4.9 CIRCULATION

INTRODUCTION

The circulation section of this EIR will analyze potential environmental impacts related to transportation. Determination of significant environmental effects will be analyzed in the thresholds as defined by the CEQA checklist provided in CEQA Guidelines Appendix G.

EXISTING CONDITIONS

ENVIRONMENTAL BASELINE SETTING

The existing transportation system within the City includes the regional highway system, the local street system, transit routes, and bicycle/pedestrian facilities. The regulatory setting which governs this transportation system reflects a variety of policies and programs implemented by agencies such as the California Department of Transportation (Caltrans), the Southern California Association of Governments (SCAG), Riverside County, and the Coachella Valley Association of Governments (CVAG).

Coachella's transportation network consists of freeways, arterial roadways, and local streets. Regional access is provided by Interstate 10 while State Route 86, 86S, and Grapefruit Boulevard (State Route 111) provide connectivity to neighboring cities, as does an established transit (bus) service.

REGIONAL HIGHWAY SYSTEM

Interstate 10 provides direct access into the City by way of on-off ramps located at Dillon Road. It runs east-west to the north of Coachella and has two lanes in general in each direction in the vicinity of the City. Interstate 10 is the foundation of Coachella's regional transportation network and serves much of the population in Riverside County as a whole.

State Route 86S is a regional highway that extends north-south in the City of Coachella. It begins at Interstate 10, north of the City, maintaining access control until reaching Tyler Street. South of Tyler Street, it operates as a divided arterial with two lanes in each direction with an open median. The posted speed limit on State Route 86S is 55 miles per hour throughout the length of the City. SR-86S is a major regional highway that provides access to Interstate 10 to the north and continues south to the Salton Sea and City of Imperial, near the United States border with Mexico.

LOCAL STREET SYSTEM

Grapefruit Boulevard (State Route 111) extends north-south in the City and is specified in the City Circulation Element as an enhanced major arterial roadway from the northern City boundary to Harrison Street. From Harrison Street to Tyler Street it is specified as a major arterial, and south of Tyler Street it is specified as a primary arterial. In its current implementation, Grapefruit Boulevard operates as a primary arterial with two lanes in each direction. The posted speed limit

is 50mph in this section. South of Tyler Street, Grapefruit Boulevard operates as a secondary thoroughfare. SR-111 continues south from the City around the Salton Sea and reaches the City of Calexico at the United States/Mexico border.

Harrison Street extends north-south and is specified in the Circulation Element as an enhanced major arterial from Grapefruit Boulevard south to Avenue 52, then as a major arterial south to Airport Boulevard. In its current implementation, Harrison Street operates as a primary arterial with two lanes in each direction. South of Avenue 54, Harrison Street operates as a two-lane highway. South of the City, Harrison Street merges with SR-86S.

Avenue 48/Dillon Road is specified as a major arterial roadway running east-west in the northern part of the City. It becomes Dillon Road after crossing over SR-86S and continues east to I-10. Dillon Road is specified as an enhanced major arterial in that area. Avenue 48 operates as a six-lane, undivided major arterial west of Van Buren Street, and as a primary arterial or secondary thoroughfare east of Van Buren Street and onto Dillon Road. This link provides key access to SR-86S and I-10 for the City.

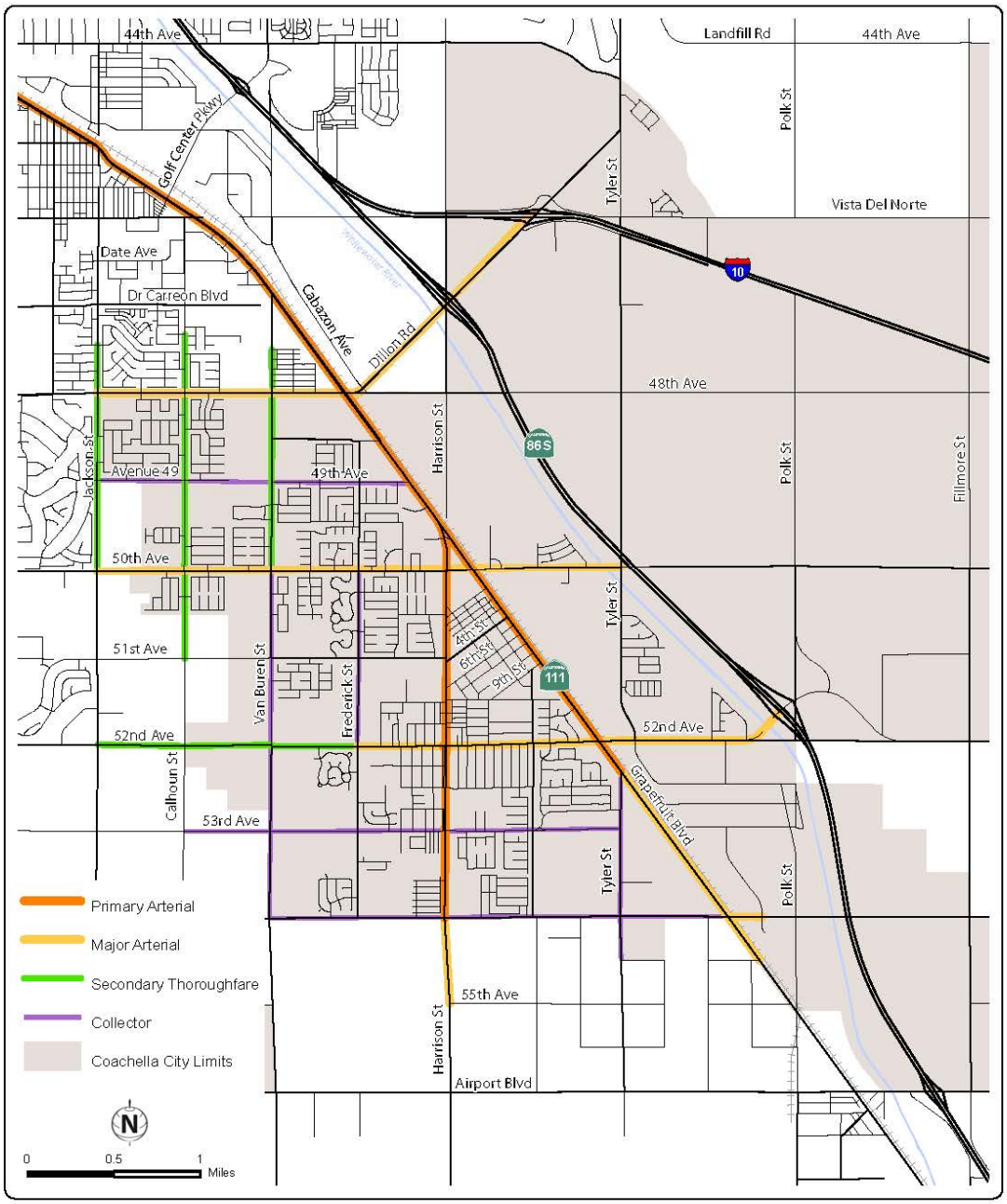
Avenue 50 and **Avenue 52** are east-west links that are specified as a primary and major arterial, respectively. They both currently operate as primary arterials and feature divided, 4-lane sections between Grapefruit Boulevard and SR-86S. In the City core, they mainly operate as secondary thoroughfares to Grapefruit Boulevard.

Jackson Street operates as a north-south running secondary thoroughfare at the western limit of the City between Avenue 48 and Avenue 49, with two lanes of traffic in each direction. Its main function is to provide circulation to and from the commercial developments in the northwest region of the City.

Van Buren Street is specified in the City's current General Plan as a north-south running secondary thoroughfare in the west region of the City, extending from the northern to southern City boundary. It currently operates as a collector with two lanes of traffic in each direction. Its main function is to provide access to the larger arterials for local residential developments.

Frederick Street is specified in the City's current General Plan as a north-south running secondary thoroughfare in the City, between Avenue 50 and Airport Boulevard. It currently operates as a collector with two lanes of traffic in each direction. Its main function is to provide access to the larger arterials for local residential developments.

Figure 4.9-1: Existing Roadway System in the City of Coachella.



EXISTING TRANSIT FACILITIES

Public transportation in Coachella consists of the following services and facilities:

- Public bus, and
- Paratransit

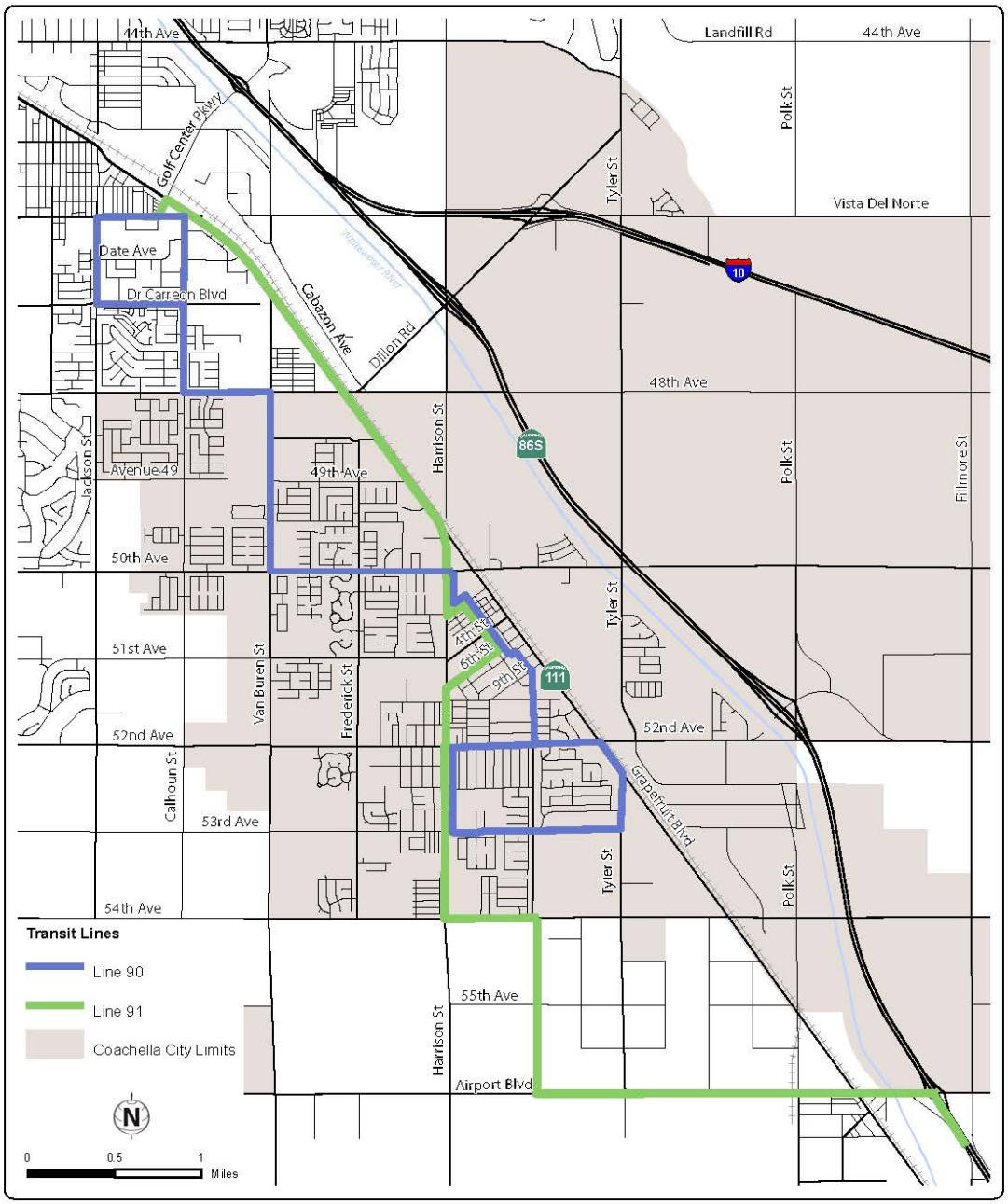
Public transportation in Coachella is operated by SunLine Transit Agency, which enables commuters to travel within the City and adjacent cities with minimal transfers. Currently, SunLine operates two buses routes within the City, Route 90 and Route 91.

Route 90 operates all seven days of the week and connects Coachella to the City of Indio. Service frequency is at 35-minute headways on weekdays and weekends.

Route 91 operates all seven days of the week and connects Coachella to the Cities of Indio, Thermal, Oasis and Mecca. Weekday service frequency is at 60-minute headways and weekend service frequency is at 80-minute headways.

In Coachella, an intermediate type of service is provided by SunLine via their SunDial bus service. SunDial provides next day, curb-to-curb transit service by reservation for any person with a SunDial ADA Certification Card. This certification is obtained via the application process from SunLine. Pick up and drop off can only occur within ¾ miles of a SunLine bus route, and the transit service is shared among multiple riders.

Figure 4.9-2: Existing Transit Facilities in the City.



BICYCLE AND PEDESTRIAN FACILITIES

The City has a limited network of bicycle facilities. There is a more extensive network of pedestrian facilities since many of the streets in the residential and commercial areas have sidewalks.

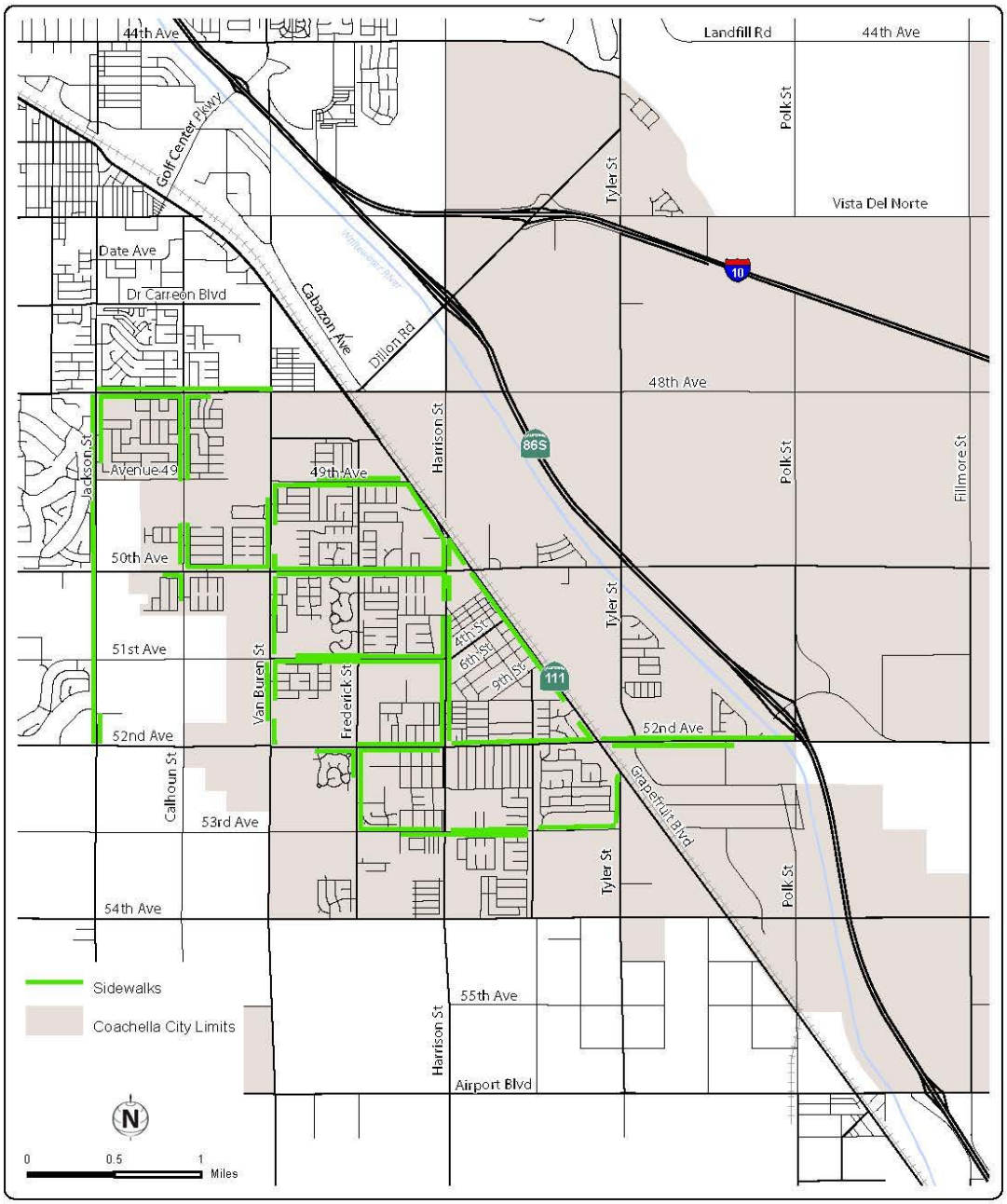
Bicycle Facilities

The bicycle network in Coachella consists only of shared bicycle and motor vehicle facilities. There is currently one bike lane in the City on Calhoun Street between Avenue 48 and Avenue 49. The lane terminates south of Avenue 49 and bicycles share an unsigned road section with motor vehicles. The lane continues north into the City of Indio. Most of the roads in Coachella's industrial and agricultural areas are narrow and feature no shoulder, or often soft sand shoulders.

Pedestrian Facilities

Currently, most of the streets in the residential and commercial areas of the City have sidewalks. All sidewalks in the more newly developed portions of Coachella tend to be adjoining and have curb ramps. A smaller portion of sidewalks in the older areas of central Coachella do not have curb ramps. Many of the sidewalks in the newer areas of Coachella do not incorporate parkways. Parkways are more common in older residential neighborhoods and often feature shade trees. While older residential development areas use shorter blocks, newer developments have longer blocks, and walls are common to prevent pedestrian access mid-block. In general, the pedestrian network is well-connected within areas of higher residential density. In industrial and agricultural areas of Coachella, sidewalks are uncommon and there is little consideration for pedestrian connectivity.

Figure 4.9-3: Existing Pedestrian Facilities in the City along Major Traveled Ways.



TRAFFIC DATA COLLECTION

This analysis evaluates intersections and roadway segments within the City, which were selected for analysis based on a review of the Circulation Element. Roadways which were classified as arterials were analyzed as roadway segments and intersections where two arterial roadways crossed were analyzed as well. Additionally, intersections at ramp junctions along I-10 and SR-86 South were included in the analysis as well. Intersections within the City's existing boundaries were prioritized in this analysis as other locations within the City's Sphere of Influence currently do not exist or will be substantially rebuilt in conjunction with new development as it occurs. Therefore, the intersections included in this analysis include the major roadways that current exist within the City.

Traffic count data was collected in 2007 by Urban Crossroads. This data was used to assess existing conditions for two primary reasons. First, this 2007 traffic count data matches the time period associated with the County of Riverside's Travel Demand Model, which were used to validate and calibrate the model. Second, the 2007 period predates the economic downturn which occurred in 2008 and represents a more typical condition for baseline traffic than more recent counts.

Intersection counts were collected between 7 AM to 9 AM and 4 PM to 6 PM. Roadway segment counts were collected during a 24-hour period on a weekday. This data is provided on the following exhibit as reported in the 2007 study.

