

## **Noise**

Implementation of Alternative 2 would result in lower overall development compared to the proposed project because development in the Station Square Transit Village area would be cut to 65 percent of that anticipated as part of the proposed project. Traffic volumes would be reduced on some streets because of the reduced development yield. As such, the amount of noise associated with both stationary and vehicular sources generated by Alternative 2 would be reduced compared to the proposed project.

## **Population and Housing**

Alternative 2 would be expected to generate less net new residential development than the proposed project because it not involves a 65 percent reduction in residential units in the Station Square Transit Village compared to the proposed project. Alternative 2 would be expected to result in approximately 3,275 fewer net new residents in Monrovia than the proposed project. Although this population growth would be within SCAG projections for the City and the region,

Monrovia would continue to have more employment opportunities than housing units and be less likely to achieve a jobs/housing balance than the proposed project.

### **Public Services**

Alternative 2 would result in less overall residential and non-residential development than the proposed project. Overall, a moderately lower level of service and need for the expansion and construction of new facilities would be required under this alternative. As with the proposed project, new development would be required to pay development fees and in-lieu fees to fund public services, including police and fire protection services, schools, and library facilities.

### **Recreation**

As this alternative would result in a lower population, a comparatively reduced demand for parks and recreation services would result. Under Alternative 2, if no new parkland was developed, the City would have a ratio of 2.2 acres of parkland per 1,000 residents. The City would not meet the national standard of providing 3 acres of parkland per 1,000 residents. As with the proposed project, Alternative 2 would result in increased use of existing neighborhood and regional parks, other recreational facilities, and trails that may cause or accelerate substantial physical deterioration.

### **Transportation/Traffic**

Under Alternative 2, the City would be expected to have a lower overall population compared to the proposed project. However, Alternative 2 assumes that the Gold Line light rail service would not be extended to Monrovia. As such, traffic volumes on City streets would remain high. Alternative 2 would generate an estimated total net increase of approximately 32,972 daily trips, including approximately 2,111 during the morning peak hour and 3,160 during the evening peak hour. These estimates are approximately 70 to 75 percent of those for the proposed project during the peak hours and on a daily basis. According to the City of Monrovia's impact criteria, daily traffic increases under Alternative 2 would result in significant daily traffic impacts on 9 of 66 analyzed street segments compared to 12 street segments as a result of the proposed project. Although the impacts would be reduced compared to the proposed project, Alternative 2 would still result in significant and unavoidable impacts to transportation/traffic.

### **Utilities and Service Systems**

Buildout in 2030 under Alternative 2 would be expected to result in lower overall population compared to the proposed project. As with the proposed project, new development would not exceed the capacity of existing or planned water supply, wastewater service, and landfill capacity.

### **Conclusion**

Alternative 2 assumes implementation of the proposed Land Use and Circulation Elements. However, the total amount of development permitted in the City would be reduced by 4 percent. The reduction in development would occur only in the Station Square Transit Village area, where development would be reduced by 65 percent overall. Alternative 2 assumes that the Gold Line light rail service would not be extended to Monrovia. Compared to the proposed project, this alternative would result in similar environmental impacts with respect to aesthetics,

cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, public services, and recreation. This alternative would result in reduced impacts relative to air quality, noise, transportation/traffic, and utilities and service systems. This alternative would not achieve a jobs/housing balance as well as the proposed project. Similar to the proposed project, Alternative 2 would still result in significant and unavoidable impacts to air quality and transportation/traffic.

Alternative 2 would implement the proposed Land Use and Circulation Elements. However, this alternative assumes that the Gold Line light rail service to Monrovia would not be constructed and fewer residential units would be developed in the Station Square Transit Village area. As such, Alternative 2 would not achieve the following project objective to the same degree as the proposed project:

- Support the use of public transportation, including light rail transit, to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel.
- Attain a balanced mix of land use within the City, thereby providing residents with ready access to housing, employment, and commercial services; and
- Work toward regional jobs/housing balance goals.

