5.15 TRANSPORTATION/ TRAFFIC

The six components of the project analyzed herein are:

1) Adoption and implementation of the General Plan;
2) Adoption and implementation of the revised Zoning Code;
3) Adoption and implementation of the revised Subdivision Code;
4) Adoption and implementation of amendment to the Noise Code;
5) Adoption and implementation of the Magnolia Avenue Specific Plan (MASP); and
6) Adoption and implementation of the Citywide Design and Sign Guidelines.

Of the six project components, the revised Subdivision Code, the Noise Code Amendment, and the Citywide Design and Sign Guidelines address land division, site planning, building design, and community aesthetics rather than changes to land uses which could affect traffic or parking standards. The three components listed above were created for compatibility with the proposed General Plan Update. Since they are not considered to have impacts related to Transportation and Traffic, these three project components will not be analyzed further in this Section. The MASP implements General Plan land uses while attempting to focus or "intensify" uses around key transportation corridors. This places more people closer to public transportation options which would reduce automobile trips. Mode split and auto occupancy information was reviewed in the *General Plan 2025 Program Transportation Study,* July 2004, revised April, 2007 ("Transportation Study") to ensure that proper allowances were made for transit ridership and ridesharing in the traffic model; they are consistent with assumptions made in the Southern California Association of Governments (SCAG) model which takes into account some trip savings in mixed use areas where housing and jobs are in close proximity. Therefore, for purposes of this EIR analysis, any additional reductions, beyond what SCAG typically assumes, gained through the MASP were not taken into consideration in the traffic analysis. The revised Zoning Code includes parking standards and requirements and therefore it is addressed in this section where adequate parking is analyzed. Impacts related to the adoption and implementation of the General Plan will be addressed herein.

The Transportation and Traffic Section of this EIR has been changed from the previously circulated EIR. In addition to the overall changes listed in the Project Description Section of this EIR, background information and analysis was added for the Planning Area. Information for all topics within this Section was verified and updated as necessary. The *City of Riverside General Plan 2025 Program Transportation Study* was updated and this EIR section is based upon the updated Transportation Study. Both the Project as it is expected to be built-out and a second "worst case" project were evaluated using SCAG regional traffic modeling for the Planning Area.

Since an initial study was not prepared with the issuance of the Notice of Preparation, the following discussion is related to the project's potential to cause an impact by increasing traffic in relation to the existing traffic load and capacity of the street system, exceeding an established level of service standard, changing air traffic patterns, increasing hazards due to design features, causing inadequate emergency access, causing inadequate parking capacity, or causing conflicts with adopted policies, plans, or programs supporting alternative transportation.

In addition to other reference documents, the following references were used in the preparation of this section of the EIR:

- Transportation Research Board, *Highway Capacity Manual,* 2000.
- Meyer, Mohaddes, Associates, Inc., *City of Riverside General Plan 2025 Program Transportation Study,* July 2004, revised April, 2007 ("Transportation Study").
- City of Riverside, *Airport Master Plan Final Technical Report for Riverside Airport*, approved by City on November 16, 1999.
- City of Riverside, *General Plan*, *"Exhibit 2 Existing Roadway Functional Classifications,"* 1994.
- Southern California Association of Governments, Final 2004 Regional Transportation Plan Amendment #3, adopted June 7, 2007, (http://scag.ca.gov/rtp2004/2004amend/Final_2004RTP_Amendment3.pdf)
- Southern California Association of Governments, *Regional Aviation Plan for the 2004 Regional Transportation Plan*, April, 2004.
- City of Riverside, *Railroad Grade Separation Report*, 2003.
- Riverside County Transportation Commission (RCTC), *Perris Valley Line,* Accessed on March 2007. (Available at http://www/perrisvalleyline.info/).
- Southern California Association of Governments, *Destination 2030: 2004 Regional Transportation Plan.* April, 2004.
- U.S. Census Bureau website: http://www.census.gov/main/www/cen1990.html, accessed May 2, 2007.

Methodology

The City and Sphere of Influence (SOI) areas are analyzed together in all the traffic modeling and sometimes are referred to in this section of the EIR as "the City" or "the Planning Area." To assure that traffic analyses evaluated the existing and future conditions correctly, existing and approved developments within the SOI which have not yet been annexed were included in the modeling.

Three future General Plan land use scenarios were developed in order to evaluate impacts on the circulation system within the Planning Area. The three scenarios have three different levels of development intensity ranging from "Typical" densities that the City expects to be built by 2025 to the "worst case" maximum allowable densities throughout the Planning Area; to "maximum with planned residential development (Maximum w/PRD)." The three levels are described below, however for comparison and to provide a bookend analysis, only the results of Typical and Maximum w/PRD are presented in this section:

Typical[1] – Assumes generally average residential densities for future areas of development with most existing built-out areas generally staying the same as today. This is the most likely scenario for how Riverside will grow in the future, and is close in comparison to SCAG's Regional Model. Total population within the Planning Area is estimated to reach 383,077 by 2025 under the Typical level of development.

[1] See Table LU-3 – Land Use Designations in the General Plan for exact density assumptions.

Maximum[1] – The maximum allowable densities for future areas of residential and commercial development are assumed, with many existing buildings replaced with higher density development. Total population within the Planning Area could reach 486,376 by 2025 under the Maximum level of development.

Maximum with PRD[1] – Maximum residential densities can be exceeded if proposed under a "planned residential development." These Maximum w/PRD densities were assumed in all areas where allowed. Total population within the Planning Area could reach 585,926 by 2025 under the Maximum w/PRD level of development. This represents a "worse case" for CEQA analysis purposes, but it is not realistic to assume this level of development will be allowed or achieved through the Planning Area unless catastrophic destruction occurred and many developed portions of the Planning Area were rebuilt at Maximum with PRD levels.

As part of the General Plan update, an updated travel demand model for the City of Riverside was produced and is based on the regional model of SCAG. The regional model was used as the main model and subarea modeling procedures were then used to create a focused subarea model for the City and SOI. The existing models were used to build upon the network, zone structure, and trip generation components of the regional model. The City model is fully nested within the regional model and regional zones area used and disaggregated for greater detail in the City. A hierarchical modeling approach was established, using regional trip tables as the basis for all regional trips.

The internal City trip generation is based on land use data that was converted into socioeconomic data. This methodology is used because the regional model, upon which the City model is based, uses socioeconomic data to drive model trip generation. The City Planning Division provided the land use data.

Mode split, which involves separating the predicted trips from each origin zone to each destination zone into distinctive modes of transportation (e.g., walking, bicycle, driving, train, bus) and auto occupancy, which estimates the number of passengers per vehicle, was reviewed to ensure that suitable allowances were made for transit ridership and ridesharing in the model, and that they were consistent with SCAG. Links were made between the travel demand model's zonal data and the GIS databases for compatibility. The model's base year traffic was validated across the City's major travel corridors and also subregional corridors.

Although not usually analyzed at the programmatic General Plan level, a model post-processor was developed that enabled the City to utilize forecasts at the intersection level for selected major intersections in the City. The model post-processor includes the development of an "off-model" spreadsheet and the use of software such as TRAFFIX for use in calculating intersection levels of service (LOS). Intersection traffic volumes were obtained from a series of traffic counts conducted in 2003 to identify intersection traffic flows at 15 key intersections in the City. The City chose these 15 intersections to study because they are on regional transportation routes at key intersections or where regional transportation routes intersect. The intersection analysis was conducted in order to give more information about how regional traffic affects the City. This intersection analysis was performed for informational purposes only, however. Mitigation measures cannot be feasibly designed for intersection impacts at a programmatic level because variables affecting intersection performance, such as driveway configurations, land use types,

etc. must be evaluated on a project-specific basis. The appendix of the Traffic Report contains the model base network, a map of the Traffic Analysis Zone system and the zonal trip generation data that was used in the existing model runs and for the two buildout scenarios.

A series of interim model runs were performed prior to the preparation of the Circulation Element and these were shared with the Citizens' Advisory Committee, City Planning Commission, and City Council for their input and recommendations to evaluate the effects of changes to the circulation system. The results of the model runs showing roadway volumes and levels of service are included in the appendix of the Transportation Study, and a general description of each model run as follows:

- Existing 2003 volumes on existing 2003 network ─ This evaluated the existing conditions of the roadway system, and based on 2003 traffic counts, not the model run.
- Existing 2003 roadway network with the Typical Density Land Use Data ─ This looked at the impacts of the future land use on the existing roadway system, with no improvements.
- 1994 General Plan Roadway Network with the Typical Density Land Use Data ─ This assumes that all streets are built to the circulation system contained within the 1994 General Plan.
- Alternative 1 – 1994 General Plan Roadway Network with the Typical Density Land Use Data and Cajalco Road as six lanes between I-215 and I-15 – This evaluates the inter-regional and local impacts of improving Cajalco Road, thus relieving traffic on other east-west roadways such as SR 91.
- Alternative 2 – 1994 General Plan Roadway Network with the Typical Density Land Use Data and Cajalco Road as six lanes between I-215 and Orange County – This also evaluates the inter-regional and local impacts of improving Cajalco Road, thus relieving traffic on other east-west roadways such as SR 91.
- Alternative 3 – 1994 General Plan Roadway Network with the Typical Density Land Use Data and Cajalco Road as six lanes between I-215 and I-15, Central Avenue connection in place and Overlook Parkway connected to Madison – This helped in the evaluation of changes due to the Central Avenue connection and the Overlook Parkway Connection.
- Alternative 4 – 1994 General Plan Roadway Network with the Typical Density Land Use Data and Cajalco Road as six-lanes between I-215 and I-15 and Overlook Parkway as four-lanes connected to Madison – This helped in the evaluation of changes due to the Overlook Parkway connection to Madison. Of the four alternatives, this was the preferred alternative and was carried forward for the final analysis of the General Plan Circulation Element traffic analysis.
- Proposed General Plan 2025 Circulation System with Typical Density Land Use ─ This is what the Transportation Study is based upon, and includes Cajalco Road as 6-lanes from I-215 to I-15, Overlook Parkway as two-lanes to Madison, and no Central Avenue connection.
- Proposed General Plan 2025 Circulation System with Maximum Density with PRD Land Use ─ This is also discussed within the Transportation Study, and includes Cajalco Road as 6-lanes from I-215 to I-15, Overlook Parkway as two-lanes to Madison, and no Central Avenue connection.

SETTING

A comprehensive transportation network of streets and highways, multi-use trails, bus transit and commuter rail provides mobility options within the City of Riverside. The automobile has been the dominant mode of travel in the region, and will likely continue to be, but the mix of facilities and modal types provides options for travel that are not dependent on the automobile for regional mobility.[2]

The City of Riverside is served by the existing network of roadways, shown in **Figure 5.15-1, Existing Network of Roadways**. There are several freeways within the City limits:

- **SR-91**: a major east-west inter-regional facility that runs from the beach cities in Los Angeles County and ends at SR-60 to the east;
- **SR-60**: another east-west facility that terminates near downtown Los Angeles and is generally located north of SR-91 and is concurrent with I-215 for approximately 5 miles east of the City of Riverside; and
- **I-215**: a north-south interstate that provides access to I-15 in San Bernardino on the north and ties to I-15 south of the City near Murrieta.

Existing traffic volumes on these freeways within the City range from 101,000-125,000 vehicles per day (vpd) on SR 60, 160,000-197,000 vpd on SR-91, and 151,000-173,000 vpd on I-215.

According to the General Plan, the City of Riverside has defined the roadway system using a series of functional roadway classifications, consisting of local streets, collector streets, arterial streets, and scenic and special boulevards and parkways.

Local Streets

Local streets principally provide vehicular, pedestrian, and bicycle access to property that is directly abutting the public right-of-way with movement of "through" traffic discouraged. Local streets are designated to be 36' wide curb-to-curb within a 66-foot right-of-way and have two through lanes (one in each direction).

Collector Streets

Collector streets are intended to serve as the intermediate route to handle traffic between the local streets and streets of higher classification. Collector streets also provide access to abutting property, and are two-lanes in width. Collector streets may handle some localized "through" traffic from one local street to another; however, their purpose is not to provide for through traffic capacity but to connect the local street system to the arterial network. The 66' collector streets are designed to be 40' wide curb-to-curb within a 66' right-of-way; and the 80' collector streets are designed to be 40' wide curb-to-curb but have an 80' wide right-of-way.

