

4.16 TRANSPORTATION/TRAFFIC

This section analyzes the impacts to local and regional transportation systems associated with the adoption and implementation of the proposed 2010 General Plan Update, and the potential traffic impacts on areawide roadways and intersections as a result of future development and redevelopment pursuant the proposed 2010 General Plan Update. Information in this section is primarily derived from the traffic study prepared by Kunzman Associates, Inc. dated December 10, 2009. The traffic study is included in Appendix H to this PEIR.

The analysis of intersection operations is based on the Intersection Delay Method, as contained in the Highway Capacity Manual (Kunzman 2009). This method calculates vehicle delay based on the capacity of the intersection, with the length of delay defining the Level of Service (LOS) at the intersection.

The LOS is a qualitative and quantitative measure that describes the operational conditions and a motorist's and/or passenger's perception of travel conditions. LOS is designated a letter from A to F, with LOS A representing free flowing traffic conditions. LOS B represents stable flow, but with restrictions and operating speeds beginning to be affected by traffic volume. LOS C represents stable flow, with more restrictions and with speed and maneuverability closely controlled by higher traffic volumes. LOS D represents high density but stable flow, with traffic volumes severely restricting traffic flow. LOS E represents operating conditions at or near capacity level, with low but relatively uniform speeds. LOS F represents forced or breakdown flow, with many stops and low operating speeds.

While LOS on roadway segments may be measured, roadway performance is controlled by the performance of intersections, and more specifically, by intersection performance during peak hours. This is because traffic control at intersections interrupts traffic flow that would otherwise be relatively unimpeded. Thus, LOS typically depends on the quantity of traffic at the intersection. Table 4.16-1 provides the LOS and the corresponding average delay per vehicle for signalized and unsignalized intersections.

**TABLE 4.16-1
LEVELS OF SERVICE**

Level of Service (LOS)	Average Delay Per Vehicle (seconds/vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	* 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and * 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and * 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and * 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and * 50.0
F	> 80.0	> 50.0

Source: TRB 2000.

The City of Rancho Cucamonga has set a standard of LOS D or better (lower) for local intersections, while the San Bernardino County Congestion Management Program (CMP) sets a standard of LOS E for intersections in the County's CMP-designated highway system. The County implements an enhanced transportation management program to ensure that the designated roadways meet this LOS E standard. When the CMP standards differ from the City standards, the CMP guidelines defer to the local agency standards.

4.16.1 RELEVANT POLICIES AND REGULATIONS

Federal

Manual on Uniform Traffic Control Devices

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) was updated in 2009 and is contained in 23 Code of Federal Regulations (CFR), Part 655, Subpart F. The FHWA requires that the updated MUTCD be adopted by individual states as their legal state standard for traffic-control devices within two years of the update. The MUTCD identifies the standards that should be used to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads that are open to public traffic.

Regional

Regional Transportation Plan (RTP)

SCAG prepared the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) to maximize regional mobility and accessibility; to ensure safety and reliability; to preserve the transportation system; to maximize productivity of this system; while protecting the environment and encouraging land use and growth patterns that complement the transportation system. RTP strategies serve to link communities within the region, to meet air quality standards, and to improve the quality of life.

The RTP is a long-range transportation plan (with an approximate 30-year horizon) that projects population and employment growth and defines the vision and overall goals for the regional multi-modal transportation system. It identifies future transportation infrastructure needs and defines planned multi-modal transportation improvements, including freeways, high-occupancy vehicle facilities, bus and rail transit, freight movement, and aviation.

Regional Transportation Improvement Program

The RTIP implements the projects and programs of the RTP. The RTIP lists the specific regional transportation projects needed to meet the circulation needs of the region, along with the funding sources of each project. The 2008 RTIP projects in and near the City of Rancho Cucamonga include:

- widening of ramps and streets at the I-15 freeway's Base Line Road interchange;
- interchange improvements on the I-10 at Grove Avenue;
- a High-Occupancy Vehicle (HOV) lane addition on I-10 from Haven Avenue to Ford Street;
- airport ground access at I-10/Haven and I-10/Archibald;
- a new interchange on the I-15 between Foothill Boulevard and Arrow Highway;
- widening the on-ramps at I-15 and Foothill Boulevard;
- a new I-15/Duncan Canyon Road interchange;
- widening of segments of Milliken Avenue, Holt Boulevard, Arrow Highway, Wilson Street, Carnelian Street, and Grove Avenue;
- the Pacific Electric Inland Empire Trail; and
- Foothill Boulevard/Archibald Avenue intersection improvements.

Work Area Protection and Traffic Control Manual

The Work Area Protection and Traffic Control Manual was developed by the California Joint Utility Traffic Control Committee to provide the basic standards for the safe movement of traffic on highways or streets in accordance with Section 21400 of the *California Vehicle Code*, the Manual on Uniform Traffic Controls for Street and Highways, and applicable State of California Supplements. Guidelines for the provision of traffic controls are provided in the manual for the protection of the public, motorists, cyclists, pedestrians, and workers. Contractors performing work on or adjacent to a roadway must install and maintain traffic-control devices for the safe passage of vehicles, travelers, cyclists, and pedestrians and for the safety of the construction workers.

On-Road Motor Vehicle Mitigation Options

SCAQMD's Rule 2202 requires employers who employ 250 or more employees on a full- or part-time basis to implement various trip-reduction measures to meet an emission reduction target (ERT) based on the number of employees at the site. The ERT can be met by (1) implementing a variety of optional trip-reduction programs and measures for on-site implementation and/or (2) the purchasing credits to offset emissions. Trip-reduction programs and measures may include incentives to use transit or alternative modes of travel, increased vehicle occupancy, off-peak commutes, or reductions in trip lengths through employment center relocation, video-conference centers, and telecommuting centers.

County

Measure I 2010–2040 Strategic Plan

Measure I authorizes a half-cent sales tax in San Bernardino County until March 2040 for use exclusively on transportation improvement and traffic management programs. The *Measure I 2010–2040 Strategic Plan* is the official guide for the allocation and administration of the combination of local transportation sales tax, State and Federal transportation revenues, and private fair-share contributions to regional transportation facilities to fund the Measure I 2010–2040 transportation programs. The Strategic Plan identifies funding categories and allocations and planned transportation improvement projects in the County for freeways, major and local arterials, bus and rail transit, and traffic management systems.

Long-Range Transit Plan

The San Bernardino Associated Governments (SANBAG) has updated its Long-Range Transit Plan (LRTP), which addresses the transit needs of the County for an approximate 25-year horizon. The LRTP prioritizes goals and projects for transit system improvements and expansions. With the passage of SB 375 in 2008, the LRTP has been modified to more closely connect land use and transportation planning strategies. The LRTP addresses countywide travel challenges and creates a system that would increase the role of transit in future travel choices. The Plan seeks to reduce dependence on cars, encourage community revitalization, and encourage more balanced transit-oriented land use development in the County. The LRTP anticipates that premium transit service, such as rapid buses and rail modes, will increase transit use by providing shorter travel times and increased reliability, mobility, and accessibility.

Congestion Management Program

Proposition 111 was passed in June 1990 and provided additional transportation funding through an increase in the State gas tax. The tax was contingent on the development of a

Congestion Management Program (CMP) for each county with an urbanized area having a population of 50,000 persons or more, to be developed and adopted by a designated Congestion Management Agency (CMA). Within San Bernardino County, SANBAG is the designated CMA.

SANBAG's CMP addresses Countywide traffic congestion through an interrelation of transportation, land use, and air quality programs. The CMP sets LOS standards for the County's CMP-designated highway system and implements an enhanced transportation management program to ensure that the designated roadways and intersections meet set standards. The San Bernardino County CMP sets a standard of LOS E for roadway intersections and freeway interchanges in the County's CMP-designated highway system. CMP-designated highways and streets in Rancho Cucamonga are:

- I-15 Freeway,
- SR-210 Freeway,
- Grove Avenue,
- Archibald Avenue,
- Haven Avenue,
- Milliken Avenue,
- Etiwanda Avenue,
- 16th Street/Base Line Road,
- Foothill Boulevard,
- Arrow Highway, and
- 4th Street.

When the CMP was originally adopted in 1992, a number of freeways and highways were operating at LOS F, which automatically made them exceed the LOS E standard. Thus, a secondary standard was established, such that if the 1992 LOS was F, a ten percent degradation is considered a deficiency. In addition, signalized intersections are considered deficient if the overall volume/capacity ratio is equal to or more than 1.0, even if the LOS defined by vehicle delay is below the LOS standard. The following intersections in the City operated at LOS F in 1992:

- Archibald Avenue and Foothill Boulevard,
- Carnelian Street Base Line Road,
- Vineyard Avenue and Foothill Boulevard,
- Grove Avenue and Foothill Boulevard, and
- Foothill Boulevard, between Mountain Avenue and Archibald Avenue.

SANBAG implements the CMP using its Development Mitigation Nexus Study as the basis for identifying fair-share contributions from new development for regional transportation improvements (freeway interchanges, railroad grade separations, and regional arterial highways).

The CMP also outlines the requirements any Traffic Impact Analyses (TIA) needed for proposed development projects. However, cities that adopt a Development Impact Fee (DIF) program consistent with the requirements of Measure I are exempt from the TIA requirements. The City of Rancho Cucamonga's DIF program is consistent with Measure I requirements; it requires the City to fund regional transportation projects through its DIF program. Thus, developments in the City do not need to prepare TIAs per the CMP if they will comply with the City's DIF program.

Local

Title 10 of the Municipal Code

Title 10 of the Rancho Cucamonga Municipal Code specifically addresses vehicles and traffic in the City. This regulation establishes a traffic enforcement division within the SBSD to enforce the street traffic regulations of the City and State vehicle laws. It also outlines the responsibilities of the City Traffic Engineer, advisory traffic committee, SBSD and Fire Departments as they relate to traffic regulations and their enforcement.