Level of service data is presented for each of the intersections and roadway segments discussed below. Level of service (LOS) represents one approach to evaluate the performance of transportation facilities by comparing observed traffic conditions against defined thresholds. In the case of intersections, LOS is evaluated by calculating intersection delay. For roadway segments, LOS is analyzed by comparing the roadway segment volume against an estimated capacity or a typical threshold for that type of roadway. Additional information regarding the methodologies and data used intersection and roadway segment LOS is provided in subsequent sections. The City's current General Plan applies LOS D as a performance threshold for roadway segments and intersections.

Figure 4.9-4: Existing Roadway Segment Counts along the Major Roadways.

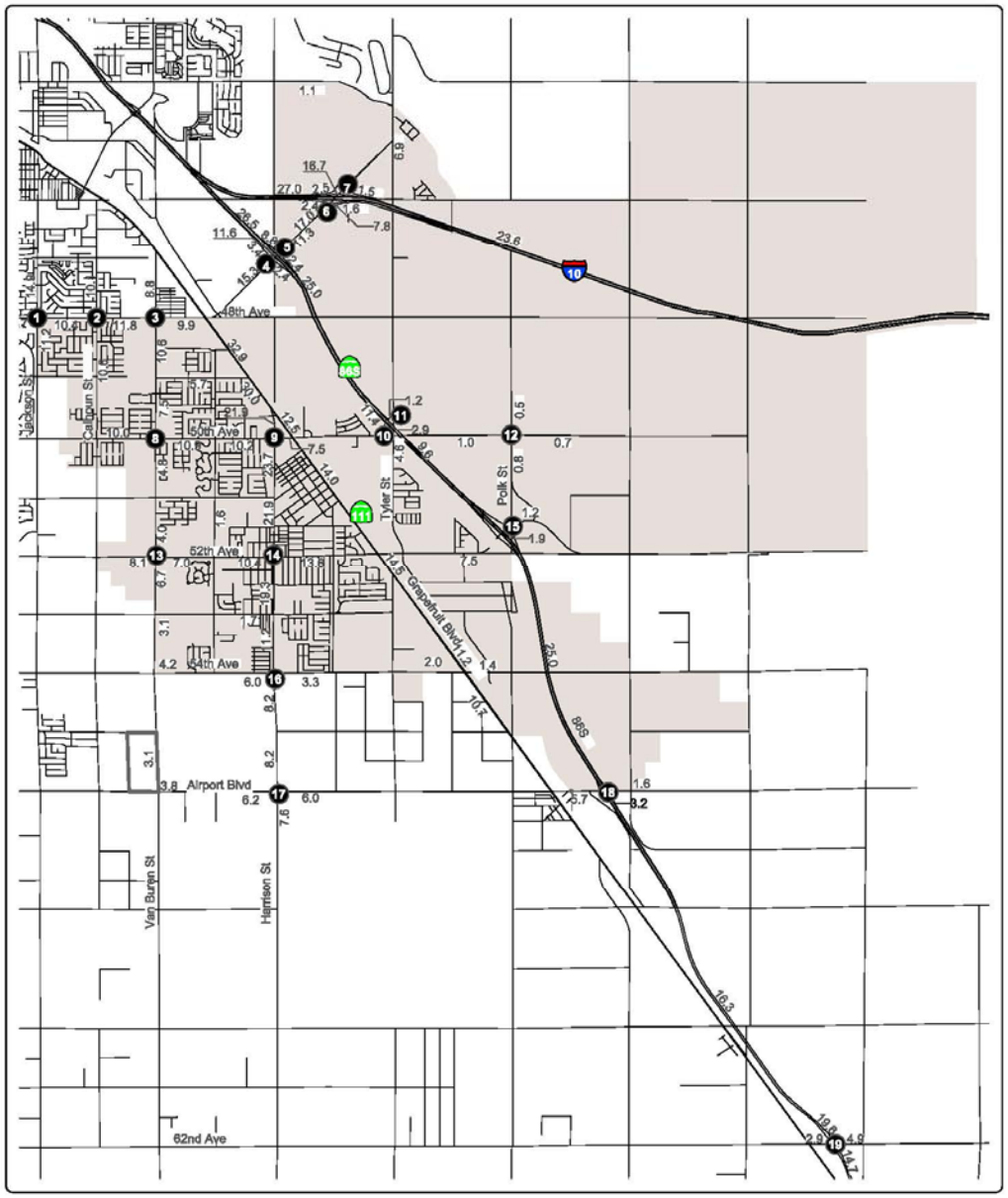


Figure 4.9-5: Existing Intersection Counts

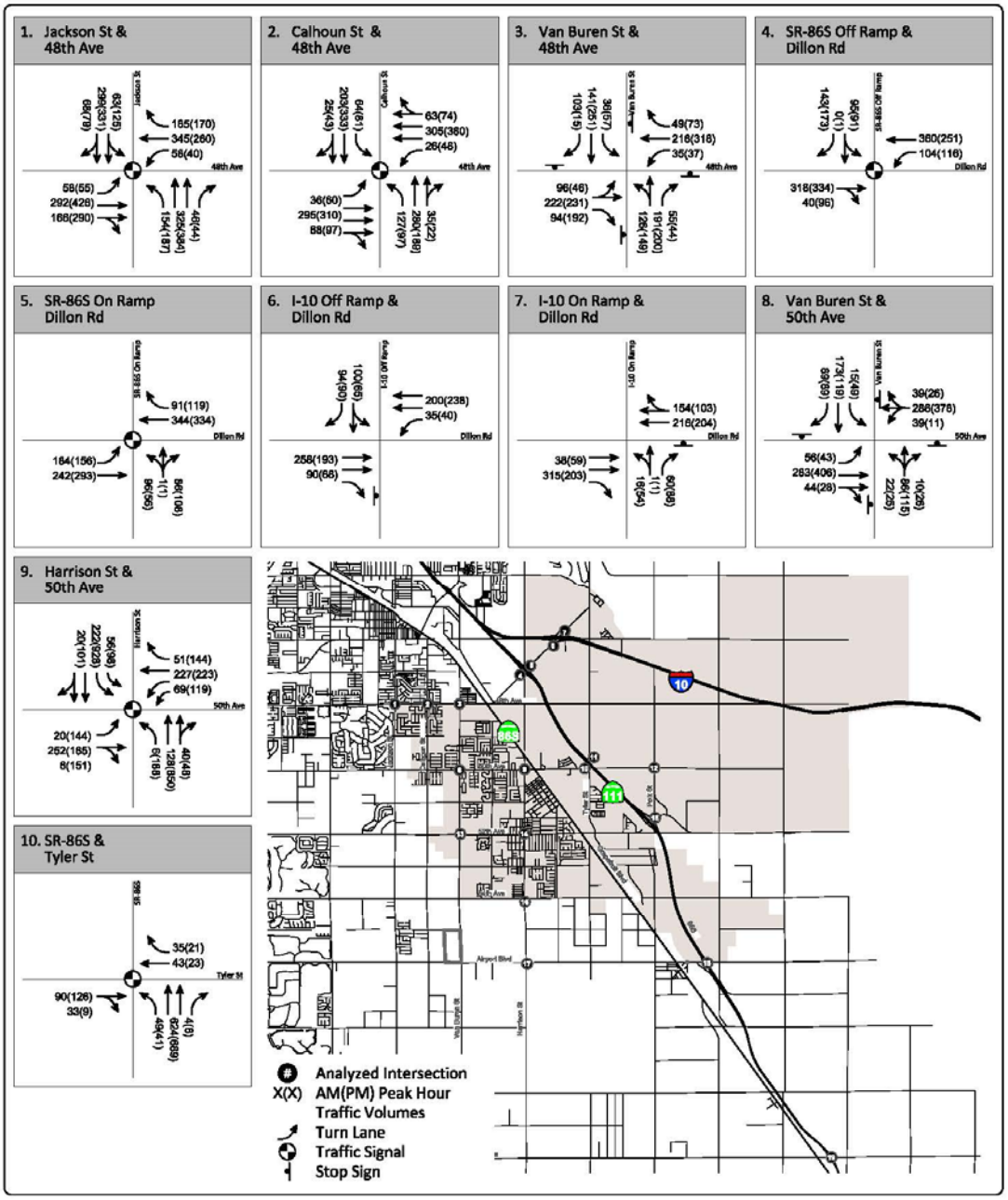
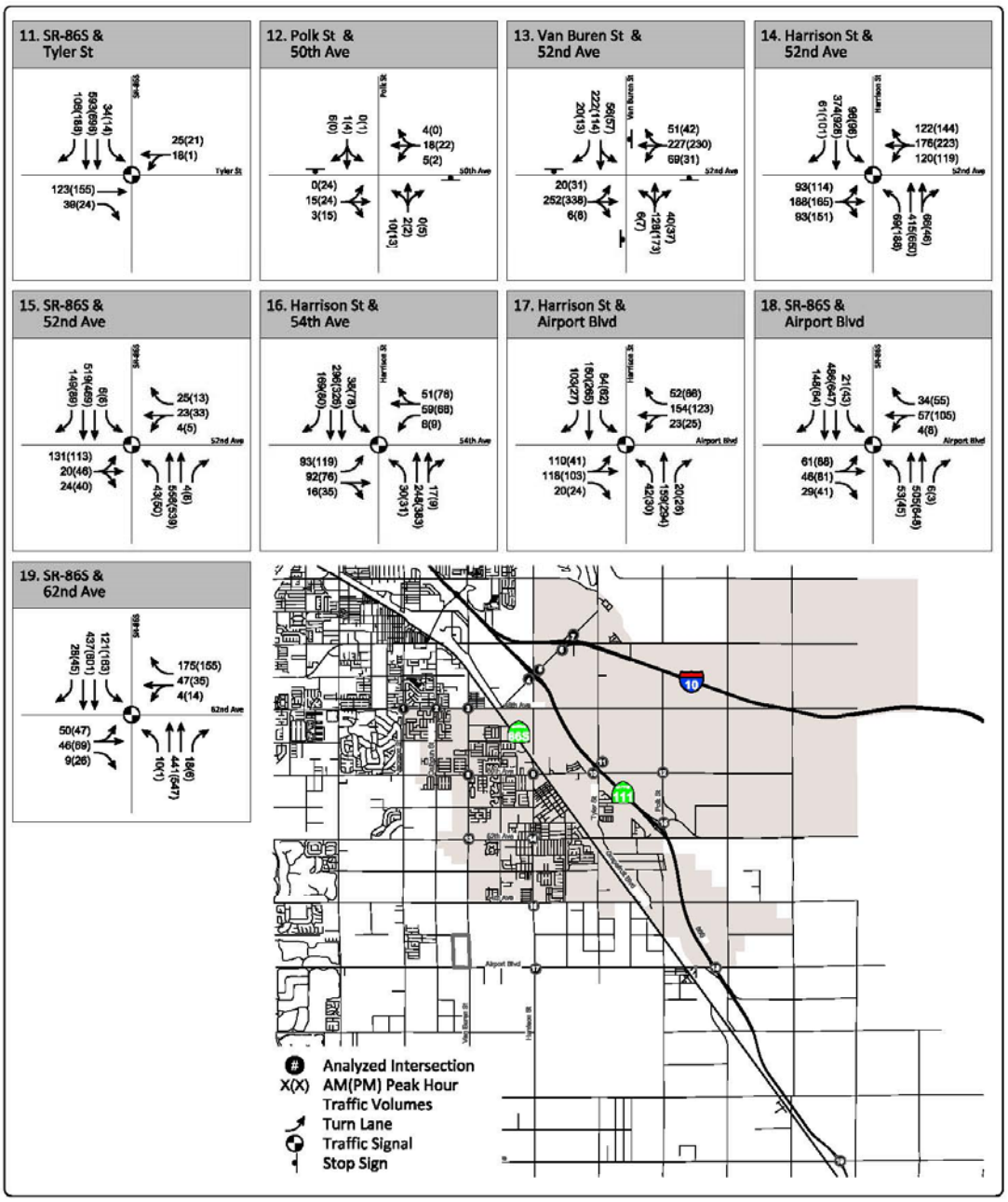