[2] The EIR presents information regarding the existing setting of the transportation network throughout the City and Sphere areas. More detailed information regarding Magnolia Avenue is presented in Chapter 5 of the Magnolia Avenue Specific Plan, which is incorporated by reference herein.

Arterial Streets

Arterial streets carry through traffic and connect to the State highway system with restricted access to abutting properties. They are designed to have the highest traffic carrying capacity in the roadway system with the highest speeds and limited interference with traffic flow by driveways. Riverside has several arterial classifications: 88' arterial with four-lanes, 64' wide curb-to-curb; 100' arterial with four lanes, a raised median, 80' wide curb-to-curb; 110' arterial with four lanes, a raised median, 86' wide-curb-to-curb; 120' arterial with six lanes, a raised median, 100' wide curb-to-curb; and a 144' arterial with eight travel lanes, a raised median, 124' wide curb-to-curb. In general, parking may be allowed, or peak hour parking may be prohibited on higher volume arterials.

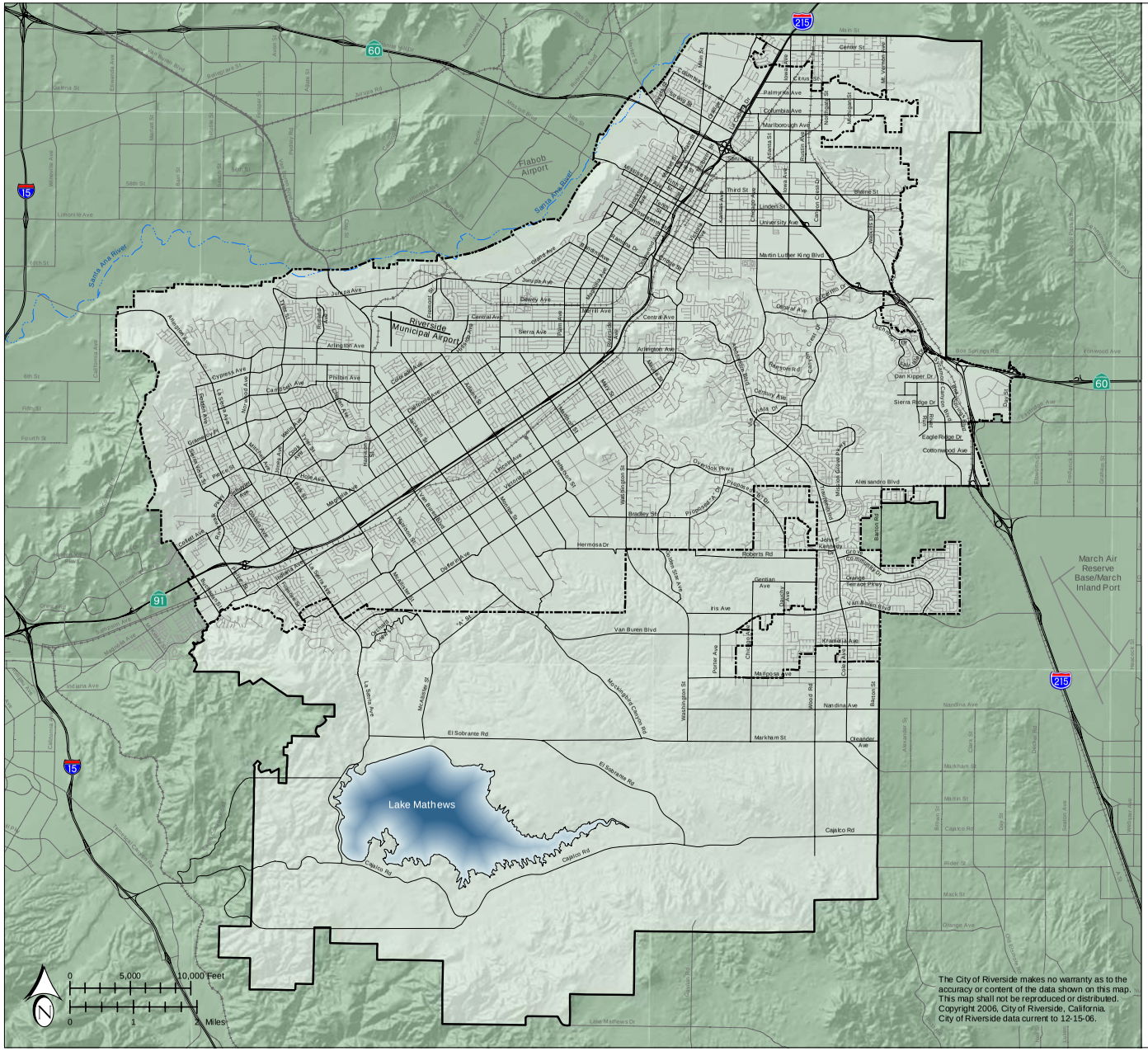
Scenic and Special Boulevards and Scenic Parkways

Some roads are designated as scenic boulevards, special boulevards, and scenic parkways, may require special landscaping and additional right-of-way. Some roadways designated this way include: Arlington Avenue, Van Buren Boulevard, Overlook Parkway, Alessandro Boulevard, La Sierra Avenue, among others. Regardless of special designations, all roadways were evaluated at their appropriate classifications.

Level of Service

Level of Service (LOS) is a qualitative measure used to describe the efficiency of traffic flow. LOS describes the way traffic conditions are perceived by individuals. LOS measurements also describe variables such as speed and travel time, freedom to maneuver, traffic interruptions, traveler comfort and convenience, and safety. Measurements range from LOS "A" (representing free flow and excellent comfort for the motorist, passenger or pedestrian) to LOS "F" (reflecting highly congested traffic conditions where traffic volumes approach or exceed the capacities of streets, sidewalks, intersections, etc.). **Table 5.15-A, Intersection Level of Service Definitions**, identifies conditions associated with each LOS descriptor. LOS is based on average vehicle delay and also on the volume-to-capacity ratio.

LOS can be determined for a number of transportation facilities including freeways, multi-lane highways, two-lane highways, signalized intersections, intersections that are not signalized, arterials, transit and pedestrian facilities. For the Riverside General Plan, intersection LOS has been measured to determine the peak period operating characteristics at several key intersections in the City, as well as along segments of the freeways that traverse the City.



CITY OF RIVERSIDE
ENVIRONMENTAL IMPACT REPORT

LEGEND

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: CITY OF RIVERSIDE

Figure 5.15-1

EXISTING NETWORK OF ROADWAYS

Table 5.15-A
Intersection Level of Service Definitions

LOS	Interpretation	Signalized Intersection Delay (seconds per vehicle)	Stop-Controlled Intersection Average Delay (seconds)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	>10	>10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized; traffic queues start to form.	>10 and >20	>10 and >15
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and >35	>15 and >25
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	>35 and >55	>25 and >35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches.	>55 and .80	>35 and >50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go-type traffic flow.	>80	>50

Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

Existing Traffic Volumes and LOS

Traffic flow is measured and analyzed both on a daily basis and during peak hours of traffic flow (commute peak hours). On a daily basis, traffic flow is measured on roadways at mid-block locations to determine the overall level of travel demand and level of service. Average Daily Traffic (ADT) values are developed that represent the typical daily traffic flow on each key roadway in the City. Some of the highest traffic volume locations in the City are:

1. Van Buren Boulevard north of Arlington Avenue ─ 49,900 to 56,500 ADT
2. Alessandro Boulevard between Chicago Avenue and Trautwein Road ─ 42,100 to 46,400 ADT
3. Van Buren Boulevard west of Wood Road ─ 42,100 ADT
4. Tyler Street between Magnolia Avenue and Indiana Avenue ─ 40,900 ADT
5. Arlington Avenue between Victoria Avenue and Alessandro Boulevard ─ 37,200 ADT
6. Van Buren Boulevard between Magnolia Avenue and Indiana Avenue ─ 37,100 ADT

During peak hours, intersection traffic volume is counted to determine the operating conditions during the peak hours of travel demand. Typically, intersection traffic demand in measured for the peak morning and afternoon/evening commute peak periods (7am to 9am and 4pm to 6pm). Then, the single highest hour in the morning and in the afternoon is determined and used to develop intersection level of service estimates.

Intersection traffic volumes were obtained from a series of new traffic counts conducted in 2003 to identify intersection traffic flows at 15 key intersections in the City. The City chose these 15 intersections to study because they are on regional transportation routes at key intersections or where regional transportation routes intersect. The intersection analysis was conducted in order to give more information about how regional traffic affects the City. Each study intersection was field reviewed to determine the number of lanes on each intersection approach by type, type of traffic control, and other relevant information. The roadway characteristics and traffic volume data were then used to estimate existing AM and PM peak hour operating conditions.

Table 5.15-B Existing (2003) Intersection LOS					
Intersection		**AM Peak Hour**		**PM Peak Hour**	
		LOS	**DELAY (seconds)**	**LOS**	**DELAY (seconds)**
Alessandro	Arlington/Chicago	C	26.8	D	41.6
Alessandro	Trautwein	C	23.9	B	13.8
Arlington	La Sierra	B	20.0	C	20.8
Canyon Crest	Central	C	26.5	C	29.0
Magnolia	Arlington	C	27.5	C	30.3
Magnolia*	Central/Brockton	D	39.5	D	43.7
Magnolia	Tyler	C	20.1	C	27.1
Market	University	C	23.9	C	24.8
Martin Luther King	Canyon Crest	C	22.1	C	24.8
Martin Luther King	Chicago	C	28.4	C	27.3
Van Buren	Arlington	D	41.7	D	47.3
Van Buren	Indiana	C	25.4	C	25.7
Van Buren	Magnolia	C	27.0	C	29.5
Van Buren	Orange Terrace	C	30.7	A	7.9
Van Buren	Trautwein	C	28.9	C	23.7

*The Magnolia/Central/Brockton Intersection roadway improvements have already been constructed, so no further analysis is required in this document.

The Magnolia/Central/Brockton intersection has been modified with temporary closures and it is being evaluated to determine whether these closures provide the desired improvements on Central and Magnolia in terms of traffic signal synchronization. These temporary improvements were requested by City Council when the proposed intersection improvement project came before Council (complete with its own CEQA documentation) on January 17, 2006. The Public Works Department will report its findings to City Council and, based on those findings, the City Council will determine whether to make the modifications permanent.

As shown in **Table 5.15-B, Existing (2003) Intersection LOS,** above, all intersections that were analyzed operate at LOS D or better, indicating generally acceptable conditions.

Magnolia/Central/Brockton Intersection

The prior version of this EIR included a discussion of the Magnolia/Central/Brockton intersection. That intersection has a unique configuration and often experienced congested operating conditions. Brockton Avenue is a two-way roadway north of Central Avenue and it intersects with Central Avenue immediately west of Magnolia Avenue, effectively forming a complex five-legged intersection. Under the configuration in place in 2003, complex signal timing and a long signal phase length was required to clear traffic from the five legs of the intersection safely, which reduced the available green signal time for the heaviest traffic flows. Signal phase timing was dedicated to clearing traffic through the Brockton Avenue portion of the

intersection. Although **Table 5.15-B** above, shows LOS D conditions for this intersection during morning and afternoon peak hour conditions, the model does not fully account for the short distance between lights at this intersection so actual LOS for certain legs of the intersection were likely worse than LOS D. Roadway modification and signal timing changes were reviewed under CEQA and improvements are already underway for this intersection, including temporary modifications for analysis to determine if there is significant improvement in traffic on Central and Magnolia Avenues due to traffic light synchronization. Therefore, it will not be analyzed further in this chapter.

Neighborhood Traffic Management

As traffic volumes and congestion have increased on the major regional roadways, drivers looking to reduce their travel times begin to look at alternative routes using the local street system to avoid problem areas. This neighborhood intrusion by "cut-though" traffic has become a growing concern for some residential areas. The City of Riverside, through the Department of Public Works, has an active Neighborhood Traffic Management Program to minimize and/or prevent intrusion of regional cut-through traffic into residential neighborhoods, through traffic management and traffic calming strategies; and to improve the livability of neighborhoods through controlling the impacts of outside traffic. The strategies include speed control methods, parking restrictions, speed humps, pedestrian safety improvements and sight obstruction elimination.