Title 10 includes speed limits on various streets in the City, designates one-way streets and alleys, stop-controlled streets; identifies driving rules, pedestrian rights and duties, and restrictions on stopping, standing and parking; establishes permit parking districts and truck routes; and contains other regulations that promote public safety on streets, sidewalks and driveways.

Designated truck routes are limited to major and secondary arterials where trucks may travel, and prevent trucks from utilizing local streets in residential neighborhoods.

Citywide System Fees for Transportation Development

As noted above, the City has adopted a DIF program to fund transportation system improvements in and near the City. Chapter 3.28 of the City's Municipal Code contains the ordinance that spells out the DIF program and determination of fair-share costs for needed improvements. The fees would finance the improvement or construction of roadways and bridges that would mitigate traffic impacts of new development and redevelopment in the City, based on the Nexus Improvement Program.

The developer may be granted a credit against the DIF that would otherwise be charged to the project when (1) a developer constructs a roadway improvement that is larger in size, length, or capacity over that needed by the development and (2) the construction is necessary to ensure efficient and timely construction of the facility. If reimbursement is needed, the amount available in any year shall be at the discretion of the City Engineer.

As part of this program, the City requires new development to conduct a traffic impact analysis to determine the number of trips that would be generated by the development and the improvements needed to serve the development. The traffic analysis serves as the basis for determination of any necessary transportation system improvements that should be constructed as part of the development.

Trip Reduction Ordinance

Chapter 17.10.070 – Trip Reduction of the City's Development Code requires the provision of one shower facility accessible to both men and women by each project that has at least 250,000 square feet of commercial use, 325,000 square feet of industrial use, 125,000 square feet of office use, or 250 rooms in a hotel or motel. Office parks with 1,000 employees or more are required to provide on-site video conference facilities. Ride-sharing opportunities should also be provided through:

1. Distributing ride-share matching forms to all new employees and regularly to continuing employees;
2. Completing surveys of employees to determine interest in ride-sharing;

3. Designating a staff member to assist other employees in finding carpool matches;
4. Advertising and promoting to generate interest and viability for the program;
5. Tailoring work hours to facilitate ride-sharing;
6. Providing preferentially located or priced parking for carpoolers;
7. Leasing vans, at cost, for employees who vanpool;
8. Providing company fleet cars at nominal cost for commuting by carpoolers;
9. Subsidizing subscription bus services, particularly in the early period of formation; and
10. Modifying work hours.

Commercial, office, and industrial facilities must designate ten percent of the total parking area for preferential use by carpools and vanpools. Commercial and office developments with more than 25 parking spaces must also provide motorcycle parking spaces. Bicycle storage spaces must be provided in all multi-family residential projects with more than ten units, and in commercial, office, and industrial developments. Transit improvements (bus shelters, bus pullouts, and bus pads) should be provided if the City Engineer deems it necessary.

Roadway Functional Design Guidelines

The City has established guidelines for the improvement of City streets, which identify the number of lanes, median improvements, access restriction, intersection spacing, curbside parking, and additional right-of-way or easement for each roadway designation. These guidelines are used for the development of individual roadways to their final configurations.

General Design Guidelines

The following three sections call for access and circulation design that provide a safe and efficient system for vehicles and pedestrians: Section 17.08.090 – General Design Guidelines for Residential Districts; Section 17.10.060 – General Design Guidelines for Commercial Districts; and Section 17.30.060 – General Design Guidelines for Industrial Districts. The guidelines address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic, and interconnected public and private sidewalks.

Intersection Line of Sight Design

The City has developed guidelines for the provision of adequate light of sight for roadways and intersections, which identify clear zones for medians and parkways and landscape requirements in areas that may affect line of sight. These guidelines show acceptable and unacceptable designs to protect line of sight and promote driving safety.

Streets, Sidewalks and Public Places

Title 12 – Streets, Sidewalks and Public Places, of the Rancho Cucamonga Municipal Code requires that an encroachment permit be obtained from the City Engineer for the construction of public improvements or the protection of public improvements from construction activities. The

permit requires compliance with the Work Area Protection and Traffic Control Manual and the Manual on Uniform Traffic Controls for Street and Highways.

This Title also requires the improvement of the one-half of the street abutting a parcel as part of the development or improvement of the parcel, along with the dedication of the street right-of-way to the City upon completion of improvements. Street improvements should be made to meet the City's standards for the street.

In addition to required dedication for street purposes, additional dedication for storm drain, sewer, water or other utility purposes may be required in connection with building permits where such dedication is necessary to prevent the flooding of adjacent or nearby property or to permit connection to required utilities.

Parking Regulations

Chapter 17.12 – Parking Regulations of the City's Development Code outlines the City's requirements for the provision, design, and location of parking spaces needed to serve new buildings, new land uses, building expansions or changes in occupancy. The regulations include parking stall sizes, amount of parking for each land use, provision of loading areas, landscaping and design of parking lots, and parking structures. They are intended to ensure that off-street parking is available to serve the specific use, while providing appropriate buffers and transitions to surrounding land uses.

Shared parking is allowed subject to (1) a parking study that shows that substantial conflict will not exist in the main hours or periods of peak demand for both uses and (2) with a written agreement between both parties on the stalls subject to joint use. A reduction in parking provision may be approved if the following are incorporated into a project and that evidence shows employees and/or customers will utilize, on a regular basis, these transportation alternatives: (1) a detailed transportation management plan showing the availability of mass transit and (2) provisions are created for carpooling, staggered work hours, and other measures.

Hiking and Riding Trails Master Plan

The City's Hiking and Riding Trails Master Plan identifies a system of regional and community trails, needed bridges and street undercrossings, and trailheads to access the trail system at various locations throughout the City.

The Regional Multi-Purpose Trails serve as the backbone of the trail system and connects to regional parks, open space preserves, the San Bernardino National Forest, and other regional trails beyond the City. It generally runs along flood-control channels and utility corridors. A Regional Multi-Purpose Trail runs along the east-west route of the old Pacific Electric Railroad as part of the Pacific Electric Inland Empire Trail, which, upon completion, will connect the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto.

Community Trails provide convenient off-road access to community facilities such as parks, schools, and shopping centers. They serve as collectors that link local feeder trails in subdivisions to the regional trail system. Community trails follow streets, utility corridors, and easements and are intended for equestrian and pedestrian use. The North Etiwanda Preserve Trail is an interpretive trail system that provides over three miles of public trail access through the Northern Etiwanda Preserve. The trail connects local points of interest, including historic water delivery system and pumping station remnants, early settlers ruins, a Native American cultural site, riparian wetlands, and a fresh water marsh.

Local Feeder Trails are found within residential subdivisions as private easements. They provide access to the rear of every lot, wherever feasible, to a Community or Regional Multi-Purpose Trail. Local feeder trails can also provide logical riding loops within subdivisions. Neighborhoods in Alta Loma and Etiwanda include a network of equestrian trails that connect to Community and Multi-Use Regional Trails. The Victoria Park Lane Trail and the Terra Vista Greenway provide pedestrian and bike connections between schools and parks through the Victoria Park and Terra Vista neighborhoods.

4.16.2 EXISTING CONDITIONS

Regional transportation access to the City of Rancho Cucamonga is provided by three freeways: Interstates 10, 15 and SR-210. The I-10 freeway is an east-west freeway located just south of the City limits. It has interchanges at major north/south arterials, including Vineyard Avenue, Archibald Avenue, Haven Avenue, Milliken Avenue, and Etiwanda Avenue. The I-15 freeway runs north-south along the eastern edge of the City, with interchanges at Summit Avenue, Base Line Road, Foothill Boulevard, and 4th Street. The SR-210 freeway runs east-west through the northern portion of the City, with interchanges at Carnelian Street, Archibald Avenue, Haven Avenue, Milliken Avenue, and Day Creek Boulevard.

Average traffic volumes on the freeways in 2008 were approximately 151,000 to 198,000 vehicles per day on the I-15 Freeway from 4th Street to Summit Avenue and approximately 153,000 to 173,000 vehicles per day on the SR-210 Freeway from Carnelian Street to the I-15 Freeway (Caltrans 2009).

Major roadways in the City generally run east-west or north south, with east-west roadways carrying more traffic than north-south roadways. This is primarily because the east-west arterials serve as regional connections to neighboring communities.

Principal travel corridors in the City include Foothill Boulevard and 4th Street for east-west travel, and Haven Avenue and Milliken Avenue for north-south travel. These principal travel corridors traverse the City and extend beyond the City limits to connect to freeways and adjacent communities. They are typically six-lane streets and carry the highest traffic volumes, which range from 30,000 to 40,000 daily vehicles, with more than 40,000 vehicles in certain locations.

Secondary travel corridors in the City include Base Line Road and Arrow Highway for east-west travel, and Carnelian Street/Vineyard Avenue, Archibald Avenue, and Day Creek Boulevard for north-south travel. These corridors generally extend across the entire City and, in most cases, connect with freeways and extend into other communities. They are typically four-lane streets, with some six-lane segments, and they carry traffic volumes ranging from 20,000 to 30,000 vehicles per day.

A system of tertiary travel corridors supports and provides access to the primary and secondary corridors in the City. These include Wilson Avenue, Church Street, Banyan Street, 19th Street, and 6th Street in the east-west directions, and Hermosa Avenue, Rochester Avenue, Etiwanda Avenue, and East Avenue in the north-south direction. These streets carry local traffic and are often four-lane streets, with some two-lane segments. They typically carry from 10,000 to 15,000 vehicles per day.

