



Circulation Element of the Monrovia General Plan

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Table of Contents

I. INTRODUCTION TO THE CIRCULATION ELEMENT	1
PURPOSE OF THE CIRCULATION ELEMENT	1
RELATED GENERAL PLAN ELEMENTS	1
RECENT TRENDS IN LOCAL AND REGIONAL COMMUTING PATTERNS	2
SCOPE AND CONTENT OF THE ELEMENT	3
II. CIRCULATION ELEMENT GOALS AND POLICIES	4
TRAFFIC CONGESTION	4
STREET CLASSIFICATION AND IMPROVEMENTS	8
ACCIDENT AND TRAFFIC SAFETY	10
TRANSIT AND PUBLIC TRANSPORTATION	11
TRUCK ROUTES	12
PEDESTRIAN AND BICYCLE FACILITIES	13
HILLSIDE STREETS	14
PARKING	15
REGIONAL PLANNING	16
III. THE CIRCULATION PLAN	18
MASTER PLAN OF STREETS	18
PUBLIC TRANSPORTATION PLAN	28
TRUCK ROUTE PLAN	30
BICYCLE FACILITIES PLAN	32
PEDESTRIAN FACILITIES PLAN	34
PARKING PLAN	34

I. INTRODUCTION TO THE CIRCULATION ELEMENT

The Circulation Element is one of seven mandated elements of a City's General Plan and is intended to guide the development of the City's circulation system in a manner compatible with the General Plan's Land Use Element. Because of the importance of a well planned circulation system, the State of California has mandated the adoption of a Citywide Circulation Element since 1955.

The anticipated level of future development in Monrovia, as identified in the planned amendments to the Land Use Element, will generate increased levels of traffic and place additional demands on the City's circulation system. To help meet the demands and achieve balanced growth, the City of Monrovia has adopted specific goals and policies that serve as the basis for the Circulation Element.

PURPOSE OF THE CIRCULATION ELEMENT

The intent of the Circulation Element is to provide the City a circulation system that is safe, sensible, and provides efficient movement of people and goods throughout Monrovia. The current State mandate for a Circulation Element states that the General Plan shall include:

"...a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan."

To satisfy these objectives, portions of the circulation system that require improvements due to anticipated land uses in Monrovia are identified. In an effort to alleviate traffic congestion and improve mobility, street improvements, travel demand management strategies and additional transit opportunities have been identified. The corresponding goals and policies have been adopted to ensure that all components of the circulation system will satisfy the transportation needs of the City of Monrovia.

RELATED GENERAL PLAN ELEMENTS

The Circulation and Land Use Elements are two interrelated elements of the General Plan. The type and intensity of land developed will cause impacts to circulation patterns in Monrovia, while the ability of circulation facilities to accommodate future traffic volumes will be a factor in determining the most beneficial type of land uses. Land uses and policies of the Circulation Element also have a direct relationship with the housing, open-space, noise and safety elements.

RECENT TRENDS IN LOCAL AND REGIONAL COMMUTING PATTERNS

According to the 2000 Census, the majority of Monrovia’s employed adults commute to work outside of the City and travel by single-occupancy private automobile. Just over 18 percent (18.1%) of the City’s working residents (16 years of age and older) are employed in Monrovia. This represents a decrease from the 1990 Census, which showed that 20.5 % of working residents were employed in the City.

As shown in Table I-1, almost 76% of Monrovia’s working residents commuted alone in 2000, an increase of about 2% since 1990. A corresponding decrease in the percentage of residents traveling to work by carpool or public transit occurred during that decade. The portion of people employed at home increased by one-third between 1990 and 2000, to 2.8% of all workers, while the portion of those who walked to work rose slightly (to 3.4%) and the portion of bicycle commuters remained constant (0.9%). When compared with similar statistics for Los Angeles County as a whole, more workers in Monrovia drove alone or walked to work and fewer carpooled or took transit.

TABLE I-1 MODE SPLIT FOR RESIDENTS' COMMUTE TRIPS (%) MONROVIA & LOS ANGELES COUNTY, 1990 & 2000

Means of Journey to Work	City of Monrovia			Los Angeles County		
	1990	2000	Change	1990	2000	Change
Drove alone	74.1	75.7	1.6	70.1	70.4	0.3
Carpooled	15.2	13.6	-1.6	15.5	15.1	-0.4
Public Transit	3.3	2.9	-0.4	6.4	6.6	0.2
Motorcycle	0.4	0.2	-0.2	0.5	0.2	-0.3
Bicycle	0.9	0.9	0.0	0.6	0.6	0.0
Walked	3.0	3.4	0.4	3.3	2.9	-0.4
Other means	0.9	0.6	-0.3	0.8	0.8	0.0
Worked at home	2.1	2.8	0.7	2.7	3.5	0.8

Note: Percentages may not total to 100.0% due to rounding. Sources: U.S. Census Bureau, Census 2000 SF3 and 1990 Census of Population and Housing

The heaviest traffic flows through the City are in the east-west direction, with a larger volume of traffic heading towards the employment centers to the west, including Pasadena, Burbank and Los Angeles, in the morning and then returning eastbound through the City of Monrovia in the evening. Based on data derived from the Southern California Association of Governments (SCAG) regional travel demand forecasting model, it is estimated that approximately one-third of the total traffic

during the weekday peak periods on major east-west arterial surface streets is not local traffic, but is instead through traffic (trips not beginning or ending within the City). This traffic either originates in the areas immediately outside the City or is diverted from the Foothill Freeway (I-210) due to peak period congestion there.

In 2002, when the Foothill Freeway was extended from San Dimas to Fontana (from east of SR57 to east of I-15), traffic volume on that freeway increased noticeably and, with worsening congestion on the freeway, Monrovia and other Foothill communities experienced an increase in spillover traffic on local arterial streets. In July 2007, the final four-mile extension of the Foothill Freeway from Fontana to San Bernardino (I-215) was completed. This new roadway link, combined with continuing development throughout the greater region, is expected to result in additional traffic through Monrovia, both on the Foothill Freeway and on surface streets. The City will monitor changes in traffic patterns that occur.

SCOPE AND CONTENT OF THE ELEMENT

This element includes goals and policies regarding transportation facilities in the City and an implementation plan. The goals and policies are presented in nine sections, each of which addresses major components and aspects of the circulation system. Each section contains summary information on the existing and future conditions of the system, relevant plans and programs that influence the circulation in Monrovia, and the goal and policy statements corresponding to each component. Following these sections, noteworthy characteristics of each component of the system are discussed and displayed in the associated figures. Detailed information pertaining to existing traffic conditions in the City are documented in the environmental impact report (EIR) prepared for this update to the Circulation Element and amendments to the Land Use Element.

II. CIRCULATION ELEMENT GOALS AND POLICIES

The Circulation Element is based on a set of circulation-related goals that reflect and are designed to support the citywide objectives of the General Plan. The goals acknowledge the economic, social, and environmental conditions in the City and surrounding regions, and the anticipated needs of the community. The circulation goals and policies are discussed in the following sections: 1) Traffic Congestion; 2) Street Classification and Improvements; 3) Accident and Traffic Safety; 4) Transit and Public Transportation; 5) Truck Routes; 6) Bicycle Routes and Pedestrian Facilities; 7) Hillside Streets; 8) Parking; and 9) Regional Planning.

TRAFFIC CONGESTION

The goals and policies to address traffic congestion problems are based on specific issues related to overall increases in traffic demand and the inadequacy of the existing street system to accommodate peak period traffic flows. The issues identified in relation to traffic congestion fall into the following categories: existing truck routes, circulation in the downtown area, the need for signal coordination, additional demands on the system generated by new development, accommodation of the planned light rail line and compliance with the Los Angeles County Congestion Management Program.

GOAL 1: 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.

Policy 1:1: Regulate the intensity of land use to keep traffic on any arterial in balance with roadway capacity.

