4.2 TRANSPORTATION AND MOBILITY

This section includes a description of the existing transportation system in the planning area and an evaluation of how adoption and implementation of the Draft General Plan and GGRP would affect the roadway, transit, bicycle, and pedestrian components of the overall transportation system.

The analysis area for transportation and mobility impacts consists of the incorporated City of Citrus Heights and lands outside the City within the planning area defined in Section 3.0, "Project Description". No other local jurisdiction requested analysis of facilities located outside the analysis area in correspondence received in response to the NOP for this EIR.

4.2.1 REGULATORY SETTING

Applicable existing transportation policies, laws, and regulations are summarized below. This information provides a context for the impact discussion related to the plan's consistency with applicable regulatory conditions.

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations or laws pertaining to transportation are applicable.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Interstate 80 Transportation Concept Report

Caltrans has completed a transportation concept report (TCR) for I-80. I-80 crosses through the northwest corner of the planning area and this plan would govern transportation plans affecting I-80 or its interchanges with Citrus Heights roadways. This report identifies long-range improvements for specific state freeway and highway corridors and establishes the "concept," or desired, level of service (LOS) for specific corridor segments. The report also identifies long-range capacity expansion intended to accommodate 20-year forecasts of peak period vehicle traffic demand. Additionally, the reports identify the ultimate design concept for conditions beyond the immediate 20-year design period. A limitation of this report is that it does not consider funding availability.

Through Citrus Heights, the Interstate 80 Transportation Concept Report (Caltrans, January 2001) identifies the existing four mixed flow lanes and one high occupancy vehicle (HOV) lane in each direction as the ultimate facility. Potential improvements to the corridor in the study area would be focused on ramp metering, changeable message signs, and traffic operations surveillance, plus local investments in parallel capacity expansion and transit service. The concept LOS for this section of I-80 is LOS E.

Interstate 80 and Capital City Freeway Corridor System Management Plan (Caltrans, May 2009)

In addition to the TCR, a Corridor System Management Plan (CSMP) was developed for I-80, which is intended to provide for "the integrated management of travel modes and roadways to facilitate the efficient and effective mobility of people and goods within California's most congested transportation corridors." This plan does not include capacity expansion for I-80 through the Citrus Heights area, but instead focuses on management strategies to improve traveler information, reduce recurring congestion, and reduce the duration of non-recurring congestion.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Metropolitan Transportation Plan for 2035

The Sacramento Area Council of Governments (SACOG) is responsible for regional transportation planning for the six-county area that includes El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba counties. Most of this area is designated a federal non-attainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties and agencies must be consistent with the MTP. A project is considered consistent if it is contained in the MTP and is included in the computer modeling of transportation and air quality impacts by SACOG. In addition, any regionally significant transportation project planned for a city or county must be included in the MTP because of its potential effect on travel demand and air pollution.

2009/12 Metropolitan Transportation Improvement Program

The 2009/12 Metropolitan Transportation Improvement Program (MTIP) (SACOG, 2008) is a list of transportation projects and programs to be funded and implemented over the three-year period. SACOG submits this document to Caltrans and amends the program on a quarterly cycle. The MTIP and its amendments are subject to air quality conformity analysis under federal regulations, which limits the use of federal funds for regionally significant, capacity-increasing roadway projects.

Regional Transit TransitAction Plan

The TransitAction Plan is the Sacramento Regional Transit District's (RT) long-range Transit Master Plan, setting out a transit vision for the next 25 years. The Plan provides a comprehensive assessment of alternatives and presents an integrated package of transit investments and increased service frequencies designed to make transit a real transportation choice in the Sacramento region (RT 2010). The TransitAction Plan aligns with the smart growth vision established by the SACOG Preferred Blueprint Scenario, providing a range of rail transit modes (i.e., commuter rail, light rail (LRT), low-floor European street trams, streetcars) and bus transit modes (i.e., bus rapid transit, enhanced buses, express buses, local buses, community shuttles, and neighborhood rides) to support the Blueprint. The TransitAction Plan identifies an extension of light rail from Watt Avenue/I-80 across to Auburn Boulevard, continuing east to Sunrise Boulevard and then traveling north toward Roseville. The TransitAction Plan also proposes a European street tram on Greenback Lane, connecting to the light rail extension, then traveling east to Sunrise Boulevard and continuing to Rancho Cordova.

City of Citrus Heights Capital Improvement Program

The Citrus Heights Capital Improvement Program (CIP) is a five-year plan which identifies capital projects and equipment purchases, provides a planning schedule and identifies financing options. The CIP allocates existing funds and anticipated revenues to rehabilitate, restore, improve and add to the City's infrastructure, including transportation, drainage, facilities, grant-funded projects, the innovation fund program and general purpose expenditures. The document, prepared by the City Manager's Office and the General Services Department based on submissions from City departments, is reviewed by the Planning Commission, and then is submitted to the City Council for adoption, along with the City's annual budget. The five-year plan does not appropriate funds, but rather functions as a budgeting and planning tool, supporting the actual appropriations that are made through adoption of the budget. The first year's budget is typically adopted with the CIP.

City of Citrus Heights Bikeway Master Plan

The City's 2009 Bikeway Master Plan provides recommendations for implementing a comprehensive and coordinated bikeway system in the City to improve the bicycle travel for all residents and visitors.

4.2.2 ENVIRONMENTAL SETTING

EXISTING ROADWAY SYSTEM

Major Roadways

The planning area is served by a series of east-west and north-south arterials and collector streets. Major east-west arterials include Madison Avenue, Greenback Lane, and Antelope Road. Major north-south arterials include Sunrise Boulevard, Fair Oaks Boulevard, Auburn Boulevard, San Juan Avenue, Dewey Drive, and Sylvan Road. Major collector streets include Old Auburn Road, Oak Avenue, Van Maren Lane, Mariposa Avenue, and Twin Oaks Avenue. Exhibit 4.2-1 displays the location of these roadways.

