

5. Environmental Analysis

5.12 TRANSPORTATION AND TRAFFIC

This section of the DEIR evaluates the potential for implementation of the Sierra Madre General Plan Update (General Plan Update) to result in transportation and traffic impacts in the City of Sierra Madre. The analysis in this section is based in part on the following technical report:

- Sierra Madre General Plan Traffic Impact Study, Fehr & Peers, March 2015.

A complete copy of this technical report is included as Appendix E to this DEIR.

5.12.1 Environmental Setting

5.12.1.1 REGULATORY SETTING

This section presents applicable measures of effectiveness for the performance of the circulation system and the applicable regulatory setting.

Levels of Service

The Traffic Impact Study prepared by Fehr & Peers for the General Plan Update (see Appendix E) analyzed the operation of Sierra Madre's roadway system (includes roadway segments and intersections), within the City's boundary, as well as three intersections it shares with the City of Pasadena. Operations for these roadway facilities are expressed in terms of level of service (LOS), which is a general measure of traffic operating conditions where a letter grade (A to F) is assigned. LOS qualitatively measures the operating conditions within a traffic system and how drivers and passengers perceive these conditions.

The intersection analysis for intersections within the City employs a methodology based on empirical research conducted by the Transportation Research Board and other authorities. Signalized intersection operations are evaluated using methodologies provided in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board). These methodologies assess average control delays and then assign a corresponding letter grade that represents the overall condition of the intersection. These grades range from LOS A (no congestion; minimal delay) to LOS F (excessive or high levels of congestion). LOS E represents at-capacity operations.

Operating conditions for the signalized study area intersections along the City's border with Pasadena were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume-to-capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU value translates to an LOS estimate.

Descriptions of the LOS letter grades for signalized intersections, and the relationship between the various V/C ratios, as well as the LOS value at various levels of delay for signalized and unsignalized intersections, are provided in Table 5.12-1.

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Table 5.12-1 Intersection Level Of Service Criteria

Level of Service	Description	ICU (V/C)	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0.000 - 0.600	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	>0.600 - 0.700	> 10.0 to 20.0	>10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	>0.700 - 0.800	>20.0 to 35.0	>15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	>0.800 - 0.900	>35.0 to 55.0	>25.0 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	>0.900 - 1.000	> 55.0 to 80.0	>35.0 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	>1.000	> 80.0	>50.0

Source: Fehr & Peers 2015.

Notes: ICU = Intersection Capacity Utilization; V/C = volume per capacity.

Significant Traffic Impact Criteria

The current (1996) Sierra Madre General Plan does not provide for any intersection-based thresholds; therefore, LOS F was used as the primary threshold for the analysis conducted in the Traffic Impact Study for the intersections analyzed; that is, LOS F is considered the unacceptable level of service. LOS E is the maximum acceptable level of congestion for the City's intersections during the AM (7–9AM) and PM (4–6PM) peak commute hours (see Appendix E). As outlined in the Traffic Impact Study, a significant traffic impact would occur at an intersection or along a roadway segment under the following conditions:

- An intersection degrades to LOS F (signalized or unsignalized) with the addition of traffic from the proposed build out of the General Plan Update.
- Traffic is increased at an intersection (signalized or unsignalized) that operates at LOS F prior to the addition of General Plan Update build out traffic
- The V/C ratio at a signalized intersection increases by more than 0.02 at an intersection already operating at LOS F based on the application of the ICU methodology, where jurisdiction is shared with the City of Pasadena.
- For any intersections where the City of Sierra Madre shares jurisdiction with the City of Pasadena, the significance criteria outlined in Table 5.12-2 applies.

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Table 5.12-2 City of Pasadena Impact Criteria

Level of Service	Final V/C Ratio	Project-Related Increase in V/C
A	0.000 - 0.600	equal to or greater than 0.060
B	>0.600 - 0.700	equal to or greater than 0.050
C	>0.700 - 0.800	equal to or greater than 0.040
D	>0.800 - 0.900	equal to or greater than 0.030
E	>0.900 - 1.000	equal to or greater than 0.020
F	>1.000	equal to or greater than 0.010

Source: Fehr & Peers 2015.

Notes: V/C = volume to capacity

- The addition of traffic from the General Plan Update build out causes a roadway segment for Major Streets and Collector Streets to exceed a capacity of 15,000 vehicles per day, or causes a roadway segment for Local Collector Streets to exceed a capacity of 7,500 vehicles per day.

The significance criteria outlined above was derived from a variety of sources, including:

- As stated above, the current (1996) Sierra Madre General Plan does not provide for any intersection-based thresholds; therefore, LOS F was used as the primary threshold for the traffic analysis conducted.
- The roadway segment LOS capacity (15,000 and 7,500 daily vehicles) was taken from the General Plan Update, which defines these thresholds as the upper limit for acceptable roadway segment operations.
- The impact thresholds from the City of Pasadena reflect those thresholds available at the time work commenced on the Traffic Impact Study in 2013. While the City of Pasadena has since adopted updated traffic thresholds, the thresholds applied in the Traffic Impact Study are those which were available at the time the study was commenced.

Applicable Plans and Regulations

The regulatory framework is used to inform decision makers about the regulatory agencies policies that affect transportation in the City of Sierra Madre. This enables them to make informed decisions about planning improvements to transportation systems in the City. Major policy documents impacting the transportation system in Sierra Madre include laws at the state level and planning documents at a regional level.

State

AB 1358, California Complete Streets Act

The California Complete Streets Act of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, Assembly Bill 1358 required circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must “meet the needs of all users...in a manner suitable to the rural, suburban, or urban context of the general plan.” Essentially, this bill requires a

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circulation element to plan for all modes of transportation where appropriate—including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasked the Governor's Office of Planning and Research to release guidelines for compliance with this legislation by January 1, 2014.

Regional

SCAG's 2013 RTP/SCS

The Southern California Association of Governments's (SCAG) 2013 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) provides a regional transportation plan for six counties in Southern California: Orange, San Bernardino, Riverside, Los Angeles, Ventura, and Imperial. The primary goal of the RTP is to increase mobility for the region. With recent legislation, this plan also encompasses sustainability as a key principle in future development.

Los Angeles County Congestion Management Program

The Los Angeles County Congestion Management Program (CMP) requires the analysis of freeway segments where the proposed project would add more than 150 peak hour trips to a freeway segment. The threshold for analyzing a CMP intersection is the addition of 50 peak hour trips to a CMP roadway segment or intersection.