Figure 4.9-6 Existing Intersection Counts



INTERSECTION OPERATIONS

As previously stated, the existing conditions analysis for study intersections were conducted by Urban Crossroads. Existing LOS results for study intersections are summarized in **Table 4.9-1.**

Table 4.9-1 Intersection Level of Service

Intersection	Traffic Control[2]	Delay[1] (secs)		Level of Service	
		AM	PM	AM	PM
Jackson Street (NS) at:					
• Avenue 48 (EW)	Signalized	35.0	35.6	C	D
Calhoun Street (NS) at:					
• Avenue 48 (EW)	Signalized	22.2	23.2	C	C
Van Buren Street (NS) at:					
• Avenue 48 (EW)	AWS	21.7	40.3	C	E
• Avenue 50 (EW)	AWS	20.9	<50	C	F
• Avenue 52 (EW)	AWS	24.2	18.2	C	C
SR-86S SB Ramps (NS) at:					
• Dillon Road (EW)	Signalized	18.8	21.6	B	C
SR-86S NB Ramps at:					
• Dillon Road (EW)	Signalized	23.1	21.7	C	C
Dillon Road (NS) at:					
• I-10 EB Ramps (EW)	SSSC	14.2	13.6	B	B
• I-10 WB Ramps (EW)	SSSC	13.6	13.6	B	B
Harrison Street (NS) at:					
• Avenue 50 (EW)	Signalized	30.2	43.4	C	D
• Avenue 52 (EW)	Signalized	32.7	44.3	C	D
• Avenue 54 (EW)	Signalized	22.3	25.1	C	C
• Airport Blvd (EW)	Signalized	24.9	24.2	C	C
SR-86S SB Ramps (NS) at:					
• Avenue 50 (EW)	Signalized	17.9	16.5	B	B
SR-86S NB Ramps (NS) at:					
• Avenue 50 (EW)	Signalized	18.4	18.5	B	B
Polk Street (NS) at:					
• Avenue 50 (EW)	SSSC	9.0	10.0	A	B
SR-86S (NS) at:					
• Avenue 52 (EW)	Signalized	40.5	38.2	D	D
• Airport Blvd (EW)	Signalized	25.7	29.5	C	C

• Avenue 62 (EW)	Signalized	31.7	30.1	C	C

1 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersection with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All Way Stop; SSSC = Side Street Stop Controlled

Source: *City-wide Traffic Study, Urban Crossroads, March 20, 2007.*

EXISTING ROADWAY SEGMENT OPERATIONS

As previously stated, the existing conditions analysis for study roadway segments were conducted by Urban Crossroads. Existing volumes for the roadway segments are summarized in Table 4.9-2. These segments were selected for analysis as they represent facilities that either are currently classified as Major Arterials or will be classified as Major Arterials on the map of transportation facilities in the Circulation Element.

TABLE 4.9-2 AVERAGE DAILY TRAFFIC

Road	From	Forecasted Volume	V/C	LOS
Avenue 48	East of Jackson	10,400	0.17	C or better
Avenue 48	West of Van Buren	11,800	0.20	C or Better
Avenue 48	East of Van Buren	9,900	0.55	C or Better
Avenue 50	West of Van Buren	10,000	0.33	C or Better
Avenue 50	West of Harrison	10,200	0.34	C or Better
Avenue 50	East of Harrison	7,500	0.21	C or Better
Avenue 50	East of SR-86 S	1,000	0.06	C or Better
Avenue 52	West of Van Buren	8,100	0.45	C or Better
Avenue 52	East of Van Buren	7,000	0.39	C or Better
Avenue 52	East of Harrison	13,600	0.75	C or Better
Avenue 52	East of SR-111	7,500	0.18	C or Better
Avenue 52	West of SR-86 S	7.500	0.18	C or Better
Avenue 52	East of SR-86 S	1,200	0.42	C or Better
Avenue 54	East of Van Buren	4,200	0.23	C or Better
Avenue 54	East of Harrison	3,300	0.18	C or Better
Avenue 54	West of Tyler	3,300	0.18	C or Better
Avenue 54	East of Tyler	2,000	0.11	C or Better
Avenue 54	East of SR-111	1,400	0.08	C or Better
Airport Blvd	East of Van Buren	3,800	0.21	C or Better
Airport Blvd	East of Harrison	6,000	0.33	C or Better
Airport Blvd	West of SR-111	5,700	0.31	C or Better
Airport Blvd	East of Fillmore	1,600	0.09	C or Better
Dillon Rd	South of SR-86 S	15,300	0.66	C or Better
Grapefruit Blvd (SR-111)	South of Ave 48/Dillon	32,900	0.82	D
Grapefruit Blvd (SR-111)	North of Harrison	30,000	0.75	C or Better
Grapefruit Blvd (SR-111)	North of Ave 50	12,500	0.31	C or Better
Grapefruit Blvd (SR-111)	North of Ave 52	14,000	0.35	C or Better
Grapefruit Blvd (SR-111)	South of Ave 52	14,500	0.36	C or Better
Grapefruit Blvd (SR-111)	North of Ave 54	11,200	0.28	C or Better

TABLE 4.9-2 AVERAGE DAILY TRAFFIC

Road	From	Forecasted Volume	V/C	LOS
Grapefruit Blvd (SR-111)	South of Ave 54	10,700	0.27	C or Better
Harrison St	North of Ave 50	21,900	0.61	C or Better
Harrison St	South of Ave 50	23,700	0.66	C or Better
Harrison St	North of Ave 52	21,900	0.61	C or Better
Harrison St	South of Ave 52	19,300	0.54	C or Better
Harrison St	North of Ave 54	11,200	0.31	C or Better
Harrison St	South of Ave 54	8,200	0.45	C or Better
Harrison St	North of Airport	8,200	0.46	C or Better
Harrison St	South of Airport	7,600	0.42	C or Better
Van Buren St	North of Ave 52	4,000	0.22	C or Better
Van Buren St	North of Ave 50	7,500	0.41	C or Better
Van Buren St	North of Ave 54	3,100	0.17	C or Better
Van Buren St	North of Ave 56	3,100	0.17	C or Better
SR-86	North of Airport Blvd	25,000	0.48	C or Better
SR-86	South of Airport Blvd - NB	16,800	0.49	C or Better

Source: *Urban Crossroads (2007)*

REGULATORY SETTING

STATE

AB 1358 – Complete Streets Act

The California Complete Streets Act of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multi-modal perspective. The bill states that streets, roads, and highways must "meet the needs of all users...in a manner suitable to the rural, suburban, or urban context of the general plan." Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate – including walking, biking, car travel, and transit.

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

SB 375

On December 11, 2008, the ARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32. Strategies related to SB 375, particularly the integration of land use and transportation planning, can be implemented at a Citywide level to reduce Citywide VMT and GHG, which then facilitate reductions at the Regional and Statewide level.

There are five major components to SB 375. First, SB 375 will address regional GHG emission targets. ARB's Regional Targets Advisory Committee will guide the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the State. These targets, which MPOs may propose themselves, will be updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs will be required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on eight-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Residential or mixed-use projects qualify if they conform to the SCS. Transit oriented developments (TODs) also qualify if they 1) are at least 50% residential, 2) meet density requirements, and 3) are within one-half mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emission modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

SB 97

While AB 32 places a limit on GHG emissions, it does not specify how climate change regulations affect requirements of the California Environmental Quality Act (CEQA). SB 97, passed in 2007, required the Governor's Office of Planning and Research to develop CEQA guidelines by July 1, 2009 with the provision that these guidelines are certified by the California Resources Agency by January 1, 2010.

STIP

The State Transportation Improvement Program (STIP) is a multi-year capital improvement program for transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of

transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal to the CTC by December 15th (odd years). Caltrans prepares the Interregional Transportation Improvement Program (ITIP) and regional agencies prepare the Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years).