Policy 1:2: Limit direct private property access to arterials, where dual access is possible, to minimize interference with through traffic.

Policy 1:3: Locate new industrial and commercial developments and their access points in such a way that traffic does not impact local residential streets and alleys for access to the development and its parking.

Policy 1:4: Design each arterial with sufficient capacity to accommodate anticipated traffic levels based on the intensity of existing and planned land use. Investigate and analyze revisions to the "grid" street network in the Station Square Transit Village area south of I-210 as a method to improve street capacity and signal operations.

Policy 1:5: Implement traffic signal coordination on City arterial streets to the maximum extent practical, and integrate signal coordination efforts with those of adjacent jurisdictions.

Policy 1:6: Develop and implement intersection capacity improvements where feasible and justified by existing or projected traffic demands. Opportunities to improve intersection operations throughout the City are expected to arise as future development occurs, including the area around the planned light rail station.

Policy 1:7: Design and employ traffic control measures, including signalization, limiting access, limiting on-street parking during peak periods, constructing turn lanes, and modifying lane striping and signage to ensure City streets and roads function as needed. One specific location identified for potential re-striping improvements is the eastbound segment of Huntington Drive beneath the I-210 freeway, where the roadway narrows from three through lanes to two.

Policy 1:8: Compile a comprehensive prioritized program of transportation improvements to provide for the transportation network described in the updated Circulation Element and use the Capital Improvement Program process to implement the identified street improvements. The City should consider conducting a nexus study to establish a basis for implementing a traffic impact fee program for new development in the City. This program would require new development to provide a fair-share contribution to a pool of funds to be used for future transportation system improvements.

Policy 1:9: Improve intersection and street sections wherever possible to maintain an acceptable level of service for peak traffic flows. With the recognition that the City is largely built out and that major physical improvements to the circulation system will be limited to certain areas, establish level of service (LOS) D as the minimum standard to be maintained, except at locations where LOS F conditions currently exist. When reviewing impacts at locations where existing development constrains the ability to widen or otherwise improve roadways to achieve the desired LOS, consider improvements to pedestrian and transit facilities as acceptable traffic mitigation measures. The City has determined that a project would have a significant traffic impact under California Environmental Quality Act (CEQA) at an intersection if the conditions in Table II-1 were found. For the purpose of applying these significance criteria, the V/C ratio shall be reported using the Intersection Capacity Utilization (ICU) methodology. LOS at two-way stop-controlled intersections shall be based on the Highway Capacity Manual (HCM) methodology and the incremental change in volume-to-capacity (V/C) ratio calculated by analyzing such intersections with the ICU methodology assuming a two-phase signal.

TABLE II-1 SIGNIFICANT IMPACT CRITERIA FOR INTERSECTIONS

Intersection Level of Service under Existing Conditions	Project-Related Increase in V/C
A	0.06
B	0.05
C	0.04
D	0.03
E	0.02
F	0.01

Policy 1:10: For daily traffic, the desired levels of service differ according to the functional classification of the street: LOS D on primary arterials ($V/C \leq 0.90$), mid-D on secondary arterials ($V/C \leq 0.85$), LOS C on collector streets ($V/C \leq 0.80$) and LOS A on local streets ($V/C \leq 0.60$). The City has determined that a project would have a significant traffic impact under CEQA on a street if the conditions in Table II-2 are met.

Policy 1:11: Prepare and adopt a formal set of traffic study guidelines to identify the methodologies used to assess potential traffic impacts of new development proposals. These guidelines should include the thresholds of significance described in Policies 1:9 and 1:10, specific criteria to determine whether or not a detailed traffic impact study is needed and a

TABLE II-2 SIGNIFICANT IMPACT CRITERIA FOR STREET SEGMENTS

Traffic Growth over Total Projected Future Daily Volume	Required Mitigation Measures
0.0 -2.4% Daily Traffic Growth *	Staff review and Conditions
2.5% -4.9% Daily Traffic Growth *	Initial study required if existing count > 2,000 VPD Soft mitigation required
5.0% -7.4% Daily Traffic Growth *	Initial study required Soft mitigation required Physical mitigation may be required
>7.5% Daily Traffic Growth *	Initial study required Soft mitigation required Physical mitigation may be required Project alternative may be considered
<p>* The incremental increases shown would be considered to be significant if the street segment under consideration were projected to operate worse than its desired level of service 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).</p>	

description of the process for preparing and reviewing any traffic impact studies that may be required.

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 1:14: Encourage school officials to establish rules and incentives so that students do not use their own vehicles for school transportation.

Policy 1:15: Support the efforts of the Los Angeles County Metropolitan Transportation Authority (Metro) to establish a regional traffic impact fee for new development.

STREET CLASSIFICATION AND IMPROVEMENTS

A number of issues have been reviewed to develop goals and policies related to street classification and improvements. These issues include: reclassification of certain street system to better reflect their functions within the overall street network, damage to pavement from heavy vehicles, the need for signalization of intersections, improvement of streets and intersections, low-cost street improvements and maintenance, the need for reflective beads and striping, roadway connection and extensions, and roadway widening.

GOAL 2: 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.

Policy 2:1: Develop an effective street classification system that serves the various traffic needs in the area, including primary arterials, secondary arterials, collector streets, commercial streets, local/residential streets and alleys. Modify the functional classification and design of selected streets, including:

Downgrade Myrtle between Maple Avenue and Foothill Boulevard from a Primary Arterial Street to a Collector Street.

Upgrade California Avenue to a Secondary Arterial between Duarte Road (currently a Local Street) and Huntington Drive.

Widen Myrtle Avenue between Evergreen Avenue and Duarte Road to full Primary Arterial Standards (120' right of way).

Consider constructing a new east-west street south of Pomona Avenue (tentatively to be named Center Street) to Collector Street standards between Magnolia Avenue and Shamrock Avenue. Consider realigning or vacating portions of Pomona Avenue and Railroad Avenue in this area as the redevelopment plans precede.

Retain designation of Duarte Road as a Secondary Arterial Street and pursue opportunities to widen to full Secondary Arterial standards, including coordinating with the Metro Gold Line Foothill Construction Authority to obtain additional right-of-way between Myrtle Avenue and California Avenue.

Reclassify Royal Oaks Drive between Shamrock Avenue and the eastern City limits to a 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). Consider reconfiguring Evergreen Avenue to two-way operation between Magnolia

Avenue and the end of the eastbound I-210 freeway off-ramp, consistent with the segment of Evergreen Avenue west of Magnolia Avenue, to reduce weaving conflicts that occur just east of this location.

Huntington Drive is currently a Primary Arterial Street with a 100-foot right-of-way configured for four through lanes, with raised median islands and turn lanes at most intersections. As future demand dictates, the City should consider reconfiguring the existing right-of-way to allow for six through lanes to provide additional capacity during peak periods and throughout the day.

Policy 2:2: All street improvements should be designed with sufficient capacity to accommodate anticipated traffic volumes based on the intensity of existing and planned land use.

Policy 2:3: Design and employ traffic control measures to ensure that City streets and roads function safely and efficiently.

Policy 2:4: Provide for safe operations of traffic by adhering to state and national standards and uniform practices.

Policy 2:5: Coordinate street system improvements and signalization with regional transportation efforts. While recognizing the limitations imposed by existing physical constraints, consideration should be given to the potential reconfiguration of the I-210 Myrtle Avenue interchanges as a single-point urban interchange (SPUI).

Policy 2:6: Discourage through traffic from using local collector and residential streets.

Policy 2:7: Seek to maintain at least LOS E during peak hours at intersections, except at locations where LOS F currently exists.

Policy 2:8: Regulate the intensity and stages of development so that traffic on any arterial remains in balance with roadway capacity.

Policy 2:9: As new development or redevelopment occurs, limit driveway and alley access onto arterial streets wherever possible to enhance the quality of traffic flow.