5.12.1.2 EXISTING CONDITIONS

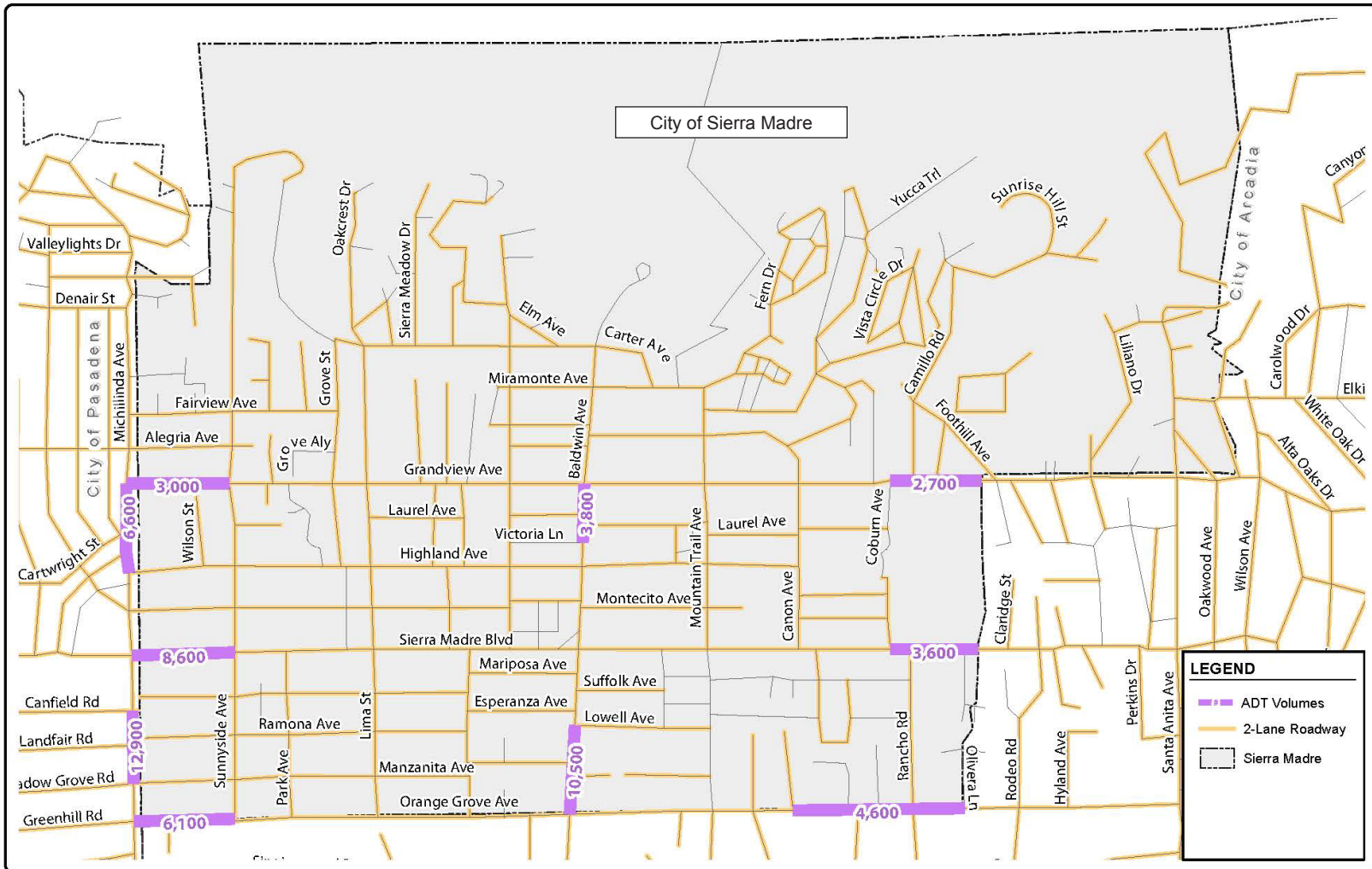
This section presents the existing transportation conditions in the City, including the roadway network, bicycle and pedestrian network, public transit network, and current intersection and roadway segment operations.

Existing Roadway Network

The following describes the major roadway facilities in Sierra Madre and vicinity. The existing roadway network, including existing traffic volumes is provided in Figure 5.12-1, *Existing Roadway Network*.

- **Interstate 210 (I-210)** is an east-west travelling freeway servicing the San Gabriel Valley. The western terminus lies at the interchange with I-5 in the San Fernando Valley, and the eastern terminus lies in San Bernardino County at the interchange with I-10. This freeway is a major regional route connecting the foothill communities to the coast and Inland Empire. The roadway features six to eight lanes, including a high occupancy vehicle lane, and has a posted speed limit of 65 miles per hour (mph) throughout the valley. I-210 runs through the City of Arcadia, one half-mile to the south of the Sierra Madre border, providing access primarily via interchanges at Santa Anita Avenue, Baldwin Avenue, and Michillinda Avenue, all of which enter the City at some point in their alignment. I-210 is the gateway connector to the regional freeway network for the residents of Sierra Madre, and is therefore of key importance to the City.

Figure 5.12-1 - Existing Roadway Network
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- **Michillinda Avenue** is the only street in the City classified as a Major Road, traveling north-south and serving as the boundary between Sierra Madre and Pasadena to the west. It is one of the primary roads connecting the City to I-210, and is thus a key part of the regional road network for Sierra Madre. The northern portion of the road terminates in a residential neighborhood against the foothills, while the southern terminus is located in Arcadia at the intersection with Huntington Drive, a major arterial running through the San Gabriel Valley. Within Sierra Madre, the street maintains a two-lane, undivided configuration with a posted speed limit of 35 mph. The character of the roadway is primarily residential within the City, providing access to single-family homes on both the Sierra Madre and Pasadena sides of the border. There is some commercial development accessible by Michillinda Avenue on the Pasadena side near the intersection with Sierra Madre Boulevard.
- **Sierra Madre Boulevard** serves as the primary east-west Collector within the City and connects Sierra Madre to Pasadena to the west and Arcadia to the east. The street curves south in Pasadena and continues to San Marino, between I-210 and I-10. Within Sierra Madre the street maintains an undivided, two-lane configuration and a posted speed limit of 25 to 30 mph.
- **Baldwin Avenue** is classified as a Collector within the city, traveling north-south and connecting Sierra Madre to I-210. Baldwin Avenue serves as the central north-south street within the City, forming the downtown core along with Sierra Madre Boulevard. Having an interchange with I-210 makes Baldwin Avenue a key part of the regional road network for the City. Within the City the road maintains a two-lane, undivided configuration and a posted speed limit of 25 to 35 mph.
- **Grandview Avenue** is classified as a Local Collector within the City, providing an east-west passage in the northern part of Sierra Madre. The main circulatory function of this street is directing traffic from the foothill communities to Santa Anita Avenue, Baldwin Avenue, and Michillinda Avenue so they may connect to the rest of the City and I-210. The roadway maintains an undivided, two-lane section within the City and a posted speed limit of 30 mph. Grandview Avenue terminates on the west side at Michillinda Avenue and on the east side past Santa Anita Avenue in Arcadia. Between Camillo Road and Santa Anita Avenue, Grandview Avenue serves as a border between Sierra Madre and Arcadia. Within the City the roadway is lined with single-family homes.
- **Orange Grove Avenue** is classified as a Local Collector within the City and provides an east-west corridor at the City's southern limit. For the entire length of Orange Grove Avenue within Sierra Madre it serves as the southern border with Arcadia. On the western side of the City the street terminates at Michillinda Avenue. However, the street resumes again in Pasadena, serving as a larger collector. Orange Grove Avenue terminates on the east side at Santa Anita Avenue in Arcadia. Throughout Sierra Madre the street maintains a two-lane, undivided configuration and a 35 mph posted speed limit. The character of Orange Grove Avenue within the city limits is residential, with single-family homes lining both sides of the street for the majority of the street.
- **Lima Street and Mountain Trail Avenue** are classified as Local Collectors within Sierra Madre. They are both north-south running streets that run the entire length of the City from the southern limit at Orange Grove Avenue to their end points in the foothill communities. They are both two-lane, undivided roadways with a posted speed limit of 30mph, and they both primarily feature single family homes.

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Existing Traffic Conditions

Traffic counts were collected by Fehr & Peers as a part of the Traffic Impact Study (see Appendix E) for 10 key study area intersections during the AM (7–9AM) and PM (4–6PM) peak commute hours. Table 5.12-3 provides the LOS for the study area intersections under the Existing Traffic Conditions. As shown in the table, the highest delays occur at the intersection of Orange Grove Avenue and Baldwin Avenue, which could be considered the primary entry point to the City. As also shown in the table, all intersections in the City operate at an acceptable LOS (LOS E or better).