REGIONAL

2012 SCAG RTP/SCS

The Regional Transportation Plan (RTP) is developed, maintained, and updated by the Southern California Association of Governments (SCAG), Southern California's MPO. SCAG encompasses the six counties in Southern California including Los Angeles, Orange, Riverside, San Bernardino, Ventura and Imperial. On April 4, 2012, SCAG's Regional Council adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future* with the primary goal of increasing mobility for the region's residents and visitors, while also emphasizing sustainability and integrated planning. The vision of the RTP/SCS encompasses three principles that collectively work as the key to the region's future: mobility; economy; and sustainability.

The 2012–2035 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. As such, the 2012–2035 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero emission transportation technologies in the 2023–2035 time frame and clear steps to move toward this objective. The RTP/SCS provides a blueprint for improving quality of life for the region's residents by providing more choices for where they will live, work, and play, and how they will move around.

The RTP/SCS contains a host of improvements to the region's multimodal transportation system. These improvements include closures of critical gaps in the network that hinder access to certain parts of the region, as well as the strategic expansion of the transportation system where there is room to grow, in order to provide the region with the mobility it needs. The RTP/SCS also contains a financial plan that identifies how much money is available to support the region's transportation investments. The plan includes a core revenue forecast of existing local, state, and federal sources along with funding sources that are reasonably available over the time horizon of the RTP/SCS.

Riverside County CMP

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including Riverside, to prepare a Congestion Management Plan (CMP). The CMP, which was prepared by the RCTC in consultation with the County and the cities in Riverside County, is an effort to align land use, transportation, and air quality management efforts, to promote reasonable growth management programs that effectively use statewide transportation funds, while ensuring that new development pays its fair share of needed transportation improvements.

The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by RCTC to evaluate the condition of the Congestion Management System (CMS) as well as meet other monitoring requirements at the State and Federal levels. Per the adopted Level of Service target of "E," when a CMS segment falls to "F," a deficiency plan is required. Preparation of a deficiency plan will be the responsibility of the local agency where the deficiency is

located. Other agencies identified as contributors to the deficiency will also be required to coordinate with the development of the plan. The plan must contain mitigation measures, including Transportation Demand Management (TDM) strategies and transit alternatives, and a schedule of mitigating the deficiency. To ensure that the CMS is appropriately monitored to reduce the occurrence of CMP deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMS

Coachella Valley Association of Governments, Transportation Uniform Mitigation Fee (CVAG TUMF)

A regional fee program for CVAG was first implemented in 1989 has been periodically updated since then. This fee program collects funds from development projects and funds local and regional improvements throughout the Coachella Valley.

LOCAL

1996 General Plan Update

The most recent general plan update for the City of Coachella was completed in 1996. Key policies from the 1996 update include:

> The City shall establish intersection Level of Service "D" as the minimum acceptable Level of Service. No development project shall be approved which will increase the traffic on City intersections to a level worse than a Level of Service "D" during the A.M. or P.M. peak hour without adequate mitigation. The City may approve alternatives to this policy based upon detailed review and consideration of other factors. The methodology used to determine the traffic impacts of new development shall be generally consistent with those described in the Model Traffic Impact Analysis Guidelines of the Riverside County Congestion Management Plan (CMP).
>
> The City shall establish street Level of Service "D" as the minimum acceptable Level of Service. No development project shall be approved which will increase the traffic on City streets to a level worse than a Level of Service "D" during the A.M. or P.M. peak hour without adequate mitigation. The City may approve alternatives to this policy based upon detailed review and consideration of other factors. The methodology used to determine the traffic impacts of new development shall be generally consistent with those described in the Model Traffic Impact Analysis Guidelines of the Riverside County Congestion Management Plan (CMP).

ENVIRONMENTAL IMPACTS AND MITIGATION

SIGNIFICANCE CRITERIA

The CEQA Checklist contains the following statements regarding transportation:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

- 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.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Based on these statements, the following significance criteria were identified:

- A significant impact would occur if the Project conflicts with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? For roadway facilities in the City of Coachella, this impact is evaluated in terms of LOS D thresholds for roadways and intersections.
- A significant impact would occur if the project conflicts with the Riverside County Transportation Commission (RCTC) Congestion Management Program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the RCTC for designated roads or highways?
- A significant impact would occur if the project 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.
- A significant impact would occur if the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or impede emergency vehicle access?
- A significant impact would occur if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

ROADWAY CONGESTION

Impact 4.9-1: Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. For roadway facilities in the City of Coachella, this impact is evaluated in terms of LOS D thresholds for roadways and intersections?

Significance: Significant and Unavoidable for regional roadways including SR-86 South and Grapefruit Boulevard. Less than significant with mitigation for City roadways.

Increases in Citywide population and housing will create additional vehicular trips. These additional vehicle trips will use City roadways and intersections which may result in additional congestion. This effect of this increase in traffic is quantified using methodologies identified below.

The intersection analysis employs a methodology based on empirical research conducted by the Transportation Research Board and other authorities. Signalized intersection operations are evaluated using methodologies provided in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board). These methodologies assess average control delays and then assign a corresponding letter grade that represents the overall condition of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. For this study, levels of service are calculated using Traffix software, which implements 2000 HCM methodologies. Descriptions of the LOS letter grades for signalized intersections and the relationship between the various delays are provided in Table 4.9-3, which also provides the LOS value at various levels of delay for unsignalized intersections.

Table 4.9-3: Intersection Level of Service Criteria

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

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

Intersections

The previous General Plan for the City of Coachella set the LOS threshold for intersections at LOS D. However; the CGPU does not explicitly set an LOS threshold for intersections. Given this lack of specific LOS statements in the General Plan, LOS D thresholds are set for each intersection and intersections which will operate at LOS E or LOS F are considered to deficient and require mitigation.

Using this approach, the following intersections would operate at a deficient LOS (LOS E or F).

- Jackson Street/Avenue 48
- Van Buren Street/Avenue 48
- Van Buren Street/Avenue 52
- SR-86S SB Ramps/Dillon Road
- SR-86S NB Ramps/Dillon Road
- Dillon Road/I-10 EB Ramps
- Dillon Road I-10 WB Ramps
- Harrison Street/Avenue 50
- Harrison Street/Avenue 52
- Harrison Street/Avenue 54
- Harrison Street/Airport Boulevard
- Polk Street/Avenue 50
- SR-86S/Avenue 52

Roadway Segments

Table 4.9-4 provides the roadway segment thresholds used to identify impacts to roadway segments. For the majority of the roadway segments, the threshold applied is LOS D to determine whether a roadway segment exceeds the allowable thresholds. However; the CGPU Mobility Element also includes a policy which allows transportation facilities to exceed these standardized thresholds including:

- Dillon Road (South of SR-86 S)
- Grapefruit Boulevard (SR-111) (South of Ave 48/Dillon Road)
- Grapefruit Boulevard (SR-111) (North of Harrison)

- Harrison Street (North of Avenue 52)
- Harrison Street (North of Avenue 54)

Exempting these facilities from the LOS thresholds on these select will encourage the use of alternative travel modes such as walking, biking, and transit while maintaining the overall roadway network within the City.

- ♦ After applying these thresholds with the exceptions above, the following roadway segments would operate at a deficient LOS. Avenue 50 (East of SR-111)
- ♦ SR-86 (North of Airport Boulevard – NB)
- ♦ SR-86 (North of Airport Boulevard – SB)
- ♦ SR-86 (South of Airport Boulevard – NB)
- ♦ SR-86 (South of Airport Boulevard – SB)

Table 4.9-4: Roadway Segment Thresholds

Roadway Classification	Number of Lanes	Maximum Two-Way Traffic Volume for LOS D (ADT)[1]
Major Arterial[2]	6D	56,000
Primary Arterial[2]	4D	37,400
Secondary Arterial[2]	4D	28,900
Major Collector[2]	4U	20,000
Minor Collector[2]	2U	12,000
Local Street[1]	2U	10,400

Notes:
(1) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.
(2) Maximum two-way ADT values sourced from *Coachella General Plan 2020 Circulation Element, September 1996.*
Source: Riverside County Congestion Management Program, 2008, and Coachella General Plan 2020 Circulation Element, September 1996.

2035 Conditions

2035 conditions within the City reflect the proposed land use changes associated with the General Plan, which are then overlaid on the proposed roadway network designed to complement this proposed

development. Data regarding the future operations of intersections is presented in Table 4.9-5 while future roadway segments are provided in Table 4.9-6.