Policy 2:10: Consider locating bus turn-outs where appropriate along heavily-traveled arterials or where the lack of a turn-out would be detrimental to traffic flow.

Policy 2:11: Continue the roadway maintenance program to inspect and repair roadway pavement and street lighting periodically.

Policy 2:12: Improve skewed and offset intersections, wherever possible.

Policy 2:13: Require future dedication for widening of streets and alleys as new development occurs. Prepare and maintain a master map of right-of-way dedications to be pursued as new development proposals are considered. Establish a maintenance program for utilities in alleys (e.g., lighting), access and upgrading of existing alleys.

ACCIDENT AND TRAFFIC SAFETY

These goals and policies address specific issues related to existing concerns for traffic safety on City streets. The issues include: safety along Foothill Boulevard, speed limit violations and accidents, unsafe movements at some locations, need for a policy on speed bumps and speed control in residential areas

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

Policy 3:1: Pursue the “3 E’s” (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 stop 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.

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 Metro 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 as appropriate.

Policy 3:5: Continue the activities of the Traffic Safety Committee.

Policy 3:6: Provide continuity to the sidewalk system, including wheelchair ramps, when new development occurs, to minimize pedestrian/vehicle conflicts.

Policy 3:7: Expand bicycle routes where opportunities arise and demand warrants to minimize conflicts between cyclists and motorists.

Policy 3:8: Expand crosswalk safety monitoring system in school zones. Coordinate efforts with the Monrovia Unified School District and the Monrovia Police Department.

Policy 3:9: In response to resident complaints, prepare studies to establish the need for speed bumps and other traffic calming devices in residential areas. Prepare neighborhood traffic protection plans as appropriate.

TRANSIT AND PUBLIC TRANSPORTATION

These goals and policies address the need for a better transit system in view of regional and corridor transportation improvement plans. The issues include: need for more transit facilities to serve the captive riders, encouraging multi-family residential developments near transit routes, renovation of the historic railroad depot, development of a light rail line, need for more north-south transit services, additional park and ride lots and enhancements to the fixed-route transit loop connecting the downtown area with other areas of the City.

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

Policy 4:1: Comply with the requirements of Americans with Disabilities Act (ADA) to ensure accessibility of elderly and disabled persons to public transportation. Continue to support Access Services, which provides ADA-compliant Para transit services (dial-a-ride service) in 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 the improvements determined to be necessary.

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.

Policy 4:6: Encourage employers to reduce vehicular trips through carpooling and vanpooling and by offering employees incentives such as reduced-rate transit passes

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 4:8: Recognize privately-operated transportation services (taxis, vans, buses and limousines) as an integral part of the City’s public transportation system

Policy 4:9: Investigate new opportunities to further finance demand-responsive transit service

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 4:11: Provide adequate transportation and coordination between park-and-ride lots and the planned light rail station. Develop special design guidelines for providing adequate pedestrian access to the planned light rail station.

Policy 4:12: Consider amending the City’s parking ordinances to establish a reduction in parking requirements for new developments within a defined distance from the planned light rail station.

TRUCK ROUTES

Existing truck routes within the City have generated numerous concerns related to noise and public safety. Several issues have been identified to develop goals and policies addressing these concerns. The issues include: noise and safety concerns of the residents of Foothill Boulevard, Mountain Avenue, and Myrtle Avenue; the need to provide for adequate north-south truck circulation; and designating streets for truck routes

GOAL 5: Ensure a truck circulation pattern through the City to provide efficient transportation of commodities while maintaining safety and harmony in its residential neighborhoods.

Policy 5:1: Limit designated truck routes for commercial trucks to minimize their impact on local traffic and neighborhoods. Coordinate with adjacent jurisdictions where possible to reduce the volume of truck traffic traveling through the City. Revise the existing network of designated truck routes in the City, as appropriate, with consideration of the effect any changes may have on alternate routes.

Policy 5:2: Maintain truck routes to appropriate design standards to accommodate truck volumes safely.

Policy 5:3: Minimize noise impacts to sensitive land uses (residential areas, schools, hospital, etc.) with the development of barriers (e.g., sound walls) and other physical separations between these uses and noise-generating traffic corridors.

Policy 5:4: As appropriate, require new development to provide adequately sized on-site truck loading areas to minimize interference with nearby traffic circulation

Policy 5:5: Install appropriate signage to denote truck routes clearly. Analyze the performance of existing truck routes.

Policy 5:6: Enforce truck regulations to improve safety. As appropriate and as necessary, work with specific businesses and adjacent jurisdictions to address complaints.

PEDESTRIAN AND BICYCLE FACILITIES

Every traveler is a pedestrian at some point in each trip, and the walking environment is one of the most fundamental public places. Short trips can be made entirely on foot and the provision of adequate pedestrian facilities supports this mode of transportation. The City's pedestrian network consists of sidewalks, crosswalks and, in the hillside area, trails. The City also has an existing network of on-street bicycle lanes and bicycle routes (Class II and Class III bicycle facilities). There are concerns related to the condition and continuity of pedestrian facilities in the City. There are also concerns regarding bike access between Monrovia and neighboring communities. Specific issues include: need for improved mountain bike access, incorporation of the Clamshell Hiking/Bike Trail into the General Plan, striping for bike lanes on City streets, sidewalk system, bike parking and bike trail along the Sawpit Wash.

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

Policy 6:1: Provide for the safety of pedestrians and bicycles by adhering to state and national standards and uniform practices.

Policy 6:2: Develop a Citywide 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 6:4: Continue to improve the accessibility of pedestrian facilities to the elderly and disabled, through such measures as construction of wheelchair ramps.

Policy 6:5: Encourage the provision of an accessible and secure area for bicycle storage at all new and existing developments.

Policy 6:6: Encourage provision of bicycle racks or storage facilities at public gathering places.

Policy 6:7: Maintain established bicycle facilities within the City according to established design standards. Review the signage on the existing bikeways and install additional signage as appropriate. Respond in a timely manner to citizen requests regarding maintenance concerns on all bicycle facilities.

Policy 6:8: Require new developments to provide adequate pedestrian paths on adjacent streets, including wheelchair ramps, and through the development projects, where determined to be appropriate.

Policy 6:9: Continue installation of facilities accessible for disabled persons and link public facilities and commercial areas to residential neighborhoods. The use of audible warning devices at intersections along these routes should be considered.

Policy 6:10: Periodically review the established Safe Routes to School programs in cooperation with the Monrovia Unified School District. These programs educate students, parents and other residents on the benefits of walking and bicycling for school travel. Consider partnering with school officials to seek available State funding to develop and implement programs to promote bicycle safety education and the benefits of bicycle transportation.

HILLSIDE STREETS

The characteristic steep grades, curvature and rural traffic of hillside streets north of Hillcrest Boulevard have raised several concerns. Goals and policies have been developed to address these issues. Specific issues are: new developments in the hillside area, hillside standards and specifications for circulation and street improvements, lateral circulation within the hillside area, and interconnection between the hillside area and other specific plan areas

GOAL 7: Develop and maintain a safe and efficient system of hillside streets and bike trails for movement of vehicles, people and goods.

Policy 7:1: Strictly follow hillside guidelines for new developments in hillside areas and design hillside streets to Hillside standards and specifications for circulation and street development.

Policy 7:2: Improve and maintain existing pedestrian trails along Sawpit Wash and Santa Anita Wash.

Policy 7:3: Provide adequate lateral circulation within hillside developments so that access can be obtained from more than one street.

Policy 7:4: Improve existing fire breaks and fire roads for better emergency access.

Policy 7:5: Encourage formation of assessment districts to coordinate new hillside developments and for the maintenance of new private streets. Require homeowners associations to maintain new private streets properly through conditions, covenants and other mechanisms.

Policy 7:6: Develop standards for adequate trail access including accommodations for parking at trailheads.