Table 5.12-3 Existing Traffic Conditions Intersection Level of Service

Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
Grandview Avenue at Michillinda Avenue	CSS	13.9	B	12.1	B
Grandview Avenue at Lima Street	AWS	10.0	A	8.8	A
Grandview Avenue at Mountain Trail Avenue	AWS	10.0	A	8.8	A
Grandview Avenue at Santa Anita Avenue	AWS	8.1	A	8.2	A
Sierra Madre Boulevard at Michillinda Avenue ²	Signalized	0.569	A	0.606	B
Sierra Madre Boulevard at Lima Street	AWS	13.2	B	14.3	B
Sierra Madre Boulevard at Baldwin Avenue	AWS	19.1	C	20.4	C
Sierra Madre Boulevard at Mountain Trail Avenue	AWS	12.5	B	10.3	B
Orange Grove Avenue at Baldwin Avenue	AWS	30.7	D	31.7	D
Orange Grove Avenue at Rancho Road	CSS	12.5	B	14.5	B

Source: Fehr & Peers 2015.

Notes: AWS = All Way Stop; CSS = Cross Street Stop

¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with all way stop control. For intersection with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown. ICU values are shown at the signalized intersection that shares jurisdiction with the City of Pasadena.

² Signalized intersection is shared between the cities of Sierra Madre and Pasadena.

Transit Network

Fixed-Route Transit

The Los Angeles Metropolitan Transit Authority (Metro) operates two transit routes in Sierra Madre:

- **Metro Line 487** is an express line connecting Downtown Los Angeles to the cities of San Gabriel, Sierra Madre, and El Monte. Within Sierra Madre the line runs down Sierra Madre Boulevard, with stops every few blocks. Headways are approximately 20 minutes during the weekday peak periods. This line also stops at the Metro Gold Line train station in Pasadena, providing another method of connectivity to Los Angeles.

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- **Metro Line 268** runs through the western portion of the San Gabriel Valley, connecting the cities of Altadena, Pasadena, Sierra Madre, Arcadia, and El Monte. Within Sierra Madre the line runs along Sierra Madre Boulevard from Michillinda Avenue to Baldwin Avenue, and along Baldwin Avenue from Sierra Madre Boulevard south to Orange Grove Avenue where it crosses into Arcadia. This line operates on 30-minute headways during the weekday peak periods.

Figure 5.12-2, *Transit Facilities*, shows the bus routes and stops for the Metro lines that serve the Sierra Madre.

The City of Sierra Madre operates a fixed-route shuttle bus known as the Gateway Coach to serve residents during the week. The line only operates on 50-minute headways during the morning, mid-day and evening peak periods. The Gateway Coach does not currently provide access to the Metro Gold Line station; however, it does provide access to downtown Sierra Madre, and the shopping center located in Hastings Ranch in Pasadena at the intersection of Michillinda Avenue and Sierra Madre Boulevard.

Paratransit

Paratransit is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. The City provides fully demand-responsive transportation service through the Dial-A-Ride program. Dial-A-Ride provides same day, curb to curb transit to anyone who meets the qualification conditions: be a City resident, and be either 62 years of age or older, or disabled in a manner that makes use of regular transit unduly difficult.

Transit Connectivity

The Metro Line 487 stops at the Sierra Madre Villa Gold Line station in the City of Pasadena, which is just west of the western City boundary near the I-210/Sierra Madre Villa Avenue intersection. This station provides access to the regional light rail system, as well as serving as a bus transit hub for the northwest San Gabriel Valley, with several bus lines from multiple jurisdictions intersecting. Metro line 487 also connects to Downtown Los Angeles, providing access to commuter rail and interstate rail service through Metrolink and Amtrak, respectively. The Dial-A-Ride paratransit service can also access the Metro Gold Line station.

Truck Routes

The goods or freight movement system in Sierra Madre consists of designated truck routes. The City's Municipal Code (Chapter 10.36, Truck Routes) includes language relating to truck routes. It defines weight restrictions, specifies the ability of trucks to enter areas not designated as truck routes, and defines the truck routes within the City. Roads in the City that are designated truck routes (that is, routes that permit the movement of vehicles exceeding a maximum gross weight of three tons) include Michillinda Avenue from the southerly City limits northerly to Sierra Madre Boulevard; Sierra Madre Boulevard from Michillinda Avenue easterly to Mountain Trail; Mountain Trail from Sierra Madre Boulevard northerly to Montecito Avenue; Montecito Avenue from Mountain Trail westerly to Baldwin Avenue; and Baldwin Avenue from Montecito Avenue southerly to the City limits.

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Bicycle and Pedestrian Network

Bicycle Facilities

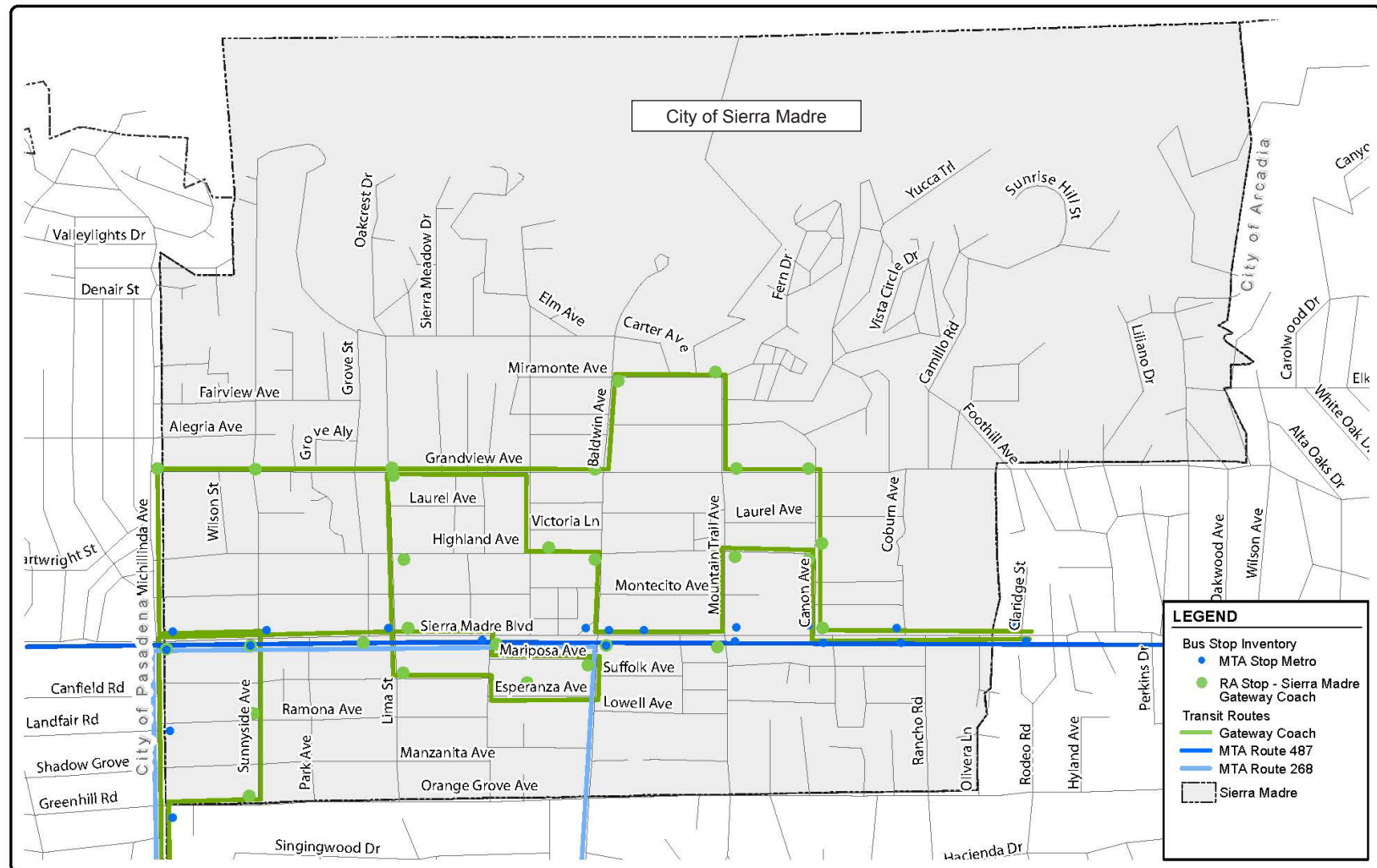
There are currently no defined bicycle facilities within the City of Sierra Madre; the city facilities are limited to bike racks, but no bicycle lanes. The bike racks are located in Memorial Park (bandshell), Sierra Vista Park (pool/recreation center), 100 W. Sierra Madre Boulevard, Kersting Court, and East Montecito public parking lot (corner of East Montecito and N. Baldwin Avenue). The streets within the city are generally wide, with enough cross-sectional space to accommodate individual bicyclists even when parking is provided; this is particularly true for the Local Collectors and Local Streets. However, the streets within the city are not wide enough to accommodate large groups of bicyclists, which typically use Sierra Madre and Orange Grove Avenue on the weekends.