Table 4.9-5: 2035 Intersection Level of Service

Intersection	Traffic Control[2]	Delay[1] (secs)		Level of Service	
		AM	PM	AM	PM
Jackson Street (NS) at:					
• Avenue 48 (EW)	Signalized	36.8	47.7	D	D
Calhoun Street (NS) at:					
• Avenue 48 (EW)	Signalized	26.5	37.3	C	D
Van Buren Street (NS) at:					
• Avenue 48 (EW)	AWS	31.6	**54.0**	C	**E**
• Avenue 50 (EW)	AWS	23.4	24.0	C	C
• Avenue 52 (EW)	AWS	25.3	27.7	C	C
SR-86S SB Ramps (NS) at:					
• Dillon Road (EW)	Signalized	**56.4**	**58.0**	**E**	**E**
SR-86S NB Ramps at:					
• Dillon Road (EW)	Signalized	**80.6**	**53.9**	**F**	**E**
Dillon Road (NS) at:					
• I-10 EB Ramps (EW)	SSSC	**>50**	**>50**	**F**	**F**
• I-10 WB Ramps (EW)	SSSC	**>50**	18.8	**F**	C
Harrison Street (NS) at:					
• Avenue 50 (EW)	Signalized	26.5	**>80**	C	**F**
• Avenue 52 (EW)	Signalized	50.0	**>80**	D	**F**
• Avenue 54 (EW)	Signalized	23.8	31.7	C	C
• Airport Blvd (EW)	Signalized	**58.1**	50.9	**E**	D
SR-86S SB Ramps (NS) at:					
• Avenue 50 (EW)	Signalized	12.9	12.2	B	B
SR-86S NB Ramps (NS) at:					
• Avenue 50 (EW)	Signalized	17.3	17.8	B	B
Polk Street (NS) at:					
• Avenue 50 (EW)	SSSC	24.6	19.6	C	B
SR-86S (NS) at:					
• Avenue 52 (EW)	Signalized	35.6	35.3	**D**	D
• Airport Blvd (EW)	Signalized	31.1	40.6	C	D
	Signalized	25.8	23.5	C	C

• Avenue 62 (EW)					

1 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersection with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All Way Stop; SSSC = Side Street Stop Controlled

Source: *Coachella General Plan EIR Traffic Study, June 2013.*

As noted in Table 4.9-5, there are eight locations where the incremental traffic associated with the General Plan will cause an intersection to operate at a level worse than LOS D. These locations include:

- Van Buren Street/Avenue 48
- SR-86S SB Ramps/Dillon Road
- SR-86S NB Ramps/Dillon Road
- Dillon Road/I-10 EB Ramps
- Dillon Road I-10 WB Ramps
- Harrison Street/Avenue 50
- Harrison Street/Avenue 52
- Harrison Street/Airport Boulevard

Roadway segment volumes are shown in Table 4.9-6. As shown in this table, there are ten roadway segments which exceed the LOS D threshold including:

- Avenue 50 (East of SR-111)
- Dillon Road (South of SR-86 S)
- Grapefruit Boulevard (SR-111) (South of Ave 48/Dillon Road)
- Grapefruit Boulevard (SR-111) (North of Harrison)
- Harrison Street (North of Avenue 52)
- Harrison Street (North of Avenue 54)
- SR-86 (North of Airport Boulevard – NB)
- SR-86 (North of Airport Boulevard – SB)
- SR-86 (South of Airport Boulevard – NB)
- SR-86 (South of Airport Boulevard – SB)

TABLE 4.9-6 2035 ROADWAY SEGMENT LOS

Road	From	Classification	Lanes	Forecasted Volume	Capacity	V/C	LOS
Avenue 48	East of Jackson	Major Arterial	6	31,960	56,000	0.57	C or better
Avenue 48	West of Van Buren	Major Arterial	6	32,070	56,000	0.57	C or Better
Avenue 48	East of Van Buren	Major Arterial	6	26,190	56,000	0.47	C or Better
Avenue 50	East of Jackson	Major Arterial	6	18,910	56,000	0.34	C or Better
Avenue 50	West of Van Buren	Major Arterial	6	20,570	56,000	0.37	C or Better
Avenue 50	West of Harrison	Major Arterial	6	19,190	56,000	0.34	C or Better
Avenue 50	East of Harrison	Major Arterial	6	17,450	56,000	0.31	C or Better
Avenue 50	East of SR-111	Primary Arterial	4	34,920	37,400	0.93	E
Avenue 50	East of SR-86 S	Major Arterial	6	28,880	56,000	0.52	C or Better
Avenue 52	West of Van Buren	Primary Arterial	4	18,260	37,400	0.49	C or Better
Avenue 52	East of Van Buren	Major Arterial	6	19,320	56,000	0.35	C or Better
Avenue 52	East of Harrison	Major Arterial	6	20,640	56,000	0.37	C or Better
Avenue 52	East of SR-111	Major Arterial	6	49,250	56,000	0.88	D
Avenue 52	West of SR-86 S	Major Arterial	6	21,170	56,000	0.38	C or Better
Avenue 52	East of SR-86 S	Major Arterial	6	20,500	56,000	0.37	C or Better
Avenue 54	East of Jackson	Primary Arterial	4	13,370	37,400	0.36	C or Better
Avenue 54	East of Van Buren	Primary Arterial	4	11,700	37,400	0.31	C or Better
Avenue 54	East of Harrison	Primary Arterial	4	10,990	37,400	0.29	C or Better
Avenue 54	West of Tyler	Primary Arterial	4	5,760	37,400	0.15	C or Better
Avenue 54	East of Tyler	Primary Arterial	4	6,730	37,400	0.18	C or Better
Avenue 54	East of SR-111	Primary Arterial	4	2,510	37,400	0.07	C or Better
Airport Blvd	East of Jackson	Major Arterial	6	13,620	56,000	0.24	C or Better
Airport Blvd	East of Van Buren	Major Arterial	6	8,200	56,000	0.15	C or Better

TABLE 4.9-6 2035 ROADWAY SEGMENT LOS

Road	From	Classification	Lanes	Forecasted Volume	Capacity	V/C	LOS
Airport Blvd	East of Harrison	Major Arterial	6	5,650	56,000	0.10	C or Better
Airport Blvd	West of Polk	Major Arterial	6	13,730	56,000	0.25	C or Better
Airport Blvd	West of SR-111	Major Arterial	6	9,610	56,000	0.17	C or Better
Airport Blvd	East of SPRR	Primary Arterial	4	18,830	37,400	0.50	C or Better
Airport Blvd	East of Fillmore	Primary Arterial	4	4,730	37,400	0.13	C or Better
Ave 58	East of SR-111	Secondary Arterial	4	5,860	28,900	0.20	C or Better
Dillon Rd	North of Ave 44	Major Arterial	6	20,880	56,000	0.37	C or Better
Dillon Rd	South of SR-86 S	Major Arterial	6	54,830	56,000	**0.98**	**E**
Grapefruit Blvd (SR-111)	South of Ave 48/Dillon	Major Arterial	6	54,300	56,000	**0.97**	**E**
Grapefruit Blvd (SR-111)	North of Harrison	Major Arterial	6	64,970	56,000	**1.16**	**F**
Grapefruit Blvd (SR-111)	North of Ave 50	Major Arterial	6	32,150	56,000	0.57	C or Better
Grapefruit Blvd (SR-111)	North of Ave 52	Major Arterial	6	24,310	56,000	0.43	C or Better
Grapefruit Blvd (SR-111)	South of Ave 52	Major Arterial	6	43,110	56,000	0.77	C or Better
Grapefruit Blvd (SR-111)	North of Ave 54	Major Arterial	6	21,320	56,000	0.38	C or Better
Grapefruit Blvd (SR-111)	South of Ave 54	Major Arterial	6	19,210	56,000	0.34	C or Better
Grapefruit Blvd (SR-111)	North of Ave 56	Major Arterial	6	20,250	56,000	0.36	C or Better
Grapefruit Blvd (SR-111)	South of Ave 56	Primary Arterial	4	17,350	37,400	0.46	C or Better
Harrison St	North of Ave 50	Expressway	6	26,600	56,000	0.48	C or Better
Harrison St	South of Ave 50	Primary Arterial	4	26,420	37,400	0.71	C or Better
Harrison St	North of Ave 52	Primary Arterial	4	40,370	37,400	**1.08**	**F**
Harrison St	South of Ave 52	Primary Arterial	4	28,130	37,400	0.75	C or Better
Harrison St	North of Ave 54	Primary Arterial	4	35,550	37,400	**0.95**	**E**

TABLE 4.9-6 2035 ROADWAY SEGMENT LOS

Road	From	Classification	Lanes	Forecasted Volume	Capacity	V/C	LOS
Harrison St	South of Ave 54	Major Arterial	6	29,940	56,000	0.53	C or Better
Harrison St	North of Airport	Major Arterial	6	30,110	56,000	0.54	C or Better
Harrison St	South of Airport	Major Arterial	6	33,510	56,000	0.60	C or Better
Jackson St	South of Ave 50	Primary Arterial	4	23,790	37,400	0.64	C or Better
Jackson St	North of Ave 56	Primary Arterial	4	26,590	37,400	0.71	C or Better
Van Buren St	North of Ave 52	Primary Arterial	4	27,520	37,400	0.74	C or Better
Van Buren St	North of Ave 50	Primary Arterial	4	27,420	37,400	0.73	C or Better
Van Buren St	North of Ave 54	Major Arterial	6	35,490	56,000	0.63	C or Better
Van Buren St	North of Ave 56	Major Arterial	6	41,200	56,000	0.74	C or Better
Van Buren St	South of Ave 56	Major Arterial	6	43,600	56,000	0.78	C or Better
SR-86	North of Airport Blvd - NB	Freeway	2	39,590	40,100	**0.99**	**E**
SR-86	North of Airport Blvd - SB	Freeway	2	42,080	40,100	**1.05**	**F**
SR-86	South of Airport Blvd - NB	Freeway	2	38,890	40,100	**0.97**	**E**
SR-86	South of Airport Blvd - SB	Freeway	2	44,520	40,100	**1.11**	**F**
I-10	West of Dillon Road – WB	Freeway	2	43,240	42,000	**1.03**	**FX**
I-10	West of Dillon Road – EB	Freeway	2	41,170	42,000	**0.98**	**EX**
I-10	East of Dillon Road – WB	Freeway	2	36,760	42,000	**0.88**	**DX**
I-10	East of Dillon Road – EB	Freeway	2	38,500	42,000	**0.92**	**XE**

Source: *Fehr & Peers, 2014*

Mitigation Measures

Within one year of adoption of the CGPU, the City shall update its Development Impact Fee (DIF) program to establish a plan and funding mechanism that provides for the implementation of all of the roadway improvements identified in the Mobility Element. The DIF shall also include the following physical improvements and provide for their implementation prior to build out of the General Plan.