## Alternative 3: Grid Pattern for the Station Square Transit Village

Alternative 3: Grid Pattern for the Station Square Transit Village assumes the same amount of total development as the proposed project. This alternative would implement the proposed Land Use Element as described in Chapter 2.0, Project Description. As such, total population in 2030 is expected to be 58,805 persons, or an increase of 19,658 persons. New development would be expected to occur through the recycling and reuse of existing parcels located throughout the City and through concentrated development in the three focus areas (South Myrtle Avenue, West Huntington Drive, and the Station Square Transit Village area). Further, it is assumed that construction of the Gold Line light rail service to Monrovia would occur as part of this alternative.

Alternative 3 differs from the proposed Circulation Element in that it modifies the roadway pattern in the Station Square Transit Village to maintain the current grid pattern that exists elsewhere in the City (see Figure 5-1). A new collector street running parallel to and south of Pomona Avenue, tentatively named Center Street, would be constructed as a through street between Magnolia Avenue and Shamrock Avenue. In this alternative, the segment of Pomona Avenue west of Myrtle Avenue would be converted to a cul-de-sac limited to right-turn in/right-turn out and the segment immediately east of Myrtle Avenue would be vacated, as would portions of Railroad Avenue. To eliminate conflicts associated with vehicles exiting I-210, Evergreen Avenue would be converted to a two-way operation and a cul-de-sac would be installed east of Primrose Avenue.



Source: City of Monrovia, 2007



Scale 1:200

**Figure 5-1**  
**Alternative 3: Grid Pattern in the**  
**Station Square Transit Village Focus Area**

## Comparison of Environmental Impacts to the Proposed Project

### **Aesthetics**

As with the proposed project, Alternative 3 would result in additional development throughout the City. Future development would create increased nighttime lighting impacts due to streetlights, automobile headlights, and security and outdoor lighting. As with the proposed project, development pursuant to Alternative 3 would be required to comply with the Section 17.32.080 of the Zoning Code, which requires that new development projects be reviewed to ensure that new lighting is focused into the site so as not to reflect onto an adjoining property or any public way. Further, buffers, particularly between residential and non-residential uses would be required within the site to prevent new sources of light from spilling onto existing and new residential uses. Thus, light levels within the planning area would not substantially increase under the proposed project and Alternative 3.

### **Air Quality**

Alternative 3 allows for the same amount of development as the proposed project. Further, the number of vehicle trips would be the same as the proposed project because Alternative 3 assumes construction of Gold Line light rail service to Monrovia. Implementation of this alternative would result in the same amount of air pollutant emissions associated with vehicular and stationary sources as the proposed project. These emissions would exceed the SCAQMD daily air quality emissions thresholds. As with the proposed project, the overall impact would be considered significant and unavoidable.

### **Cultural Resources**

Implementation of this alternative would result in a similar impact to cultural resources as the proposed project. The City would continue to enforce its Historic Preservation Ordinance, which requires that all potentially eligible historic resources be reviewed by the Historic Preservation Commission as part of the City's development review process. The significance of impacts to historic resources resulting from specific future development projects would be determined on a project-by-project basis.

### **Hazards and Hazardous Materials**

Alternative 3 would involve the reuse of industrial and manufacturing sites, which would contain hazardous materials. Any new development facilitated by City planning policies and zoning regulations that involves contaminated property would involve the clean up and/or remediation of the property in accordance with federal, state, and local requirements and regulations. No construction would occur at such locations until a "no further action" or similar determination is issued by the County Fire Department, DTSC, the Regional Water Quality Control Board, and/or other responsible agencies. Individual development proposals would continue to comply with existing City standards and practices regarding hazardous waste.

### **Hydrology and Water Quality**

Alternative 3 allows for the same amount and location of development as the proposed project. The City has projected that it would be able to provide more water and expected future demand pursuant to annual population growth consistent with the proposed project. As such, these

water supplies would be able accommodate the amount of development that would occur as part of Alternative 3. The impacts to groundwater supply would be less than significant.

As with the proposed project, the increase in impervious surfaces as a result of Alternative 3 would be limited because new development would primarily occur as redevelopment of currently developed sites. Although the amount and velocity of storm water runoff would be expected to increase, compliance with existing City policies and development review procedures would ensure that runoff from new development projects would not exceed the capacity of the storm water drainage system or result in adverse impacts to water quality.