Regional Roadway Network

Several freeways traverse the Riverside planning area (Figure CCM-1, Regional Road Network): SR-91, a major east-west inter-regional facility that extends from the beach cities in Los Angeles County to SR-60 to the east; SR-60, connecting downtown Los Angeles to the Inland Empire; and I-215, a north-south interstate route that provides access to Temecula and San Diego County.

Improvements planned for the freeways include high-occupancy vehicle lanes, auxiliary and truck climbing lanes, interchange upgrades and reconstructions and limited areas of additional mixed-flow lane additions. These are described in SCAG's RTP.

Caltrans, the RCTC and the Federal Highway Administration (FHWA) are working in partnership to complete improvements to the 60/91/215 interchange and segments of each of the freeways that serve it. This project, costing more than $317 million, represents one of the largest and most complex transportation projects in the Inland Empire. Caltrans also plans to improve the Van Buren Boulevard/I-215 interchange.

The Mid County Parkway (formerly known as the Ramona Expressway/Cajalco Road Corridor) is a CETAP Alternative of the Riverside County Integrated Project. This planned roadway will roughly follow the existing Cajalco Road between I-215 to I-15, south of Lake Mathews. Another possible corridor is the "Bi-County Corridor" that would ultimately connect the SR-60/I-215 interchange in Box Springs (at the west end of Moreno Valley) with Barton road, connecting to I-10 via existing planned California Street. These routes will relieve congestion on SR-91 heading through Riverside and offer alternatives to the 60/215/91 interchange for regional commuters.

The Mid County Parkway has the potential to be extended farther east, across I-15 and through the Cleveland National Forest, providing an additional connection to Orange County besides the overburdened SR-91 freeway. The project, if pursued, would connect at the SR-241 toll road in unincorporated Orange County north of the city of Irvine. The City will continue to support the development of this connection and other efforts by Caltrans, RCTC and FHWA to improve regional circulation.

Goods Movement

Industrial uses and interstate shipping require truck access and mobility for the delivery of parts and raw materials, movement of inventories, and the shipping of finished goods to the marketplace. Commercial and residential uses require the delivery of goods and services for daily operations and other functions. In the City of Riverside, trucks are generally not restricted to specific roadways. The City Municipal Code designates certain roads where trucks over ten thousand (10,000) pounds are prohibited, except when making deliveries. These code sections are 10.56.010 and 10.56.020. Code section 10.56.010 includes all roadways listed in section 10.56.020, and additional roadways.

The City of Riverside contains active rail lines that serve the Union Pacific and Burlington Northern Santa Fe companies. The freight rail system serves the growing Ports of Los Angeles and Long Beach, and much of the freight travels easterly through Riverside. In 2000, peak railroad traffic in Riverside County was 85 freight trains per day and is expected to grow to 169 trains per day in 2020. The City is actively pursuing grade separation projects in order to increase vehicular safety, and reduce vehicular delays thus reducing air quality impacts caused by idling vehicles waiting for trains to pass. In 2003, the City completed the Railroad Grade Separation Report that will help the City prioritize the grade separation projects. The City has identified a total of 28 grade separation projects, listed below. Of the 28 grade separation projects, one project is fully funded, and four are partially funded.

1. Third Street – Partially Funded – City currently conducting preliminary engineering and environmental documentation
2. 7th Street
3. Adams Street
4. Brockton Avenue
5. Buchanan Street
6. Chicago Avenue
7. Columbia Avenue – Partially Funded
8. Cridge Street
9. Gibson Street
10. Harrison Street
11. Iowa Avenue
12. Jackson Street
13. Jane Street
14. Jefferson Street
15. Jurupa Avenue – Funded
16. Madison Street
17. Magnolia Avenue – Partially Funded
18. Mary Street
19. Mountain View Avenue
20. Palm Avenue
21. Palmyrita Avenue
22. Panorama Road
23. Pierce Street
24. Riverside Avenue
25. Spruce Street
26. Streeter Avenue
27. Tyler Street
28. Washington Street

Since the original Railroad Grade Separation Report was completed in 2003, three grade crossings have been closed:

- Jurupa Avenue
- Mountain View Avenue
- Kansas Avenue

Air Traffic

Riverside Municipal Airport is an integral part of the local and regional air transportation system, providing private aviation services to the City of Riverside and the surrounding area. The airport is situated on 441 acres in the northwest portion of the City of Riverside, bordered by Central Avenue to the north, Arlington Avenue to the south, Hillside Avenue to the east, and Van Buren Boulevard to the west. The airport is owned and operated by the City, with its operations overseen by the City of Riverside Airport Commission. As of 2003, annual operations totaled about 110,000 flights, about evenly split between local and itinerant travel. According to a 1999 Master Plan for the Airport, annual operations peaked in 1991 (more than 200,000 annual operations) and hit a low of about 73,000 operations in 1997.

Another significant air facility that impacts the planning area is the approximately 6,500-acre March Air Reserve Base/March Inland Port (MARB/MIP). Located to the City's southeast (outside of the Planning Area), between the cities of Perris and Moreno Valley, MARB/MIP had earlier served as a United States Air Force base, where activities began in 1918. The Department of Defense realigned the base as an air reserve base in 1996. A Joint Powers Authority (JPA), of which the City of Riverside is a part, administers operations on the base. In addition to the air reserve activities, the JPA's long-range plan calls for the base to serve as an inland port, accommodating cargo in transfers between ground and air shipping. The cargo port opened with one private cargo carrier in 2005. According to SCAG Regional Transportation Plan projections, in 2030 passenger service at MARB/MIP will reach 8.0 million annual passengers and approximately 12.8 percent of all regional air cargo tonnage will flow through the airport.

Flabob Airport, located just northwest of the City of Riverside across the Santa Ana River, features a 3,200-foot runway; the facility primarily supports private recreational and business air travel. It is located in the unincorporated Riverside County community of Rubidoux and outside of the Planning Area; Flabob operations impact a small portion of the northern part of the City, particularly with regard to air safety concerns.

Parking Capacity

Parking is tightest within the City near activity centers, Downtown and UC Riverside. The Zoning Code (Title 19 of the Riverside Municipal Code) includes parking requirements to ensure that adequate parking is provided on-site for most uses. The Code also establishes minimum stall dimensions consistent with current standards for other jurisdictions.

Emergency Access

The City has adopted the 2000 Uniform Fire Code as amended by the California State Fire Marshal. The code, codified in Section 16.32.020 of the Riverside Municipal Code, establishes site planning and design standards to ensure adequate emergency access to new developments. In addition, as new development is proposed, the City reviews the project to ensure that adequate parking is provided off-street and emergency access lanes are not blocked.

Alternative Transportation

Transit Service

The City is served by a mix of bus and rail services. Extensive bus service is provided by the Riverside Transit Agency (RTA), which serves western Riverside County. A representative of the RTA served as a member of the Technical Advisory Committee (TAC) providing recommendations in the development of the General Plan. RTA also offers an intercity Dial-A-Ride service for ADA-certified passengers. Routes within the City are shown in **Figure 5.15-2, Existing Transit Service.**

RTA plans a new first-class transit center in the City of Riverside. Facilities will incorporate digital kiosks that give passengers accurate and up-to-the-minute arrival information. The transit center will likely be located near the Metrolink station. A 2005 transportation funding bill earmarked $750,000 for the center. In 2006, RTA included $2.5 million for the transit center on the TUMF list of projects.

RTA also recently implemented a Bus Rapid Transit (BRT) demonstration project in Riverside County. BRT is a system of fast-moving, high-occupancy buses that utilize the latest in technology for clean, efficient express bus service. In concept, BRT would provide several buses operating just minutes apart with limited stops.

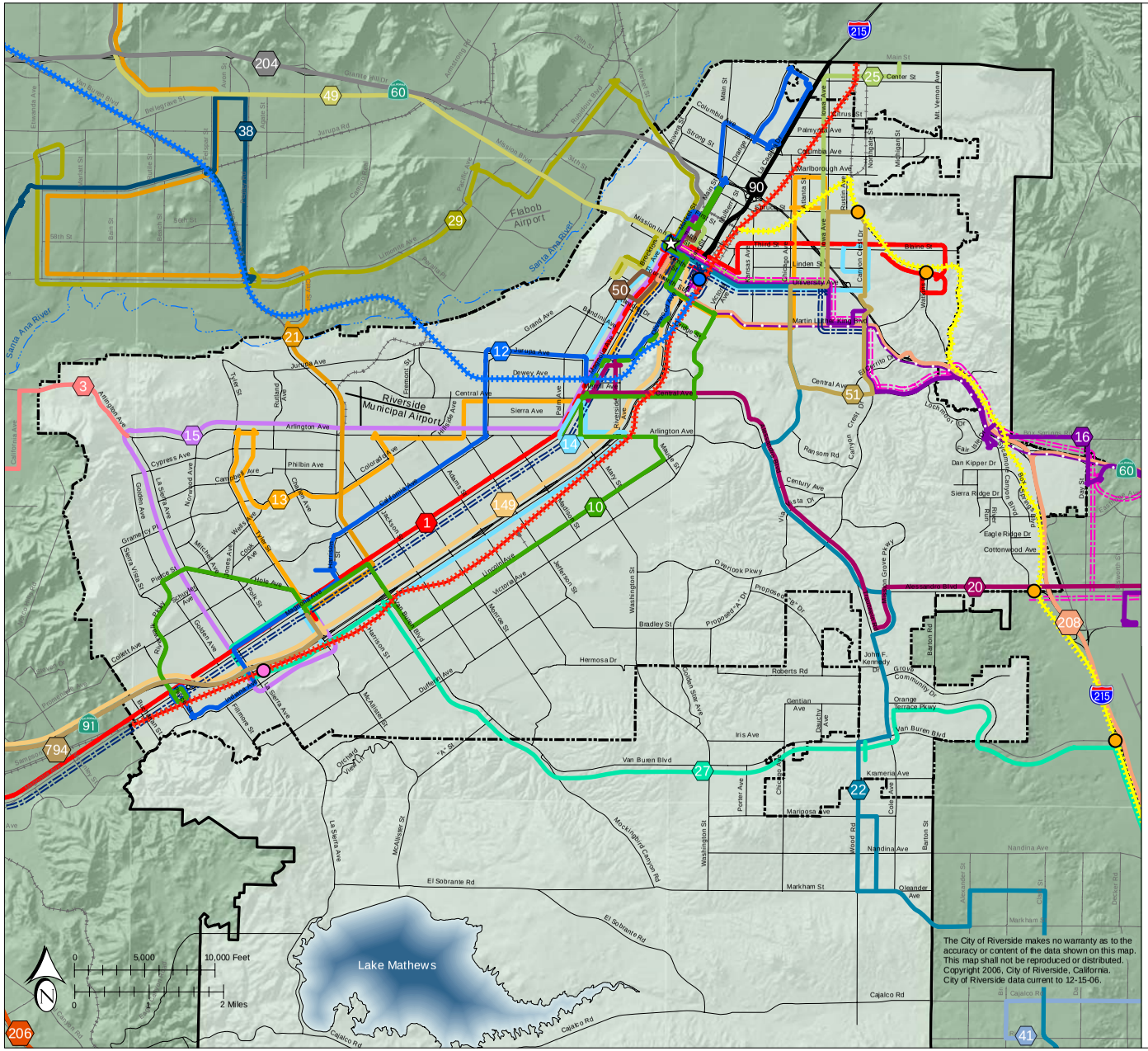
Passenger rail service is provided by Metrolink. Three lines traverse the City: the Inland Empire-Orange County Line, which runs between San Bernardino and San Juan Capistrano; the 91 Line, which runs from Riverside to downtown Los Angeles via Fullerton and other points in Orange County; and the Riverside Line, which runs from Riverside to downtown Los Angeles. Amtrak service is also available at the Downtown Metrolink Station. The San Jacinto Branch Line Commuter Rail (Perris Valley Line) Project is a proposed 19-mile extension of the Metrolink 91 Line that would begin at the existing Riverside-Downtown Station and proceed north on the Union Pacific Riverside Industrial Lead tracks for approximately two miles before turning southeast along the San Jacinto Branch Line. The terminus of the Perris Valley Line is in the City of Perris at State Route 74 and I-215. Upon start up in 2009, the Perris Valley Line Project will include up to five new stations, operate through three cities (Riverside, Moreno Valley, and Perris), as well as directly serve University of California, Riverside and March Air Reserve Base. The project will also provide additional communities such as Hemet, San Jacinto, Murrieta, Lake Elsinore and Temecula closer access to the Southern California commuter rail network.