Existing average daily traffic volumes on major roadways in the City are shown in Exhibit 4.16-1, Existing Traffic Volumes. These volumes were derived from peak hour traffic counts made in 2007, 2008, and 2009. The LOS at major intersections and freeway interchanges in the City are listed in Table 4.16-2, Existing Intersection LOS.

**TABLE 4.16-2
EXISTING INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
Grove Avenue				
Foothill Boulevard	19.2	B	21.0	C
Arrow Highway	10.3	B	10.7	B
Carnelian Street				
SR-210 westbound	17.3	B	16.0	B
SR-210 eastbound	11.4	B	18.9	B
19th Street	29.6	C	29.4	C
Base Line Road	28.2	C	29.7	C
Vineyard Avenue				
Foothill Boulevard	26.8	C	36.2	D
Arrow Highway	27.1	C	26.3	C
Archibald Avenue				
SR-210 westbound	18.0	B	15.2	B
SR-210 eastbound	12.4	B	15.2	B
19th Street	26.7	C	27.7	C
Base Line Road	25.9	C	32.1	C
Foothill Boulevard	25.8	C	31.1	C
Arrow Highway	28.6	C	27.7	C
4th Street	28.3	C	31.5	C
Haven Avenue				
SR-210 westbound	15.1	B	16.3	B
SR-210 eastbound	17.3	B	15.3	B
Base Line Road	28.7	C	34.3	C
Foothill Boulevard	30.2	C	37.3	D
Arrow Highway	26.0	C	29.1	C
Milliken Avenue				
SR-210 westbound	17.5	B	13.4	B
SR-210 eastbound	14.9	B	15.7	B
Base Line Road	27.6	C	31.0	C
Foothill Boulevard	28.9	C	35.1	D
Arrow Highway	25.9	C	36.4	D
4th Street	31.9	C	43.3	D
Rochester Avenue				
Arrow Highway	23.7	C	31.4	C
Day Creek Boulevard				
SR-210 westbound	17.4	B	14.8	B
SR-210 eastbound	14.2	B	15.9	B
Etiwanda Avenue				
Base Line Road	26.3	C	25.4	C
Foothill Boulevard	29.0	C	34.0	C
Arrow Highway	34.5	C	99.9	F
East Avenue				
Base Line Road	63.4	E	46.5	D
I-15 southbound				
Beech Avenue	16.1	B	12.0	B
Base Line Road	19.1	B	13.7	B
Foothill Boulevard	9.1	A	7.0	A

**TABLE 4.16-2 (Continued)
EXISTING INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
I-15 northbound				
Beech Avenue	12.9	B	15.6	B
Base Line Road	13.4	B	18.1	B
Foothill Boulevard	11.4	B	13.0	B
Americana Way				
Base Line Road	21.4	C	22.4	C
All intersections are signalized. Bold text identifies Delay and LOS that exceed standards.				
Source: Kunzman 2009				

As shown, all intersections currently operate at LOS D or better, except for two:

- Etiwanda Avenue at Arrow Highway (LOS E in AM peak)
- East Avenue and Base Line Road (LOS F in PM peak)

Bus Transit

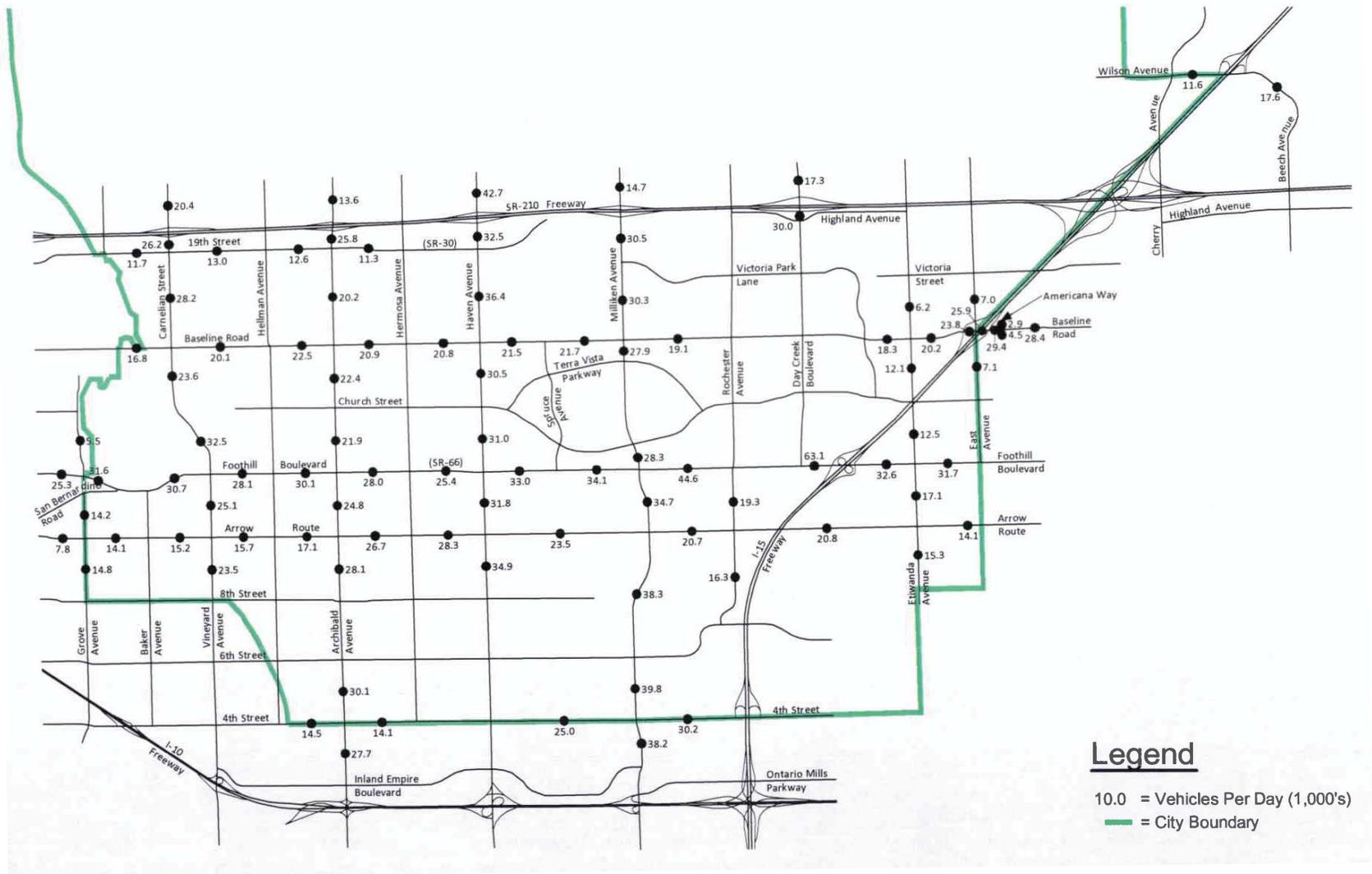
Bus transit services are available in the City through fixed-route and demand-response services provided by Omnitrans. There are seven bus routes that run through the City, connecting to the neighboring cities of Fontana, Upland, Ontario, Montclair, and Chino. The routes serve major destinations in the region, such as Chaffey College, the Rancho Cucamonga Metrolink Station, the Fontana Metrolink Station, the Ontario Mills Mall, the LA/Ontario Airport, the Ontario Civic Center, the Pomona TransCenter, the Montclair TransCenter, the Chino Civic Center and Transit Center, and the Rancho Cucamonga Civic Center.

Within Rancho Cucamonga, the bus routes run on major roadways, including Haven Avenue, Day Creek Boulevard, Milliken Avenue, Carnelian Street/Vineyard Avenue, Base Line Road, Foothill Boulevard, and Arrow Highway, and segments of Banyan Street, Victoria Park Lane, and 4th Street.

Omnitrans' demand-response service (Access) is a curb-to-curb van service for people unable to independently use the fixed-route service. Reservations can be made for pick-up and drop-off within a three-quarter mile range of the existing Omnitrans fixed bus routes and during the same service hours. This service complies with the requirements of the Americans with Disabilities Act (ADA).

Commuter and Freight Trains

Metrolink, operated by the Southern California Regional Rail Authority, is a regional rail system that provides commuter rail transportation for the region. The Rancho Cucamonga Metrolink Station is located at 11208 Azusa Court (west of Milliken Avenue), where passenger trains run 19 round trips daily from downtown Los Angeles to downtown San Bernardino on weekdays, 10 round trips on Saturdays, and 7 round trips on Sundays (SCRRA 2010).



Legend

- 10.0 = Vehicles Per Day (1,000's)
- = City Boundary

Existing Traffic Volumes

Rancho Cucamonga General Plan Update



Source: Kunzman Associates, Inc.

Exhibit 4.16-1



The Metrolink railroad runs east-west through the southern section of the City, with grade separations at Milliken and Haven Avenues. This same rail line is occasionally used by freight trains when the Union Pacific Railroad line (running east-west south of the I-10 freeway) is closed or restricted for limited periods. Local freight train traffic in the City includes switches¹ on various spur lines² serving the industrial areas at the southern section of the City, including:

- A spur line extending south from the Metrolink tracks between Archibald Avenue and Hermosa Avenue; sidings³ extending south from the Metrolink tracks just east of Haven Avenue.
- A wye⁴ and spur tracks extending north from the Metrolink tracks just west of Milliken Avenue.
- Spurs extending north and south from the Metrolink tracks between Milliken Avenue and Rochester Avenue.
- Spur tracks extending north from the Metrolink tracks between I-15 and Etiwanda Avenue.