### **Land Use and Planning**

Alternative 3 would result in the same development pattern as the proposed project. It would be consistent with the overarching goals set forth in local plans. Alternative 3 would allow for mixed-use development and concentrated development in the Station Square Transit Village area consistent with SCAG's RTP.

### **Noise**

Implementation of Alternative 3 would result in the same level of overall development as the proposed project. Traffic volumes would be similar to the proposed project. As such, the amount of noise associated with both stationary and vehicular sources generated by Alternative 3 would be similar to the proposed project.

### **Population and Housing**

Alternative 3 would generate the same amount of net new residential development as the proposed project. As with the proposed project, the amount of new development anticipated would assist the City in achieving a more balanced community in terms of jobs/housing ratio and would allow the City to meet its share of regional housing.

### **Public Services**

Alternative 3 would result in the same amount of residential and non-residential development as the proposed project. As with the proposed project, new development would be required to pay development fees and in-lieu fees to fund public services, including police and fire protection services, schools, and library facilities. This alternative would not require the construction of new or expansion of existing public facilities.

### **Recreation**

This alternative would result in the same amount of overall development and population growth as the proposed project. Under Alternative 3, if no new parkland was developed, the City would have a ratio of 2.1 acres of parkland per 1,000 residents. The City would not meet the national standard of providing 3 acres of parkland per 1,000 residents. As with the proposed project, Alternative 3 would result in increased use of existing neighborhood and regional parks, other recreational facilities, and trails that may cause or accelerate substantial physical deterioration.

## **Transportation/Traffic**

Alternative 3 assumes that the Gold Line light rail service would not be extended to Monrovia. Further, Alternative 3 requires the construction of a grid pattern in the Station Square Transit Village area similar to the grid pattern found throughout the City. Alternative 3 would generate an estimated total net increase of approximately 44,194 daily trips, including approximately 3,027 during the morning peak hour and 4,351 during the evening peak hour. According to the City of Monrovia's impact criteria, daily traffic increases under Alternative 3 would result in significant daily traffic impacts on 10 of 66 analyzed street segments compared to 12 street segments as a result of the proposed project. The impacts of Alternative 3 would be reduced compared to the proposed project.

## **Utilities and Service Systems**

Buildout in 2030 under Alternative 3 would be expected to result the same overall population as to the proposed project. As with the proposed project, new development would not exceed the capacity of existing or planned water supply, wastewater service, and landfill capacity.

## **Conclusion**

Alternative 3 assumes implementation of the proposed Land Use and Circulation Elements with modifications to the roadway network in the Station Square Transit Village area to create a grid pattern consistent with the rest of the City. The total amount of development under Alternative 3 would be the same as the proposed project. Compared to the proposed project, this alternative would result in similar environmental impacts with respect to aesthetics, air quality, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, and utilities and service systems. Similar to the proposed project, Alternative 3 would still result in significant and unavoidable impacts to air quality and transportation/traffic; however, two fewer street segments would be significantly affected after mitigation under this alternative than the proposed project.

Alternative 3 would implement the proposed Land Use and Circulation Elements and assumes construction of the Gold Line light rail service to Monrovia. As such, Alternative 3 would achieve all of the objectives of the proposed project.

## **Environmentally Superior Alternative**

Table 5-3 summarizes the impacts of each of the alternatives relative to the proposed project. Alternative 1 and Alternative 2 have the potential to reduce the level of impacts relative to aesthetics, air quality, cultural resources, recreation, transportation/traffic, and utilities and service systems more than Alternative 3 and the proposed project. Alternative 1 would result in the smallest population growth compared to the proposed project, and as such, would have the least environmental impacts of all the alternatives. However, CEQA Guidelines Section 15126.6(e)(2) states that If the No Project Alternative is determined to be the environmentally superior alternative, an environmentally superior alternative must also be identified among the remaining alternatives. Alternative 2 would reduce impacts compared to the proposed project. Thus, Alternative 2 is considered the environmentally superior alternative.