In addition to Metrolink, the California High Speed Rail Authority proposes a high-speed train (HST) system for intercity travel in California between the major metropolitan centers of Sacramento and the San Francisco Bay Area in the north, through the Central Valley, to Los

Angeles, Riverside and San Diego in the south. The HST would carry passengers at speeds in excess of 200 mph on a fully grade-separated track, with state-of-the-art safety, signaling and automated control systems. As of 2004, neither funding nor final alignments for this project had been determined.

Non-Motorized Transportation

Bicycling and walking as transportation modes can play an increasingly significant role as an alternative to the single-occupant automobile. The City of Riverside has recognized this fact with its system of trails and bikeways throughout the City. The Bicycle Master Plan designates a series of Class I and Class II bicycle facilities throughout the City. The Bicycle Master Plan and the System of Trails is shown on **Figure 5.15-3, Bike Trails.**



CITY OF RIVERSIDE
ENVIRONMENTAL IMPACT REPORT

LEGEND

RAIL CORRIDORS

- 91/ORANGE COUNTY/INLAND EMPIRE LINES
- PROPOSED PERRIS VALLEY METROLINK LINE- POTENTIAL ALIGNMENT
- RIVERSIDE METROLINK LINE
- LA SIERRA STATION
- DOWNTOWN STATION
- POTENTIAL METROLINK STATIONS
- DOWNTOWN TERMINAL

RTA BUS ROUTES AS OF DECEMBER 2006

- 1 UCR/DOWNTOWN RIVERSIDE TO WEST CORONA METROLINK
- 3 ARLINGTON/LA SIERRA TO MAGNOLIA/FULLERTON
- 10 MAIN/RUSSELL TO PIERCE/STERLING
- 12 STEPHENS/CENTER TO PIERCE/STERLING
- 13 CHICAGO/MARLBOROUGH TO GALLERIA AT TYLER
- 14 BLAINE/CANYON CREST TO GALLERIA AT TYLER
- 15 DOWNTOWN TO GALLERIA AT TYLER
- 16 MAIN/RUSSELL TO MARCH RESERVE AIR FORCE BASE
- 20 MAGNOLIA CENTER TO MORENO VALLEY
- 21 COUNTRY VILLAGE TO GALLERIA AT TYLER
- 22 DOWNTOWN TO LAKE ELSINORE OUTLET CENTER
- 25 DOWNTOWN TO LOMA LINDA VA HOSPITAL
- 27 GALLERIA AT TYLER TO HEMET VALLEY MALL
- 29 DOWNTOWN TO ETIWANDA/RUBIDOUX
- 38 RCC NORCO TO JURUPA
- 41 MEAD VALLEY TO RCR MED CENTER
- 49 RIVERSIDE TO COUNTRY VILLAGE
- 50 JURY TROLLEY SERVICE
- 51 UCR TO CANYON CREST TOWN CENTER
- 90 RIVERSIDE TO SAN BERNARDINO
- 149 RIVERSIDE TO ORANGE
- 204 RIVERSIDE TO MONTCLAIR
- 206 TEMECULA AND MURRIETA TO CORONA
- 208 TEMECULA TO RIVERSIDE METROLINK
- 794 GALLERIA AT TYLER TO COSTA MESA

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE
- PROPOSED BRT A
- PROPOSED BRT B

SOURCE: RIVERSIDE TRANSIT AUTHORITY, 2006

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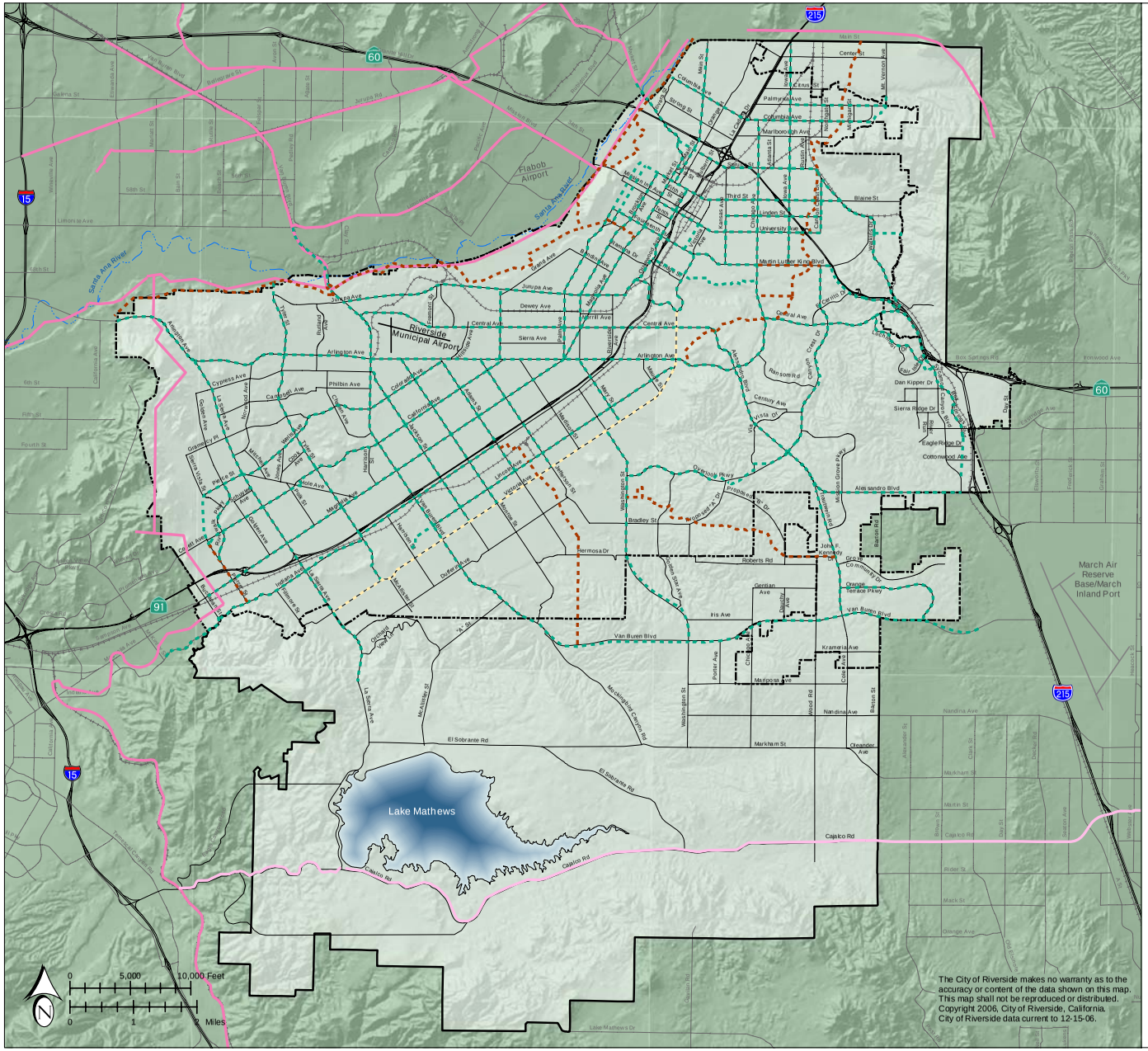
Figure 5.15-2
EXISTING
TRANSIT SERVICE



CITY OF RIVERSIDE
ENVIRONMENTAL IMPACT REPORT

LEGEND

CITY BIKEWAYS
- CLASS 1
- CLASS 1&2
- CLASS 2

RIVERSIDE COUNTY BIKEWAYS
- CLASS 1 BIKE PATH
- CLASS 1 BIKE PATH/REGIONAL TRAIL

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: CITY OF RIVERSIDE AND RIVERSIDE COUNTY GIS DATA

County Disclaimer: The County of Riverside assumes no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to change and may not be complete or appropriate for all purposes. County GIS and other sources should be queried for the most current information. Do not copy or resell this map. Horizontal accuracy: Parcel data is of mapping grade (quality) only and does not represent trustworthy locations or legal boundaries. User assumes all risk of use of this product.
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Figure 5.15-3
BIKE TRAILS

Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Therefore, significance determinations utilized in this Section are from Appendix G of the CEQA Guidelines. A significant impact will occur if implementation of the Project:

- causes an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system
- exceeds, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
- results 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
- substantially increase hazards due to a design feature or incompatible uses
- results in inadequate emergency access
- results in inadequate parking capacity
- conflicts with adopted policies, plans, or programs supporting alternative transportation

RELATED REGULATIONS

Federal

There are no relevant federal regulations applicable to the proposed General Plan Update.

State

Statewide Transportation Improvement Program (STIP)

The California Department of Transportation (Caltrans) administers transportation programming. Transportation programming is the public decision making process which sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources.

Regional

Regional Transportation Plan

The Regional Transportation Plan (RTP) is prepared by the Southern California Association of Governments (SCAG) to address regional issues, goals, objectives, and policies for the Southern California region. The RTP, which SCAG periodically updates, sets broad goals for the region

and provides strategies to reduce problems related to congestion and mobility. The RTP identifies transportation facilities that are of regional significance. In order to be eligible for federal funding assistance, transportation projects must be consistent with the RTP.

The RTP sets broad goals for the region and provides strategies to reduce problems related to congestion and mobility. RTP goals relevant to Riverside include:

- Improving the levels of service (LOS) for the movement of people and goods
- Ensuring that transportation investment provides the greatest possible mobility benefit
- Serving the transportation needs of everyone
- Developing regional transportation systems and serve the needs of cities and communities

Community and Environmental Transportation Acceptability Process

The Community and Environmental Transportation Acceptability Process (CETAP), a component of the Riverside County Integrated Project that identifies alternative routes for possible major new multi-modal transportation facilities to serve the current and future transportation needs of Western Riverside County, led to the identification of potential transportation corridor routes in western Riverside County that will benefit commuters and serve the County's growing economy. The Mid County Parkway (formerly known as the Ramona Expressway/Cajalco Road Corridor) that traverses the southern portion of the City's Planning Area is a CETAP alternative that is projected to relieve congestion on State Route (SR) -91 heading through Riverside and offer an alternative to the 60/215/91 interchange for regional commuters.

County of Riverside Congestion Management Plan

Urbanized areas such as Riverside County are required by State law to adopt a Congestion Management Plan (CMP). The goals of the CMP are to reduce traffic congestion and to provide a mechanism for coordinating land use development and transportation improvement decisions. Local agencies are required to establish minimum LOS thresholds in the general plans and conduct traffic impact assessments on individual development projects. Deficiency plans must be prepared when a development project would cause LOS "F" on non-exempt CMP roadway segments. The deficiency plans outline specific mitigation measures and a schedule for mitigating the deficiency.

Western Riverside County Transportation Uniform Mitigation Fee (TUMF)

In 2002, the jurisdictions of western Riverside County, including the cities of Riverside, Corona, and Moreno Valley and Riverside County, agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee, or TUMF, program. TUMF is a multi-jurisdictional impact fee program that funds capacity improvements on a defined system of arterial highways as needed to mitigate cumulative impacts associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF, based on the proposed intensity and type of development. Riverside's participation in this program constitutes an important step toward making needed improvements to the regional transportation system.

Local

Neighborhood Traffic Management

As traffic volumes and congestion have increased on the major regional roadways, drivers looking to reduce their travel times begin to look at alternative routes using the local street system to avoid problem areas. This neighborhood intrusion by "cut-through" traffic has become a growing concern for some residential areas.

The City of Riverside has an active Neighborhood Traffic Management Program to minimize and/or prevent intrusion of regional cut-through traffic into residential neighborhoods through traffic management and traffic calming strategies; and to improve the livability of neighborhoods through controlling the impacts of outside traffic. The strategies include speed control methods, parking restrictions, speed humps, pedestrian safety improvements and sight obstruction elimination. The community is actively involved in requesting calming measures, and in some cases, helps the City in the costs of the improvements.