Trails and Bikeways

The Pacific Electric Trail is a 21-mile long trail that follows the former Southern Pacific railroad corridor and was originally built for the Pacific Electric Railway. This trail runs east-west through the City and will connect to the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto when fully completed. The North Etiwanda Preserve Trail is an interpretive trail system that provides over three miles of public trail access through the North Etiwanda Preserve. The North Etiwanda Preserve is a conservation area that protects sensitive wildlife species. This trail allows hikers to explore the alluvial fan sage scrub habitat within designated trails and to view interpretive signs providing information about the history of the area and biological benefits of the Preserve.

Bike paths, lanes, and routes are found throughout the City, with the main east-west route along the Pacific Electric Trail. The north-south route runs along Deer Creek from the SR-210 Freeway to the southern City limit. Other established or planned bike paths run along the Cucamonga Channel and Demens Creek in the western part of the City, on Wilson Avenue and Etiwanda Avenue in the northeast, and within the Terra Vista community. Bike lanes are present and/or will be provided on most principal and secondary travel corridors. Bike routes (signs) are planned in older areas where bike lanes are not feasible. Exhibit 4.16-2, Bicycle Plan, shows the bike paths, lanes and routes in the City.

Airport

There is no airport or airstrip in the City. However, the LA/Ontario International Airport is located just south of the City. This airport is a medium-hub, full-service airport with commercial jet service to major U.S. cities and international destinations. It is located approximately 1.2 miles from City's southern boundary. In 2006, 7 million passengers used the airport and over 600,000 tons of air freight were shipped through this airport (LAWA 2010).

¹ Points where the main track diverges into two or three tracks

² Tracks that extend from the main line into a business park, warehouse or factory

³ Low-speed track segments used for marshaling, stabling, storing, loading and unloading

⁴ A triangular arrangement of railway tracks with a switch (point) at each corner

Aircraft flight patterns from the airport do not fall within Rancho Cucamonga boundaries, and noise from aircraft is not a significant concern in the City. A portion of the Airport Influence Area, which includes the area surrounding an airport that can be affected by airport operations, overlaps the City's southern boundary, generally along 8th Street to the I-15 freeway. This issue is discussed further in Sections 4.8, Hazards and Hazardous Materials, and 4.12, Noise, of this PEIR.

4.16.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The project would result in a significant adverse impact related to transportation and traffic if it would:

- Threshold 4.16a:** 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;
- Threshold 4.16b:** Conflict with an applicable congestion management level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways;
- Threshold 4.16c:** 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;
- Threshold 4.16d:** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Threshold 4.16e:** Result in inadequate emergency access;
- Threshold 4.16f:** Conflict with adopted policies, plans, or programs regarding public transit bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

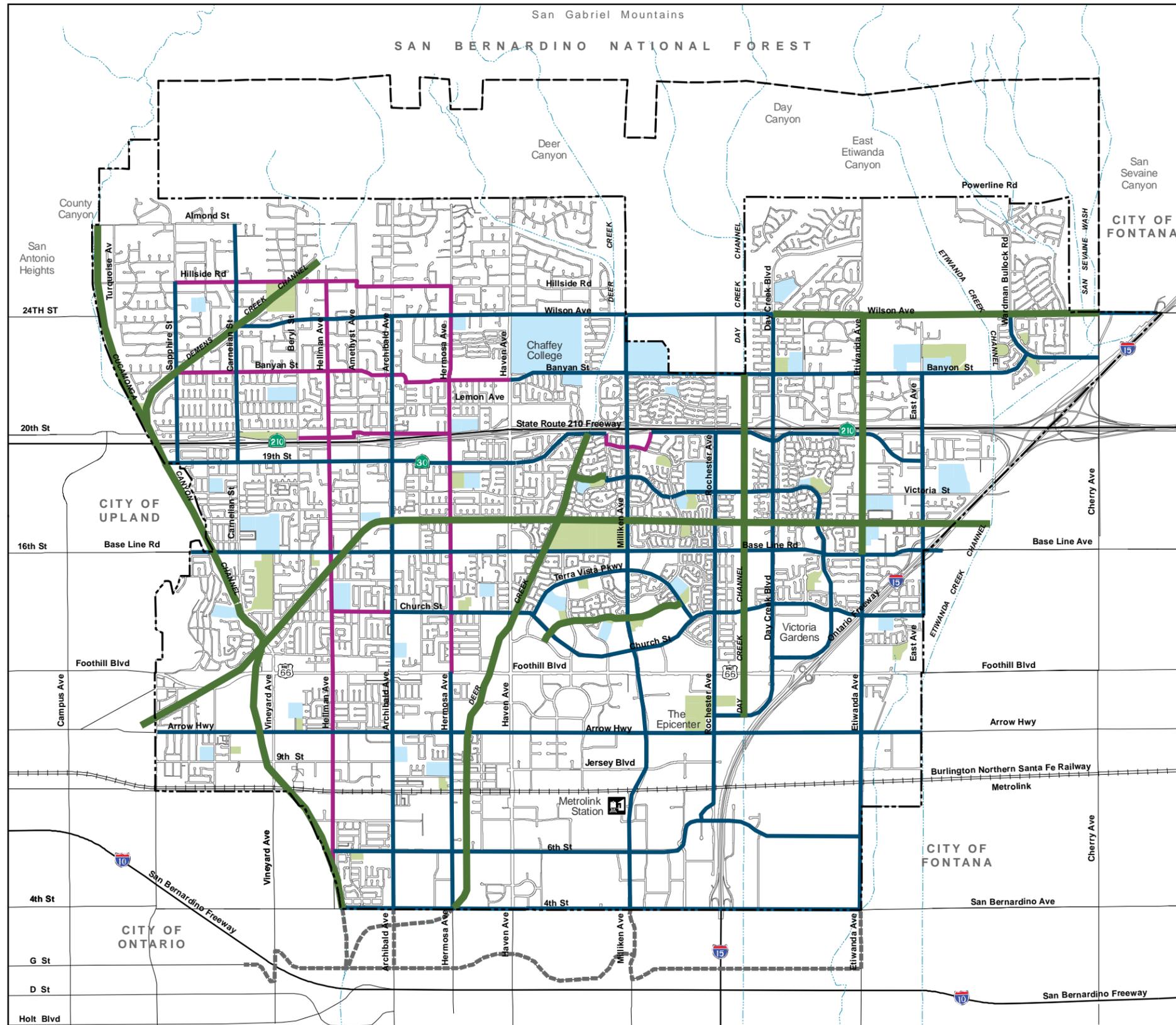
4.16.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address the development of an efficient and comprehensive transportation network in the City that meets the needs to the existing and future land uses and supports the City vision for enhance mobility and expanded transportation choices. Implementation of these goals and policies and their corresponding implementation actions would improve the transportation system in the City and prevent adverse traffic impacts. These include:

Policy LU-8.3: Require adequate access for emergency vehicles and evacuations.

Implementation Action: *Continue to coordinate the review of development proposals within hillside areas with emergency personnel.*

GOAL CM-1: *Provide an integrated and balanced multi-modal transportation network of complete streets to meet the needs of all users and transportation modes.*



- Bicycle Plan**
- Class I (Bike Path)
 - Class II (Bike Lane)
 - Class III (Bike Street)
 - Bike Routes Outside Rancho Cucamonga
- Parks and Schools**
- Schools
 - Parks
- Rancho Cucamonga City Boundary
- Sphere of Influence
- Waterways



D:/Projects/Hogle/J007/Graphics/ex_bikeplan.ai

Bicycle Plan

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-2



R:/Projects/Hogle/J007/Graphics/EIR/Ex4.16-2_Bikeplan.pdf

Policy CM-1.1: Provide a safe and efficient street system in the City to support mobility goals, all transportation modes, and the goals of the Managing Land Use, Community Design, and Historic Resources Chapter.

Implementation Action: *Add the intersection improvements listed below to the Capital Improvement Program (CIP) or appropriate equivalents identified and approved by the City Engineer in the future that would offset the identified impacts; implement the improvements as funding becomes available. Prepare a report on the need for the improvements and their relationship to the impacts caused by new development in Rancho Cucamonga.*

- *Work with Caltrans and SANBAG to implement a new freeway interchange at 1-15 and Arrow Highway.*
- *Complete Wilson Avenue between Milliken Avenue and Day Creek Boulevard.*
- *Complete Rochester Avenue between Banyan Street and Wilson Avenue.*
- *Pursue Federal funds for a grade separation of the SPRR at Etiwanda Avenue.*
- *Complete storm drain and widening of Hellman Avenue from Foothill Boulevard to Cucamonga Creek.*
- *Complete Wilson Avenue from East Avenue to Wardman Bullock*
- *Improve the Base Line Road at I-15 Freeway Interchange*
- *Complete Youngs Canyon from Cherry Avenue to Banyan Street*

Policy CM-1.2: Provide an integrated network of roadways that provides for convenient automobile, transit, bicycle, and pedestrian circulation movement around the City.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information. Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-1.3: Complete the circulation system by constructing new roadway facilities and freeway interchanges pursuant to the Circulation Plan (Figure CM-2).

Implementation Action: *Identify in the CIP future projects and new roadways based on available funding.*

Policy CM-1.4: Provide access for seniors and those with physical disabilities in all elements of the transportation system.

Implementation Action: *Continue to operate the Silver Fox Express. Consult with Omnitrans regarding providing ACCESS transportation services. Require that all new future transportation facilities have appropriate and adequate access for seniors and people with physical disabilities.*

Policy CM-1.5: Implement street design standards. Modified standards may be applied where appropriate on arterial corridors relating to transit, bicycle facilities, sidewalks, and on-street parking to be context sensitive to adjacent land uses and districts, and to all roadway users, including transit, bicycles, and pedestrians.