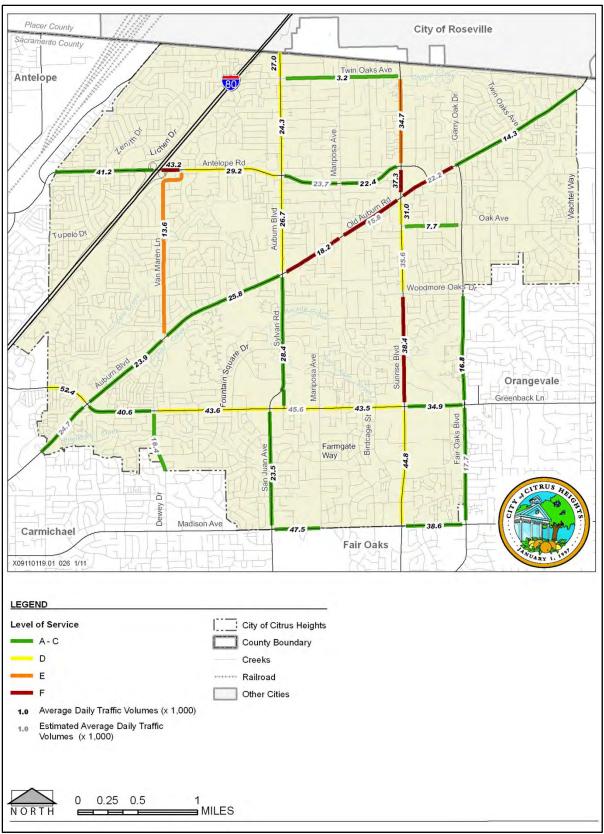
Table 4.2-1 summarizes the existing characteristics of each roadway within the entire right-of way including number of travel lanes, shoulder widths, and the presence of bicycle and/or pedestrian facilities. Access control for each roadway is also listed, which is defined as high, moderate, or low depending on the number of driveways, frequency of stops (traffic signals), and prevailing travel speeds. High access control facilities typically have no driveways and speeds of 45–55 miles per hour (mph). Moderate access control facilities typically have limited driveways and speeds of 35–45 mph. Low access control facilities typically have frequent driveways and speeds of 35–45 mph.

As shown, most roadways within the planning area are classified as moderate access control facilities. High access control facilities include segments of Greenback Lane and Madison Avenue, while low access control facilities include segments of Auburn Boulevard, Sunrise Boulevard, Old Auburn Road, and San Juan Avenue. Most of the two-lane collector streets, such as Oak Avenue, Van Maren Lane, Twin Oaks Avenue, and Mariposa Avenue, are also low access control facilities.

DAILY TRAFFIC VOLUMES AND OPERATIONS

Exhibit 4.2-1 displays existing average weekday daily traffic volumes on major roadway segments within the planning area. The volumes are based on both actual traffic counts and travel demand model estimates for certain segments adjacent to count locations. Traffic counts were conducted between October and December 2009, which is considered representative of traffic conditions in July 2010, when the City issued the NOP for this EIR. Segments of Greenback Lane, Madison Avenue, Antelope Road, and Sunrise Boulevard carry the greatest levels of traffic (over 40,000 vehicles per day). Auburn Boulevard, San Juan Avenue, Sylvan Road, Fair Oaks Boulevard, and Old Auburn Road carry between 15,000 and 30,000 vehicles per day on average. Existing traffic volumes on the study roadway segments are generally lower than those collected for the General Plan in 1998 (an overall average of approximately 8% lower citywide). The greatest reductions in traffic volume counts are on Sunrise Boulevard (approximately 30% lower between Greenback Lane and Old Auburn Road) and Greenback Lane (approximately 16% lower between the west City limits and Dewey Drive). The overall lower traffic volumes are likely a function of the 2008-2009 economic recession and related high unemployment rate and are consistent with general traffic trends in the greater Sacramento area.

Exhibit 4.2-1 also illustrates the existing vehicle Level of Service (LOS) on each roadway based on daily traffic volume capacity thresholds. LOS is a term that describes the operating performance of a facility from a driver's perspective and is reported on a scale from A to F. LOS A represents driving conditions that are not impeded by other traffic and represents low levels of roadway capacity utilization. On the other end of the spectrum, LOS F represents heavy or full utilization of roadway capacity and can have operations where traffic speeds are substantially reduced from free-flow conditions. Daily volume thresholds are used to identify the potential need to expand roadways based on the City's LOS threshold. The decision to expand roadway capacity also involves consideration of the up-front and ongoing costs of roadway improvements, as well as consideration of the perspective of other users, such as bicyclists and pedestrians, and objectives related to environmental protection. Table 4.2-2 summarizes the capacity thresholds for each access control type.



Source: Fehr & Peers Transportation Consultants, 2010

Existing Average Daily Traffic Volumes and Level of Service (2009)

Table 4.2-1 Existing Roadway Characteristics									
Roadway	From	То	Travel Lanes	Access Control ¹	Shoulder Widths	Speed Limit	Sidewalk Coverage ²	Bicycle Facilities ²	
	Greenback Lane	Van Maren Lane	4	Moderate	4 ft.			Existing Class II lanes	
Auburn	Van Maren Lane	Sylvan Road	4	Moderate	4 ft.	40 mph	Sidewalks on both sides of		
Boulevard	Old Auburn Road	Antelope Road	4	Low	4 ft.	40 mpn	street	None	
	Antelope Road	Twin Oaks Avenue	4	Low	4 ft.			None	
	Madison Avenue	Greenback Lane	6	Moderate	2–4 ft.				
	Greenback Lane	Woodmore Oaks Drive	4	Moderate	6 ft.		Sidewalks on both sides of street but scattered missing segments on east	None	
Sunrise	Woodmore Oaks Drive	Oak Avenue	4	Moderate	6 ft.	40 mph			
Boulevard	Oak Avenue	Old Auburn Road	4	Moderate	8 ft.	40 mpn	and west side of street	Existing Class II lanes	
	Old Auburn Road	Antelope Road	4	Low	6 ft.		north of Greenback Lane		
	Antelope Road	Twin Oaks Avenue	4	Moderate	6 ft.				
	Madison Avenue	Greenback Lane	4	Moderate	6 ft.		Scattered missing	None	
Fair Oaks Boulevard	Greenback Lane	Woodmore Oaks Drive	2–4	Moderate	6 ft.	45 mph	sidewalk segments on east and west side of street	Class II lanes	
	Woodmore Oaks Drive	Old Auburn Road	2	Moderate	6 ft.		north of Greenback Lane	None	
San Juan Avenue	South City Limits	Greenback Lane	4	Low	3–6 ft.	40 mph	Scattered missing segments on east side	Existing Class II lanes	
Sylvan Road	Greenback Lane	Auburn Boulevard	4	Moderate	6–8 ft.	40 mph	Scattered missing segments on east side	Existing Class II lanes	
Van Maren Lane	Greenback Lane	Auburn Boulevard	4	Moderate	3–6 ft.	35 mph	Scattered missing sidewalk segments on east	Class II lanes for portion of	
· an march Danc	Auburn Boulevard	Antelope Road	2	Low	6–10 ft.	33 mpii	and west side of street	roadway	