RELATED GENERAL PLAN POLICIES

Implementation of the following General Plan policies will assist in minimizing adverse conditions to traffic and transportation for the City. Project Policies addressing Intersection, Roadway and Freeway Impacts also includes the following policies, the adherence to and implementation of which will lessen traffic impacts for Year 2025 conditions:

Master Plan of Roadways

Policy CCM-1.1: Support development of CETAP corridors, including the Mid County Parkway (formerly known as the Ramona Expressway/Cajalco Road Corridor) and the Bi-County Corridor from Riverside to San Bernardino County.

Policy CCM-1.2: Support the addition of capacity improvements to SR-91, SR-60, I-215 and I-15.

Policy CCM-1.3: Support the development of a new regional roadway facility linking Riverside County with Orange County.

Policy CCM-1.4: Support improvement of the Van Buren Boulevard/I-215 interchange and along the length of Van Buren between I-215 and SR-91.

Policy CCM-2.1: Complete the Master Plan of Roadways shown on Figure CCM-4 (Master Plan of Roadways).

Policy CCM-2.2: Balance the need for free traffic flow with economic realities and environmental and aesthetic considerations, such that streets are designed

to handle normal traffic flows with tolerances to allow for potential short term delays at peak flow hours.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-2.4: Minimize the occurrence of streets operating at LOS "F" by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

Cooperative Implementation

Objective CCM-5: Cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the regional transportation system.

Policy CCM-5.1: Coordinate impacts of new roadway connections with adjacent cities and Riverside County to ensure consistency in design and operations of the new facilities and connections.

Policy CCM-5.2: Support implementation of the SCAG *Regional Transportation Plan*.

Policy CCM-5.3: Promote citizen involvement in decisions regarding major street widening projects through the direct involvement of the area residents affected.

Policy CCM-5.4: Actively participate with other jurisdictions and agencies such as the County, RCTC, RTA, SCAG, WRCOG and CALTRANS to facilitate regionally integrated transportation networks.

Policy CCM-5.5: Participate in programs to mitigate regional traffic congestion.

Policy CCM-5.6: Integrate signal systems with adjacent jurisdictions and Caltrans.

Policy CCM-5.7 Work with Riverside County and as a member of the March Joint Powers Authority to ensure adequate circulation within the JPA jurisdictional area and around Riverside National Cemetery.

The Circulation and Community Mobility Element of the General Plan includes the following policies related to the City's Neighborhood Traffic Management Program.

Protecting Our Neighbourhoods

Policy CCM-7.1: Discourage and/or prevent regional cut-through traffic in residential neighborhoods through the employment of traffic calming measures within Riverside.

Policy CCM-7.3: Discourage freeway access improvements that could facilitate further non-local traffic intrusion into community neighborhoods.

Policy CCM-7.4: Limit local roadway improvements to those that are necessary to support proposed General Plan land uses.

Policy CCM-7.5: Discourage improvements beyond those contained in the Circulation and Community Mobility Element to accommodate additional regional traffic.

Because the City's Neighborhood Traffic Management Program is necessary to protect local residential neighborhoods and streets from regional cut-through traffic, the City has developed the following policies to offset the Program's impact:

Trip Reduction

Policy CCM-6.1: Encourage the reduction of vehicle miles, reduce the total number of daily peak hour vehicular trips, increase the vehicle occupancy rate and provide better utilization of the circulation system through the development and implementation of TDM programs contained in the SCAQMD and County of Riverside TDM Guidelines.

Policy CCM-6.2: Encourage the use of telecommunications by Riverside residents, employees and students as a means to reduce air and noise pollution generated by traffic.

Protecting Our Neighborhoods

Policy CCM-7.2: Work with adjacent jurisdictions, the County and regional agencies to address the impacts of regional development patterns on the local circulation system.

The following General Plan policies promote a public multi-modal transit network serving the City and region.

Bus and Rail Service

Policy CCM-9.1: Encourage increased use of public transportation and multi-modal transportation as means of reducing roadway congestion, air pollution and

nonpoint source water pollution, through such techniques as directing new growth along transportation corridor.

Policy CCM-9.2: Support implementation of RTA's Bus Rapid Transit Program and recommendations of the Go Riverside Task Force.

Policy CCM-9.3: Explore the feasibility of light rail/monorail within the City, to include a connection between the Downtown and La Sierra Metrolink Stations.

Policy CCM-9.4: Support efforts of the California High Speed Rail Authority to bring high-speed trains to California and Riverside.

Policy CCM-9.5: Incorporate facilities for transit and other alternative modes of transportation, such as park-and-ride lots and bus turnouts, in the design of future developments.

Policy CCM-9.6: Enhance and encourage the provision of attractive and appropriate transit amenities, including shaded bus stops, to facilitate use of public transportation.

Policy CCM-9.7: Ensure adequate connections among all alternative modes.

Policy CCM-9.8: Preserve options for future transit use where appropriate when designing improvements for roadways.

Policy CCM-9.9: Improve and enhance pedestrian connections between Downtown Riverside and the Downtown Metrolink station through use of walkways and the City's Green Line Trolley service.

Safe Routes to School

Policy ED-4.1: Continue to meet with the school districts and colleges and universities to ensure well-planned, safe, pedestrian-friendly schools and education facilities.

Policy ED-4.2: Work with the Riverside Transit Agency to ensure that schools are effectively served by bus routes.

Policy ED-4.3: Work with the school districts to incorporate bicycle access, racks and bike lanes into school design.

Policy ED-4.4: Work with the school districts to effectively plan for and manage access, congestion and parking around schools.

Policy ED-4.6: Work toward providing a bicycle network within Riverside that connects schools, employment centers and residential areas.

Policy ED-4.7: Plan transit facilities near educational facilities.

Policy ED-4.8: Support the Safe Routes to School programs of the Alvord and Riverside Unified School Districts.

Policy CCM-8.1: Continue to regularly meet with local school districts to identify safe routes to all schools, enabling better school access by cyclists and pedestrians. Support the establishment of safe drop-off and pick-up zones around schools during the morning and afternoon peak hours.

Policy CCM-8.2: Promote walking and biking as a safe mode of travel for children attending local schools.

Policy CCM-8.3: Apply creative traffic management approaches to address congestion in areas with unique problems, particularly on roadways and intersections in the vicinity of schools in the morning and afternoon peak hours and near churches, parks and community centers.

Policy CCM-8.4: Give priority to sidewalk and curb construction to areas near schools with pedestrian traffic.

Policy CCM-8.5: Continue to participate in the Riverside County Transportation Commission's SB 821 program for the funding of facilities for the exclusive use of pedestrians and bicyclists to eliminate missing sidewalk and/or bicycle path links.

Policy CCM-8.6: Continue to administer the Pedestrian and Bicycle School Safety Program through the Police Department to provide education for school aged children to help them identify traffic hazards and to develop safe pedestrian and biking habits.

Environmental Impacts Before Mitigation

***Threshold**: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.*

As stated in the Transportation Study, a comparison of future conditions was made to the baseline (existing conditions) SCAG travel demand model. The existing conditions model used land use and socioeconomic data prepared by SCAG for the entire region. Based on the application of the trip generation rates to the existing SCAG defined land uses within the City, it was determined that the City currently generates approximately 1.69 million trips per day. Upon build-out of the proposed Typical scenario, the trips are expected to grow to 2.53 million trips per day, and under the Maximum w/PRD scenario the trips would grow to 8.93 million trips per day. Trip-making within the City is projected to increase by approximately 50 percent between now and the build-out under the Typical density scenario, and over 400% under the Maximum w/PRD density scenario. Trip-making in the southern California region as a whole is projected to increase by approximately 36 percent under the Typical density scenario and 39% under the

Maximum w/PRD density scenario. This indicates that under either scenario the City will experience a higher rate of growth in travel than the southern California region as a whole, which reflects the fact that portions of the City are still growing more rapidly than the rate at which the remaining region is developing. These results are summarized in **Table 5.15-D, Existing and Future Trip Generation Estimates** below:

Table 5.15-D
Existing and Future Trip Generation Estimates

	City of Riverside Trips	SCAG Region Trips	Percentage of City Trips in the SCAG Region	% Increase in Riverside Trips	% Increase in SCAG Region Trips
Existing Trips	1,691,131	68,816,018	2%	N/A	N/A
Buildout at Typical Density	2,531,474	93,423,523	3%	49.7%	35.8%
Buildout at Maximum w/PRD Density	8,929,061	95,153,498	9%	428.0%	38.3%

As stated in the Methodology discussion, it is not realistic to assume that the Maximum with Planned Residential Development level of development will be allowed or achieved throughout the Planning Area. Additionally, the Project itself contains several growth regulating features. For example, in addition to General Plan Policies requiring LOS D where possible, projects could only be built to maximum densities within a PRD if the project would be "adequately served by public infrastructure[.]" (Zoning Code, § 19.780.050) that make development under Maximum with PRD not reasonably foreseeable.

The results of the above comparison between existing and proposed Project traffic indicate an increase in traffic which is substantial, at least 50 percent, in relation to the existing traffic load; **potential adverse impacts are significant**.

On a daily basis, traffic flow is measured on roadways at mid-block locations to determine the overall level of travel demand and level of service. Average Daily Traffic (ADT) values are developed that represent the typical daily traffic flow on each key roadway in the Planning Area. Currently, some of the highest traffic volume locations in the City are:

- Van Buren Boulevard north of Arlington Avenue ─ 49,900 to 56,500 ADT
- Alessandro Boulevard between Chicago Avenue and Trautwein Road ─ 42,100 to 46,400 ADT
- Van Buren Boulevard west of Wood Road ─ 42,100 ADT
- Tyler Street between Magnolia Avenue and Indiana Avenue ─ 40,900 ADT
- Arlington Avenue between Victoria Avenue and Alessandro Boulevard ─ 37,200 ADT
- Van Buren Boulevard between Magnolia Avenue and Indiana Avenue ─ 37,100 ADT

The Appendix of the Transportation Study [2025 Forecasted ADTs (with Existing Network)] indicates that substantial increases from the existing ADTs will result, as shown below:

- Van Buren Boulevard north of Arlington Avenue ─ 67,700 to 73,600 ADT
- Alessandro Boulevard between Chicago Avenue and Trautwein Road ─ 96,200 to 87,100 ADT
- Van Buren Boulevard west of Wood Road ─ 74,400 ADT
- Tyler Street between Magnolia Avenue and Indiana Avenue ─ 57,000 ADT
- Arlington Avenue between Victoria Avenue and Alessandro Boulevard ─ 58,200 to 59,200 ADT
- Van Buren Boulevard between Magnolia Avenue and Indiana Avenue ─ 42,700 to 48,900 ADT

As shown above, these increases in ADT at key locations are projected to be substantial and therefore potentially significant without mitigation. However, if the capacity of these and all other roadways throughout the Planning Area is adequate to accommodate the projected traffic volumes, then impacts would be less than significant. As discussed under the following Threshold, not all roadway segments will operate at acceptable levels in the future. None of the above segments will operate at LOS D or better according to **Figure 5.15-4, Volume to Capacity (V/C) Ratio and Level of Service (LOS) (Typical 2025)** at Typical build-out of the Project, and ADT would be even higher under the Maximum w/PRD scenario. Therefore, these substantial increases are **significant and unavoidable.** The feasibility of mitigation for this impact is discussed below.

Threshold*: Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.*

Intersection Level of Service

Although not usually analyzed at the programmatic General Plan level, intersection level of service for several selected major intersections in the City was evaluated. The intersections that were evaluated in the Transportation Study were chosen by the City because they were known to be busy and to carry cut-through traffic from drivers living outside of the City but commuting through. The City of Riverside currently does not have specific intersection thresholds that apply to intersections. As such, the thresholds used in the Transportation Study are based on standard practices throughout Southern California and consistent with City practices regarding environmental review of development projects. Table 5.15-1 shows the intersection level of service definitions from the 2000 Highway Capacity Manual. Intersections typically represent the most critical locations of bottlenecks and congestion since a right-of-way must be shared by opposing traffic. The City has generally adopted LOS "D" as the minimum threshold goal for a system-wide level of service on arterials and collectors.[3] The minimum LOS "D" objective reflects the City's desire to maintain stable traffic flow throughout the City, recognizing that

[3] The existing General Plan allows LOS E to serve as "a minimum acceptable standard for transportation planning and facility design." The existing General Plan also allows LOS F to "continue to exist in some circumstances" (Policy T 1.2, City of Riverside General Plan, 1994).

peak-hour congestion may occur at locations near freeways or other locations with unusual traffic characteristics due to regional traffic flow.