Implementation Action: *Integrate into the CIP process the planning of modified standards for Foothill Boulevard to accommodate BRT and for other arterials as appropriate to reflect the bikeway plan and pedestrian improvements necessary to support mixed-use districts.*

GOAL CM-2: *Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.*

Policy CM-2.1: Facilitate bicycling and walking citywide.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.*

Policy CM-2.2: Encourage all feasible measures to reduce total vehicle miles traveled by automobiles, including enhanced transit access and land use approaches that provide compact and focused development along major transit corridors.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined. Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future. Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project. Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route*

maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.

Policy CM-2.3: Support the use of hybrid, electric, and low/zero emission vehicles.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.4: Replace City vehicles with energy-efficient and alternative fuel source models when replacing vehicles or adding to the City's fleet.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.5: Establish priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles.

Implementation Action: Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.6: Accommodate charging and fueling stations for alternative fuel vehicles, and put forth strong efforts to have charging facilities provided at employment centers.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities. Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.7: Require new developments of more than 100 employees (per building or per tenant/company) to develop Transportation Demand Management programs to minimize automobile trips and to encourage use of transit, ridesharing, bicycling, and walking.

Implementation Action: Consider expanding §17.10.070 Trip Reduction of the Development Code to include additional Transportation Demand Management programs.

Policy CM-2.8: Support the installation of high-speed communications infrastructure to facilitate the ability of residents to work at home.

Implementation Action: Continue to implement Title 7 Telecommunications Regulations of the Municipal Code.

GOAL CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.

Policy CM-3.1: Consult with regional transit operators to maintain and improve the coverage and frequency of transit service in the City.

Implementation Action: *Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.*

Policy CM-3.2: Support Omnitrans' expansion of Bus Rapid Transit (BRT) into Rancho Cucamonga, along Foothill Boulevard, with stops at all major north-south streets, and with direct routing via Victoria Gardens.

Implementation Action: *Proactively engage with Omnitrans to identify the timing of BRT service, preferred BRT stops within the City, and necessary local infrastructure improvements needed to accommodate BRT service. Develop a time frame and development requirements so that development projects at affected locations can incorporate needed improvements along planned BRT routes. Work with Omnitrans to develop station designs, lighting, and station amenities that are compatible with Rancho Cucamonga's design character.*

Policy CM-3.3: Provide local transit circulator service in the City to serve local neighborhoods, Victoria Gardens, the Metrolink Station, the Civic Center, Central Park, and key destinations.

Implementation Action: *Study the feasibility of establishing a local transit circulator to connect businesses, adjacent development, and activity centers in the City. Explore options for alternative funding from sources other than the General Fund, such as having merchants sponsor the shuttle. These buses should operate on fixed routes (with possibly some minimal real-time deviation) and on regular and convenient schedules. The service could be based on smaller (20-35 seat) buses. This action to include the following:*

Conduct a Transit Planning Study

Study to determine the best approach to initiating local transit service, to develop a Short-Range (Five Year) Transit Plan for operating such a service, and to determine funding sources.

Explore the Feasibility of Extending Local Transit Service

Explore the possibility of extending to adjacent jurisdictions in cooperation with such jurisdictions who could also participate in funding, if beneficial to the City.

Work with Regional Transit Operators (Omnitrans)

Develop the optimum coordination and integration of bus transit services between the local City circulator system and the regional service.

Policy CM-3.4: Consult with Omnitrans to establish and maintain transit hubs at Victoria Gardens, Chaffey College, the Metrolink Station, and other locations as appropriate to facilitate use of transit and transfers between transit services.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.

Policy CM-3.5: Consider and evaluate the relocation of Metrolink Station to Haven Avenue to provide improved connections to transit and to support planned transit-oriented land uses along Haven Avenue.

Implementation Action: Work with Metrolink and SCRRA to study the feasibility of moving the Metrolink Station from its current location to Haven Avenue. Explore options for alternative funding from sources other than the General Fund, such as grants, and specifically grants that promote transit-oriented development.

Policy CM-3.6: In addition to requiring private development to provide transit amenities, consult with regional transit operators to provide attractive and convenient bus stops, including shade/weather protection, seats, transit information, and bus shelters as appropriate.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit

passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel. Also, develop a program, with identified funding sources, for providing amenities at bus stops in the City.

Policy CM-3.7: Continue to develop and maintain a citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets to provide connections between neighborhoods, schools, parks, civic center/facilities, recreational facilities, and major commercial centers.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.8: Continue to encourage the provision of bicycle facilities, such as bicycle lockers and secure bike parking, throughout the City.

Implementation Action: Identify existing locations where bicycle lockers and secure bicycle parking could be provided at key locations throughout the City, and develop a funding and implementation plan. Encourage/require the provision of bicycle lockers and secure bike parking for major development projects, as defined in the Development Code. Modify the Development Code to require provision of bicycle parking spaces, bicycle lockers, and, as appropriate, showers for bicycle riders at new buildings providing significant employment, at transit stations, in the commercial districts, and at recreational destinations in the City.

Policy CM-3.9: Identify and implement a dedicated funding source for implementation and completion of the bicycle network as identified in the Bicycle Plan.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those

arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.10: Continue to complete the installation of sidewalks and require new development to provide sidewalks.

Implementation Action: Use the CIP to identify a schedule for installing new and replacement sidewalks throughout the City, placing priority on installing missing sidewalks near schools and activity centers, and replacing sidewalks that have been identified as hazardous to public safety.

Policy CM-3.11: Continue to require pedestrian amenities on sidewalks on major streets that are key pedestrian routes, including the provision of benches, shade trees, and trash cans.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-3.12: Continue to require that the siting and architectural design of new development promotes safety, pedestrian-friendly design, and access to transit facilities.

Implementation Action: Develop standards to be applied to development projects along transit corridors that require transit and pedestrian accessibility.

Policy CM-3.13: Establish a number of bike hubs in the City (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit nodes and at commercial nodes.

Implementation Action: Conduct a study to determine the best locations for bike hubs in the City, and develop a plan, wayfinding program, and implementation process for providing bike hubs that provide secure bicycle lockers, bike racks, and connections to transit at key locations in the City.

Policy CM-3.14: Enhance pedestrian and bicycle access to local and regional transit, including facilitating connections to transit.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized

categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.15: Coordinate the provision of the non-motorized networks (bicycle and pedestrian) with adjacent jurisdictions to maximize sub-regional connectivity.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.16: Establish fixed route local circulator bus service connecting major activity centers.

Implementation Action: *Explore development of a fixed route local circulator bus system, station location, and funding mechanisms.*

GOAL CM-4: *Maximize the operational efficiency of the street system.*

Policy CM-4.1: Continue to implement traffic management and traffic signal operation measures along the arterial roadway to minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.*

Policy CM-4.2: Continue to design and operate arterials and intersections for the safe operation of all modes of transportation, including transit, bicyclists, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with*

the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.3: Continue to implement Intelligent Transportation System (ITS) measures and advanced traffic management technologies where appropriate.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.4: Maintain the City's transportation infrastructure in good condition; develop and maintain adequate funding sources for its ongoing maintenance and upkeep.

Implementation Action: Continue to implement and follow the schedule for resurfacing streets and streets improvements per the CIP.

GOAL CM-5: Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.

Policy CM-5.1: Continue to require that new development participates in the cost of transportation mitigation and improvements necessitated by new development, including non-automobile solutions.

Implementation Action: Require payment of Traffic Impact Fees as approved by the City Council, used to finance specific improvements made necessary by new development. The relationship between the fees, the cost of the improvements, and new development has been established in fee analyses approved by the City Council. These fees shall be reviewed from time to time and adjusted as needed.

Policy CM-5.2: Require evaluation of potential traffic and transportation impacts associated with new development prior to project approval, and require adequate mitigation measures, including non-automobile solutions prior to, or concurrent with, project development.

Implementation Action: Require applicants to prepare traffic and transportation impact assessments consistent with adopted City guidelines and standards. Continue to require sidewalks, pedestrian paths, and connections to be provided as part of new development projects to improve and enhance access between neighborhoods, and from neighborhoods to schools, parks, trails, commercial centers, and other activity centers.

Policy CM-5.3: Require that new and substantially renovated office, retail, industrial, and multi-unit developments implement transit amenities, including bus turnouts, transit shelters, and other streetscape elements, as appropriate.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-5.4: Require that new and substantially renovated office, retail, industrial, institutional and multi-unit developments include bicycle and pedestrian amenities on site and/or in the vicinity of the development to facilitate bicycling and walking, including on-site bike paths where appropriate, secure off-street bicycle parking, sidewalk improvements, and benches. The City will encourage such developments to provide bicycle facilities such as showers and changing rooms.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-5.5: Allow shared parking between land uses where feasible and appropriate, and encourage “park once” strategies to facilitate the efficient use of parking resources.

Implementation Action: Continue to monitor and look for opportunities to improve parking throughout the City. Incorporate Park-Once strategies on large development projects. Encourage shared use parking in those areas where a mix of uses with different peak usage are located adjacent or near each other. Review and update parking standards to ensure that they are responsive to trip generation patterns and parking usage throughout the City.

Policy CM-5.6: Evaluate proposed parking and circulation plans for new school sites, and coordinate with school districts to provide for safe pedestrian, bicycle, and vehicular access to and around schools.

Implementation Action: Regularly consult with school districts to identify any problems with circulation around school sites. Work with the districts to establish school-specific circulation plans that address traffic management, parking, needed infrastructure improvements (and sidewalks in particular), and programs that can reduce the number of children getting to school by car.

GOAL CM-6: Coordinate with other jurisdictions on regional transportation issues.

Policy CM-6.1: Actively pursue Federal, State, and regional funds for local and regional roadway improvements.

Implementation Action: Assign dedicated staff to research and pursue available funding sources.

Policy CM-6.2: Support appropriate regional plans for high-occupancy vehicle lanes, Bus Rapid Transit and express bus, rail transit, and high-speed rail, provided it does not negatively impact the City.