Table 4.2-1	
Existing Roadway Characteristics	

Roadway	From	То	Travel Lanes	Access Control ¹	Shoulder Widths	Speed Limit	Sidewalk Coverage ²	Bicycle Facilities ²
	West City Limits	Auburn Boulevard	6	High	4–6 ft.			Class II lanes from West City limits to Mariposa Avenue
Greenback Lane	Auburn Boulevard	Dewey Drive	6	Moderate	4 ft.	40 mph east of		
	Dewey Drive	San Juan Avenue	6	Moderate	2–4 ft.	Indian	Sidewalks on both sides of street	
	San Juan Avenue	Sunrise Boulevard	6	Moderate	2–4 ft.	River Drive		
	Sunrise Boulevard	Fair Oaks Boulevard	6	Moderate	2–4 ft.			
	West City Limits	Interstate 80	6	Moderate	6–8 ft.		Scattered missing	E-idia.
Antolono Dood	Interstate 80	Van Maren Lane	4	Moderate	3–6 ft.	40 mmh	sidewalk segments on north and south side of	Existing Class II lanes on various segments
Antelope Road	Van Maren Lane	Auburn Boulevard	4	Moderate	3–6 ft.	40 mph	street east of Van Maren	
	Auburn Boulevard	Sunrise Boulevard	4	Moderate	3–6 ft.		Lane	
	Sylvan Road	Sunrise Boulevard	2	Low	4–8 ft.			Class II lanes Sunrise Blvd. to Fair Oaks Blvd.
Old Auburn	Sunrise Boulevard	Antelope Road	2	Moderate	2–4 ft.	35 mph	Scattered sidewalk segments missing on north	
Road	Antelope Road	Fair Oaks Boulevard	4	Moderate	2–4 ft.	33 mpn	and south side of roadway	
	Fair Oaks Boulevard	North City limits	2	Moderate	2–4 ft.			
Madison	West City Limits	Sunrise Boulevard	6	High	6–8 ft.	45 mph	Sidewalks on both sides of	None
Avenue	Sunrise Boulevard	East City Limits	5	High	0–6 It.	50 mph	street	None
Oak Avenue	Sunrise Boulevard	East City Limits	2	Low	6–10 ft.	40 mph	Scattered sidewalk segments missing on north and south side of roadway	Existing Class II lanes
Twin Oaks Ave.	Auburn Boulevard	Old Auburn Boulevard	2	Low	Varies	25 mph	Missing sidewalk on both sides of street west of Garry Oak Drive	Class II lanes east of Garry Oak Drive

Notes

^{1.} Access control is defined as Low, Moderate, or High depending on the number of driveways, frequency of stops, and prevailing travel speeds.

^{2.} More detailed descriptions of existing/proposed pedestrian and bicycle facility locations are provided in the bicycle and pedestrian section. Source: Fehr & Peers Transportation Consultants, 2009.

Table 4.2-2 Roadway Segment Daily Volume Thresholds								
Dandway Tyma	Number of		Daily Volume Threshold					
Roadway Type	Lanes	LOS A	LOS B	LOS C	LOS D	LOS E		
	2	9,000	10,500	12,000	13,500	15,000		
Low Access Control	4	18,000	21,000	24,000	27,000	30,000		
	6	27,000	31,500	36,000	40,500	45,000		
	2	10,800	12,600	14,400	16,200	18,000		
Moderate Access Control	4	21,600	25,200	28,800	32,400	36,000		
	6	32,400	37,800	43,200	48,600	54,000		
	2	12,000	14,000	16,000	18,000	20,000		
High Access Control	4	24,000	28,000	32,000	36,000	40,000		
	6	36,000	42,000	48,000	54,000	60,000		
E	6	2,000	64,800	92,400	111,600	120,000		
Freeway	8	56,000	86,400	123,200	148,800	160,000		

Policy 29.1 in the City's first General Plan established a LOS D threshold, which would not result in full utilization of roadway capacity and could result in adverse effects on bicyclists and pedestrians if roadways and intersections were expanded to meet vehicular LOS needs during peak hours. Policy 29.1 in the Draft General Plan establishes a complete streets policy with a LOS E threshold. Exceptions to the LOS E threshold are allowed for certain roadway segments. New trips added by proposed projects to exempt roadways must be mitigated, but exempt roadways or intersections cannot be widened to add capacity.

As shown in Exhibit 4.2-1 and Table 4.2-3, the following roadway segments currently operate at LOS F on a daily volume basis:

- ► Antelope Road Interstate 80 to Van Maren Lane
- ► Sunrise Boulevard Greenback Lane to Woodmore Oaks Drive and Old Auburn Road to Antelope Road
- ▶ Old Auburn Road Sylvan Road to Mariposa Avenue

The following roadway segments operate at LOS E on a daily basis:

- ► Van Maren Lane Auburn Boulevard to Antelope Road
- ► Sunrise Boulevard Antelope Road to Twin Oaks Avenue

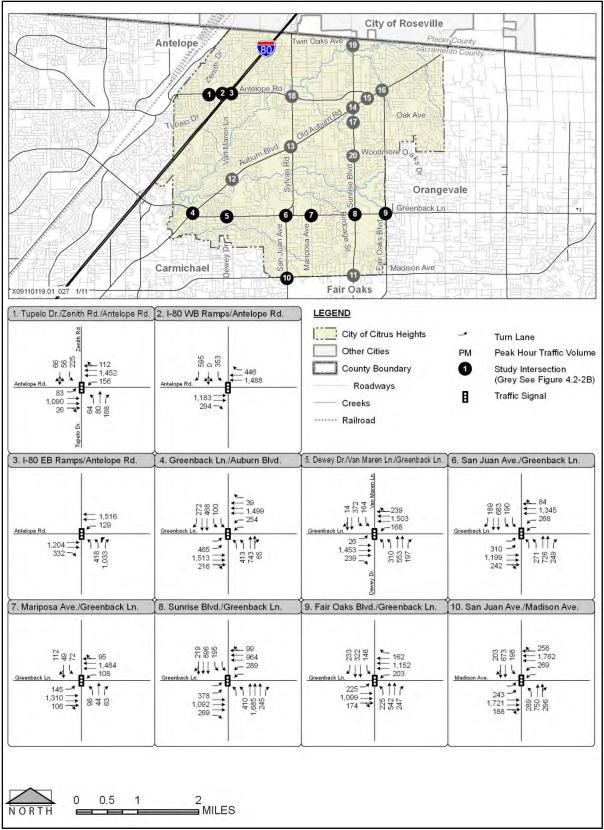
The remaining study segments operate at LOS D or better.