The results of the travel demand model in the Transportation Study prepared for the General Plan estimates were used to project future intersection LOS in the City under both Typical and Maximum w/PRD density scenarios. A total of fifteen key intersections in the City were analyzed during the a.m. and p.m. peak hours. **Table 5.15-H, Existing and Typical Density Scenario Intersection Levels of Service,** below, shows the intersections during the a.m. peak hour and p.m. peak hour for both the Typical and Maximum w/PRD density scenarios, and notes whether they are projected to exceed the minimum threshold goal for acceptable levels of service and compares the existing intersection conditions with the projected future intersection conditions resulting from each scenario.

Table 5.15-H
Existing and Typical Density Scenario
Intersection Levels of Service

Intersection		Existing Intersection Conditions				Typical Density Scenario Intersection Conditions Before Mitigation				Future Maximum w/PRD Intersection Conditions Before Mitigation			
		a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Alessandro	Arlington/ Chicago	C	26.8	D	41.6	E	60.7	F	88.3	F	303.7	F	409.6
Alessandro	Trautwein	C	23.9	B	13.8	D	47.6	C	26.1	F	209.8	F	133.2
Arlington	La Sierra	B	20	C	20.8	C	24.5	E	58.4	F	952.4	F	OVRFL
Canyon Crest	Central	C	26.5	C	29	E	63.3	F	90.8	F	285.9	F	304.8
Magnolia	Arlington	C	27.5	C	30.3	C	29.5	D	43.2	F	326.2	F	482.2
Magnolia	Central/ Brockton	D	39.5	D	43.7	*	*	*	*	*	*	*	*
Magnolia	Tyler	C	20.1	C	27.1	C	22.7	C	30.8	F	366.5	F	619.4
Market	University	C	23.9	C	24.8	C	23.7	C	25.7	F	223.8	F	416.8
Martin Luther King	Canyon Crest	C	22.1	C	24.7	C	28.6	E	71.5	F	296.4	F	399.3
Martin Luther King	Chicago	C	28.4	C	27.3	D	36.7	D	44.7	F	316.4	F	393.6
Van Buren	Arlington	D	41.7	D	47.3	E	75.4	E	65.1	F	320.1	F	928.7
Van Buren	Indiana	C	25.4	C	25.7	C	24.9	C	26.4	F	120.5	F	149.6
Van Buren	Magnolia	C	27	C	29.5	C	29.4	D	42.8	F	430.4	F	580.2
Van Buren	Orange Terrace	C	30.7	A	7.9	B	13.8	A	8.4	E	56.8	E	63.1
Van Buren	Trautwein	C	28.9	C	23.7	D	44	D	46.4	F	206.7	F	223.2

The Project at Typical build-out levels would result in deficiencies (LOS E or F) at three intersections during the a.m. peak hour, and five at the p.m. peak hour. Due to the amount of traffic generated under the Maximum w/PRD density assumptions, all analyzed intersections would exceed the LOS standard, as shown above in **Table 5.15-H.** Without mitigation, the intersections with projected LOS which exceeds LOS D under the Typical development scenario are: Alessandro/Arlington/Chicago, Arlington/La Sierra, Canyon Crest/Central, Martin Luther King/Canyon Crest, and Van Buren/Arlington.

Table 5.15-I, Conceptual General Plan Intersection Improvement Recommendations lists potential improvements that could reduce potentially significant impacts to less than significant levels. The General Plan is by nature very conceptual and programmatic, however. There are no site specific project plans proposed in the vicinity of those intersections at this time, so project layout, driveway locations, land use types, intensities and other variables affecting intersection

performance are unknown. Without such detail, it is speculative to accurately estimate future intersection-specific performance or mitigation requirements. Therefore, on-going development activity and development proposals must be reviewed on a case-by-case basis as they arise, and as such details become available. The following conceptual improvements have been identified for consideration once specific development projects are proposed. However, for the reasons mentioned above, it is not feasible to require these improvements at this time. Consideration of these intersections could occur pursuant to MM Trans 1, which requires site specific study of projects meeting certain screening criteria. MM Trans 1 will provide mitigation to the extent possible, but does not prohibit the City from approving a project which causes significant impacts to intersections. **Therefore, this impact is considered significant and unavoidable.**

Table 5.15-I
Conceptual General Plan Intersection Improvement Recommendations

Intersection		Buildout LOS		Concept Improvements						
				Dual Left-turn Lanes	Add thru Lanes	Add Right-Turn Lane	Install Traffic Signal	LOS with Improvements		Notes
		a.m. peak	p.m. peak					a.m. peak	p.m. peak	
Alessandro	Arlington/Chicago	E	F	WB	SB			D	D	R-O-W acquisition required
Arlington	La Sierra	C	E			EB			C	
Canyon Crest	Central	E	F	SE,WB				D	D	R-O-W acquisition required
Martin Luther King	Canyon Crest	C	E	WB					D	R-O-W acquisition required
Van Buren	Arlington	E	E					D	D	Signal Modification – WB Right Turn overlap

Roadway Links

The City of Riverside Public Works Department has defined LOS D as the minimum adequate service level on roadway links for planning and design purposes. For purposes of this Transportation Study, the threshold is defined as any roadway segment that would have a volume/capacity ratio of 1.0 or higher at the buildout, which would then require consideration of changes in the roadway classification. Thus, roadway links are considered to operate over-capacity when the future forecast daily traffic volume exceeds the daily capacity values. The daily capacity values, which are given in average daily traffic (ADT), are as follows:

- 144’ Arterial (8-lane) ─ 65,000 ADT
- 120’ Arterial (6-lane) ─ 49,500 ADT
- 110’ Arterial (4-lane) ─ 33,000 ADT
- 100’ Arterial (4-lane) ─ 33,000 ADT
- 88’ Arterial (4-lane) ─ 22,000 ADT
- 80’ Collector (2-lane) ─ 12,500 ADT
- 66’ Arterial (2-lane) ─ 12,500 ADT

These are generally considered to be Level of Service "D" thresholds. Therefore any links exceeding these values (greater than V/C ratio of 1.0) based on future traffic projections are considered to be deficient, and would be at LOS E or F conditions in the future.

Riverside County uses a similar methodology of roadway links as the City to assess traffic conditions. The County determines the existing LOS for each segment/link along the street and highway network. The County uses a different nomenclature system for the functional roadway classifications; however the general roadway types are similar. The County standards currently have slightly lower daily capacity values as compared to City standards. Since the analysis includes the SOI, and upon future annexation of these areas into the City, only the City standards would be relevant when considering criteria for the determination of a potentially significant traffic impacts. Thus, the City's thresholds have been applied to the SOI areas since the County standards would no longer be applicable if the land is annexed into the City.

The regional future model roadway network outside the Planning Area boundaries used for this analysis includes the existing roadway system plus the planned/funded improvements that are embedded within the SCAG model. The model includes projects included in the State Transportation Improvement Program as well as other regional funded and programmed improvements. All City Capital Improvement Program projects within the City for existing streets are included in the "buildout" model network. All roadway network improvements that are included in specific plans have also been coded into the network. In addition, all streets in the regional future model roadway network are assumed to be built out to their ultimate classification in terms of number of lanes.

As discussed above, several regional mechanisms exist to address regional traffic issues. For example, the TUMF provides funding for capacity improvements on a defined system of arterial highways as needed to mitigate cumulative impacts associated with new growth. Additionally, the Riverside County Transportation Commission, the Board of which includes a representative from the City, oversees planning and funding of transportation improvements within the County. Finally, the SCAG performs transportation planning on a larger scale, specifically with the Regional Transportation Plan and Guide. These mechanisms are all designed to address the impacts of cumulative growth throughout the region. The City actively supports the operation of these regional mechanisms. For example, Policies CCM-1.1 through CCM-1.3 call on the City to support the CETAP and improvements to regional serving freeways.

As shown on **Figure 5.15-4, Volume to Capacity (V/C) Ratio and Level of Service (LOS) (Typical 2025),** roadways projected to be at LOS E and F upon build-out of the proposed General Plan Typical density scenario include:

- Fourteenth west of Victoria;
- Alessandro between Trautwein and Sycamore Canyon;
- Arlington just east of SR-91;
- Cajalco between La Sierra and Lake Mathews;
- California east of Polk;
- Central east of Canyon Crest;
- Hole near Hedrick, and between Tyler and Magnolia;

- La Sierra south of California;
- Madison between Magnolia and Indiana;
- Magnolia between La Sierra and Polk;
- Martin Luther King east of Kansas;
- Mockingbird Canyon south of Markham;
- Monroe south of Indiana
- Overlook west of Proposed "A" Dr.;
- Pierce south of Magnolia;
- Sycamore Canyon between El Cerrito and Central;
- Portions of Van Buren south of Cypress, south of Indiana, south of Magnolia, west of Wood, from west of Trautwein to Barton, as well as west of the I-215 interchange;
- Wood south of Van Buren, and south of Mariposa.
- First between Brockton and Market;
- Adams between Victoria and Dufferin;
- Alessandro between Central and Trautwein, and between Sycamore Canyon and I-215;
- Arlington from west of Victoria to Chicago;
- Portions of Cajalco between I-15 and I-215;
- Center near the I-215 NB and SB Ramps;
- Central east of Victoria and east of Canyon Crest;
- Challen between Philbin and Cypress;
- Chicago between Arlington and Central;
- Portions of Hole between La Sierra and Tyler;
- Iowa between Linden and Blaine;
- La Sierra between Magnolia and Dufferin;
- Linden between Chicago and Iowa;
- Madison between Arlington and Magnolia;
- Magnolia west of Van Buren;
- Portions of Martin Luther King between SR-91 and SR-60/I-215;
- Mockingbird Canyon south of Van Buren;
- Overlook east of Washington;
- Polk south of Magnolia;
- Sycamore Canyon between Central and Box Springs/Fair Isle;
- Trautwein between Alessandro and Van Buren;
- Tyler between SR-91 and Magnolia; and
- Portions of Van Buren north of Cypress, near SR-91, between Lincoln and Mockingbird Canyon, and east of Orange Terrace.

Note that Overlook Parkway was modeled in this final model run as a two-lane roadway between Washington and Alessandro. The levels of service shown on the Transportation Study plots, and the listing above, are based on a two-lane configuration. However Overlook Parkway already exists as a four-lane roadway from Washington to Bodewin Court, and from Sandtrack to Alessandro. Since the City does not plan to reduce the number of lanes on the existing four-lane sections, the v/c ratio and corresponding level of service could be revised to reflect the existing four-lane portions of the roadway. The levels of service would then be better than LOS D on the four-lane portions (rather than E or F as shown above), and could be removed from the list

above; however, the Transportation Study presents a conservative analysis of impacts based on a two-lane configuration. Further study of this roadway connection will be conducted through the specific plan process, which will include appropriate site-specific traffic studies and environmental review, to determine the appropriate movement of traffic, westerly from Overlook Parkway to the 91 Freeway. The specific plan will be adopted prior to the connection of Overlook Parkway across the arroyo.

Each of the above roadway segments which are projected to have unacceptable LOS, are shown in **Table 5.15-J, Current Status of Roadways Projected to Operate at LOS E or F in 2025.** The table presents the City's current efforts to improve roadway capacity for the future and decisions which have been made regarding proposed improvements.