Implementation Action: *Consult with Omnitrans and/or Caltrans when coordinating with regional transportation plans that directly impact the City.*

Policy CM-6.3: Maintain consistency with the South Coast Air Quality Management District air quality mandates, SANBAG's Congestion Management and Nexus Programs, and SCAG's Regional Mobility Plan requirements.

Implementation Action: *Continue to review and participate in the implementation and update of regional air quality and transportation plans.*

Policy CM-6.4: Require the provision of appropriate mitigation of traffic impacts in surrounding communities resulting from development in Rancho Cucamonga. Work with surrounding communities to ensure that traffic impacts in Rancho Cucamonga resulting from development outside the City are adequately mitigated.

Implementation Action: *Continue to consult with surrounding jurisdictions in the coordination of traffic projects and proposed development.*

Policy CM-6.5: Consult with Caltrans, SCAG, the South Coast Air Quality Management District, SANBAG, Omnitrans, San Bernardino County, and the cities of Upland, Fontana, Ontario, and Montclair to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.

Implementation Action: *Continue to consult with regional agencies to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.*

GOAL CM-7: Maintain an efficient and safe network of goods and freight movement that supports the needs of the business community.

Policy CM-7.1: Continue to maintain a truck circulation system that defines truck routes, directs the movement of trucks safely along major roadways, and minimizes truck travel on local and collector streets.

Implementation Action: *Continue to enforce the truck route ordinance. Periodically review the ordinance to ensure that it adequately manages truck traffic throughout the City.*

4.16.5 STANDARD CONDITIONS OF APPROVAL

Existing regulations address the provision of adequate transportation systems to meet the circulation and transportation needs of the region. Compliance by existing and future development and redevelopment with these standard conditions would reduce traffic congestion and promote traffic safety. These include those Standard Conditions of Approval (SCs) listed below.

SC 4.16-1 Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection

improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.

- SC 4.16-2** All future work within streets, sidewalks, and public places in the City shall comply with Title 12 of the Municipal Code, which requires an encroachment permit from the City and compliance with set standards that include those in the Work Area Protection and Traffic Control Manual. Application for the permit shall be made as part of the City's plan check process and prior to any work on public areas or rights-of-way.
- SC 4.16-3** Improvements to the City's transportation network are planned as part of the SCAG's Regional Transportation Improvement Plan (RTIP); the SANBAG's Measure I 2010–2040 Strategic Plan; and the City's Nexus Improvement/development impact fee (DIF) Program. Future development and redevelopment shall pay applicable DIF during the plan check process. The DIF, along with the use of State and Federal funds, is expected to implement various freeway, highway, roadway projects in and near Rancho Cucamonga.
- SC 4.16-4** All future roadway improvements shall comply with the City's Roadway Functional Design Guidelines, which include the number of lanes, median improvements, access restrictions, intersection spacing, curbside parking, required rights-of-way, and easement access based on the roadway designation. Closely related to roadway design would be the provision of adequate line of sight, in accordance with the City's Intersection Line of Sight design guidelines and General Design Guidelines that address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic and interconnected public and private sidewalks. Roadway improvement plans shall show compliance with these standards, as reviewed by the City's Building and Safety Department during the plan check process.
- SC 4.16-5** The City shall continue to implement Title 10 of the Municipal Code, which establishes various responsibilities and programs to regulate vehicles and traffic in the City. The enforcement of traffic regulations would promote safety on streets, sidewalks and driveways through speed limits, parking permits, truck routes, pedestrian rights and duties, intersection controls, and other restrictions.
- SC 4.16-6** Future development and redevelopment shall comply with the City's Trip Reduction Ordinance, which calls for the provision of amenities or programs to encourage the use of alternative modes of travel by employees; patrons; and visitors of commercial, industrial, office, and mixed use developments. These include shower facilities, preferred parking, bicycle storage, video conference facilities, transit improvements, and other measures to reduce vehicle trips in the City. These facilities shall be shown in the site improvement and building plans submitted to the City during the permit process.
- SC 4.16-7** Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register

with the SCAQMD to implement an emission reduction program, in accordance with this Rule.

SC 4.16-8 The City shall develop trails in accordance with the Hiking and Riding Trails Master Plan to provide opportunities for hiking, riding, and bicycle use throughout the City. Concurrently, the City shall also implement its Bicycle Plan for the development of bikeways, bike lanes, and bike routes throughout the City. Future development and redevelopment on sites where hiking, riding, and bicycle trails are planned shall provide the necessary improvements and/or land dedication to facilitate the implementation of the Hiking and Riding Trails Master Plan.

SC 4.16-9 Future development and redevelopment shall comply with SANBAG's Long Range Transit Plan, which calls for improvements to the transit systems that serve the County, including the provision of premium transit service, bus transit improvements and rail system improvements. Accommodations for bus bays, bus stops, transit centers, and other facilities shall be provided by future development and redevelopment in accordance with the Long Range Transit Plan, and in consultation with SANBAG. Implementation of this plan is expected to encourage greater transit use in the County.

4.16.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would generate new vehicle trips that could add to existing traffic volumes on roadways, intersections and freeways in and near the City.

Circulation System

Threshold 4.16a: **Would the proposed 2010 General Plan Update conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The traffic study by Kunzman Associates analyzes the traffic impacts of buildout of the proposed 2010 General Plan Update. Because SANBAG's traffic modeling forecasts and projected long-term transportation needs planning is based upon traffic growth projections contained in Rancho Cucamonga's 2001 General Plan, the study compared the trip generation of all land uses at buildout of the current 2001 General Plan with the proposed 2010 General Plan Update to determine compliance with SANBAG documents. The analysis showed that the proposed 2010 General Plan Update would generate fewer vehicle trips daily and during the AM and PM peak hours than the current land use plan. This is due to a decrease in reduced overall employment and the vehicle trips associated therewith.

Projections of traffic volumes in 2030 were based on the linear growth of traffic from 2009 (existing conditions) to 2030 (proposed General Plan buildout), using the incremental growth assumptions from the I-10 High-Occupancy Vehicle (HOV) Traffic Model (Year 2003) and the Year 2030 average daily traffic forecasts. The existing traffic count data were used to determine initial turning movement proportions according to the forecasted traffic volumes on each approach. Table 4.16-3 shows the projected delay and LOS at major intersections in the City.

**TABLE 4.16-3
YEAR 2030 INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
Grove Avenue				
Foothill Boulevard	22.1	C	22.2	C
Arrow Highway	10.7	B	11.8	B
Carnelian Street				
SR-210 westbound	18.7	B	16.1	B
SR-210 eastbound	11.6	B	19.5	B
19th Street	33.6	C	37.1	D
Base Line Road	31.1	C	55.0	D
Vineyard Avenue				
Foothill Boulevard	28.3	D	49.7	D
Arrow Highway	30.6	D	35.6	D
Archibald Avenue				
SR-210 westbound	18.6	B	15.8	B
SR-210 eastbound	13.2	B	15.7	B
19th Street	28.5	D	37.8	D
Base Line Road	27.1	D	53.6	D
Foothill Boulevard	29.5	D	43.2	D
Arrow Highway	30.9	D	35.1	D
4th Street	34.4	D	37.4	D
Haven Avenue				
SR-210 westbound	16.0	C	20.4	C
SR-210 eastbound	18.0	B	15.8	B
Base Line Road	29.3	D	38.9	D
Foothill Boulevard	36.0	D	49.0	D
Arrow Highway	31.0	D	38.1	D
Milliken Avenue				
SR-210 westbound	18.0	B	13.9	B
SR-210 eastbound	15.7	B	16.0	B
Base Line Road	29.4	C	33.2	C
Foothill Boulevard	33.5	C	40.7	D
Arrow Highway	28.3	C	38.3	D
4th Street	34.2	C	47.8	D
Rochester Avenue				
Arrow Highway	48.5	D	99.9	F
with improvements	44.4	D	50.5	D
Day Creek Boulevard				
SR-210 westbound	18.4	B	16.8	B
SR-210 eastbound	15.1	B	16.2	B
Etiwanda Avenue				
Base Line Road	29.9	C	29.9	C
Foothill Boulevard	38.8	D	58.2	E
with improvements	35.5	D	41.8	D
Arrow Highway	99.9	F	99.9	F
with improvements	25.9	C	27.6	C
East Avenue				
Base Line Road	77.7	E	64.6	E
with improvements	31.7	C	32.1	C

**TABLE 4.16-3 (Continued)
YEAR 2030 INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
I-15 southbound				
Beech Avenue	19.5	B	20.4	C
Base Line Road	22.6	C	14.3	B
Foothill Boulevard	9.7	A	7.5	A
I-15 northbound				
Beech Avenue	18.9	B	33.6	C
Base Line Road	14.3	B	18.9	B
Foothill Boulevard	12.3	B	14.3	B
Americana Way				
Base Line Road	22.0	C	23.0	C
Bold text identifies Delay and LOS that exceed standards.				
Source: Kunzman 2009.				

As indicated above, the City of Rancho Cucamonga has set a standard at LOS D or better for intersections in the City. Based on the Year 2030 projections, the following intersections are projected to operate at LOS E or worse:

- Rochester Avenue at Arrow Highway (LOS F in PM peak)
- Etiwanda Avenue at Foothill Boulevard (LOS E in PM peak)
- Etiwanda Avenue at Arrow Highway (LOS F in PM peak)
- East Avenue at Base Line Road (LOS E in PM peak)

Improvements to these intersections are needed to improve LOS and have been identified as follows:

Rochester Avenue at Arrow Highway:

Northbound right-turn overlap
Eastbound additional left-turn lane
Westbound right-turn overlap

Etiwanda Avenue at Foothill Boulevard:

Northbound additional through lane
Northbound right-turn lane
Southbound right-turn lane
Westbound additional through lane

Etiwanda Avenue at Arrow Highway:

Northbound additional through lane
Northbound right-turn lane
Southbound additional through lane
Eastbound additional through lane
Westbound right-turn lane

East Avenue at Base Line Road:

Northbound left-turn lane
Northbound additional through lane
Southbound additional through lane
Eastbound additional through lane
Westbound additional through lane

These improvements would lead to operations of LOS D or better at these intersections.