MAJOR INTERSECTIONS

Peak Hour Traffic Volumes and Operations

The traffic analysis for intersection locations in the planning area is based on weekday peak hour conditions to account for the hour of the day that experiences the greatest levels of traffic. Generally, the PM weekday peak hour (between 4:00 - 6:00 PM) has greater traffic volumes than the morning peak hour (between 7:00 - 9:00

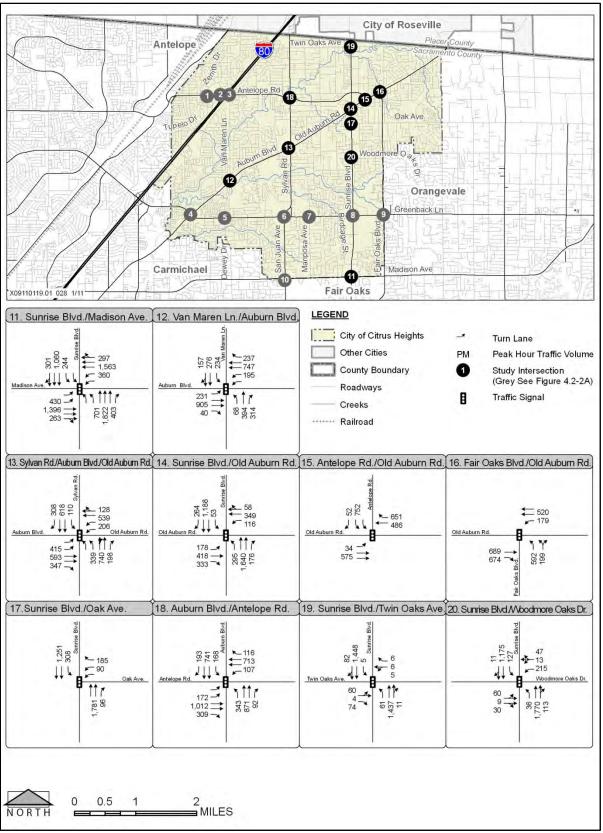
Table 4.2-3 Existing Roadway Level of Service (2009)						
Location Location	Average Volume	Classification	Existing LOS			
1. Twin Oaks Avenue – between Mariposa Avenue and Sunrise Boulevard	3,200	2 Lane Low Access Control	A			
2. Antelope Road – between City limits and Interstate 80	41,200	6 Lane Moderate Access Control	С			
3. Antelope Road – between Interstate 80 and Van Maren Lane	43,200	4 Lane Moderate Access Control	F			
4. Antelope Road – between Van Maren Lane and Auburn Boulevard	29,200	4 Lane Moderate Access Control	D			
5. Antelope Road – between Mariposa Avenue and Sunrise Boulevard	22,400	4 Lane Moderate Access Control	В			
6. Auburn Boulevard – between Greenback Lane and Van Maren Lane	23,900	4 Lane Moderate Access Control	В			
7. Auburn Boulevard – between Van Maren Lane and Sylvan Road	25,800	4 Lane Moderate Access Control	С			
8. Auburn Boulevard – between Old Auburn Road and Antelope Road	26,700	4 Lane Low Access Control	D			
9. Auburn Boulevard – between Antelope Road and Twin Oaks Avenue	24,300	4 Lane Low Access Control	D			
10. Auburn Boulevard – just north of Twin Oaks Avenue	27,000	4 Lane Low Access Control	D			
11. Old Auburn Road – between Sylvan Road and Mariposa Avenue	18,200	2 Lane Low Access Control	F			
12. Old Auburn Road – east of Fair Oaks Boulevard	14,300	2 Lane Moderate Access Control	C			
13. Greenback Lane – between City limits and Auburn Boulevard	52,400	6 Lane High Access Control	D			
14. Greenback Lane – between Auburn Boulevard and Dewey Drive	40,600	6 Lane Moderate Access Control	C			
15. Greenback Lane – between Dewey Drive and San Juan Drive	43,600	6 Lane Moderate Access Control	D			
16. Greenback Lane – between Mariposa Avenue and Sunrise Boulevard	43,500	6 Lane Moderate Access Control	D			
17. Greenback Lane – between Sunrise Boulevard and Fair Oaks Boulevard	34,900	6 Lane Moderate Access Control	В			
18. Madison Avenue – between San Juan Avenue and Mariposa Avenue	47,500	6 Lane High Access Control	C			
19. Madison Avenue – between Sunrise Boulevard and Fair Oaks Boulevard	38,600	5 Lane High Access Control	C			
20. San Juan Avenue – north of Madison Avenue	23,500	4 Lane Low Access Control	C			
21. Sylvan Road - between Greenback Lane and Auburn Boulevard	28,400	4 Lane Moderate Access Control	C			
22. Sunrise Boulevard – between Madison Avenue and Greenback Lane	44,800	6 Lane Moderate Access Control	D			
23. Sunrise Boulevard – between Greenback Lane and Woodmore Oaks Drive	38,400	4 Lane Moderate Access Control	F			
24. Sunrise Boulevard – between Oak Avenue and Old Auburn Road	31,000	4 Lane Moderate Access Control	D			
25. Sunrise Boulevard – between Old Auburn Road and Antelope Road	37,300	4 Lane Low Access Control	F			
26. Sunrise Boulevard – between Antelope Road and Twin Oaks Avenue	34,700	4 Lane Moderate Access Control	Е			
27. Fair Oaks Boulevard – between Greenback Lane and Woodmore Oaks Drive	16,800	3 Lane Moderate Access Control	В			
28. Oak Avenue – between Sunrise Boulevard and Fair Oaks Boulevard	7,700	2 Lane Low Access Control	A			
29. Van Maren Lane – between Auburn Boulevard and Interstate 80	13,600	2 Lane Low Access Control	Е			
Source: Fehr & Peers Transportation Consultants, 2009.						



Source: Fehr & Peers Transportation Consultants, 2010

Existing Peak Hour Traffic Volumes and Lane Configurations (2009)

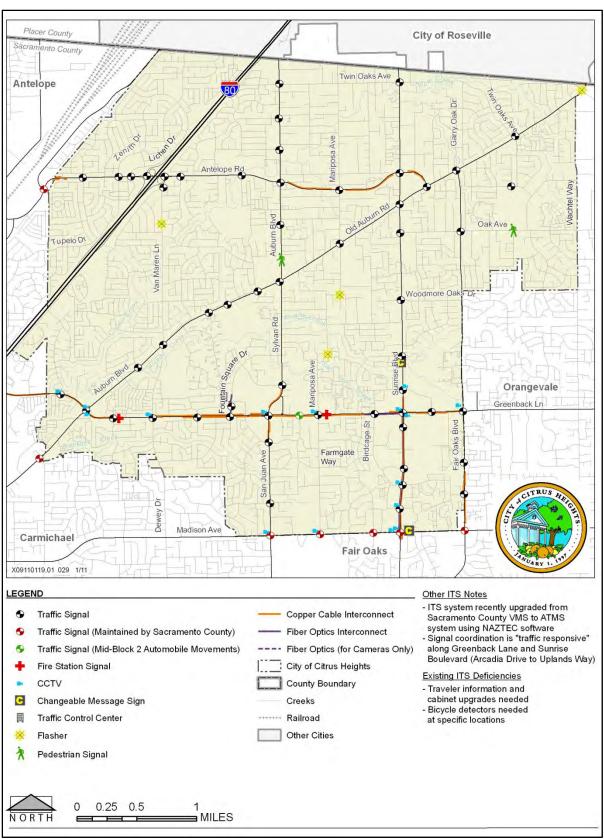
Exhibit 4.2-2A



Source: Fehr & Peers Transportation Consultants, 2010

Existing Peak Hour Traffic Volumes and Lane Configurations (2009)