Pedestrian Facilities

The City's Public Works Department recently (January 2015) prepared a Sidewalk Master Plan, which implements goals and policies of the General Plan Update. Per the Sidewalk Master Plan, sidewalks are not continuous throughout the City and many are in need of repairs or replacement. There are locations where there are sidewalks present on both sides of the roadway; areas with sidewalks on only one side; areas with discontinuous sidewalks are provided; areas with sidewalks that are damaged and in need of repair or replacement; areas where sidewalks that are not wide enough to accommodate all uses; and others with no sidewalks at all. As stated in the Sidewalk Master Plan, the sidewalk inspection conducted shows a total of 610 locations in the city that need repair. The primary goal of the Sidewalk Master Plan is the provision of continuous improvements towards a safe, accessible, useful, aesthetically pleasing and sustainable system of walkways throughout the city (Sierra Madre 2015). The purpose of the Sidewalk Master Plan is to:

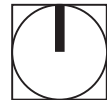
- Inventory all existing standard and non-standard sidewalks in the city.
- Inventory all street segments with no sidewalk or with discontinuous sections of sidewalk.
- Identify opportunities and constraints for future sidewalk considerations.
- Recommend changes and additions to existing programs, policies, and municipal codes.
- Build upon existing prioritization criteria for sidewalk repair and installation.
- Identify potential funding sources for sidewalk repair and construction.

Figure 5.12-2 - Transit Facilities
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- LEGEND**
- Bus Stop Inventory
 - MTA Stop Metro
 - RA Stop - Sierra Madre Gateway Coach
 - Transit Routes
 - Gateway Coach
 - MTA Route 487
 - MTA Route 268
 - Sierra Madre

0 2,000
Scale (Feet)



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5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project could:

- T-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- T-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- T-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-5 Result in inadequate emergency access.
- T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

5.12.3 Relevant General Plan Policies and Implementation Program Measures

The following are relevant policies and implementation measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce impacts related to transportation and traffic as a result of implementation of the General Plan Update.

General Plan Update Policies

Land Use Element

- **Policy L5.1:** Prohibit the use of cul-de-sacs and require through streets in new subdivisions except when no other access is physically feasible due to property ownership, parcel location or other physical factors.
- **Policy L34.3:** Identify opportunities to improve pedestrian access from public parking areas to commercial uses, particularly the access from the parking lot on Mariposa Avenue to the commercial uses on the south side of Sierra Madre Boulevard.

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- **Policy L49.2:** Provide enhanced paving for all pedestrian crosswalks on Sierra Madre Boulevard and Baldwin Avenue within the downtown district, and consider installation of the same on East Montecito Avenue.
- **Policy L49.7:** Improve pedestrian connections between the street and the public parking lots through signage, coordination with property owners, purchase of properties and other mechanisms.
- **Policy L51.1:** Maintain the existing street classification system.
- **Policy L51.3:** Maintain existing facilities for bicyclists, pedestrians, and transit users.
- **Policy L51.4:** Explore the development of new facilities for bicyclists, pedestrians and transit users.
- **Policy L51.5:** Encourage and support the use of non-automotive travel throughout the City.
- **Policy L51.6:** Encourage City staff, employees, residents and visitors to walk and bicycle as often as possible.
- **Policy L51.7:** Utilize non-automotive transportation solutions as a tool to further goals related to environmental sustainability and economic development.
- **Policy L51.8:** Prioritize improvements for non-vehicular modes like bicycles, pedestrians, and transit to eliminate the need for new or expanded roadways and intersection improvements like traffic signals.
- **Policy L52.1:** Ensure that all pedestrians, particularly seniors and the disabled, are able to travel safely and easily throughout the City.
- **Policy L52.2:** Prioritize opportunities to implement traffic calming techniques and limit new driveway curb cuts along roadways, such as Sierra Madre Boulevard and East Montecito.
- **Policy L52.3:** Provide safe travel routes for bicyclists including designated bicycle lanes on streets where these facilities can be accommodated.
- **Policy L52.4:** Evaluate the impact of any capital improvement project on the travel needs of bicycles, pedestrians, and vehicle users.
- **Policy L52.5:** Install and maintain mirrors on blind streets in the canyon.
- **Policy L52.6:** Improve pedestrian crossing opportunities work to increase pedestrian safety, and eliminate painted crosswalks where they provide a false sense of security, and make a more concerted effort to enforce laws related to pedestrian safety.
- **Policy L52.7:** Create and implement a City bikeway plan.

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- **Policy L52.8:** Require the incorporation of bicycle facilities into the design of land use plans and capital improvements, including bicycle parking within new multi-family and non-residential sites or publicly accessible bicycle parking.
- **Policy L52.9:** Explore the possibility of sidewalk continuity where feasible.
- **Policy L53.1:** Develop a comprehensive Citywide approach to residential street traffic calming.
- **Policy L53.2:** Coordinate with law enforcement agencies to ensure adequate enforcement of speed limits along streets, including local collector and local streets.
- **Policy L53.3:** Maintain and enforce speed limits which address the residential nature of local collector and local streets.
- **Policy L53.4:** Install and maintain traffic calming measures where appropriate.
- **Policy L56.1:** Make streets handicap-accessible with more ramps and curb cuts.
- **Policy L56.2:** Promote usage of the Dial-A-Ride paratransit service.
- **Policy L56.3:** Ensure that all streets are accessible to all persons including those with mobility challenges

Resource Management Element

- **Policy R23.1:** Establish a transportation system management program to encourage the use of transit, carpooling, shuttles and other transportation options to reduce vehicle miles traveled and vehicle trips.
- **Policy R23.6:** Provide and enhance local transit service to reduce personal vehicle trips.
- **Policy R23.7:** Maintain links to the MTA Gold Line light rail system.
- **Policy R23.8:** Pursue funding sources for facilities and programs linked to regional transit.

Community Services Element

- **Policy C12.1:** Explore the feasibility of a bicycle lane throughout the City for recreational and transportation usage.
- **Policy C26.1:** Explore other transit funding sources.
- **Policy C26.2:** Develop inter-jurisdictional coordination of the transportation program with Arcadia and/or Pasadena, thereby sharing the cost of the program.