Table 5.15-J[4]
Current Status of Roadways Projected to Operate at LOS E or F in 2025

Roadway Segments Currently being Studied for Widening.	• Fourteenth west of Victoria and Martin Luther King east of Kansas (LOS E); Martin Luther King between SR-91 and SR 60/I-215 (LOS F). Martin Luther King between SR-91 and Chicago is in the CIP for further study. • Magnolia between La Sierra and Polk; this is not in the CIP but the City Manager has asked that it be widened to 6 lanes between La Sierra and Tyler.
Roadway Segments where Model may be at too gross/programmatic a level. Detailed analysis per MM Trans 1 will Resolve.	• Adams between Victoria and Dufferin; • Challen between Philbin and Cypress;
Roadway is part of the CETAP Corridor.	• Cajalco between La Sierra and Lake Mathews (LOS E); • Portions of Cajalco between I-15 and I-215 (LOS F);
Roadway Segments where Model may be too Gross and where localized intersection improvements may improve LOS, detailed analysis required once projects are proposed.	• Hole near Hedrick, and between Tyler and Magnolia; • Monroe south of Indiana; • Pierce south of Magnolia; • Wood south of Van Buren, and south of Mariposa (County); • First between Brockton and Market; • Portions of Hole between La Sierra and Tyler; • Iowa between Linden and Blaine; • Linden between Chicago and Iowa; • Madison between Arlington and Magnolia; • Magnolia west of Van Buren; • Polk south of Magnolia; • La Sierra south of California;
Roadway Segments affected by issues at freeway interchange.	• Madison between Magnolia and Indiana; • Center near the I-215 NB and SB Ramps; • Tyler between SR-91 and Magnolia;
Located within the County at this time, no proposed changes to date.	• Mockingbird Canyon south of Van Buren (County) (LOS F); • Mockingbird Canyon south of Markham (County) (LOS E);

[4] More detailed information regarding Magnolia Avenue is presented in Chapter 5 of the Magnolia Avenue Specific Plan, which is incorporated by reference herein.

Table 5.15-J[4] **Current Status of Roadways Projected to Operate at LOS E or F in 2025**	
Decision made, following discussion of the Circulation Element components in the Citizens Advisory Committee, Planning Commission and City Council, not to build roadways larger just to accommodate regional cut-through traffic	• Alessandro between Trautwein and Sycamore Canyon • Arlington just east of SR-91; • Sycamore Canyon between El Cerrito and Central; • Portions of Van Buren south of Cypress, south of Indiana, south of Magnolia, west of Wood, from west of Trautwein to Barton, as well as west of the I-215 interchange; • Alessandro between Central and Trautwein, and between Sycamore Canyon and I-215; • Arlington from west of Victoria to Chicago; • Chicago between Arlington and Central; • La Sierra between Magnolia and Dufferin; • Sycamore Canyon between Central and Box Springs/Fair Isle; • Trautwein between Alessandro and Van Buren; • Portions of Van Buren north of Cypress, near SR-91, between Lincoln and Mockingbird Canyon, and east of Orange Terrace;
Other – This segment was studied as part of the connection of Central alternative in the Transportation Study. The City determined, based on those results, that the impacts to existing homes, schools, and churches which line this street, worse LOS at key intersections, and dividing a neighborhood did not warrant the connection or widening the segment to alleviate traffic.	• Central east of Victoria and east of Canyon Crest;
Other – This roadway was studied concerning the connection of Overlook at the arroyo alternative in the Transportation Study. The City determined, based on those results, that Overlook should be connected but not until the segment that will get traffic to the 91 Freeway is studied and determined. A specific Plan is required prior to connecting Overlook.	• Overlook west of Proposed "A" Dr.; • Overlook east of Washington.

As described in the table above, some roadway segments which are identified in the General Plan Transportation Study as operating at LOS E or F at build-out may be improved under other projects, such as CETAP. Others are currently being evaluated through studies funded in the CIP or otherwise. In some cases, it appears that the General Plan traffic analysis, which is done at a programmatic regional scale, cannot evaluate some localized details which will likely cause impacts to be found to be less than significant when MM Trans 1 is implemented. Finally, in certain cases, the City has made a determination that potential impacts caused by widening a roadway segment to accommodate regional cut-through traffic, or to accommodate local traffic in key areas, would cause greater adverse environmental impacts to the neighborhoods and businesses than the traffic congestion, and is therefore infeasible as mitigation.

Freeway Analysis

Table 5.15-K
Freeway Analysis
Proposed General Plan

Segment	Existing ADT	Existing Peak Hour Volume	Existing LOS	Future ADT	Future LOS	Percentage of Future Trips Starting/Ending in Planning Area
Route 91						
Pierce St to Magnolia Ave	176,000	14,700	F	207,400	F	25%
Magnolia Ave to La Sierra Ave	178,000	14,900	F	212,000	F	26%
La Sierra Ave to Tyler St	178,000	14,900	F	202,000	F	33%
Tyler St to Van Buren Blvd	180,000	15,100	F	224,000	F	34%
Van Buren Blvd to Adams St	174,000	14,600	F	210,900	F	35%
Adams St to Madison St	176,000	14,700	F	207,400	F	34%
Madison St to Arlington Ave	176,000	14,300	F	210,500	F	36%
Arlington Ave to Central Ave	177,000	14,200	F	194,100	F	35%
Central Ave to 14th St	172,000	13,600	F	218,700	F	38%
14th St to University Ave	171,000	13,400	F	222,600	F	38%
University Ave to Mulberry St	162,000	12,600	F	211,000	F	36%
Mulberry St to La Cadena Dr	162,000	12,400	F	211,000	F	36%
La Cadena Dr to SR-60	160,000	12,400	E	211,000	F	36%
I-215						
SR-60 to Spruce St	183,000	15,600	F	293,700	F	17%
Spruce St to 3rd St/Blaine St	171,000	14,700	F	293,700	F	17%
3rd St/Blaine St to University Ave	170,000	14,800	F	287,100	F	17%
University Ave to Martin Luther King Blvd	177,000	15,400	F	301,100	F	17%
Martin Luther King Blvd to El Cerrito Dr	181,000	16,300	F	308,000	F	16%
El Cerrito Dr to Central Ave	188,000	16,900	F	308,000	F	16%
Central Ave to Box Springs Rd	180,000	16,200	F	324,500	F	16%
Box Springs Rd to SR-60	110,000	8,900	C	322,300	F	16%
SR-60 to Eastridge Ave	112,000	9,000	E	185,000	F	12%
Eastridge Ave to Alessandro Blvd	106,000	9,000	E	198,000	F	18%
Alessandro Blvd to Frontage Rd	104,000	8,900	D	200,500	F	18%
Frontage Rd to Van Buren Blvd	105,000	9,000	D	202,300	F	16%

Table 5.15-L
Freeway Analysis
Maximum With PRD

Segment	Existing ADT	Existing Peak Hour Volume	Existing LOS	Future ADT	Future LOS	Percentage of Future Trips Starting/Ending in Planning Area
Route 91						
Pierce St to Magnolia Ave	176,000	14,700	F	597,100	F	23%
Magnolia Ave to La Sierra Ave	178,000	14,900	F	577,000	F	26%
La Sierra Ave to Tyler St	178,000	14,900	F	410,600	F	44%
Tyler St to Van Buren Blvd	180,000	15,100	F	479,100	F	44%
Van Buren Blvd to Adams St	174,000	14,600	F	435,000	F	43%
Adams St to Madison St	176,000	14,700	F	418,300	F	41%
Madison St to Arlington Ave	176,000	14,300	F	430,000	F	45%
Arlington Ave to Central Ave	177,000	14,200	F	444,900	F	44%
Central Ave to 14th St	172,000	13,600	F	502,100	F	45%
14th St to University Ave	171,000	13,400	F	500,300	F	43%
University Ave to Mulberry St	162,000	12,600	F	578,700	F	40%
Mulberry St to La Cadena Dr	162,000	12,400	F	578,700	F	40%
La Cadena Dr to SR-60	160,000	12,400	E	578,700	F	40%
I-215						
SR-60 to Spruce St	183,000	15,600	F	567,800	F	36%
Spruce St to 3rd St/Blaine St	171,000	14,700	F	567,800	F	36%
3rd St/Blaine St to University Ave	170,000	14,800	F	440,800	F	48%
University Ave to Martin Luther King Blvd	177,000	15,400	F	467,800	F	45%
Martin Luther King Blvd to El Cerrito Dr	181,000	16,300	F	440,400	F	43%
El Cerrito Dr to Central Ave	188,000	16,900	F	440,400	F	43%
Central Ave to Box Springs Rd	180,000	16,200	F	446,100	F	42%
Box Springs Rd to SR-60	110,000	8,900	C	431,100	F	39%
SR-60 to Eastridge Ave	112,000	9,000	E	247,900	F	38%
Eastridge Ave to Alessandro Blvd	106,000	9,000	E	249,700	F	45%
Alessandro Blvd to Frontage Rd	104,000	8,900	D	256,800	F	43%
Frontage Rd to Van Buren Blvd	105,000	9,000	D	260,700	F	41%

The freeways traversing and near the Planning Area are major regional routes for both personal and commercial traffic. The Riverside Freeway (SR 91) provides the primary linkage between Riverside County and Orange/Los Angeles counties. The Escondido (I-215) freeway) and the Corona/Ontario Freeway (I-15) are the only major routes connecting the Inland Empire region

with San Diego County; both experience significant congestion during commute hours. The interchange of the 91, 215 and 60 freeways near Downtown is a major link in the entire Southern California roadway transportation system. A major reconstruction of this interchange commenced in 2004, with the aim of providing smoother transitions between the different freeway facilities. All freeways within the Planning Area are operated and administered by the California Department of Transportation (Caltrans). The City of Riverside has no authority to control or limit usage of these regional freeways. However, the City does participate in funding for the freeways through Measure A. All other funding comes from State and Federal funds. As well, the City will build interchange improvements using Measure A, TUMF, State and Federal funds. The City will continue to support capacity improvements for the freeways through consultation with Caltrans on proposed projects and coordination of improvements.

Although not usually analyzed at the programmatic General Plan level, freeway analysis for level of service was evaluated. Nearly all segments of freeways within the Planning Area are operating at LOS F, with only some portions of the I-215 operating at or better than LOS D. **Table 5.15-K** above identifies LOS for freeway segments throughout the Planning Area and **Table 5.15-L** above identifies LOS for freeway segments throughout the Planning Area for the Maximum with PRD scenario. LOS F freeway conditions in the Planning Area indicate that freeway demand exceeds capacity. These oversubscribed conditions have the potential to contribute to increased traffic on local streets, as freeway on-ramps back up onto local streets and local arterials become attractive alternative routes. Van Buren Boulevard and Alessandro Boulevard in particular are estimated to be used by many through-drivers seeking to avoid congestion at the 91/215/60 interchange.

Implementation of the General Plan has the possibility to exceed the level of service standard (LOS D) established and **impacts are significant without mitigation related to the listed roadway segments in Table 5.15-J.** In addition, although not foreseeable, under the Maximum w/PRD scenario, nearly every roadway in the City and Sphere areas would operate at below LOS D, thereby resulting in a **significant and unavoidable impact**.

***Threshold**: 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.*

Implementation of the proposed General Plan is not expected to significantly increase the number of individuals using the airport facilities at Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/March Inland Port, which is a joint civilian and military airport. Additionally, the proposed General Plan would not result in construction of incompatible development within the airport area of influence. The General Plan has been found to be consistent with the Riverside County Airport Land Use Compatibility Plan (RCALUCP) by the Airport Land Use Commission (ALUC). The ALUC reviewed the Program for consistency with the existing RCALUCP for Flabob and Riverside Municipal Airports and the existing 1984 Compatibility Land Use Plan for March Air Reserve Base/March Inland Port. Additionally, the City is also participating in the Joint Land Use Study for March Air Reserve Base/March Inland Port which when adopted will become the RCALUCP for March Air Reserve Base/March Inland Port. Therefore, implementation of the General Plan is not expected to result in a change in air traffic patterns, including either and increase in traffic levels or additionally safety risks

associated with new development in areas subject to airport operations. Impacts associated with air traffic patterns are **less than significant**.

***Threshold**: Substantially increase hazards due to a design feature or incompatible uses.*

There are no site-specific project plans at this time, so project layouts, driveway locations, land use types, or intensities are unknown. Without such detail, it is not possible, using available traffic analysis procedures, to estimate some types of impacts. Therefore, on-going development proposals must be reviewed on a case-by-case basis as they arise, and as such details such as driveway location or intersection modification become known. The City cannot address these project impacts in this Draft EIR as it would be too speculative to try to determine how any particular development would be constructed.