Exhibit 4.2-2B



Source: City of Citrus Heights and Fehr & Peers Transportation Consultants, 2010

Existing Intersection Controls and Intelligent Transportation System Elements (2009) Exhibit 4.2-2C

AM), which was verified by reviewing the daily traffic counts conducted on roadway segments. Therefore, the PM peak hour was considered the governing peak period as a basis for the intersection analysis. Exhibits 4.2-2A and 4.2-2B display PM peak hour traffic volumes at 20 major intersections within the planning area, including the ramp terminal intersections at the I-80/Antelope Road interchange. Traffic counts were conducted at each study intersection in October 2009.

Exhibits 4.2-2A and 4.2-2B also display the existing lane configurations and traffic control devices at each intersection. Each intersection is currently signalized. Many other intersections are also controlled by traffic signals as shown in Exhibit 4.2-2C. As of 2010, the City has 62 traffic signals, including 2 fire station signals, 3 pedestrian signals, and 4 flasher/beacons. Four traffic signals are located along the City of Citrus Heights/Sacramento County border along Madison Avenue, but are maintained by Sacramento County. Three of these County-maintained signals include remote Closed Captioned Television (CCTV) cameras. Exhibit 4.2-2C also shows select roadway segments where traffic signals are operated in a coordinated fashion. The coordinated operation is part of the City's intelligent transportation system (ITS) architecture, which is intended to help the City manage transportation network operations. Specific segments under coordinated signal control include segments of Madison Avenue, Sunrise Boulevard (from Madison Avenue to Arcadia Drive), and the entire length of Greenback Lane. Other elements of the City's ITS architecture shown on Exhibit 4.2-2C are listed below.

- ► A traffic operations center capable of monitoring and controlling traffic signals throughout the City
- ▶ Twelve remote CCTV cameras mounted on signal poles for operations observation and incident detection
- ▶ One permanent changeable message sign (CMS) on Sunrise Boulevard with a central control center

Peak hour intersection operations were evaluated by computing the vehicle LOS at each study intersection. LOS at intersections is also based on a driver's perspective and is measured based on the delay experienced at the intersection. The study intersections were analyzed using the methodology contained in the *Highway Capacity Manual* (Transportation Research Board 2000). This methodology computes the average control delay in seconds on an intersection-wide basis for signalized locations and compares the results to the thresholds shown in Table 4.2-4 to determine the LOS.

Exhibit 4.2-3 displays the existing PM peak hour LOS and average control delay (in seconds per vehicle) at each intersection. The LOS is a function of many factors, including: traffic volumes, number of lanes, signal timing, heavy vehicle traffic, pedestrian activity, and lane widths.

As shown in Exhibit 4.2-3 and Table 4.2-5, the following intersection currently operates at LOS F during the PM peak hour:

Madison Avenue/Sunrise Boulevard

The following five intersections operate at LOS E during the PM peak hour:

- ► Madison Avenue/San Juan Avenue
- ► Greenback Lane /Sunrise Boulevard
- Greenback Lane /Fair Oaks Boulevard
- ► Auburn Boulevard/Antelope Road
- Sunrise Boulevard/Old Auburn Road

The remaining studied intersections operate at LOS D or better during the PM peak hour.

ACCIDENT HISTORY

The most recent three-year accident history of the majority of study intersections was obtained from the City of Citrus Heights Police Department. Accident data for the I-80/Antelope Road eastbound and westbound ramp terminal intersections was obtained from the California Highway Patrol's Statewide Integrated Traffic Records

	Table 4.2-4 Intersection Level of Service Thresholds				
Level of	Description				
Service		Traffic Signal			
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	<u>≤</u> 10			
В	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10 to 20			
С	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20 to 35			
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35 to 55			
Е	Operations with high delay values indicating poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55 to 80			
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80			

^{1.} Measured in seconds per vehicle

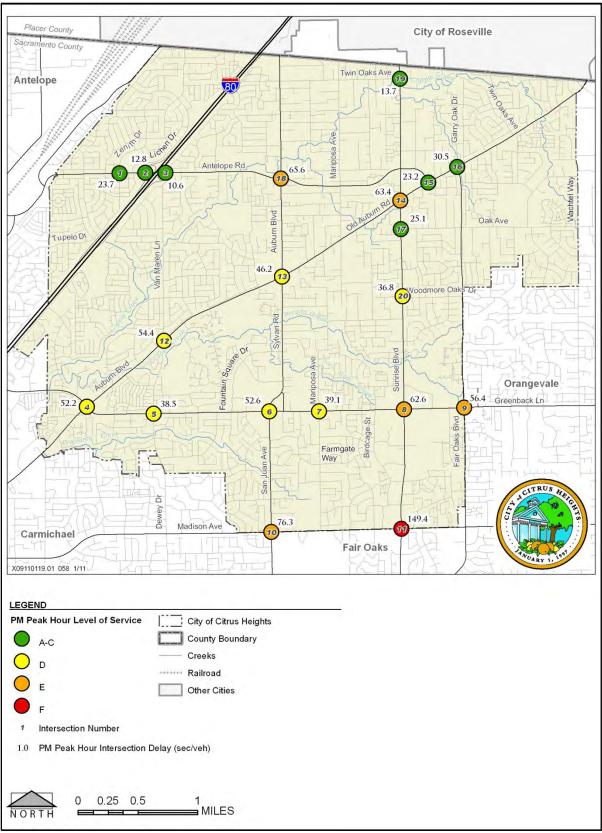
Source: Highway Capacity Manual (Transportation Research Board, 2000)

System (SWITRS). Exhibit 4.2-4 and Table 4.2-6 identify the total number of accidents involving vehicles, bicyclists, and pedestrians at each study intersection during this three-year period.¹

In addition, the average rate of accidents per million vehicles (per MV) entering each study intersection was calculated. According to 2008 Highway Safety Improvement Guidelines (Caltrans 2008), signalized intersections located in California suburban areas have an average accident rate of 0.58 accidents per MV entering the intersection. Five study intersections have accident rates that are higher than the statewide average accident rate (at least 20% higher), which are:

- ► Greenback Lane/Auburn Boulevard (0.94 accidents per MV approximately 21 accidents per year)
- ► Greenback Lane/San Juan Avenue/Sylvan Road (0.76 accidents per MV approximately 16 accidents per year)
- ► Greenback Lane/Mariposa Avenue (0.72 accidents per MV approximately 10 accidents per year)
- ► Greenback Lane/Sunrise Boulevard (0.73 accidents per MV approximately 18 accidents per year)
- ► Auburn Boulevard/Sylvan Road/Old Auburn Road (0.78 accidents per MV approximately 13 accidents per year)

Accident data was collected at each intersection from October 2006 to October 2009. Accidents that occurred within 200 feet of the intersection were assumed to be intersection-related.