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- **Policy C26.3:** Ensure that the service providers continue to provide the most effective service by monitoring complaints and responses, and evaluating ridership both monthly and annually.
- **Policy C26.4:** Continue to provide the free fixed route services for the community.
- **Policy C26.5:** Continue to coordinate discounted transit services for seniors, handicapped individuals, or low-income residents.
- **Policy C27.1:** Continue to provide comprehensive information to the transit user that is informative, accessible, and easy to understand.
- **Policy C28.1:** Continue to work with the Los Angeles County Metropolitan Transit Authority (Metro) to maintain the existing bus routes linking the City to the Gold Line train station in Pasadena and Arcadia.
- **Policy C29.3:** Explore the feasibility of creating a Park-and-Ride lot for resident commuters.
- **Policy C30.1:** Ensure the enforcement of speed laws and continue to monitor the City's busy intersections.
- **Policy C30.2:** Continue to evaluate measures, such as speed bumps, that reduce speeding.
- **Policy C30.3:** Maintain safety and efficient circulation without impacting the village atmosphere.
- **Policy C30.6:** Offer bicycle safety and traffic courses for the community sponsored by the Police and Community Services Departments.

Implementation Plan Actions

Circulation Implementation Program

- **Measure IM-1:** The City shall continue to use the street classification system, including Major, Collector, Local Collector and Local streets.
- **Measure IM-2:** When reviewing proposed subdivisions, the City shall limit the development of new roadways to the minimum required to provide access to properties. The City shall also limit expansion of existing roadways when considering traffic volumes for future development.
- **Measure IM-3:** The City shall continue to set aside sufficient budget to maintain facilities for bicyclists (such as signage and pavement marking), pedestrians and transit users. The City shall also consider whether additional funds are available to develop new facilities.
- **Measure IM-4:** The City shall prepare and implement a Citywide Sidewalk Master Plan, to include sidewalk maintenance and prioritization of sidewalk infill projects.

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- **Measure IM-5:** The City shall analyze opportunities to provide bicycle facilities in the city and include them in the new bikeway plan where appropriate.
- **Measure IM-6:** The City shall update the City's Traffic calming guidelines and provide Sierra Madre-specific criteria for the use of traffic calming devices.
- **Measure IM-7:** The City shall update the City's ADA Plan.
- **Measure IM-8:** The City shall review Municipal Code Sections relating to parking, crosswalks, and pedestrian safety and amend as necessary.
- **Measure IM-9:** The City shall publicize and encourage the use of public transportation programs, such as light rail, bus and paratransit services.

Air Quality Implementation Program

- **Measure IM-6:** The City shall create a transportation brochure to provide the public with multiple options for reducing miles traveled and vehicle trips.
- **Measure IM-9:** The City shall continue to provide the fixed route local transportation services and provide increase social media marketing for greater public awareness.
- **Measure IM-10:** The City shall continue to partner with MTA and attend quarterly meetings to ensure access to the Gold Line light rail system.
- **Measure IM-11:** The City shall partner with regional transit providers to identify funding sources to expand transportation programs.

Transit Services Implementation Program

- **Measure IM-1:** The City will partner with local municipalities to explore additional transit funding sources.
- **Measure IM-2:** The City will establish a committee to explore the feasibility of partnering with the Cities of Arcadia and Pasadena to develop regional transit service to decrease costs.
- **Measure IM-3:** The City will continue to present complaints and suggestions for service improvements to the Community Services Commission.
- **Measure IM-4:** The City will maintain contractual agreements with the transit provider to continue to provide the fixed route service at no cost to users.

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- **Measure IM-5:** Continue to offer discounted Metro Senior Passes provided by the Senior Community Commission donation account and offer free fixed-transit service to all users.
- **Measure IM-6:** The City will continue to attend Metro meetings to maintain services within Sierra Madre and access to the Goldline Station.
- **Measure IM-7:** The City will create a signage program to provide adequate directional signage to alert customers and residents of parking available behind stores on Sierra Madre Blvd.
- **Measure IM-8:** The City will consider the availability of City parking lots to determine whether a Park-and-Ride lot is feasible.
- **Measure IM-9:** The City will continue to enforce traffic laws, including monitoring of busy intersections, to maintain safety and efficient circulation without impacting the village atmosphere. The City will also consider the feasibility of utilizing measures to reduce traffic speed.
- **Measure IM-10:** The City will evaluate the feasibility of providing additional disabled parking for the Hart Park House and downtown business district.
- **Measure IM-11:** The City will provide biannual traffic control safety training for citizens at Town Hall meetings.
- **Measure IM-12:** The City will develop a new program that teaches bicycle safety.

5.12.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5, *Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The transportation and traffic-related impacts resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, all residential lots within Stonegate are subject the provisions of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52) of the City's Municipal Code.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

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Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use map (see Figures 3-4, *Current Land Use Map*, and 3-6, *Proposed Land Use Map*), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.12-1: Buildout of the City of Sierra Madre under the General Plan Update would generate an increase in traffic volumes that would impact the levels of service at local area intersections and roadway segments. [Threshold T-1]

Impact Analysis: Fehr & Peers prepared a Traffic Impact Study for the General Plan Update in accordance with the City's requirements (see Appendix E). The purpose of the study was to evaluate the potential impacts associated with implementation of the General Plan Update on the study area roadway system and intersections, as well as the potential impacts on alternative modes of transportation. Following is a discussion of the findings and conclusions of the Traffic Impact Study.

Traffic and Circulation Analysis

All future traffic volume forecasts were developed by Fehr and Peers as a part of the Traffic Impact Study for the 2035 build-out condition without and with growth in the City anticipated with implementation of the General Plan Update. As discussed in detail in Chapter 3, *Project Description*, buildout of the City was determined by identifying infill opportunity sites likely to redevelop (see Figure 3-5, *Infill Opportunity Sites*). The additional buildout that would be accommodated under the General Plan Update would generate additional vehicle traffic to the City's circulation network, which could in turn impact the levels of service at local area intersections and roadway segments. Given the existing land uses within the City and its built-out nature (see Figure 3-3, *Existing Land Uses*), limited growth is anticipated within the City except for the growth associated with the infill opportunity sites. The traffic forecasts outlined in the Traffic Impact Study reflect the area-wide growth anticipated between existing conditions and future 2035 conditions. To determine the level of ambient traffic growth, Fehr & Peers reviewed data provided by the SCAG Regional Travel Demand Model, which was used to estimate general increases in overall traffic levels. Based on this data, Fehr & Peers applied a growth rate of 0.5 percent per year to all study area intersections, which reflects increases in regional through traffic on roadways such as Sierra Madre Boulevard, Michillinda Avenue Boulevard, and Orange Grove Avenue.

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Trip Generation

To develop trip generation for the increase in development that would be accommodated under the General Plan Update, the following assumptions were applied:

- The residential units were classified as either single-family dwellings (ITE Land Use Code 210) or apartments (ITE Land Use Code 220).
- The non-residential uses were considered to be either general commercial (ITE Land Use Code 820) or industrial (ITE Land Use Code 110).

Table 5.12-4 provides the trip generation estimates for buildout of the General Plan Update. As shown in the table, buildout of the General Plan Update is forecast to result in 3,335 daily trips, 79 AM peak hour trips, and 171 PM peak hour trips.

Table 5.12-4 Project Trip Generation Summary

Land Use	ITE Code	Quantity	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Residential	210	57 DU	536	42	10	32	56	35	21
Multifamily Residential	220	64 DU	319	25	5	20	29	19	10
Commercial	820	43.7 KSF	2,132	48	30	18	186	89	97
Industrial	110	43.7 KSF	348	50	41	9	48	5	43
Total Trips			3,335	165	86	79	319	148	171

Source: Fehr & Peers 2015.