PARKING

Parking issues relate to the availability and control of parking spaces near activity centers and other land uses along the City streets. These issues reflect concerns regarding the use of parking facilities within the business areas as well as in the residential and recreational areas. The issues that have prompted development of specific parking goals and policies include: inadequate parking in the downtown area, adverse parking impacts from multi-family development, need for additional parking studies, illegal alley parking, the need for a parking assessment district, inadequate school parking, and the need to review existing parking standards.

GOAL 8: 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.

Policy 8:1: Review zoning code parking requirements and revise as necessary so that standards conform to actual parking demands.

Policy 8:2: Require all new developments to provide off-street parking in compliance with the City's Zoning Code and the requirements of the ADA.

Policy 8:3: Encourage employers to include parking provisions in transportation demand management (TDM) plans, such as preferentially-located parking for carpools.

Policy 8:4: Consider the development of parking facilities through such methods as alley vacation and lot consolidation.

Policy 8:5: Establish public parking lot maintenance assessment districts to provide for pavement repairs, sweeping and lighting.

Policy 8:6: Establish parking assessment districts and/or develop a mechanism to allow for cooperative covenanted parking agreements to develop and maintain joint-use parking lots in areas where existing on-site parking is determined inadequate.

Policy 8:7: Consider developing a mechanism to establish preferential parking districts for residents in areas where excessive spillover parking from nearby non-residential uses has been documented.

Policy 8:8: Implement parking management activity programs specified by the Southern California Air Quality Management District (SCAQMD), including Rule 1504 "Cash-Out Program for Non-Owned Employer Parking."

REGIONAL PLANNING

Planning for the development of transportation facilities in Monrovia necessarily occurs in the context of the surrounding region. Regional transportation planning in Los Angeles County is conducted primarily by two agencies.

SCAG is the designated Metropolitan Planning Organization for a six-county planning area and is responsible for preparing the Regional Transportation Plan, a blueprint for regional transportation investments also linked to achieving the air quality standards developed or administered by SCAQMD.

Metro operates the primary system of public transit within the County and is responsible for preparing the Long Range Transportation Plan (LRTP) and Congestion Management Plan (CMP) for Los Angeles County. The LRTP provides a vision for addressing the transportation needs of the County, and projects included in the LRTP receive priority in future funding and construction.

The CMP is a state-mandated program that links land use, transportation, and air quality decisions within the County and requires that local jurisdictions monitor and report development activity annually and implement a TDM ordinance. The only CMP facility in Monrovia is the Foothill Freeway; none of the streets in the City are a part of the designated CMP arterial monitoring network.

The California Department of Transportation (Caltrans) is the state agency with jurisdiction over the regional freeway system, including the Foothill Freeway (I-210). Any improvements to the freeway ramp intersections in Monrovia must be developed in consultation with and approved by Caltrans.

Jurisdictions immediately adjacent to Monrovia include the Cities of Arcadia, Bradbury, Duarte and Irwindale and the County of Los Angeles, each of which conducts land use and transportation planning for the areas they control.

GOAL 9: Support the development of a network of regional roadway facilities that 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.

Policy 9:1: Establish appropriate circulation systems between the planned light rail station and major activity centers of the City to provide efficient passenger transportation service.

Policy 9:2: Coordinate street system improvements and signalization with regional transportation efforts. Continue to coordinate with staff of Los Angeles County and nearby jurisdictions to implement the planned Intelligent Transportation Systems improvements to traffic signal systems on Huntington Drive and Myrtle Avenue. Consider expanding these types of improvements to Duarte Road, Foothill Boulevard and Mountain Avenue.

Policy 9:3: Provide adequate terminal facilities (parking, bike racks, security, etc.) for inter-city and regional travel for the users of both the 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 transportation transfer points.

Policy 9:6: Require that proposals for major new developments (as defined in the City's 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.

Policy 9:7: Coordinate the development of arterial streets with the Los Angeles County Master Plan of Highways to assure that arterial streets will be compatible with those of neighboring jurisdictions.

III. THE CIRCULATION PLAN

This section of the Circulation Element specifies the policies, standards and specifications for various transportation facilities. These standards and specifications apply to planned facilities as well as improvements to existing facilities. The plan is based on an evaluation of potential circulation impacts due to proposed zoning of Monrovia as specified in the Land Use Element of the General Plan. The following components of the Circulation Plan have been developed to minimize potential circulation impacts and maintain quality of life in Monrovia

MASTER PLAN OF STREETS

Monrovia is one of the oldest cities in Los Angeles County. Within 13.5 square miles of incorporated area, the City is primarily residential in character with strip commercial and light industrial activities along the arterial streets. Retail activities are concentrated in the Central Business District and on Huntington Drive. Monrovia has developed over the years to become a dynamic urban community with increasing opportunities for economic growth and prosperity. The City is part of cooperative efforts to plan and implement various regional transportation improvement plans. Most noteworthy of these plans is the planned light rail line that promises to promote economic growth, new employment opportunities, increased values, increased revenues and additional transportation options for the residents of Monrovia.

The northern portion of Monrovia is in the foothills of the San Gabriel Mountains where urban development is limited by topography. Although there is a substantial residential development north of Foothill Boulevard, the majority of development is south of Foothill Boulevard. Redevelopment projects continue to be planned at key locations to meet the growing needs of citizens.

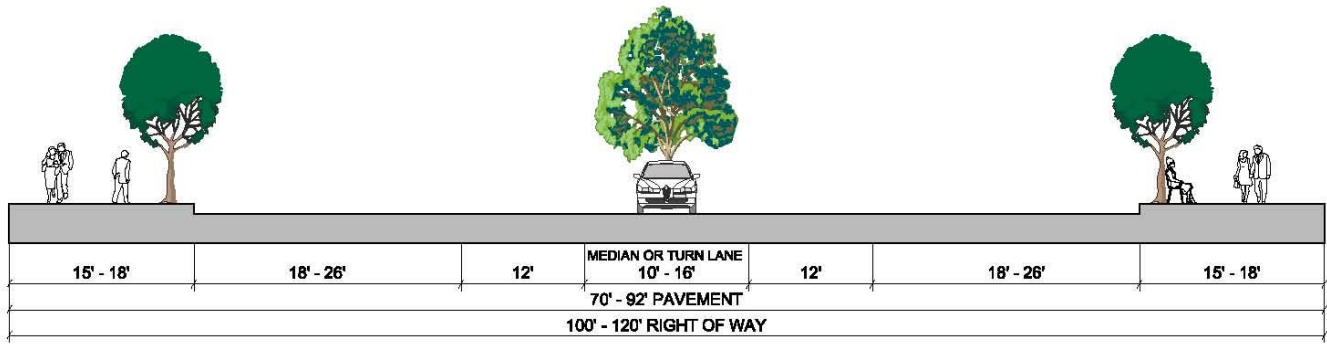
Because of topographic limitations on new growth and the fact that Monrovia is a built-out city, the possibilities of roadway expansion within the City are generally limited. An exception to this is the area around the future light rail station, where a major redevelopment project is planned.

In addition, improvements to the existing roadway system are possible through pavement resurfacing, modifying traffic movement patterns, restriping to provide turn lanes, closing certain streets to prevent through travel, prohibiting left turns at some intersections and installing computerized signal control systems along major arterials.