Source: Fehr & Peers Transportation Consultants, 2010.

Existing Intersection Peak Hour Delay and Level of Service (2009)

Exhibit 4.2-3

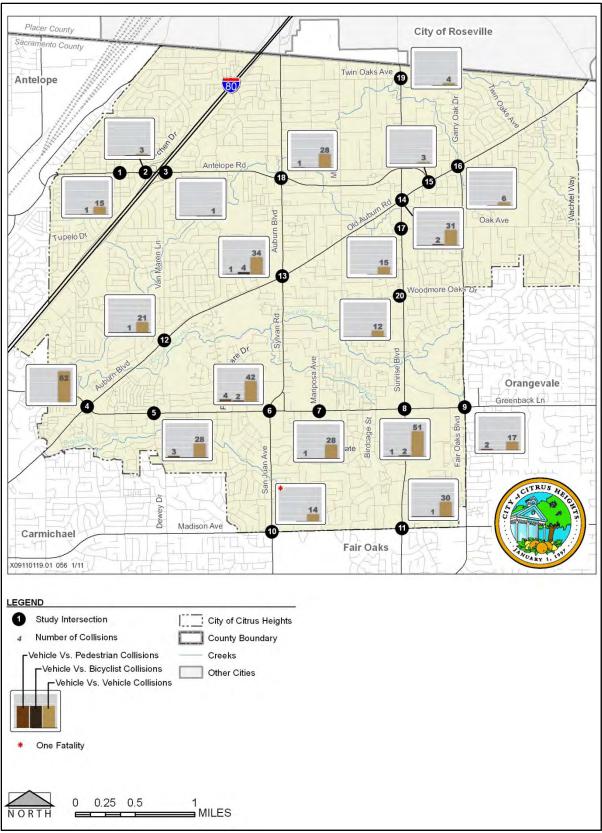
Table 4.2-5 Existing Intersection Operations (2009)				
Intersection	PM Peak Hour Control Delay	LOS		
1. Tupelo Drive/Zenith Drive/Antelope Road	23.7	С		
2. Interstate 80/Antelope Road Eastbound ramps	12.8	В		
3. Interstate 80/Antelope Road Westbound ramps	10.6	В		
4. Greenback Lane/Auburn Boulevard	52.2	D		
5. Greenback Lane/Dewey Drive	38.5	D		
6. Greenback Lane/San Juan Avenue	52.6	D		
7. Greenback Lane/Mariposa Avenue	39.1	D		
8. Greenback Lane/Sunrise Boulevard	62.6	Е		
9. Greenback Lane/Fair Oaks Boulevard	56.4	Е		
10. Madison Avenue/San Juan Avenue	76.3	Е		
11. Madison Avenue/Sunrise Boulevard	149.4	F		
12. Auburn Boulevard/Van Maren Lane	54.4	D		
13. Auburn Boulevard/Sylvan Road	46.2	D		
14. Old Auburn Road/Sunrise Boulevard	63.4	Е		
15. Old Auburn Road/Antelope Road	23.2	С		
16. Old Auburn Road/Fair Oaks Boulevard	30.5	С		
17. Oak Avenue/Sunrise Boulevard	25.1	С		
18. Antelope Road/Auburn Boulevard	65.6	Е		
19. Twin Oaks Avenue/Sunrise Boulevard	13.7	В		
20. Woodmore Oaks Drive/Sunrise Boulevard	36.8	D		
Source: Fehr & Peers Transportation Consultants, 2009.				

A review of individual accident reports indicates that most accidents involved rear-end, sideswipe, or broadside collisions within the intersection or on the Greenback Lane approaches. Many of these accidents are attributable to stop-and-go traffic conditions on Greenback Lane, which may decline with the October 2009 installation of a new coordinated signal system on Greenback Lane that is intended to improve traffic flow stability.

OTHER TRANSPORTATION ISSUES

Truck Routes

There are no posted truck routes on any of the major roadways within the planning area. However, trucks frequently use Sunrise Boulevard, Greenback Lane, Madison Avenue, Antelope Road, and Auburn Boulevard.



Source: Fehr & Peers Transportation Consultants, 2010

Intersection Accident History: October 2006 - October 2009

Exhibit 4.2-4

Table 4.2-6
Intersection Accident History (2006–2009)

Intersection	Number of Vehicle- Pedestrian collisions	Number of Vehicle- Bicyclist collisions	Total Number of Collisions	Accidents/Year	Exposure (Accident per millior vehicles entering intersection)
1. Tupelo Drive/Zenith Drive/Antelope Road	0	1	16	5.3	0.41
2. Interstate 80/Antelope Road Eastbound ramps	0	0	3	1	0.06
3. Interstate 80/Antelope Road Westbound ramps	0	0	1	0.3	0.02
4. Greenback Lane/Auburn Boulevard	0	0	62	20.7	0.94
5. Greenback Lane/Dewey Drive	3	0	31	10.3	0.54
6. Greenback Lane/San Juan Avenue	4	2	48	16	0.76
7. Greenback Lane/Mariposa Avenue	1	0	29	9.7	0.72
8. Greenback Lane/Sunrise Boulevard	1	2	54	18	0.73
9. Greenback Lane/Fair Oaks Boulevard	2	0	19	6.3	0.37
10. Madison Avenue/San Juan Avenue	0	0	14	4.7	0.19
11. Madison Avenue/Sunrise Boulevard	0	1	31	10.3	0.32
12. Auburn Boulevard/Van Maren Lane	0	1	22	7.3	0.53
13. Auburn Boulevard/Sylvan Road	1	4	39	13	0.78
14. Old Auburn Road/Sunrise Boulevard	0	2	33	11	0.59
15. Old Auburn Road/Antelope Road	0	0	3	1	0.11
16. Old Auburn Road/Fair Oaks Boulevard	0	0	6	2	0.19
17. Oak Avenue/Sunrise Boulevard	0	0	15	5	0.37
18. Antelope Road/Auburn Boulevard	1	0	29	9.7	0.55
19. Twin Oaks Avenue/Sunrise Boulevard	0	0	4	1.3	0.11
20. Woodmore Oaks Drive/Sunrise Boulevard	0	0	12	4	0.3

Source: Fehr & Peers Transportation Consultants, City of Citrus Heights, and California Highway Patrol, 2009

Emergency Service Routes

Fire stations are located on Greenback Lane east of Auburn Boulevard, Greenback Lane east of Sylvan Road, Oak Avenue east of Fair Oaks Boulevard, and Auburn Boulevard north of Antelope Road. Mercy San Juan Hospital is located west of Dewey Drive between Greenback Lane and Madison Avenue adjacent to the City in unincorporated Sacramento County. The police station is located at City Hall (Fountain Square Drive) between Greenback Lane and Stock Ranch Road. Given the locations of the police station, fire stations, and hospital, emergency service vehicles most frequently use Sunrise Boulevard, Greenback Lane, Madison Avenue, Dewey Drive, Oak Avenue, and Auburn Boulevard.