Notes: DU = dwelling units; KSF = thousand square feet

Trip Distribution

The trip distribution was developed through a review of data from the SCAG Regional Travel Demand Model, the existing roadway network, and the location of regional origins and destinations. The trip distribution applied for the Traffic Impact Study was developed as follows:

- 50 percent of all trips were distributed to the south, which reflects travel to and from I-210 south of the City.
- 20 percent of all trips were distributed to the west, which would include destinations such as Pasadena and other locations to the west.
- 20 percent of all trips were assumed to travel to the east, including destinations in other areas of the San Gabriel Valley.
- 10 percent of all trips were assumed to remain within the City, which is consistent with data provided by the United States Census Longitudinal Employer-Household Dynamics, which estimates that approximately 10 percent of the people who live in the City of Sierra Madre also work within the City.

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Trips remaining within the City were not explicitly accounted for, as it was anticipated that a majority of the new vehicle trips associated with buildout of the General Plan Update would travel into and out of the City.

Year 2035 Without Project Traffic Conditions

Table 5.12-5 provides the results of the intersection analysis for the 10 key study area intersections under the Year 2035 Without Project traffic conditions, which is the 2035 condition prior to the implementation of the General Plan Update. As stated in Chapter 3, *Project Description*, buildout of the City under the General Plan Update is not tied to a specific timeline; however, buildout of the City is linked to a forecast for the planning horizon year of 2035 for the purpose of this DEIR. As shown in Table 5.12-5, all of the study area intersections would operate at an acceptable LOS (LOS E or better) under the Year 2035 Without Project traffic conditions.

Table 5.12-5 Year 2035 Without Project Traffic Conditions Intersection Level of Service

Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
Grandview Avenue at Michillinda Avenue	CSS	15.8	C	12.9	B
Grandview Avenue at Lima Street	AWS	10.8	B	9.2	A
Grandview Avenue at Mountain Trail Avenue	AWS	10.9	B	9.2	A
Grandview Avenue at Santa Anita Avenue	AWS	8.4	A	8.5	A
Sierra Madre Boulevard at Michillinda Avenue ²	Signalized	0.64	B	0.76	C
Sierra Madre Boulevard at Lima Street	AWS	16.3	C	18.8	C
Sierra Madre Boulevard at Baldwin Avenue	AWS	28.6	D	32.1	D
Sierra Madre Boulevard at Mountain Trail Avenue	AWS	14.9	B	11.3	B
Orange Grove Avenue at Baldwin Avenue	AWS	47.8	E	49.1	E
Orange Grove Avenue at Rancho Road	CSS	13.4	B	15.7	C

Source: Fehr & Peers 2015.

Notes: AWS = All Way Stop; CSS = Cross Street Stop

¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with all way stop control. For intersection with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown. ICU values are shown at the signalized intersection that shares jurisdiction with the City of Pasadena.

² Signalized intersection is shared between the cities of Sierra Madre and Pasadena.

In addition to the intersection LOS analysis conducted as a part of the Traffic Impact Study, which is a far better indication of whether a circulation network can handle the traffic of a specified area, a roadway segment analysis was conducted for 10 key study area roadway segments to provide a high-level evaluation of how the roadway network would perform. The analysis also provides an idea of the amount of traffic that would utilize each roadway and if the existing or proposed lane configurations could adequately handle the volumes.

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Table 5.12-6 provides the results of the roadway segment analysis for the 10 key study area roadway segments under the Year 2035 Without Project traffic conditions. For the roadway segment analysis, the volume along study area roadway segments was projected for year 2035 using an applied growth factor of 0.50 percent per year. As shown in Table 5.12-6, none of the roadway segments would exceed their designated vehicle-per-day capacity.

Table 5.12-6 Year 2035 Without Project Roadway Segment Analysis

Roadway	Segment Location	Roadway Classification	Capacity	Year 2035 Without Project Volume	Exceeds Capacity?
Grandview Avenue	East of Michillinda Avenue	Local Collector Street	7,500	3,500	No
Michillinda Avenue	South of Grandview Avenue	Major Street	15,000	7,500	No
Sierra Madre Boulevard	East of Michillinda Avenue	Collector Street	15,000	9,500	No
Michillinda Avenue	South of Sierra Madre Boulevard	Major Street	15,000	14,000	No
Orange Grove Avenue	East of Michillinda Avenue	Local Collector Streets	7,500	7,000	No
Baldwin Avenue	South of Grandview Avenue	Collector Street	15,000	4,000	No
Baldwin Avenue	North of Orange Grove Avenue	Collector Street	15,000	12,000	No
Orange Grove Avenue	East of City Limits	Local Collector Street	7,500	5,000	No
Sierra Madre Boulevard	East of City Limits	Collector Street	15,000	4,000	No
Grandview Avenue	East of City Limits	Local Collector Street	7,500	3,000	No

Source: Fehr & Peers 2015.

Year 2035 With Project Traffic Conditions

Table 5.12-7 provides the results of the intersection analysis for the 10 key study area intersections under the Year 2035 With Project traffic conditions, which is the 2035 condition with implementation of the General Plan Update. As stated in Chapter 3, *Project Description*, buildout of the City under the General Plan Update is not tied to a specific timeline; however, buildout of the City is linked to a forecast for the planning horizon year of 2035 for the purpose of this DEIR. As shown in Table 5.12-7, all of the study area intersections would operate at an acceptable LOS (LOS E or better) under the Year 2035 With Project traffic conditions, with the exception of the Orange Grove Avenue/Baldwin Avenue intersection, which would operate at LOS F during the AM and PM peak commute hours.

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TRANSPORTATION AND TRAFFIC**Table 5.12-7 Year 2035 With Project Traffic Conditions Intersection Level of Service**

Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
		Delay ¹	LOS	Delay ¹	LOS
Grandview Avenue at Michillinda Avenue	CSS	16.0	C	13.0	B
Grandview Avenue at Lima Street	AWS	10.9	B	9.2	A
Grandview Avenue at Mountain Trail Avenue	AWS	11.1	B	9.4	A
Grandview Avenue at Santa Anita Avenue	AWS	8.5	A	8.6	A
Sierra Madre Boulevard at Michillinda Avenue ²	Signalized	0.65	B	0.78	C
Sierra Madre Boulevard at Lima Street	AWS	18	C	24.7	C
Sierra Madre Boulevard at Baldwin Avenue	AWS	35.7	E	47.7	E
Sierra Madre Boulevard at Mountain Trail Avenue	AWS	15.3	C	11.8	B
Orange Grove Avenue at Baldwin Avenue	AWS	55.9	F	59.4	F
Orange Grove Avenue at Rancho Road	CSS	13.7	B	16.1	C

Source: Fehr & Peers 2015.

Notes: AWS = All Way Stop; CSS = Cross Street Stop; **Bold** signifies an unacceptable level of service¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with all way stop control. For intersection with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown. ICU values are shown at the signalized intersection that shares jurisdiction with the City of Pasadena.² Signalized intersection is shared between the cities of Sierra Madre and Pasadena.

Table 5.12-8 provides the results of the roadway segment analysis for the 10 key study area roadway segments under the Year 2035 With Project traffic conditions. For the roadway segment analysis, the volume along study area roadway segments was projected for year 2035 using an applied growth factor of 0.50 percent per year. As shown in Table 5.12-8, none of the roadway segments would exceed their designated vehicle-per-day capacity.