The following physical improvements at each intersection are necessary to provide LOS D operations for either the AM or PM Peak Hours by increasing capacity and therefore reducing traffic congestion. Van Buren Street/Avenue 48

  - Signalized Intersection
- SR-86S SB Ramps/Dillon Road
  - NB Approach- Add 2nd right turn lane
  - EB Approach- Change thru-right to a third thru lane with separated right turn lane
- SR-86S NB Ramps/Dillon Road
  - NB Approach – Change to left and right turn lanes
  - EB Approach – Add 3rd left turn lane
- Dillon Road/I-10 EB Ramps
  - Signalized Intersection
- Dillon Road I-10 WB Ramps
  - Signalize Intersection
  - EB Approach- Change right turn to a free right (no conflict)
- Harrison Street/Avenue 50
  - SB Approach - Change thru from 3 to 4 lanes
  - NB Approach - Change left from 1 to 2 lanes
  - EB Approach - Change left from 2 to 3 lanes
  - WB Approach - Change right from 1 to 2 lanes
- Harrison Street/Avenue 52
  - NB Approach - Change 1 left to triple lefts
  - SB Approach - Change 1 left to triple lefts and 2 thrus to 3 thrus
  - EB Approach - Change from 2 lefts to 3 lefts and 1 right to 2 rights
  - WB Approach – Change from 1 right to 2 rights
- Harrison Street/Airport Boulevard
  - SB Approach- Add second SB thru lane

An additional mitigation measure would be to widen Avenue 50, east of SR-111, from 4 lanes to 6 lanes, which will improve the roadway segment LOS from E to LOS C or better.

Additional impact reduction is provided by policy language in the General Plan which is oriented towards reducing vehicle usage through increases in density, provision of mixed use, improving the design of development, and the provision of alternative mode facilities. Supporting policy statements include:

Land Use Element

2.9 **Infill development.** Promote and provide development incentives for infill development and redevelopment of existing properties.

2.10 **Contiguous development pattern.** Encourage and incentivize development to occur contiguous to, or proximate to, existing built areas to facilitate delivery of City services and minimize "leapfrog" development not connected to existing urbanized areas.

3.2 **Walkable streets.** Regulate new development to ensure new blocks encourage walkability by maximizing connectivity and route choice, create reasonable block lengths to encourage more walking and physical activity and improve the walkability of existing neighborhood streets.

3.3 **Pedestrian barriers.** Discourage physical barriers to walking and bicycling between and within neighborhoods and neighborhood centers. If physical barriers are unavoidable, provide safe and comfortable crossings for pedestrians and cyclists. Physical barriers may include arterial streets with speed limits above 35 mph, transit or utility rights-of-way, very long blocks without through-streets, and sound walls, among others

5.1 **Complete neighborhoods.** Through the development entitlement process, ensure that all new Neighborhoods (areas with a "Neighborhood" General Plan Designation) are complete and well-structured such that the physical layout and land use mix promote walking to services, biking and transit use; develop community identity and pride, are family friendly and address the needs of multiple ages and physical abilities. New neighborhoods should have the following characteristics:

- Be approximately 125 acres in size and approximately half-mile in diameter
- Contain short, walkable block lengths.
- Have a grid or modified grid street network (except where topography necessitates another street network layout).
- Contain a high level of connectivity for pedestrians, bicycles and vehicles (except where existing development or natural features prohibit connectivity).
- Have homes with entries and windows facing the street.
- Contain a diversity of housing types, where possible.
- Provide a diversity of architectural styles.
- Have goods and services within a short walking distance.
- Are organized around a central focal point such as a park, school, civic building or neighborhood retail such that most homes are no more than one quarter-mile from this focal point.

5.15 **Access to daily activities.** Strive to create development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, such as supermarkets, restaurants, churches, cafes, dry cleaners, laundromats, farmers markets, banks, hair care, pharmacies and similar uses.

6.6 **Redevelopment of existing retail into neighborhood centers.** Provide incentives to transform existing, auto-dominated suburban centers into neighborhood destinations by adding a diversity of uses, providing new pedestrian connections to adjacent residential areas, reducing the visual prominence of parking lots, making the centers more pedestrian-friendly and enhance the definition and character of street frontage and associated streetscapes.

9.1 **City-wide connectivity.** Establish and preserve a Citywide street network throughout the City where through roads occur approximately every one-quarter mile, except where connections cannot be made because of previous large development projects or

physical constraints. Physical constraints shall be canals, railroads, water, steep slopes, limited access roadways and similar natural and man-made barriers.

9.2 **Subarea connectivity.** Ensure a high-level of connectivity in all Neighborhoods, Centers and Districts throughout the City. The connectivity shall be measured as block perimeter and in external connectivity on the perimeter of a new development project.

9.3 **Connections between development projects.** Require the continuation of the street network between adjacent development projects and discourage the use of cul-desacs except where necessary because connections cannot be made due to existing development, topographic conditions or limited access to transportation systems.

Mobility Element

3.1 **Pedestrian network.** Improve health outcomes by creating a safe and convenient circulation system for pedestrians that focuses on crosswalks, improves the connections between neighborhoods and commercial areas, provides places to sit or gather, pedestrian-scaled street lighting, buffers from moving vehicle traffic, and includes amenities that attract people of all ages and abilities.

3.2 **Pedestrian improvement prioritizations.** Prioritize pedestrian improvements in existing areas of the City with supportive land use patterns and those facilities that provide connectivity to other modes of travel such as bicycling and transit.

3.3 **Sidewalks for roadways.** Require that the City provide wide sidewalks along all roadways which are built or reconstructed in the City except in those instances in which there is insufficient right-of-way or other physical limitations.

3.4 **Pedestrian connections for development.** Require that all development or redevelopment projects provide pedestrian connections to the external pedestrian network.

3.5 **Pedestrian access to gated communities.** Require that all new communities, regardless of the presence of gates and sound walls, provide pedestrian connections from external areas into the community.

3.6 **Pedestrian only areas.** Promote the closure of streets on a recurring basis to create temporary pedestrian zones for Community Events, such as farmers markets, community events, ciclovías (bicycle and pedestrian events), and other events consistent with the walking and biking environment policies of the Mobility Element. Leverage the momentum of other regional bike events, such as Tour de Palm Springs, to create events locally.

4.1 **Bicycle networks.** Require that the City provide additional bicycle facilities along all roadways in the City which are built or reconstructed in the City except in those instances in which there is insufficient right-of-way or other physical limitations.

4.2 **Priority bike improvements.** Prioritize improvements that address bicycling in existing areas of the City with complementary land use patterns and connections to other modes of travel including walking and transit.

4.3 **Bicycle access to gated communities.** Require that all new communities, regardless of the presence of gates and sound walls, provide bicycle connections from external areas into the community.

4.4 **Bicycle parking.** Require that the public and private development in the City provide sufficient bicycle parking.

4.5 **Wayfinding.** Develop a comprehensive and visible way-finding signage system in the city to direct cyclists to transit facilities, local and regional bike routes, civic and cultural amenities, and visitor and recreation destinations. The way-finding system should make an effort to connect with the region and surrounding cities.

5.1 **Transit improvements.** Promote transit service in areas of the City with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle/pedestrian networks.

5.2 **Bus stops.** Review existing bus stop locations to determine their accessibility to key destinations such as schools, residential areas, retail centers, civic facilities. The City will encourage bus shelters as public art and work with Sun Line to relocate bus stop locations as needed to provide greater access to these key destinations. Prioritize those bus stop locations which are connected to bicycle and pedestrian facilities.

5.3 **Promote bus shelters.** Encourage bus shelters in new development, if a stop is determined necessary by SunLine. Bus shelters should be designed as public art or to be compatible with the building architecture of the site.

5.4 **Transit accessible development.** Encourage new large residential or commercial developments to locate on existing and planned transit routes.

5.5 **Senior transit.** Expand affordable and reliable transportation options for older adults and persons with disabilities through collaboration with Sun Line, the Senior Center, and other community groups.

5.7 **Safe routes to transit.** Regularly review and improve pedestrian and cyclist access to transit.

8.1 **Regional transit.** Collaborate with Sun Line Transit to identify regional connections for City residents and employees.

8.3 **Regional non-motorized connections.** Prioritize connections between the City's bicycle and pedestrian network to regional facilities such as the CV Link and other regional trail facilities.

Significance After Mitigation

With the implementation of the physical improvements associated with the intersections and the expansion of Avenue 50, several segments of SR-86 South will continue to operate at an LOS E or F including:

- SR-86 (North of Airport Boulevard – NB)
- SR-86 (North of Airport Boulevard – SB)
- SR-86 (South of Airport Boulevard – NB)
- SR-86 (South of Airport Boulevard – SB)

These facilities are impacted by both by the proposed General Plan land uses and also by the growth in areas outside of Coachella since these roadways are regional facilities that serve both local and regional traffic. As such, the impact to these facilities cannot be fully mitigated and the impact remains significant and unavoidable.

LEVEL OF SERVICE STANDARDS

Impact 4.9-2: Would the project conflict with the Riverside County Transportation Commission (RCTC) Congestion Management Program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the RCTC for designated roads or highways?

Significance: Significant and Unavoidable.

Similar to City roadways, the incremental housing and employment growth in the City also create additional vehicular trips that will travel on regional roadways such as I-10 and SR 86 South. These facilities are within the jurisdiction of the Riverside Congestion Management Program (CMP), which is responsible for monitoring their operations. The incremental vehicular traffic associated with the General Plan could create additional congestion on these CMP roadways.

CMP facilities within the City include I-10 and SR 86 South as noted in the RCTC CMP. Since I-10 and SR-86 provides regional access to the City, they are used daily by City residents, employees and visitors traveling to and from the City. Based on data provided by the 2011 CMP Update for Riverside County, these facilities are currently operating at LOS C or better based on existing conditions. With the development of the General Plan and development in areas outside of the City, I-10 will operate at LOS E during the peak hours and SR-86 South will operate at LOS F based on future traffic conditions. Future volumes for SR-86 South and I-10 are provided in Table 4.9-6.