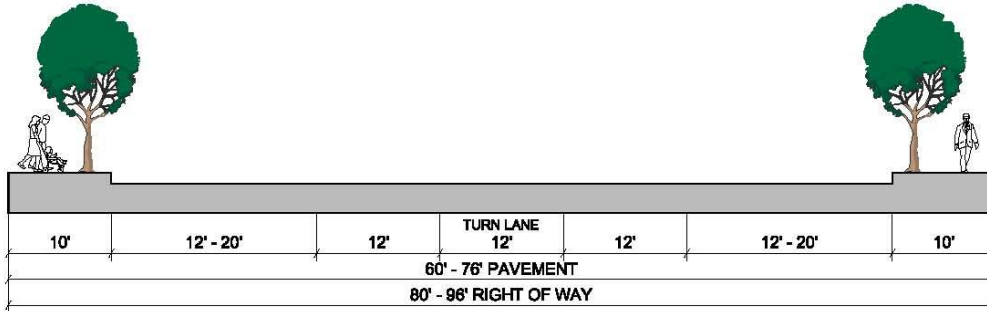
For the purpose of analysis and evaluation of roadway needs, a roadway classification system has been established. Table III-1 shows typical cross-section elements and standards used for classification of streets. Figure III-1 shows a typical cross-sectional profile for each type of street

TABLE III-1 CITY OF MONROVIA ROADWAY CLASSIFICATION STANDARDS

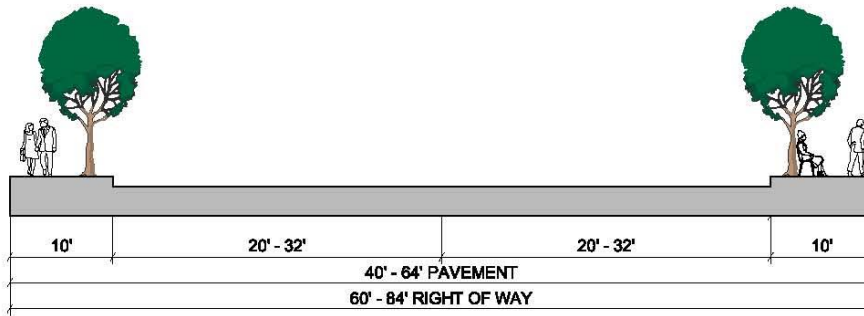
Roadway Classification	Classification Criteria						
	Right of Way Width	Curb to Curb Width	No. Of Through Lanes	Direction Separator	No. of Parking Lanes	Desired Level of Service	ADT Volumes
Primary Arterial	100' - 120'	70' - 92'	4-6	Raised Median	0 - 2	D	30,000 - 50,000
Secondary Arterial	80' - 96'	60' - 76'	4-5	Two-Way Left-Turn Lane	0 - 2	Mid-D	20,000 - 30,000
Collector Street	60' - 84'	40' - 64'	2-4	Double Yellow Lines	0 - 2	C	5,000 - 20,000
Local Street	40' - 56'	24' - 40'	1-2	None	1 - 2	A	1,000 - 5,000
Hillside Street	24' - 32'	20' - 28' Minimum	1-2	None	1 - 2	A	3,000 - 8,000
Emergency Access	16' - 20'	16' - 20' Minimum	1	None	0	-	-



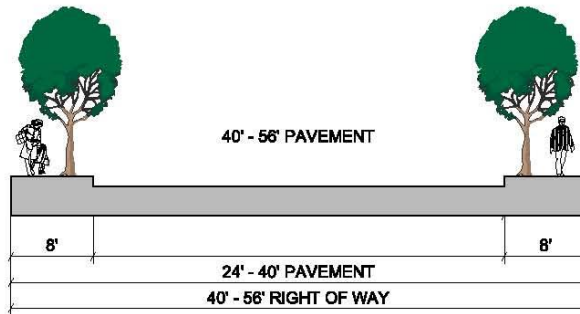
PRIMARY ARTERIAL STREETS



SECONDARY ARTERIAL STREETS



COLLECTOR STREETS



LOCAL STREETS

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**FIGURE III-1
ROADWAY CROSS-SECTION STANDARDS**

Roadways in an urban area are classified according to their function and development standards. Generally, an urban road circulation system (excluding freeways) consists of four different types of roadway facilities:

1. Primary Arterial Street
2. Secondary Arterial Street
3. Collector Street
4. Local Street (including alleys, hillside streets, commercial streets, private streets, and emergency access roads)

The following is a brief description of the functional and design characteristics of various types of urban streets.

Primary Arterial Street

This type of roadway is designed to provide for major traffic flows of urban through traffic, as well as to serve adjacent land uses. Traffic is derived from secondary arterial and collector streets via signalized intersections and from local streets and driveways for properties directly abutting the street. These streets provide regional access to and from adjacent cities and freeways. Huntington Drive and a portion of Myrtle Avenue are the two Primary Arterial streets in Monrovia

Directional traffic is generally separated by a raised center median. Each direction of travel accommodates two to three through travel lanes plus exclusive turn lanes at major intersections. Signalized intersections are generally controlled by a coordinated signal progression system. Roadway width (curb-to-curb, including median) varies from 70 to 84 feet, while right-of-way width varies from 100 to 120 feet. On-street parking may or may not be allowed depending on number of through lanes provided in each direction. For a primary arterial street, the average daily traffic (ADT) capacity may range from approximately 30,000 vehicles to 50,000 vehicles per day. Primary arterials are also characterized by speed limits of 35 to 40 miles per hour (mph)

Secondary Arterial Street

Secondary arterial streets serve as important links between primary arterial streets and collector streets. During the peak hours, these streets provide alternative routes to parallel primary arterials. Secondary arterials supplement the primary arterials to provide regional access. Directional traffic movements are typically separated by median stripes of a two-way left-turn lane. Each direction is typically striped for two travel lanes plus an exclusive left-turn lane at major intersections. On-street parking is permitted wherever possible. The pavement width of secondary arterials varies from 60 to 76 feet and the right-of-way width varies from 80 to 96 feet. The speed limit varies from 35 to 40 mph. The ADT capacity of secondary arterials varies from 20,000 to 30,000 vehicles per day. Foothill Boulevard, Duarte Road and Mountain Avenue are examples of secondary arterial streets in Monrovia.

Collector Street

Collector streets are partially controlled thoroughfares that collect traffic from local streets and feed primary and secondary arterial streets via controlled intersections. These streets do not have a continuous raised center median. They usually have two travel lanes in each direction plus an on-street parking lane. A separate left-turn lane may or may not be provided at major intersections. The pavement width varies from 40 to 64 feet while the right-of-way width varies from 60 to 84 feet. Speed limits on collector streets vary from 25 to 35 mph. The ADT capacity of collector streets ranges from 5,000 to 20,000 vehicles per day. Examples of collector streets in Monrovia are Hillcrest Boulevard and Fifth Avenue. Because Royal Oaks Drive currently carries a sufficient vehicle volume to be considered a collector street, it has been reclassified as such; due to physical constraints there, however, it may not be possible to widen this facility to full collector street standards possible in the foreseeable future.

Local Street

Local streets collect traffic directly from residential and industrial driveways. These streets accommodate traffic in both directions. Generally, travel lanes are not striped. Speed limits are not necessarily posted but are presumed to be 25 mph or less. Specific circumstances, such as schools, playgrounds, parks, etc., along these streets may warrant a lower speed limit. The pavement width varies from 24 to 40 feet with parking permitted along one or both sides of roadway. The right-of-way width varies from 40 to 56 feet. The ADT capacity of local streets is up to 5,000 vehicles per day. Palm Avenue is an example of a local street in Monrovia.

Alley

Alleys provide for accessibility and service to each individual land use. They are characterized by a narrow right-of-way and range in width from 16 to 20 feet in residential areas and up to 30 feet in industrial areas. In Monrovia there are a number of alleys in both residential and industrial areas. The majorities of residential alleys are 16 feet wide and are in the older central section of the City serving multiple-zoned areas. However, there has been a considerable debate in recent years regarding maintenance and improvement of these alleys. The master plan of the street system in Monrovia should include alleys. Consideration should be given to maintaining utilities in alleys, alley access to streets, upgrading of alleys and future dedication for widening alleys as new development occurs.