The Circulation Plan in the proposed 2010 General Plan Update's Community Mobility Element shows that the above-listed improvements have been planned to be constructed as necessary and prior to buildout. See Exhibit 4.16-3, Circulation Plan. Funding will be provided primarily through the DIF program.

The Community Mobility Element contains a number of goals and supporting policies that would maximize the operational efficiency of the street system (Goal CM-4) and that would require new development to mitigate impacts and contribute to the improvement to the City's transportation system (Goal CM-5). Implementation of these goals and policies would accommodate the roadway circulation needs of existing and future developments in the City.

Applicants for future development and redevelopment projects would be required to prepare traffic studies and participate in the DIF program for the improvement of the local and regional roadway network (SC 4.16-1). Improvements to the local and regional roadway network would include the improvement of the four intersections that are projected to operate at LOS E or worse by 2030. With local on-site or abutting roadway improvements provided by individual developments (SC 4.16-2) and regional transportation projects (SC 4.16-3), increases in traffic volumes are expected to be accommodated by the improved roadway system. Impacts would be less than significant; no mitigation is required.

Impact 4.16a: Buildout of the proposed 2010 General Plan Update would increase traffic volumes in the City, leading to four intersections operating at LOS E or worse by 2030. Improvements at these intersections would allow them to operate at LOS D or better. SCs 4.16-1, 4.16-2, and 4.16-3 would ensure improvement of the roadway system to accommodate future traffic volumes. Impacts would be less than significant; no mitigation is required.

Congestion Management Program

Threshold 4.16b: Would the proposed General Plan Update 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?

As indicated above, the City of Rancho Cucamonga has identified an LOS standard of LOS D or better, while the San Bernardino County CMP uses an LOS standard of LOS E or better for CMP-designated roadways. Since future development and redevelopment projects would be subject to City review and compliance with the City's LOS D standard (SC 4.16-1), they are not expected to lead to intersections operating at LOS E or worse. When intersections are projected to operate at LOS E or worse, the requirement for appropriate mitigation would ensure that the development implements the necessary improvements to allow the affected intersections to operate at LOS D or better.

The CMP calls for local jurisdictions to develop and implement a development mitigation program that includes payment of fair share fees for the needed roadway system improvements. The City of Rancho Cucamonga's DIF program complies with the CMP, and the City collects DIF from new development (SC 4.16-1). These fees will be used to implement the City's needed roadway improvement projects. Regional transportation improvements are also expected to be implemented over time (SC 4.16-3) and would maintain LOS E or better operations at areawide intersections.

Thus, implementation of the proposed 2010 General Plan Update and future development and redevelopment pursuant to the proposed 2010 General Plan Update would lead to LOS D intersection operations in the City, which would not exceed the CMP standard of LOS E. No adverse impacts would occur; no mitigation is required.

Impact 4.16b: With compliance of the City's standard of LOS D or better, no exceedance of the CMP standard of LOS E would occur with future development and redevelopment under the proposed 2010 General Plan Update. Adherence to SCs 4.16-1 and 4.16-2 would ensure that no impacts would occur; no mitigation is required.

Air Traffic

Threshold 4.16c: Would the proposed General Plan Update 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?

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would not be directly served by air transportation and this would not affect air traffic volumes at the LA/Ontario International Airport.

Goal CM-7 of the Community Mobility Element calls for a balance between the benefits of LA/Ontario International Airport and the impacts of aircraft operations. Supporting policies call for regional transit options (such as the extension of the Gold Line light rail system into the airport) between the City and the airport and consultation with the airport regarding noise, safety, and land use impacts to Rancho Cucamonga.

Development in the southwestern section of the City may affect aircraft operations at this airport and would need to comply with Part 77 of the Federal Aviation Regulations regarding structural height limits to prevent hazards to users, occupants, and visitors and to prevent obstruction to aircraft operations (see SC 4.8-9, in Section 4.8, Hazards and Hazardous Materials). This issue is discussed further in Section 4.8, Hazards and Hazardous Materials, of this PEIR. Impacts on air traffic patterns would be less than significant; no mitigation is required.

Impact 4.16c: Future development and redevelopment would not create a direct demand for air transportation; compliance with SC 4.8-9 from Section 4.8, Hazards and Hazardous Materials, would prevent any hazards to aircraft operations. Impacts would be less than significant; no mitigation is required.

Roadway Hazards

Threshold 4.16d: Would the proposed General Plan Update substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

During construction of roadway improvements associated with individual developments or City activities, traffic flows along various roadway segments may be affected as travel lanes are temporarily blocked to traffic. The City requires implementation of the standards in Title 12 of the Municipal Code (SC 4.16-2). Under this Title, an encroachment permit is needed for all construction or other activities within public rights-of-way. Any activity that would obstruct traffic flow requires compliance with the Work Area Protection and Traffic Control Manual. This Manual calls for the provision of traffic controls that include required signs, temporary striping,

driveway access, street closures, detours and barricades, flagger control, and other measures to maintain public convenience and safety for motorists, cyclists, pedestrians, and construction workers. Compliance with these guidelines would minimize traffic obstruction during construction and prevent hazards to all persons near the construction zones. Impacts due to temporary construction activities on public roadways would be less than significant; no mitigation is required.

Increases in vehicle trips on local roadways and freeways due to future development and redevelopment in the City could increase the potential for accidents. However, roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, access and circulation design guidelines, and intersection line-of-sight design guidelines (SC 4.16-4). Compliance with these guidelines would allow City roadways to (1) accommodate vehicles and traffic volumes; (2) separate vehicle and pedestrian traffic; and (3) provide clear zones to prevent traffic accidents.

Conflicts between vehicular traffic and other forms of travel (bicyclists and pedestrians) may also cause traffic hazards. Implementation of Title 10 of the City's Municipal Code (SC 4.16-5) promotes traffic safety through the regulation and enforcement of speed limits, stop controls, driving rules, pedestrian rights and duties, parking permits, truck routes, and other street traffic regulations. Designated truck routes would also divert trucks from residential areas and would reduce hazards to pedestrians and local traffic. This standard condition would also reduce traffic hazards in the City. Thus, impacts related to traffic hazards would be less than significant; no mitigation is required.

Impact 4.16d: Increases in vehicle trips from future development and redevelopment under the proposed 2010 General Plan Update may increase the potential for traffic accidents. Compliance with SCs 4.16-2, 4.16-4, and 4.16-5 would prevent the creation of traffic hazards. Impacts would be less than significant; no mitigation is required.

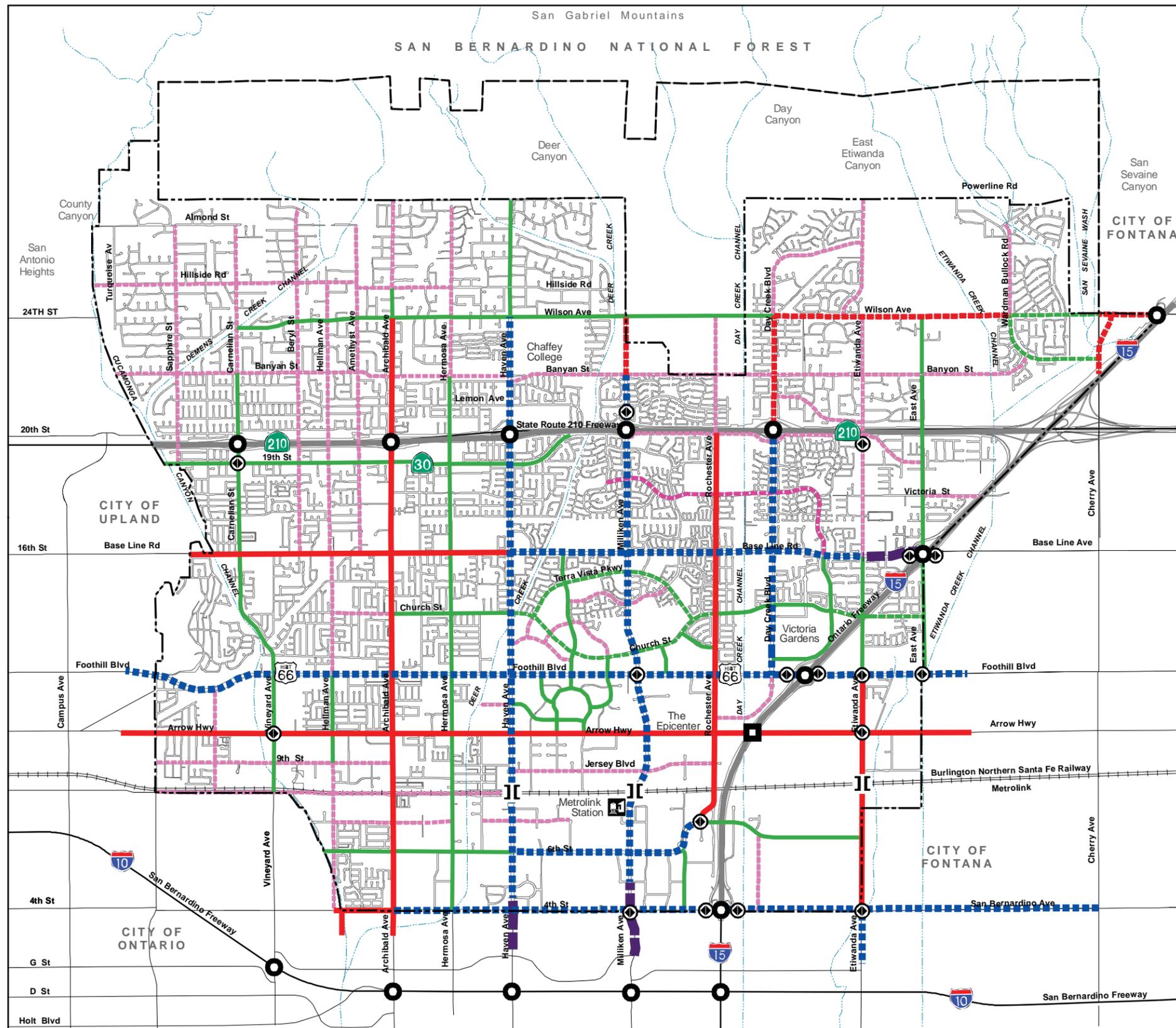
Emergency Access

Threshold 4.16e: Would the proposed General Plan Update result in inadequate emergency access?