Neighborhood Traffic Issues

The City adopted a Neighborhood Traffic Management Program (NTMP) in 2001 to reduce cut-through traffic and provide relief from traffic-related effects, such as speeding and other vehicle code violations, traffic volumes, noise, and pedestrian/bicycle conflicts. The program has since been expanded to recognize the importance of a *complete streets* philosophy and to implement a comprehensive neighborhood area-wide evaluation approach.

Neighborhoods are studied based on traffic safety, accessibility and walkability issues and opportunities. The primary means of interactive communication with residents is through the local Neighborhood Associations, and residents are encouraged to participate in the Association representing their neighborhood area.

The City's comprehensive traffic safety, accessibility, and walkability program has two components: (1) ongoing traffic safety, accessibility and walkability, and Education, Enforcement, Education, Encouragement and Evaluation (5 Es); and (2) neighborhood-wide improvement planning, including engineering studies, improvement plans, construction, and program implementation. The ongoing program provides a process for individual complaints/requests to be regularly addressed by the City's Traffic Committee, consisting of Engineering, Police, and Fire District staff. Neighborhood-wide improvement planning is longer-term and more formal, incorporating data from the City's service request system and the Traffic Committee into an interactive staff and community-based evaluation and planning process. Improvement plans generated from this process are programmed into the City's Capital Improvement Program (CIP) for implementation. The Neighborhood-wide process is conducted periodically (typically bi-annually or less frequently) to allow for plans to be developed and implemented in subsequent years.

EXISTING TRANSIT SYSTEM

Transit Routes

Sacramento Regional Transit (RT) operates bus and light rail transit (LRT) service in Sacramento County. RT operates nine eight transit routes in Citrus Heights. Routes 1, 21, 23, 24, 25, 28, 29, 93, and 103 are fixed transit service routes on segments of Auburn Boulevard, Antelope Road, Greenback Lane, Sunrise Boulevard, Fair Oaks Boulevard, Madison Avenue, San Juan Avenue, and Dewey Drive. Each route is described below and the existing transit system is illustrated on Exhibit 4.2-5.

Transit centers are provided on Arcadia Drive at Greenback Lane (Sunrise Mall Transit Center) and on Orlando Avenue and Louis Lane (near the Auburn Boulevard/Whyte Avenue intersection) just beyond the north City limits. The Arcadia Drive transit center provides connections to other RT routes, while the Auburn Boulevard transit center connects with Roseville Transit and Placer County Transit.

Route 1 begins at the transit center on Arcadia Drive at Greenback Lane and continues west, along Greenback Lane and Auburn Boulevard to the Watt/I-80 LRT station and to Luce Avenue and Palm Street. Route 1 operates Monday through Friday on approximately 20-minute headways. For Saturday, Sunday, and holiday service, Route 1 operates at 30-minute headways.



Source: Sacramento Regional Transit and Fehr & Peers Transportation Consultants, 2011

Existing Transit Facilities

Exhibit 4.2-5

Route 21 begins at the Mather Field/Mills LRT station and continues east on Coloma Road and north on Sunrise Boulevard and Twin Oaks Avenue to the Orlando Avenue-Louis Lane transit center. Route 21 operates Monday through Friday on approximately 30-minute headways and on Saturdays, Sundays, and holidays on 1 hour headways.

Route 23 begins on Arcadia Drive at Greenback Lane (Sunrise Mall Transit Center) and continues west along Greenback Lane, San Juan Avenue, Fair Oaks Boulevard, El Camino Avenue, Ethan Way, and Arden Way to the Arden Fair transit center and to the Arden/Del Paso LRT station. Route 23 operates Monday through Friday on approximately 40-minute headways for first two buses and 30-minute headways for remaining buses. Service on Saturdays consists of 30-minute headways. Service on Sundays and holidays is at one-hour intervals.

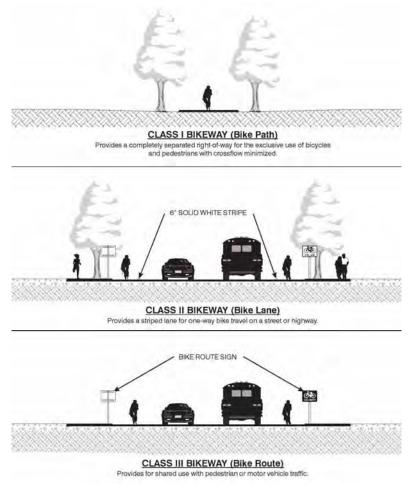
Route 24 begins on Arcadia Drive at Greenback Lane (Sunrise Mall Transit Center) and continues south along Sunrise Boulevard, east along Madison Avenue, north on Main Avenue, west on Greenback Lane back to Arcadia Drive at Greenback Lane, completing a loop route. Route 24 operates Monday through Friday on approximately 1-hour headways. Route 24 does not operate on Saturdays, Sundays or holidays.

Route 25 begins on Arcadia Drive at Greenback Lane (Sunrise Mall Transit Center) and continues south along Sunrise Boulevard, west along Madison Avenue and Coyle Avenue to Mercy San Juan Hospital; then along Manzanita Avenue and Marconi Avenue to the Marconi/Arcade LRT station; then along Del Paso Boulevard and Arden Way to the Arden/Del Paso LRT station. Route 25 operates Monday through Saturday on approximately 1-hour headways. Route 25 does not operate on Sundays or holidays.

Route 28 begins at the Sunrise Mall transit center and continues east on Greenback Lane, south on Fair Oaks Boulevard, south on Sunrise Boulevard, west on Zinfandel Drive, and south on Cordova Drive to the Cordova Town Center LRT station, then continues southwest on Folsom Boulevard to the Zinfandel LRT station, the Mather/Mills LRT station, and the Butterfield LRT station. Route 28 operates Monday through Friday on approximately 1-hour headways. Service is not provided on Saturdays, Sundays or holidays.

Route 29 begins at Dewey Drive and Madison Avenue and continues along Winding Way, California Avenue, Palm Drive, Fair Oaks Boulevard, and east on Arden Way to the Arden Fair transit center, then continues on Arden Way to SR 160 to downtown Sacramento. Route 29 is a peakonly bus service that has only two in bound trips in the morning and two out bound trips in the evening. Service is not provided on Saturdays, Sunday or holidays.