Hillside Street

Hillside streets are characterized by steep grades, curvature and rural residential traffic. In defining the capacity of a hillside street, the effects of gradient must be considered grades as high as 15 percent may be allowed in certain sections of the roadway (subject to the Fire Department's approval). Assuming an average grade of 10 percent, the capacity of the roadway should be reduced by a minimum of 5 percent. For example, the capacity of a local hillside street with two travel lanes is estimated to be 95 percent of the capacity of a typical local street. The hillside street system in Monrovia consists of a number of private streets, preexisting private ways, and common driveways. The Hillside Standards and Policies developed by the City should be followed in maintaining and improving these

streets wherever applicable. The design standards should be strictly maintained for new hillside streets as new development occurs.

Commercial Street

Commercial streets must be designed for accommodating truck traffic. Therefore, no travel lane or turning lane on an commercial street should be narrower than 12 feet. The parking lanes may be provided on either or both sides of the street. The width of a parking lane should be at least nine feet.

Figure III-2 shows the existing functional classification of the streets (i.e., the primary arterials, secondary arterials, collectors and local streets) of Monrovia. As part of this update to the Circulation Element, the modifications listed below are proposed and the resulting system is shown in Figure III-3.

Downgrade Myrtle between Foothill Boulevard and Maple Avenue from a Primary Arterial Street to a Collector Street.

Upgrade California Avenue to a Secondary Arterial between Duarte Road (currently a Local Street) and Huntington Drive.

Construct a new east-west street south of Pomona Avenue (tentatively to be named Center Street) to Collector Street standards between Magnolia Avenue and Shamrock Avenue. Consider realigning or vacating portions of Pomona Avenue, Railroad Avenue and other local streets in this area as the redevelopment plans precede.

Reclassify Royal Oaks Drive between Shamrock Avenue and the eastern City limit to a 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).

One of the criteria used in classifying urban streets is the maximum desirable ADT volumes on the street. This maximum ADT volume is referred to as the capacity of the street. It is implied that the ADT volume on a street should remain at or below this capacity level. The capacity of an urban street is a function of the maximum traffic handling capacity of its intersection with cross streets. The Highway Capacity Manual specifies the capacity of an intersection as 1,800 vehicles per hour of green time per lane. Assuming that approximately 50% of every hour is available as green time per street at an intersection, the street capacity is approximately 900 vehicles per hour per lane. This capacity of the street is expected to be fully utilized by traffic demand during the peak hour of an average day. The American Association of State Highway and Transportation Officials (AASHTO) publication, "A Policy on Geometric Design of Highways

and Streets" specifies that the design peak hour volume may be represented as 10% of ADT volumes. Therefore, the ADT capacity of a street is estimated to be 9,000 vehicles per day per lane.

The City has established specific LOS criteria to identify the maximum desirable daily level of traffic volume on different types of roadways. Level of service is a qualitative measure used to describe the condition of traffic flow at an intersection and ranges from excellent conditions at LOS A to overloaded conditions at LOS F. The AASHTO publication recommends various LOS volumes for local collector and arterial streets. For the City of Monrovia, the following LOS designation is deemed suitable:

Type of Street	Maximum Desirable Daily LOS & V/C
Primary Arterial:	LOS D (V/C \leq 0.90)
Secondary Arterial:	LOS Mid-D (V/C \leq 0.85)
Collector Street:	LOS C (V/C \leq 0.80)
Local Street:	LOS A (V/C \leq 0.60)

The City utilizes the ICU methodology to determine the intersection V/C ratio at signalized intersections. The corresponding LOS is based on the given turning movements and intersection characteristics, an assumed capacity of 1,600 vehicles per hour per lane (vphpl), and a clearance interval of 0.05 (yellow plus all red). The City is currently improving the signal control systems on key arterials to improve operations, and in the future the assumed capacity will increase to 1,700 vphpl. At intersections with LOS definitions for signalized intersections are listed in Table III 2

The City utilizes the Stop-Controlled methodologies from the HCM to determine the average vehicle control delay (in seconds) for the stop-controlled intersections. The all-way stop-controlled methodology calculates the average vehicle control delay for all intersection approaches. The two-way stop-controlled methodology relates intersection LOS to the delay experienced by the most constrained approach to the intersection, rather than to the intersection as a whole. LOS definitions for the stop-controlled intersections are provided in Table III-3.

TABLE III-2 LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

<p>The quality of traffic service provided by an urban street is evaluated based on traffic operational conditions at its intersection with cross streets. Six levels of service are used as qualitative measures of the operational conditions at an intersection. The LOS are given letter designations from A to F, with LOS A representing the best conditions and LOS F the worst. The LOS at signalized intersections is defined in terms of the volume to capacity (V/C) ratio</p>	
LOS	Traffic Operational Characteristics
A	EXCELLENT. No Vehicle waits longer than one cycle and no approach phase is fully used
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

TABLE III-3 LEVEL OF SERVICE DEFINITIONS FOR STOP-CONTROLLED INTERSECTIONS

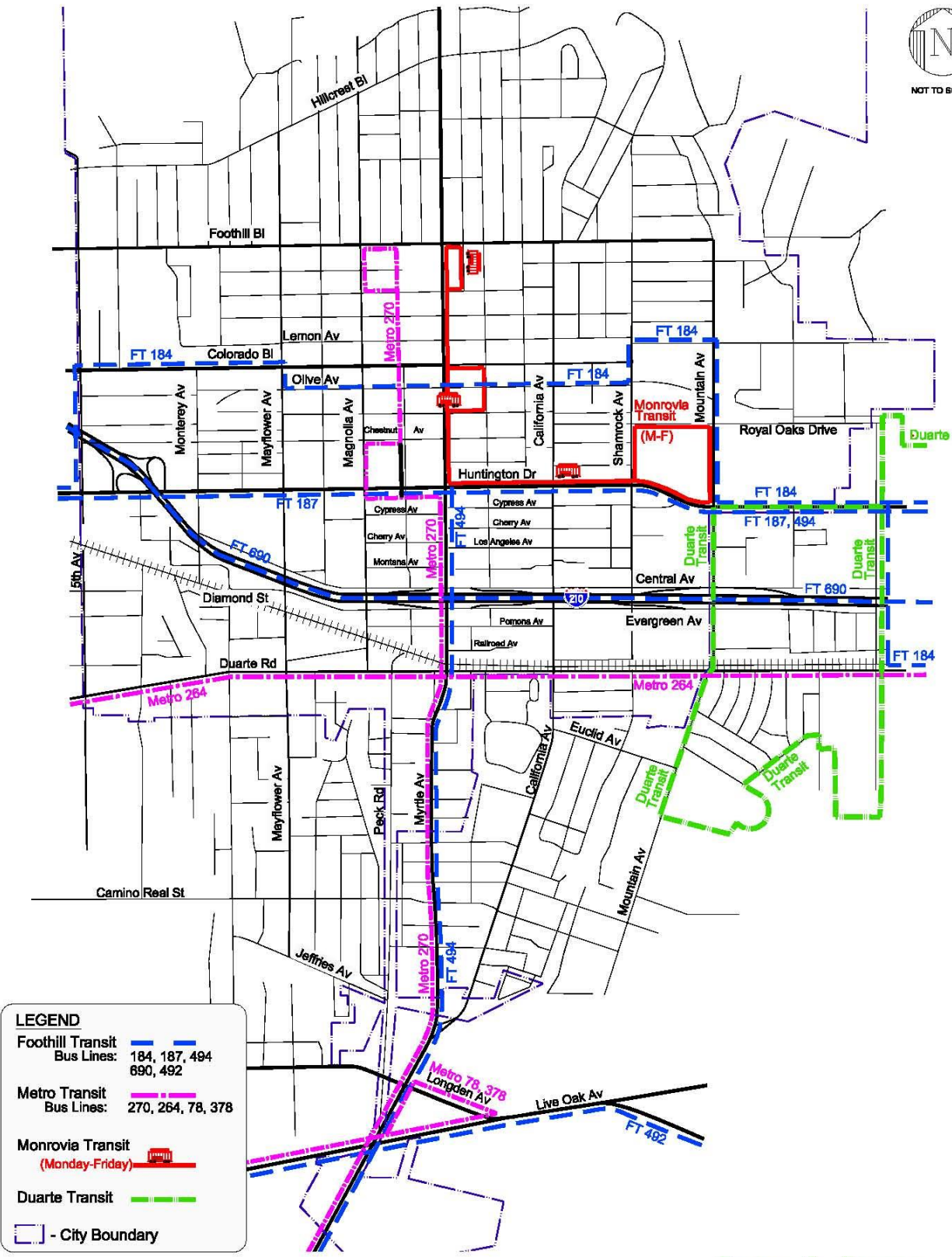
The level of service at stop-controlled intersections is defined by the average control delay per vehicle.	
LOS	Average Total Delay (seconds per vehicle)
A	< 10.0
B	> 10.0 and < 15.0
C	> 15.0 and < 25.0
D	> 25.0 and < 35.0
E	> 35.0 and < 50.0
F	> 50.0