**Table 5-3 Comparison of Alternatives to the Proposed Project**

<b>Impact</b>	<b>Alternative 1 No Project</b>	<b>Alternative 2 Reduced Development Yield</b>	<b>Alternative 3 Grid Pattern for Station Square Transit Village</b>
Aesthetics	Less	Less	Similar
Air Quality	Less	Less	Similar
Cultural Resources	Less	Similar	Similar
Hazards and Hazardous Materials	Similar	Similar	Similar
Hydrology and Water Quality	Similar	Similar	Similar
Land Use	Similar	Similar	Similar
Noise	Less	Less	Similar
Population and Housing	Similar	Similar	Similar
Public Facilities	Similar	Similar	Similar
Recreation	Less	Similar	Similar
Transportation/Traffic	Less	Less	Less
Utilities and Service Systems	Less	Less	Similar
Meet objectives of the project?	Partially	Partially	All

As summarized above, Alternatives 1 and 2 would not fully achieve the City's objectives because they do not allow for as much growth and assume that Gold Line light rail service to Monrovia would not occur. Alternative 3 would achieve all of the objectives of the proposed project, and would result in reduced impacts to transportation/traffic compared to the proposed project.

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# 7.0 Acronyms and Abbreviations

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACE	Alameda Corridor East
ADA	Americans with Disabilities Act
af	acre feet
af/yr	acre feet per year
AQMP	Air Quality Management Plan
AVR	average vehicle ridership
Basin	South Coast Air Basin
BE	Business Enterprise
BMPs	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Act
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CEQA Guidelines	Guidelines for Implementation of CEQA
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFCs	chlorofluorocarbons
CH <sub>4</sub>	methane
City	City of Monrovia
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO <sub>2</sub>	Carbon Dioxide
CRHR	California Register of Historic Resources
C-R/S	Commercial Regional/Sub-regional
CUPA	Certified Unified Program Agency
dB	decibel
dBA	A-weighted decibel
DOF	California Department of Finance, Demographic Research Unit
DTSC	California Department of Toxic Substances Control
du/ac	dwelling units per acre
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
F.A.S.T.	Foothill Air Support Team
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GHGs	greenhouse gas emissions
gpd	gallons per day
GWP	global warming potential

HAPs	hazardous air pollutants
HCP	Habitat Conservation Plan
HRA	Health Risk Assessment
HUD	United States Department of Housing and Urban Development
I-210	Interstate 210
I-605	Interstate 605
I-710	Interstate 710
IAZ	Initial Action Zone
ITS	Intelligent Transportation Systems
LACFCD	Los Angeles County Flood Control District
LARWQCB	Los Angeles Regional Water Quality Control Board
L <sub>dn</sub>	day-night level
L <sub>eq</sub>	equivalent noise level
LOS	level of service
LUST	leaking underground storage tank
M	Manufacturing
MEP	maximum extent practicable
Metropolitan	Metropolitan Water District of Southern California
µg/m <sup>3</sup>	micrograms per cubic meter
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MSAT	Mobile Source Air Toxics
MTA	Los Angeles County Metropolitan Transportation Authority
MUSD	Monrovia Unified School District
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NCCP	natural community conservation plan
NEPA	National Environmental Policy Act
NO <sub>2</sub>	nitrogen dioxide
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
O/RD/LM	Office/Research and Development/Light Manufacturing
OSHA	Occupational Health and Safety Act
Pb	lead
PD	Planned Development
PM <sub>2.5</sub>	particulate matter less than or equal to 2.5 microns in diameter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
ppm	parts per million
PPV	peak particle velocity
P/QP	Public/Quasi-Public
R	Recreation
RCC	Retail Corridor Commercial
RCM	Retail Corridor Mixed Use
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RH	High-Density Residential
RHNA	Regional Housing Needs Assessment

RMS	root mean square
RTP	Regional Transportation Plan
Sanitation Districts	County Sanitation Districts of Los Angeles County
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SGVCOG	San Gabriel Valley Council of Governments
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>4</sub>	sulfates
SPUI	Single Point Urban Interchange
SR-60	State Route 60
SUSMP	Standard Urban Storm Water Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic air contaminant
TDM	Transportation Demand Management
TIA	Transportation Impact Assessment
TSM	Transportation System Management
Upper District	Upper San Gabriel Valley Municipal Water District
USFS	U.S. Forest Service
USTs	underground storage tanks
V/C	volume-to-capacity ratio
VdB	vibration in decibels
WWECP	Wet Weather Erosion Control Plan

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