The circulation improvements identified in the General Plan Circulation Element could be implemented with this program. None of these improvements would introduce new safety hazards at intersections or along roadway segments, as most would increase capacity and flow. In addition, Policies within the Circulation Elements (CCM – 1.1-1.4, 7.1) provide for maintaining and enhancing existing roadways, increasing safety of roadways, and balancing safety, quality of life and efficiency in the design of circulation and access. These policies of the proposed General Plan will help reduce hazards due to design features. Therefore, to the extent that impacts can be evaluated at the programmatic level, potential significant adverse impacts would be ***less than significant.***

***Threshold**: Result in inadequate emergency access.*

The City will continue to implement its adopted road standards, the State of California Department of Transportation Highway Design Manual, Municipal Code, and Fire Code. As a result, new and improved roadways will be designed to avoid unsafe design and to provide adequate emergency access. Additionally, as discussed in the Hazards Section, traffic conditions could become more congested as a result of anticipated growth in the City's population as result from implementation of the proposed General Plan. In the event of an accident or natural disaster, the increase in traffic in the City may impede the rate of evacuation for the residents. Also, the response times for emergency medical or containment services could also be adversely affected by the increased traffic conditions in the City.

According to the City of Riverside's Fire Department, in the event of a disaster, the location of a shelter will only be established if needed; otherwise a "shelter-in-place" order will be enacted to provide protection. "Shelter-in-place" is intended to protect public safety by encouraging people to remain indoors. This order would keep unnecessary traffic off the roads to allow emergency vehicles to respond and/or direct an orderly evacuation, if needed. In certain circumstances, local officials may direct people to go to a community shelter for safety purposes.

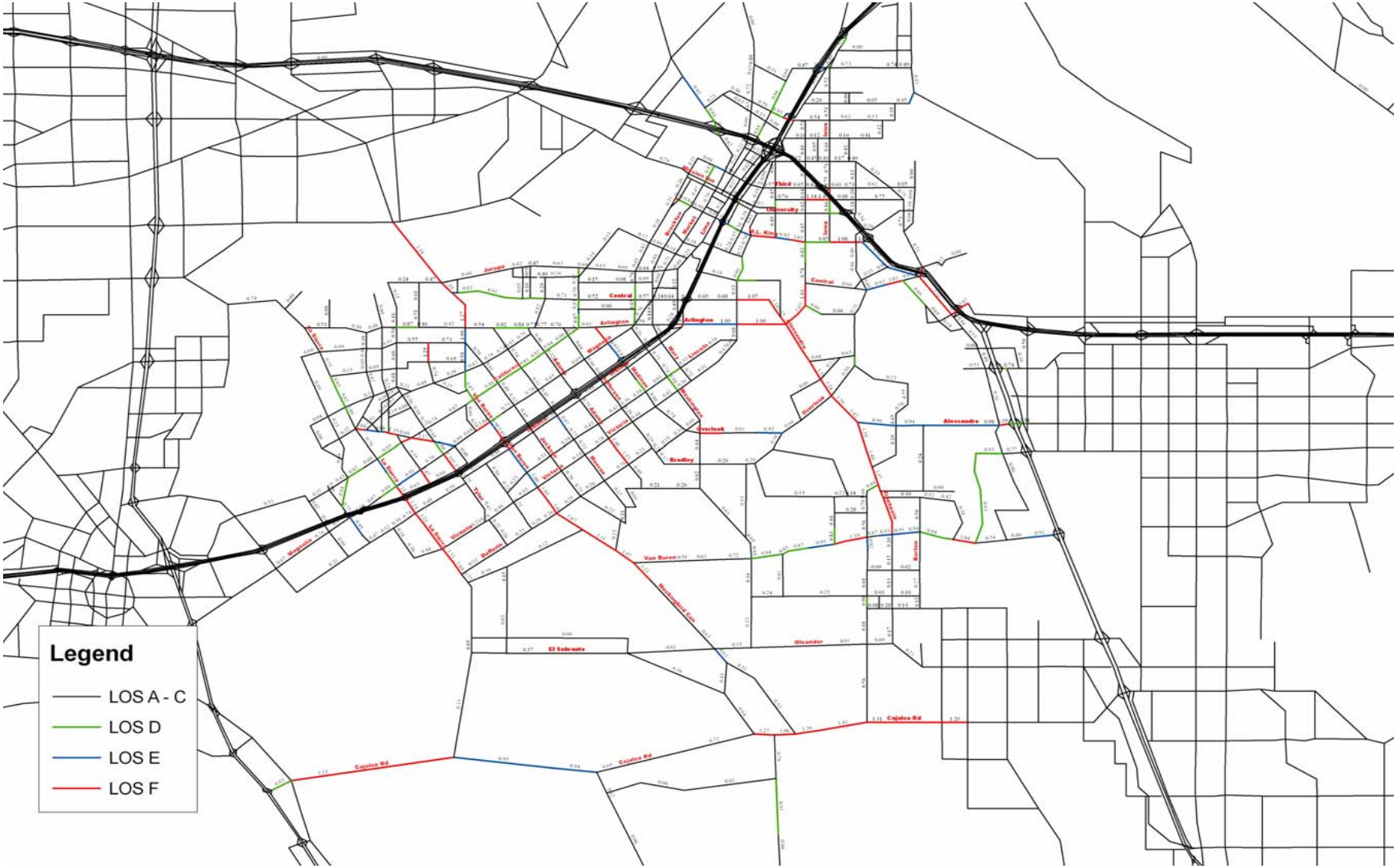

Figure 5.15-4

VOLUME TO CAPACITY (V/C) RATIO AND LEVEL OF SERVICE (LOS) (TYPICAL 2025)

The City of Riverside has developed an extensive Emergency Operations Plan, created by the Emergency Management Office. The City's Fire Department promotes a high level of multi-jurisdictional cooperation and communication for emergency planning and response management through activation of the SEMS. The General Plan also provides policies to identify methods of implementing the emergency plan. Consequently, the project would provide adequate emergency access to the project area. Therefore, any potential impacts would be ***less than significant***, and no mitigation is required.

Threshold*: Result in inadequate parking capacity.*

There are no site-specific project plans at this time, so implementation of the General Plan would not result in an inadequate parking capacity. Also, with regard to parking, each development would be required to comply with the parking standards (on-street and off-street) identified in Chapter 19.580 of the Zoning Code. Therefore impacts related to the parking capacity are ***less than significant.***

Threshold*: Conflict with adopted policies, plans, or programs supporting alternative transportation.*

Major principles underlying the General Plan include focusing future development near existing transportation corridors, ensuring land uses are supported by an efficient local roadway network, and supporting alternative modes of transportation such as walking, biking and transit. The Land Use and Urban Design Element of the General Plan, as well as the Magnolia Avenue Specific Plan, direct growth to infill sites along established transportation corridors. Much of the infill development will create more mixed use projects, which offers residents access to shops and services without needing to drive. Thus, the Project encourages pedestrian transportation.

Further, the City promotes bicycling, walking and equestrian riding for recreation and mobility. To facilitate and encourage bicycle trips, for example, the City will implement a Bicycle Master Plan that designates Class I and Class II bicycle facilities throughout the City as part of the General Plan Program. Similarly, new development projects will be required to include safe and attractive sidewalks, walkways and bike lanes; developers of residential and nonresidential projects will be encouraged to construct links adjacent to areas and communities where appropriate.

In response to school traffic safety concerns, the Riverside Public Works Department has developed a School Traffic Safety Program -- Walk Safe! – Drive Safe! which identifies school zones traffic safety problems within the community. The program emphasizes the three "Es": education of school traffic safety issues, engineering solutions and enforcement of pedestrian and vehicle safety.

The City's expanded pedestrian and bike path network will provide connections between schools, activity centers, parks and residential areas. With population growth focused along the City's major corridors, transit service will connect the major employment and education centers to areas projected for mixed-use and higher-density residential development. Also, the proposed Metrolink Perris Valley Line will be operational in 2009, extending commuter train service along the busy I-215 corridor. The train will offer service to the City's major destinations, including

UCR and Downtown, and will also provide an alternative to crowded westbound freeways for Riverside residents and those living south along the I-215 corridor. Additionally, the General Plan includes several policies designed to promote public transit. These policies include CCM-9.2 (supporting RTA's bus rapid transit proposal), CCM9.5 (requiring incorporation of alternative transportation facilities into new development), and CCM-9.8 (preserving options for future transit use when designing improvements for roadways). As a result of the focus of the General Plan, and implementation of General Plan policies as described above, the Project will support, not conflict with, policies, plans and programs related to alternative transportation. Impacts related to adopted policies, plans or programs supporting alternative transportation are **less than significant**.

PROPOSED MITIGATION MEASURES

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate the potential significant adverse impacts upon transportation facilities or to reduce impacts to below the level of significance.

MM Trans 1: To reduce potential significant impacts to intersection LOS, a project-specific traffic study shall be required for projects that generate 50 or more trips at an intersection at the PM peak hour, and for projects that affect intersections which currently, or as a result of a proposed development project, will operate at LOS E or F, to determine appropriate and feasible mitigation that shall be required by the City to reach LOS D, if possible consider existing conditions, site characteristics, economic feasibility, and other related factors.

Mitigation measures that would involve expanding roadways and intersections, beyond those identified in the CETAP and existing CIP, were considered and rejected during the public process for development of the proposed General Plan and its policies. As detailed in the history of the Circulation Element Update Process (contained in the Transportation Study Appendix), the Project reflects policy recommendations made by the Citizens Advisory Committee, Planning Commission and City Council. During that process, a conscious decision was made to avoid alterations to the circulation system that would attract or facilitate regional cut-through traffic. In particular, traffic impeded on the SR-91, SR-60, and I-215 freeways and other regional routes could seek relief on City streets, and interfere with local neighborhood function. Further, as explained in the Circulation Element of the General Plan, "Riverside has reached a point where few or no feasible opportunities exist to add or expand roadways due to fiscal, political, environmental and other constraints" (Circulation and Community Mobility Element, at p. CCM-2).

Thus, instead of widening roads and expanding intersections, the Project incorporates "Smart Growth Principles" to use the City's existing circulation system more efficiently. Specifically, the Project directs growth to infill sites along established transportation corridors, such as Magnolia and University Avenue. Further, new growth is focused on mixed-use development that will include residential and commercial functions that will reduce reliance on vehicular traffic (Circulation and Community Mobility Element, at pp. CCM-3 to CCM-4). Mixed-use development allows for reductions in overall vehicular trips due to "internal trip capture." For example, patrons of a restaurant may also visit an adjacent commercial use thereby resulting in

one vehicular trip instead of two. Similarly, residents in a mixed-use development would not require vehicular transport to access other amenities in the development. Additionally, development of restaurants and retail along established transportation corridors also reduces overall trips by encouraging "pass-through" trips. In other words, patrons may stop at such establishments while passing from one destination to another, which reduces trips on the surrounding circulation system. (*Trip Generation Handbook* (*Institute of Transportation Engineers, 2nd Edition,* 2004))

Another feature of the Project that reduces reliance on single-occupancy vehicles is an expanded network of bicycle and pedestrian trails that connect schools, parks, activity centers and residential areas. Similarly, because new growth will be focused along the City's major corridors, bus rapid transit service can connect mixed-use and high-density residential uses with major employment and educational centers (Circulation and Community Mobility Element, at p. CCM-4).

While these Project features will reduce traffic impacts to the extent feasible, as noted above, impacts will nevertheless remain significant and unavoidable. If the City adopts the Project, therefore, it must explain why this significant impact is outweighed by the Project's economic, legal, social, technological, and other benefits in a Statement of Overriding Considerations.

MM Trans 2: All trails that may be proposed to cross rail lines or within the railroad right-of-way will be conditioned and approved by the Public Utilities Commission (PUC) as required by law. In addition, any new trails proposed to be built outside the railroad right-of-way but parallel to the tracks will be designed in such a manner to ensure pedestrian safety through the use of fencing and other materials.

SUMMARY OF ENVIRONMENTAL EFFECTS AFTER MITIGATION MEASURES ARE IMPLEMENTED

Potential impacts associated with air traffic, design features, emergency access, inadequate parking, and alternative modes of transportation are **less than significant without mitigation.**

Implementation of the mitigation measure is expected to reduce impacts associated with LOS at intersections to LOS D or better, but does not require such, therefore **impacts associated with LOS at intersections will remain potentially significant and unavoidable.**

Overall traffic within the City and SOI will increase substantially and since not all projected roadway links will be able to accommodate the increases at LOS D or better, the increases are considered **significant and unavoidable.**

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