PUBLIC TRANSPORTATION PLAN

Public transportation in Monrovia is provided by Metro, Foothill Transit and by the City of Monrovia (the Monrovia Trolley) and, on the eastern boundary of the City, by the City of Duarte. These agencies currently operate 10 bus lines in Monrovia throughout the day. Figure III-4 presents the routes of the different transit lines that serve the City. Dial-a-ride par transit service operated by Access Services is also available to the public for local transportation. Regional public transportation will be significantly improved with the completion of the proposed light-rail transit line connecting Monrovia with the City of Los Angeles and other cities in the region. The City should coordinate planning for improvements to the Monrovia Trolley routes with Metro and Foothill Transit as those agencies continue to plan for changes to the existing transit network to provide the most effective service for the public, both on an ongoing basis and in conjunction with planning for the future light rail station. All public transportation facilities must fully comply with the requirements of the ADA.



NOT TO SCALE



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FIGURE III-4
EXISTING PUBLIC TRANSIT SERVICE IN MONROVIA

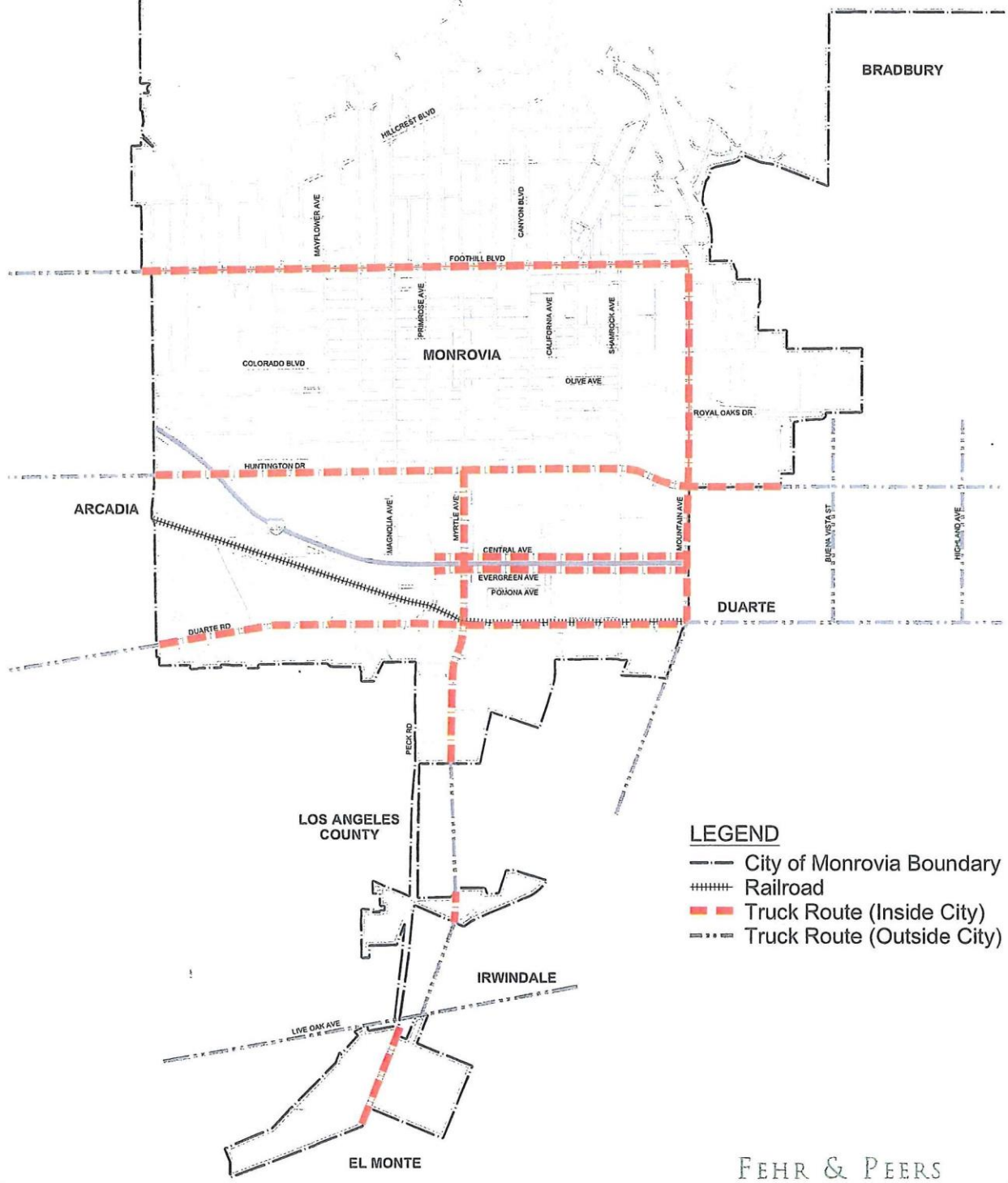
TRUCK ROUTE PLAN

Currently, there are five east-west streets and two north-south streets designated as truck routes within the City of Monrovia, depicted in Figure III-5. Although the existing use of Foothill Boulevard as part of a truck route has raised safety concerns in the past, maintaining its use is considered vital for commercial truck circulation within the City. The City is coordinating with adjacent jurisdictions to address concerns about the use of Myrtle Avenue by commercial trucks, particularly the segment between Evergreen Avenue and Duarte Road. Data for this segment of Myrtle Avenue suggests that it does not experience an exceptionally high level of truck traffic at this time, but the City may periodically monitor conditions and should continue to explore alternative strategies that may reduce the volume of trucks there.

The City will continue to enforce existing ordinances relating to the use of City streets by heavy vehicles. As appropriate, studies may be undertaken and specific safety measures developed to mitigate safety or quality of life concerns expressed residents. Future alterations may be made to the existing network of designated truck routes to protect residents while maintaining a reasonably extensive network for commercial through trucks. Because deleting street segments from the City's network of truck routes would alter established traffic patterns and divert these vehicles to other streets, within or outside the City, the implications of such an action should be carefully considered before implementation.



NOT TO SCALE



LEGEND

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

**FIGURE III-5
EXISTING TRUCK ROUTES**

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BICYCLE FACILITIES PLAN

In recognition of the potential for bicycles to be used for recreation, exercise and personal transportation, the City coordinated with Metro in the 1990s in the development of a sub regional bikeway master plan for the area. The existing bicycle facilities in Monrovia are consistent with that plan (Class II and Class III bikeways) and are shown in Figure III-6. In 2006 Metro, in consultation with local jurisdictions, prepared the *Metro Bicycle Transportation Strategic Plan*, which established a framework for future bicycle planning within the County.