Table 5.12-8 Year 2035 Without Project Roadway Segment Analysis

Roadway	Segment Location	Roadway Classification	Capacity	Year 2035 Without Project Volume	Exceeds Capacity?
Grandview Avenue	East of Michillinda Avenue	Local Collector Street	7,500	3,500	No
Michillinda Avenue	South of Grandview Avenue	Major Street	15,000	7,500	No
Sierra Madre Boulevard	East of Michillinda Avenue	Collector Street	15,000	10,000	No
Michillinda Avenue	South of Sierra Madre Boulevard	Major Street	15,000	15,000	No
Orange Grove Avenue	East of Michillinda Avenue	Local Collector Streets	7,500	7,000	No
Baldwin Avenue	South of Grandview Avenue	Collector Street	15,000	5,500	No
Baldwin Avenue	North of Orange Grove Avenue	Collector Street	15,000	13,000	No
Orange Grove Avenue	East of City Limits	Local Collector Street	7,500	5,500	No
Sierra Madre Boulevard	East of City Limits	Collector Street	15,000	4,500	No
Grandview Avenue	East of City Limits	Local Collector Street	7,500	3,000	No

Source: Fehr & Peers 2015.

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Conclusion

As concluded above, one intersection was determined to operate at a deficient LOS (LOS F) with the addition of trips from buildout of the General Plan Update. Specifically, the Orange Grove Avenue/Baldwin Avenue intersection is projected to operate at LOS F during the AM and PM peak commute hours under the Year 2035 With Project traffic conditions. Mitigating this impact would require the addition of a right-turn lane on the eastbound approach at the intersection of Orange Grove Avenue at Baldwin Avenue. Adding this new right turn lane would require no right-of-way since the eastbound approach could accommodate this lane through the restriping of the existing approach. With implementation of the restriping, this intersection would operate at and acceptable LOS (LOS E); thereby, mitigating the impact.

Additionally, the General Plan Update and Implementation Program contain policies and implementation measures, respectively, designed to minimize traffic impacts on the City's intersections and roadway segments. Following are some of these policies and implementation measures:

- **Land Use Element Policy L51.1:** Maintain the existing street classification system.
- **Land Use Element Policy L51.5:** Encourage and support the use of non-automotive travel throughout the City.
- **Land Use Element Policy L51.6:** Encourage City staff, employees, residents and visitors to walk and bicycle as often as possible.
- **Land Use Element Policy L51.8:** Prioritize improvements for non-vehicular modes like bicycles, pedestrians, and transit to eliminate the need for new or expanded roadways and intersection improvements like traffic signals.
- **Community Service Element Policy C30.3:** Maintain safety and efficient circulation without impacting the village atmosphere.
- **Community Service Element Policy C30.1:** Ensure the enforcement of speed laws and continue to monitor the City's busy intersections.
- **Circulation Implementation Program Measure IM-1:** The City shall continue to use the street classification system, including Major, Collector, Local Collector and Local streets.
- **Circulation Implementation Program Measure IM-9:** The City shall publicize and encourage the use of public transportation programs, such as light rail, bus and paratransit services.

Alternative Modes of Transportation Analysis

Impacts on alternative modes of transportation are discussed below under Impact 5.12-4.

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Impact 5.12-2: Buildout of the City of Sierra Madre under the General Plan Update would not conflict with the requirements of a congestions management plan. [Threshold T-2]

Impact Analysis: The Los Angeles County CMP requires the analysis of freeway segments where a proposed project would add more than 150 peak hour trips to a freeway segment. The threshold for analyzing a CMP intersection is the addition of 50 peak hour trips to a CMP roadway segment (non-freeway segment, such as a major thoroughfare) or intersection. Implementation of the General Plan Update would result in the addition of less than 150 peak hour trips to a freeway segment; therefore, no analysis of a CMP freeway segments is required. There are also no designated CMP intersections within the City of Sierra Madre. The closest CMP intersection is Rosemead Boulevard at Foothill Boulevard in the City of Pasadena. The General Plan Update buildout would add less than 50 trips to this intersection; therefore, no analysis of CMP roadway segments or intersections is required, as no impacts would occur.

Impact 5.12-3: Circulation improvements associated with future development that would be accommodated under the General Plan Update would be designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access. [Thresholds T-4 and T-5]

Impact Analysis:

Access and Circulation

Buildout in accordance with the General Plan Update would not result in changes to the City's circulation network, nor would it increase hazards or impact emergency access due to design features. Implementation of the General Plan Update would not result in additional roadways within the City; instead, the existing circulation system would be maintained and no changes or significant congestion would occur that would affect the ability of emergency vehicles to continue to serve all areas of Sierra Madre.

The City has also adopted roadway design standards (e.g., design speed, lane dimensions, turning radius, setbacks, and sight distance) that preclude the construction of any unsafe design features. All future roadway system improvements associated with future development activates under the General Plan Update would be designed in accordance with the established roadway design standards, some of which have also been incorporated into the policies of the General Plan Update.

Additionally, standard City protocol requires all engineered street plans to be reviewed and approved by the City's Public Works Department prior to any construction occurring, thereby further preventing the construction of any unsafe design features and ensuring that emergency access is provided. The City's Municipal Code and Public Works Department also contain design and development standards that would be applicable to future development activities associated with buildout of the General Plan Update. All future development activities would be controlled by these design and development standards. For example, project applicants are required to submit a development plan for review, which must contain a site plan showing, among other things, internal circulation pattern; access and circulation; pedestrian, vehicular, service; and points of ingress and egress. Adherence to the design and development standards would ensure that safe and efficient movement of vehicles and pedestrians is provided.

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Furthermore, where applicable, future circulation and design features associated with future development activities under the General Plan Update would be required to meet the Sierra Madre Fire Department's design and development guidelines, as applicable, and would be subject to review by the Sierra Madre Fire Department. Construction activities associated with future development and redevelopment projects would also be required to be performed per the City and Sierra Madre Fire Department's standards and codes, thereby avoiding any interference with emergency access during construction.

The City also regulates large truck operations and routes to minimize conflicts along the City's circulation system. For example, Chapter 10.36 (Truck Routes) of the City's Municipal Code provides a list of the roads throughout the City that are designated truck routes (that is, routes that permit the movement of vehicles exceeding a maximum gross weight of three tons); thereby, ensuring that large trucks utilize the City's designated truck routes and avoid traveling on non-designated truck routes.

Finally, various elements of the General Plan Update outline policies that support the design and safety of roadway and circulation improvements, as well as the provision of adequate emergency access. The General Plan Update policies focus on increasing mobility, access, and safety in the City. These include providing enhanced paving for pedestrian crosswalks at key intersections and implementing traffic-calming measures (see policies below). Following are some of the policies and implementation measures of the General Plan Update and Implementation Program, respectively, designed to ensure that potentially hazardous conditions would not occur and that adequate emergency access is provided:

- **Land Use Element Policy L5.1:** Prohibit the use of cul-de-sacs and require through streets in new subdivisions except when no other access is physically feasible due to property ownership, parcel location or other physical factors.
- **Land Use Element Policy L52.2:** Prioritize opportunities to implement traffic calming techniques and limit new driveway curb cuts along roadways, such as Sierra Madre Boulevard and East Montecito.
- **Land Use Element Policy L52.3:** Provide safe travel routes for bicyclists including designated bicycle lanes on streets where these facilities can be accommodated.
- **Land Use Element Policy L52.5:** Install and maintain mirrors on blind streets in the canyon.
- **Land Use Element Policy L52.9:** Explore the possibility of sidewalk continuity where feasible.
- **Land Use Element Policy L53.1:** Develop a comprehensive Citywide approach to residential street traffic calming.
- **Land Use Element Policy L53.2:** Coordinate with law enforcement agencies to ensure adequate enforcement of speed limits along streets, including local collector and local streets.
- **Land Use Element Policy L53.3:** Maintain and enforce speed limits which address the residential nature of local collector and local streets.