This impact is partially reduced by policies in the Mobility Element which address regional travel by encouraging the use of non-automotive modes to satisfy regional travel demand. By diverting persons from automobiles to transit and carpooling, the traffic volumes on SR-86 South and I-10 can be reduced. These policies include:

8.1 Regional transit. Collaborate with Sun Line Transit to identify regional connections for City residents and employees

8.2 Regional park and ride. Collaborate with CVAG to identify potential park and ride locations in Coachella.

8.3 **Regional non-motorized connections.** Prioritize connections between the City's bicycle and pedestrian network to regional facilities such as the CV Link and other regional trail facilities.

8.4 **Regional planning for alternative transportation.** Collaborate with CVAG on the development of any regional planning documents related to bicycles, pedestrians, transit, and low speed electric vehicles.

However; these policies cannot fully mitigate these regional impacts as development outside of the City contributes to increased traffic volumes on these facilities. Therefore, the traffic impact would be significant and unavoidable.

Fully mitigating these impacts will require the reconstruction of SR-86 South and I-10 to provide additional capacity beyond what is provided today. While development within the City provides funding for regional improvements through participation in CVAG's TUMF program, there are no current plans to widen either roadway in the SCAG Long Range Transportation Plan or other planning document.

Mitigation Measures

No feasible mitigation measure exists that could be implemented by the City that would fully mitigate these impacts to regional roadways.

TRAFFIC PATTERNS

Impact 4.9-3: Would the project 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?

Significance: Less than significant

Air transportation is a key element of the overall transportation system. Impacts to the air transportation can occur through the changes in the land use or roadway network, which can affect the operations of existing and proposed air facilities.

The General Plan will not have any direct or indirect impact upon any existing air facilities. The General Plan fully incorporates the Airport Land Use Plan, which limits any impacts which might occur. Please refer to Section 4.8, for a detailed discussion of the compatibility of the CGPU and Airport Land Use Plan.

Mitigation Measures

No mitigation measures are necessary.

TRAFFIC HAZARDS

Impact 4.9-4: Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or impede emergency vehicle access?

Significance: Less than significant

A key aspect of the transportation system is limiting hazardous conditions for all users of the transportation system including vehicles, bicyclists, and pedestrians. As such, the design of transportation facilities is a key consideration to limit these hazards.

The General Plan and the Mobility Element contain a number of policy statements related to the design of transportation facilities which limits hazardous conditions. Significant policies include:

Goal 1: A balanced transportation system that accommodates all modes of travel safely and efficiently without prioritizing automobile travel at the expense of other modes.

1.5 **Pedestrian and cyclist safety.** Balance the safety concerns of pedestrians and cyclists with motor vehicles and emergency response to ensure that the safety of all users of the transportation system is considered.

2.1 **Traffic calming.** Develop traffic calming policies for selecting targeted existing neighborhoods to include: clearly marked bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, center island narrowings, raised crosswalks, blinking crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements. [From Health Element]

2.2 **Traffic calming.** Apply traffic calming techniques to future residential streets to limit cut-through traffic and speeding on these roadways streets. - **Potential traffic calming applications can include** clearly marked bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, center island narrowings, raised crosswalks, blinking crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements

3.1 **Pedestrian network.** Improve health outcomes by creating a safe and convenient circulation system for pedestrians that focuses on crosswalks, improves the connections between neighborhoods and commercial areas, provides places to sit or gather, pedestrian-scaled street lighting, buffers from moving vehicle traffic, and includes amenities that attract people of all ages and abilities.

The CGPU also would not impede access by emergency vehicles through two mechanisms. First, the mitigation measures for intersections identified previously will limit congestion during the peak hours, allowing emergency vehicles to access locations throughout the City without being impeded by congestion. Secondly, the roadway network will be expanded to serve all areas of City, ensuring that emergency vehicles can access new locations within the City as development occurs. Therefore, this expansion of the transportation will facilitate emergency vehicle access throughout the City.

Mitigation Measures

No mitigation measures are necessary.

NON-MOTORIZED TRANSPORTATION

Impact 4.9-5: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Significance: Less than significant

The General Plan substantially expands the non-automotive facilities within the City. The proposed General Plan roadway network would provide nearly 200 miles of roadways with in-street bicycle lanes and over 50 miles of off-street facilities. The proposed cross-sections for the General Plan also provide for sidewalks along many of the roadways within the City to facilitate pedestrian travel within the City. These Citywide facilities complement CVAG's Regional Non-Motorized Plan, which will provide regional connections along alignments such as the Parkway 1e11 into the City of Coachella.

These facilities will be complemented by policies within the General Plan which encourage the development of transit, bicycle, and pedestrian facilities including:

1.1 **Complete Streets for new construction.** Require that the planning, design and construction of all new transportation projects consider the needs of all modes of travel to create safe, livable and inviting environments for pedestrians, bicyclists, motorists and public transit users of all ages and abilities.

1.2 **Complete streets for existing roadways.** Require that the planning, design and reconstruction of any existing transportation projects consider the needs of all travel modes to the extent feasible.

1.5 **Pedestrian and cyclist safety.** Balance the safety concerns of pedestrians and cyclists with motor vehicles and emergency response to ensure that the safety of all users of the transportation system is considered.

3.1 **Pedestrian network.** Improve health outcomes by creating a safe and convenient circulation system for pedestrians that focuses on crosswalks, improves the connections between neighborhoods and commercial areas, provides places to sit or gather, pedestrian-scaled street lighting, buffers from moving vehicle traffic, and includes amenities that attract people of all ages and abilities.

4.1 **Bicycle networks.** Require that the City provide additional bicycle facilities along all roadways in the City which are built or reconstructed in the City except in those instances in which there is insufficient right-of-way or other physical limitations

5.1 **Transit improvements.** Promote transit service in areas of the City with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle/pedestrian networks.

5.2: **Bus stops.** Review existing bus stop locations to determine their accessibility to key destinations such as schools, residential areas, retail centers, civic facilities. Work with Sun Line to relocate bus stop locations as needed to provide greater access to these key destinations. Prioritize those bus stop locations which are connected to bicycle and pedestrian facilities. M-8.3: **Regional non-motorized connections.** Collaborate with CVAG to provide connections between the City's bicycle and pedestrian network to regional facilities.

Given the alternative mode improvements identified and the supporting policy language, the General Plan strongly supports travel by walking, bicycling, and transit.

Mitigation Measures

No mitigation measures are necessary.

CUMULATIVE IMPACTS

Cumulative impacts associated with the Proposed General Plan occur in the context of the regional transportation including the regional roadways within the Coachella Valley such as I-10 and SR-86 South. Because the proposed project is a General Plan Update, which takes into account existing and potential development over approximately the next twenty years, the analysis of circulation-related impacts contained within this chapter of the EIR is already cumulative in nature.

Significance: Significant and Unavoidable

Like other jurisdictions in the Coachella Valley, the City of Coachella contributes traffic to regional roadways. These roadways provide access to residents, employees, and visitors who travel into and out of Coachella on a regular basis.

As discussed in the assessment of impacts via the CMP, these regional roadways are anticipated to operate at a deficient level. Some of the traffic found on these roadways will come from the City of Coachella while the remaining traffic will come from areas outside of Coachella. In the case of I-10, much of this traffic is actually through traffic which neither begins nor ends a trip in the City of Coachella. There is also through traffic using the SR-86 South, traveling to and from areas south of Coachella.This impact is partially mitigated through policies in Mobility Element of the General Plan which reduce vehicular travel outside of the City by encouraging transit, carpooling, and bicycling. These policies include:

8.1 **Regional transit.** Collaborate with Sun Line Transit to identify regional connections for City residents and employees

8.2 **Regional park and ride.** Collaborate with CVAG to identify potential park and ride locations in Coachella.

8.3 **Regional non-motorized connections.** Prioritize connections between the City's bicycle and pedestrian network to regional facilities such as the CV Link and other regional trail facilities.

8.4 **Regional planning for alternative transportation.** Collaborate with CVAG on the development of any regional planning documents related to bicycles, pedestrians, transit, and low speed electric vehicles.

Further mitigation is provided by the regional funding programs that all development in the City of Coachella participates such as the TUMF. The TUMF collects funds from developments throughout the Coachella Valley and allocates these funds to regional projects such as interchanges and major roadways. However, there are no programmed improvements along the regional facilities which are directly impacted by the General Plan including I-10 and SR-86 South, which ensures that these facilities will continue to operate in a deficient fashion.

However; it is unlikely that these policies and funding programs will fully mitigate all regional traffic impacts associated with persons traveling to and from the City of Coachella. Therefore, the impact is significant and unavoidable.

Mitigation Measures

No additional mitigation measures are feasible. Fully mitigating these impacts will require the reconstruction of SR-86 South and I-10 to provide additional capacity beyond what is provided today. While development within the City provides funding for regional improvements through participation in CVAG's TUMF program, there are no current plans to widen either roadway in the SCAG Long Range Transportation Plan or other planning document.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Significant and unavoidable impacts were noted for the following impacts:

- Impact 4-1: Regional roadways only
- Impact 4-2: Impacts to I-10 and SR-86 South as CMP facilities
- Cumulative impacts to I-10 and SR-86 South

Regional roadways are expected to experience significant and unavoidable congestion impacts from the CGPU and regional growth in the Coachella Valley. These facilities are impacted by both by the proposed General Plan land uses and also by the growth in areas outside of Coachella since these roadways are regional facilities that serve both local and regional traffic. As such, the impact to these facilities cannot be fully mitigated and the impact remains significant and unavoidable.

Additionally, with the development of the General Plan and development in areas outside of the City, I-10 will operate at LOS E and F and SR-86 South will operate at LOS F based on future traffic conditions, generating significant congestion impacts within the Planning Area. However, mitigation measures are beyond the City of Coachella's jurisdictional power, and as such, significant and unavoidable impacts to occur on a regional scale.