Future development and redevelopment is not expected in areas that are used for emergency access and evacuation. Evacuation routes include major roadways in the City, with freeways serving as primary exit routes for the planning area.

Site Access

Access to individual development sites would be made available through existing or planned roadways, as required under the City's Subdivision Ordinance – Title 16 of the Municipal Code, which requires all parcels to have access to a public street. Roadways, driveways, and parking lot aisles shall be designed and constructed in accordance with SC 4.16-4, which mandates following the City's roadway functional design guidelines, line-of-sight design guidelines, and access and parking design guidelines. Thus, future development and redevelopment pursuant to the proposed 2010 General Plan Update would have adequate site access. No adverse impact related to site access would occur; no mitigation is required



- Circulation Plan**
- Collector
 - - - Modified Collector with Median
 - Secondary
 - - - Modified Secondary with Median
 - Major Arterial
 - - - Modified Major with Median
 - Major Divided Arterial
 - Major Divided Highway
 - Freeway
 - Intersections Widened beyond Standards
 - Railroad Grade Separation
 - Freeway Interchange
 - Proposed Freeway Interchange
 - Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways



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Circulation Plan
Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-3



Emergency Access and Evacuation

Construction activities on public rights-of-way may temporary block traffic and access near the construction zone. Compliance with SC 4.16-2, which includes Title 12 of the City's Municipal Code and the standards in the Work Area Protection and Traffic Control Manual, would maintain emergency access to individual parcels at all times. The Manual specifies that early coordination with officials having jurisdiction over the affected cross streets and providing emergency services should occur before roadway or ramp closures. It also states that the needs of emergency service providers (law enforcement, fire, and medical) should be assessed and appropriate coordination and accommodations made. Thus, notification of the Rancho Cucamonga Police and Fire Departments of roadway construction work would allow for the use of alternative routes by emergency vehicles. This would avoid adverse impacts to emergency response and access.

The plan check and building permit process by the Rancho Cucamonga Fire Department includes review of access for emergency vehicles, in accordance with the California Fire Code (SC 4.14-3). Compliance with the requirements for emergency lane width, vertical clearance, and distance would ensure that adequate emergency access is available for all new development and redevelopment projects. New roadways are expected to be provided to serve future development in the hillside areas in the City's SOI in order to ensure that emergency vehicles can reach every structure built in this area. This access would also facilitate emergency evacuation of scattered developments anticipated in this area. Impacts on traffic flows for emergency response or evacuation would be less than significant; and no mitigation would be required.

Impact 4.16e: Future development and redevelopment under the proposed 2010 General Plan Update would have to provide emergency access in accordance with SCs 4.16-2 through 4.16-4. Compliance with these regulations would reduce impacts to less than significant levels; no mitigation is required.

Alternative Transportation

Threshold 4.16f: Would the proposed General Plan Update conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would increase vehicle trips and the use of alternative transportation systems in the City.

The proposed 2010 General Plan Update's Community Mobility Element provides emphasis on the developing alternative transportation systems to provide choices in travel within, to, and from the City. It promotes the development and use of alternative transportation systems through several goals and policies, including Goal CM-1 which calls for an integrated and balanced multi-modal transportation network in the City. Goal CM-2 calls for bicycling, walking, telecommuting, and use of energy-efficient vehicles as alternatives to the automobile. Goal CM-3 calls for a transportation system that includes connected transit, bicycle, and pedestrian networks. Policies that support these goals and those that promote bus transit use, walking, and bicycling are included in the Community Mobility Element, as listed above. Additionally, the Community Mobility Element includes a Bikeway Plan, which identifies the ultimate bikeway system to be implemented in the City. Thus, the proposed 2010 General Plan Update supports alternative transportation and beneficial impacts would occur.

In addition, the City's Trip Reduction Ordinance (SC 4.16-6) identifies the facilities that need to be provided in larger multi-family developments, commercial, office, and industrial projects; these would encourage the use of alternative transportation systems. Compliance with the SCAQMD's Rule 2202 (SC 4.16-7) would also reduce vehicle trips and trip lengths by encouraging the use of alternatives to the automobile. The Hiking and Riding Trails Master Plan (SC 4.16-8) also promotes walking/hiking, biking, and horse riding alternatives to reach various destinations in the City and surrounding areas. Implementation of SC 4.16-9 is also expected to lead to the expansion and improvement of transit systems in the County. No conflict with policies, plans and programs for alternative transportation would occur from future development and redevelopment under the proposed 2010 General Plan Update.

Impact 4.16f: The proposed 2010 General Plan Update promotes alternative transportation systems, through Goals CM-1, CM-2, CM-3, and their supporting policies. Future development and redevelopment would need to comply with SCs 4.16-6 and 4.16-7, which would provide facilities for alternative modes of transportation. Implementation of SC 4.16-8 and 4.16-9 would also encourage the use of alternative transportation modes. No conflict with policies, plans and programs for alternative transportation would occur; no mitigation is required.

4.16.7 CUMULATIVE IMPACTS

Traffic issues are generally regional in nature, with drivers and travelers commuting throughout the Southern California region to places of employment and residence. Thus, cumulative traffic impacts are evaluated based on impacts to the roadway transportation network that serves the region.

Future development and redevelopment pursuant to the proposed 2010 General Plan Update and future development and redevelopment in the rest of the region would increase the number of vehicle trips to, through, and from the City and within the region. Traffic congestion is expected to increase on freeways and major roadways, if no changes to the existing transportation network are made. Some vehicle trips would be confined to the City (short trips), while other trips would travel outside the City to surrounding cities and urban centers and would affect the regional transportation system.

Adverse impacts to the roadway circulation network would occur if the needed roadway improvements and trip-reduction measures and programs are not implemented. In accordance with City regulations, each development would be required to implement the roadway improvements on site and along its site boundaries and would be required to pay its fair share for needed improvements at off-site locations. Payment of the City's DIF would allow the City to fund signalization, roadway widening, and other transportation programs and improvements necessary to maintain acceptable levels of service at local intersections. The San Bernardino County Congestion Management Program (CMP) also calls for improvements to the designated CMP roadway network, to maintain levels of service at LOS E or better.

As approved by SANBAG, the City's DIF program collects fair share fees from new developments for funding roadway improvement projects that would relieve congestion at intersections and roadways in and near the City. Payment of fair share fees by individual developments would provide the necessary funding to implement roadway improvements that would reduce traffic congestion and maintain traffic safety. In accordance with SANBAG's Development Mitigation Nexus Study, future traffic volumes have also been projected and specific improvements to the regional transportation system have been identified. Funding for

these regional projects has been incorporated into the individual cities' DIF programs to allow for collection of adequate funding for these future transportation projects.

In coordination with the cities and counties in the SCAG region, SCAG has projected growth in population, housing, and employment. Travel forecasts for SCAG's RTP assume the buildout of (1) the City's proposed 2010 General Plan Update; (2) various community and subregional plans; and (3) the General Plans of the adjacent cities. The RTP is a long-range transportation plan that defines the vision and overall goals for the regional multi-modal transportation system and identifies needed multi-modal transportation improvements, including freeways, HOV facilities, bus and rail transit, freight movement, and aviation.

In support of the RTP, the RTIP lists the specific regional transportation projects needed to meet the region's circulation needs, along with each project's funding sources. Completion of these projects is expected to meet the transportation needs of the region to 2030.

Thus, traffic impacts associated with increases in traffic volumes at buildout of the City and SOI can be reduced or avoided through payment of fair-share development impact fees in accordance with SANBAG's Nexus Study and CMP; the City's roadway infrastructure projects; and project-level roadway improvements. These programs would maintain acceptable roadway operations and would prevent cumulatively significant adverse impacts in terms of traffic and circulation in the County. While increases in traffic volumes on the regional roadway network could be expected in the future, these increases have been considered and accounted for SCAG's RTP and RTIP. Completion of RTIP projects would serve the transportation and circulation needs of the region with no adverse impacts. No conflict with regional transportation plans is expected from the proposed 2010 General Plan Update.

Since the City's development impact fees would fund needed transportation projects (including regional traffic infrastructure), cumulative impacts would be less than significant. Planned roadway and freeway widening and improvement projects by various public agencies would also help improve the transportation system and traffic circulation in the region. Thus, no cumulative adverse impacts are expected.

4.16.8 MITIGATION MEASURES

No significant adverse impacts on traffic and transportation have been identified; therefore, no mitigation is required.

4.16.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Circulation System

Less Than Significant.

Congestion Management Program

No Impact.

Air Traffic

Less Than Significant.

Roadway Hazards

Less Than Significant.

Emergency Access

Less Than Significant.

Alternative Transportation

No Impact.

Cumulative Impacts

No Impact.