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- **Land Use Element Policy L53.4:** Install and maintain traffic calming measures where appropriate.
- **Circulation Implementation Program Measure IM-6:** The City shall update the City's Traffic calming guidelines and provide Sierra Madre-specific criteria for the use of traffic calming devices.
- **Circulation Implementation Program Measure IM-8:** The City shall review Municipal Code Sections relating to parking, crosswalks, and pedestrian safety and amend as necessary.
- **Circulation Implementation Program Measure IM-12:** The City will provide biannual traffic control safety training for citizens at Town Hall meetings.
- **Transit Services Implementation Program Measure IM-9:** The City will continue to enforce traffic laws, including monitoring of busy intersections, to maintain safety and efficient circulation without impacting the village atmosphere. The City will also consider the feasibility of utilizing measures to reduce traffic speed.

For the preceding reasons, impacts to the City's circulation system or to emergency access are not anticipated to occur as a result of implementation of the General Plan Update.

Conflicting Land Uses

The land uses permitted under the General Plan Update land use map (see Figure 3-6, *Proposed Land Use Map*) would be similar in nature to the existing land uses that are found throughout City (see Figure 3-4, *Current Land Use Map*). Due to the largely residential character of the City and its surroundings, implementation of the General Plan Update would not conflict or be incompatible with the existing character of the City or its surroundings. Therefore, implementation of the General Plan Update would not result in conflicting land uses or create hazardous conditions as a result of land uses and improvements associated with buildout of the General Plan Update.

Impact 5.12-4: Implementation of the General Plan Update would comply with adopted policies, plans, and programs for alternative transportation. [Threshold T-6]

Impact Analysis: Various elements of the General Plan Update outline policies that support non-automotive modes of transportation including bicycling, walking, and public transit. The existing streets and roadways in the City are not proposed to be redesigned during the lifespan of the proposed General Plan Update. The General Plan Update policies related to alternative modes of transportation focus on improving and increasing opportunities for alternative modes of transportation, as well as increasing mobility, access, and safety for these forms of transportation in the City. These include preparing and implementing a Citywide sidewalk master plan (which was recently completed, as discussed below) and bicycle plan, providing enhanced paving for pedestrian crosswalks at key intersections, and exploring the possibility of sidewalk continuity (see policies below).

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The City's complete streets network would accommodate all users of the transportation system, and it is based on the type of user. Specifically, the following policies and implementation measures of the General Plan Update and Implementation Program, respectively, demonstrate that the General Plan Update addresses the needs of all users of the City's transportation network:

- **Land Use Element Policy L49.2:** Provide enhanced paving for all pedestrian crosswalks on Sierra Madre Boulevard and Baldwin Avenue within the downtown district, and consider installation of the same on East Montecito Avenue.
- **Land Use Element Policy L51.4:** Explore the development of new facilities for bicyclists, pedestrians and transit users.
- **Land Use Element Policy L51.5:** Encourage and support the use of non-automotive travel throughout the City.
- **Land Use Element Policy L52.1:** Ensure that all pedestrians, particularly seniors and the disabled, are able to travel safely and easily throughout the City.
- **Land Use Element Policy L52.3:** Provide safe travel routes for bicyclists including designated bicycle lanes on streets where these facilities can be accommodated.
- **Land Use Element Policy L52.7:** Create and implement a City bikeway plan.
- **Land Use Element Policy L52.9:** Explore the possibility of sidewalk continuity where feasible.
- **Resource Management Element Policy R23.1:** Establish a transportation system management program to encourage the use of transit, carpooling, shuttles and other transportation options to reduce vehicle miles traveled and vehicle trips.
- **Resource Management Element Policy R23.6:** Provide and enhance local transit service to reduce personal vehicle trips.
- **Resource Management Element Policy R23.7:** Maintain links to the MTA Gold Line light rail system.
- **Resource Management Element Policy R23.8:** Pursue funding sources for facilities and programs linked to regional transit.
- **Circulation Implementation Program Measure IM-3:** The City shall continue to set aside sufficient budget to maintain facilities for bicyclists (such as signage and pavement marking), pedestrians and transit users. The City shall also consider whether additional funds are available to develop new facilities.

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- **Circulation Implementation Program Measure IM-4:** The City shall prepare and implement a Citywide Sidewalk Master Plan, to include sidewalk maintenance and prioritization of sidewalk infill projects.
- **Circulation Implementation Program Measure IM-5:** The City shall analyze opportunities to provide bicycle facilities in the city and include them in the new bikeway plan where appropriate.
- **Circulation Implementation Program Measure IM-9:** The City shall publicize and encourage the use of public transportation programs, such as light rail, bus and paratransit services.
- **Transit Services Implementation Program Measure IM-1:** The City will partner with local municipalities to explore additional transit funding sources.
- **Measure IM-2:** The City will establish a committee to explore the feasibility of partnering with the Cities of Arcadia and Pasadena to develop regional transit service to decrease costs.

Additionally, as noted above, the City's Public Works Department recently (January 2015) prepared a Sidewalk Master Plan, which implements goals and policies of the General Plan Update. The primary goal of the Sidewalk Master Plan is the provision of continuous improvements towards a safe, accessible, useful, aesthetically pleasing and sustainable system of walkways throughout the city (Sierra Madre 2015). The purpose of the Sidewalk Master Plan is to:

- Inventory all existing standard and non-standard sidewalks in the city.
- Inventory all street segments with no sidewalk or with discontinuous sections of sidewalk.
- Identify opportunities and constraints for future sidewalk considerations.
- Recommend changes and additions to existing programs, policies, and municipal codes.
- Build upon existing prioritization criteria for sidewalk repair and installation.
- Identify potential funding sources for sidewalk repair and construction.

For the preceding reasons, impacts to adopted policies, plans, and programs for alternative transportation are not anticipated to occur as a result of implementation of the General Plan Update.

5.12.5 Existing Regulations

State and Regional Regulations

- The California Complete Streets Act (Assembly Bill 1358)
- Los Angeles County Congestion Management Plan

City of Sierra Madre

- Sierra Madre Municipal Code, Chapter 10.36, Truck Routes

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5.12.6 Level of Significance Before Mitigation

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impact would be less than significant: 5.12-2, 5.12-3, and 5.12-4.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.12-1** One intersection is projected to operate at an unacceptable level of service under the Year 2035 With Project traffic conditions as a result of an increase in traffic volumes due to buildout under the General Plan Update.

5.12.7 Mitigation Measures

Impact 5.12-1

12-1 To address the Baldwin Avenue/Orange Grove Avenue intersection level of service deficiency (level of service F) that would occur during the weekday AM and PM peak commute hours under the Year 2035 With Project traffic conditions, the City shall restripe the intersection of Orange Grove Avenue at Baldwin Avenue to add a right turn lane on the eastbound approach. Adding this new right turn lane would require no right-of-way since the eastbound approach could accommodate this lane through the restriping of the existing approach.

5.12.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts associated with transportation and traffic to a less than significant level. Therefore, no significant unavoidable adverse impacts relating to traffic remain.

5.12.9 References

Fehr & Peers. 2015, March. Sierra Madre General Plan Traffic Impact Study.

PlaceWorks. 2012, September 2012. City of Sierra Madre General Plan Update Technical Background Report.

Sierra Madre, City of. 2015, January. Sidewalk Master Plan.