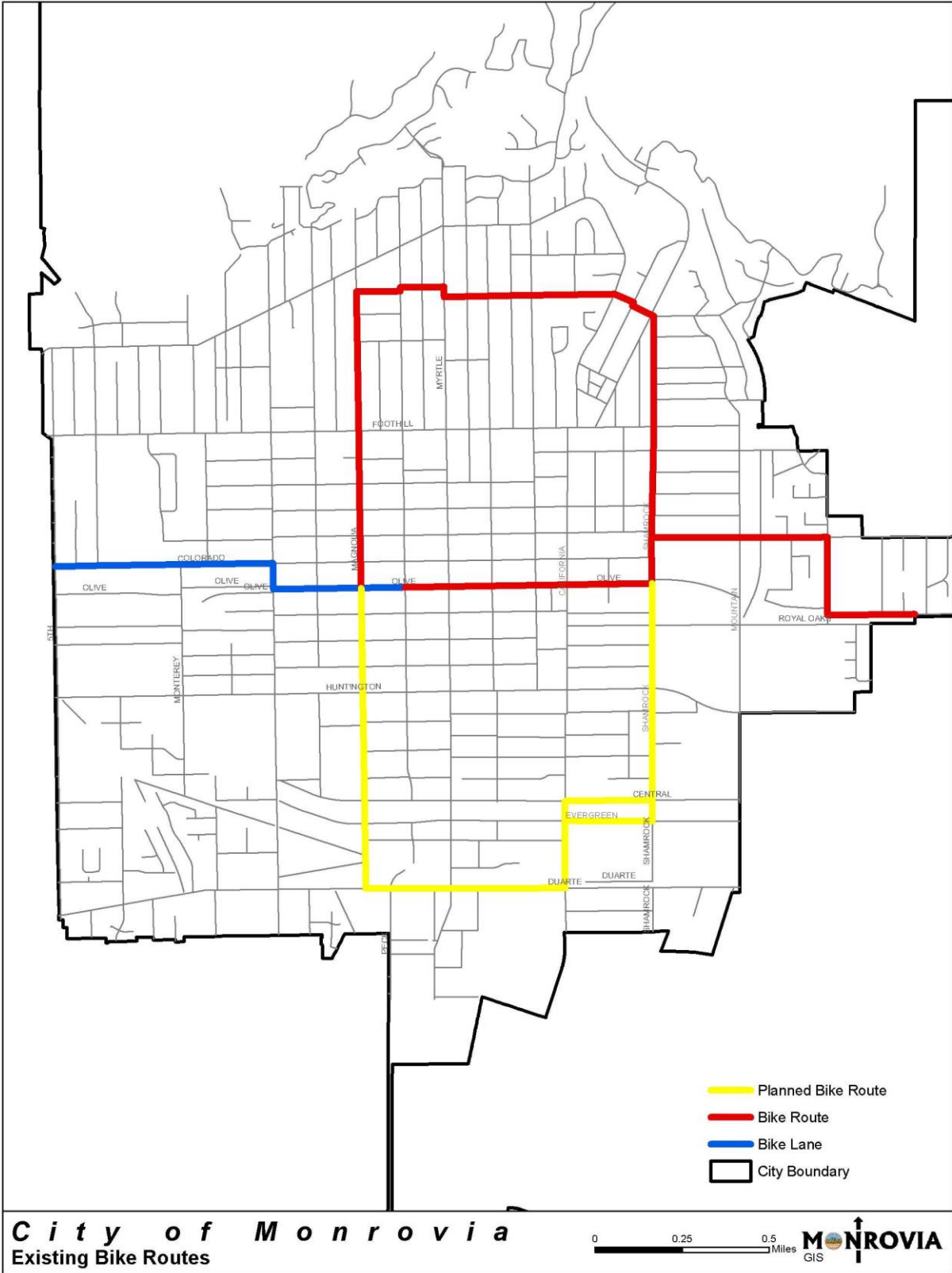
Chapter 1000 of the *Highway Design Manual* ("Bikeway Planning and Design," Caltrans, June 26, 2006) discusses three different types of bikeways. Class I Bikeways (bike paths) provide "a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized." Bike paths can be considered to serve corridors not served by streets and highways. Typical examples are within parks, campuses, along rivers, canals, utility rights-of-way, within planned developments, etc. This type of bikeway must have an exclusive right-of-way. Motorized bicycles (mopeds) and all motor vehicles should be prohibited from bike paths. While no Class I bikeways (bike paths) have been established in the City, the hillside trail system is used by mountain bike riders as well as pedestrians and equestrians.

Class II Bikeways (bike lanes) provide "a striped lane for one-way bike travel on a street or highway." Bike lanes have been established on several of the City's streets, including portions of Colorado Boulevard and Olive Avenue.

Class III Bikeways (bike routes) "provide for shared use with pedestrian or motor vehicle traffic" and provide connectivity with other bikeways or to designate preferred routes through high-demand corridors. Bike routes have been established within the City on portions of Magnolia Avenue, Shamrock Avenue and Greystone Avenue. These routes are designated for bicycles with posted bike route signs.

In addition to these three types of bikeways, cyclists may travel on any streets except freeways where they are specifically prohibited. Most bicycle travel occurs on such shared roadways due to the extent of the system and cyclists, as well as motorists, must comply with the rules of the road.

Future expansion of this network is currently planned on Magnolia Avenue and Shamrock Avenue south of Lemon Avenue and on Duarte Road, as shown in Figure III-6. A new Citywide Bicycle Master Plan should be prepared to identify opportunities to expand the existing network of bicycle facilities further. This plan should identify and prioritize bikeway improvements in the City and identify funding sources for implementation. The development of this plan should be coordinated with the development of a Citywide Pedestrian Master Plan, which is discussed in the next section.



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), waiting shelters at bus stops, curb-cut ramps (including wheel-chair ramps), and push-button devices and pedestrian crossing indicators at signalized intersections. Trails are an integral part of the hillside area of Monrovia. Although these trails are jointly used for equestrian travel, hiking and mountain biking, they serve pedestrian needs as well. Development of an integrated regional trail network system should be considered under the Hillside Specific Plan.

For a safe and efficient circulation system, the City should maintain all existing pedestrian facilities and encourage new developments to provide pedestrian routes to adjacent developments. The City will continue to install and maintain facilities that comply with the requirements of the ADA. As determined to be necessary and appropriate, lighting systems should also be provided to facilitate safe and secure use of these facilities at night.

To promote pedestrian trips, the City should develop a Citywide Pedestrian Master Plan. This may include preparing a Geographic Information System-based inventory of existing pedestrian facilities within the City (including all handicapped-accessible ramps, marked crosswalks, and paved sidewalks) 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.

PARKING PLAN

Adequate parking facilities and their efficient use are essential to maintaining a smooth and balanced circulation system. Management of parking facilities in the downtown business district is an important issue for the continued economic growth of the community. In order to maintain an adequate supply of convenient parking facilities, the City should periodically review zoning code parking requirements and revise the code as necessary. All parking facilities should comply with ADA requirements to provide adequate access for handicapped and disabled persons. All new developments are required to provide adequate off-street parking in compliance with zoning codes. The City should periodically review the adequacy of its standards for off-street parking. In the downtown business district or other areas where the on-site parking supplies are determined inadequate for existing uses, the City should consider establishing a parking assessment district or developing a mechanism to allow for cooperative covenanted parking agreements to develop and maintain joint use parking lots. Detailed parking studies should be conducted for the downtown area as necessary to evaluate the need for parking improvements.

The City should continue require that proposals for major new developments (as defined in the City's TDM ordinance) include the submission of a TDM plan 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" as defined in SCAQMD Rule 1504. The City, in cooperation with regional agencies, has developed a park-and-ride lot north of the planned light rail station. With the planned introduction of light rail service to the City, an expanded park-and-ride facility would be located south of the station. The City should continue to coordinate with the Metro Gold Line Construction Authority as planning for the light rail project and its supporting parking facilities proceeds.