Route 93 begins at the Orlando Avenue-Louis Lane transit center and continues southwest on Auburn Boulevard, Greenback Lane, Elkhorn Boulevard, Hillsdale



Boulevard, Air Base Drive, and Watt Avenue to the Watt/I-80 LRT station. Route 93 operates Monday through Friday on approximately 30-minute headways, Saturdays, Sundays and holidays on 1-hour headways.

Route 103 begins at the Orlando Avenue-Louis Lane transit center and continues southwest on Auburn Boulevard, Greenback Lane, and I-80 to the Watt/I80 LRT station. Route 103 operates Monday through Friday on 30-minute headways and during peak commute times only. This route does not operate during Saturdays, Sundays or holidays. In addition, certain trips do not operate on State holidays that fall on Monday through Friday.

Transit Schedules and Fares

Daily passes are valid for unlimited rides on RT buses and light rail until 1:30 a.m. the day after purchase or validation. Basic single fare tickets are accepted on buses. A single transit pass (good for 90 minutes) costs \$2.50, while a daily pass costs \$6.00. Monthly passes are also available for \$100. Discounts are offered for seniors (age 62 and over), youth (age 5–12), and individuals with disabilities.

EXISTING BICYCLE/PEDESTRIAN SYSTEM

Bicycle System

The City provides both on-street and off-street bicycle facilities that are generally categorized as Class I, Class II, or Class III facilities, as illustrated to the right.

Existing and proposed bicycle facilities are illustrated on Exhibit 4.2-6. Class I bike paths are provided in Rusch Park, Tempo Park and Van Maren Park (Stock Ranch). A few major roadways contain Class II bicycle lanes (although some currently lack appropriate signage). Various gaps in continuous bicycle lanes have been identified on several major arterials within the City's Bicycle Master Plan. Van Maren Lane and Old Auburn Road in particular have relatively short middle segments without Class II bike lanes that would connect to existing Class II facilities on each end. As shown in Exhibit 4.2-6, gaps in continuous Class II bicycle lanes exist on the following major roadways:

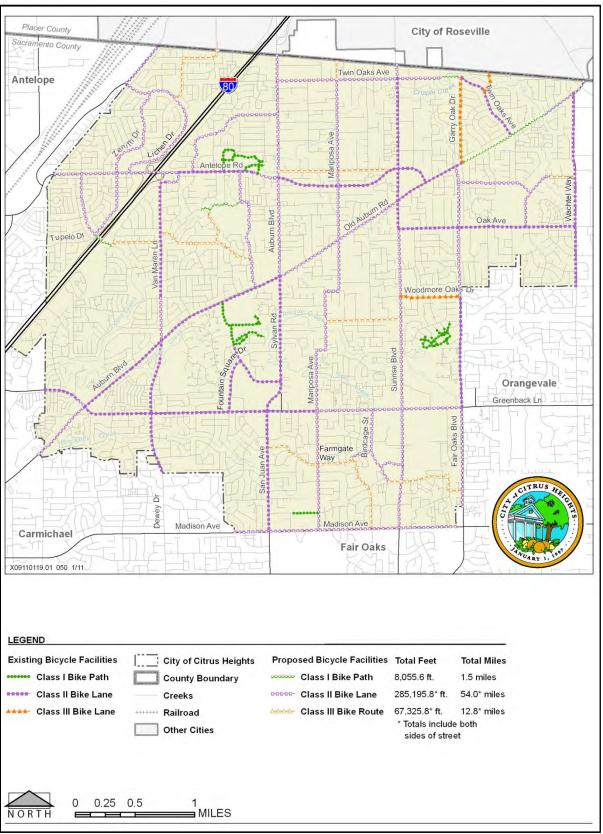
- ► Sunrise Boulevard between Oak Avenue and Madison Avenue
- ► Auburn Boulevard between Old Auburn Road and North City limits
- ► Van Maren Lane between Kittery Avenue and Auburn Boulevard
- ► Antelope Road between West City limits and Auburn Boulevard
- ► Twin Oaks Avenue between Auburn Boulevard and Garry Oaks Drive
- ► Fair Oaks Boulevard between Old Auburn Road and Madison Avenue
- ► Old Auburn Boulevard between Auburn Boulevard and Sunrise Boulevard

Some roadways, such as Mariposa Avenue and Birdcage Street, would provide logical bikeway connections but lack existing bicycle facilities along the length of the entire roadway, and are planned for future Class II bike lanes.

Exhibit 4.2-6 also illustrates the following:

- ► Lack of Class III Bike Routes on residential collector streets in various neighborhoods to provide connections to existing or proposed Class II facilities
- ▶ Limited connections between existing Class I and Class II facilities (both existing and proposed).

Multi-modal connections are especially important due to barriers to continuous bicycle and pedestrian travel, such as the lack of existing continuous bikeway facilities and sidewalks. Transit centers on Arcadia Drive at Greenback Lane (Sunrise Mall Transit Center) and on Orlando Avenue and Louis Lane (next to Auburn Boulevard at Whyte Avenue) just beyond the north City limits provide connections to other RT routes and Roseville Transit and Placer



Source: Fehr & Peers Transportation Consultants, 2009

Existing Bicycle Facilities (2009)

County Transit services. Bicyclists often rely on transit service to transfer them to destinations when barriers to continuous travel are present. Bicycle racks are provided on RT buses to accommodate bicyclists.

Pedestrian System

Pedestrian facilities in the planning area consist of paths, sidewalks, and pedestrian crossings. Existing sidewalks and gaps in the pedestrian system are illustrated on Exhibit 4.2-7. Key gaps are identified below.

- ► Sunrise Boulevard on the west side between Oak Avenue and Greenback Lane
- ► Fair Oaks Boulevard on the west side between Woodmore Oaks Drive and Greenback Lane
- ▶ Old Auburn Road on both sides between Auburn Boulevard and the east City limit
- ▶ Van Maren Lane on both sides between Kittery Avenue and Navion Drive
- ► Antelope Road on both sides between Poplar Avenue and Old Auburn Boulevard
- ► Twin Oaks Drive on both sides between Auburn Boulevard and Garry Oaks Drive

Full sidewalks (continuous on both sides of the street) exist on most major arterials such as Auburn Boulevard and segments of Sunrise Boulevard, Greenback Lane, Dewey Drive, Van Maren Lane, Fair Oaks Boulevard, and Madison Avenue. In other areas, many minor residential streets have been developed without sidewalks, primarily in older neighborhoods generally located within the central portion of Citrus Heights. Crosswalks are provided at most signalized intersections, at intersections on collector streets, and at intersections adjacent to schools.

EXISTING DEFICIENCIES

This section identifies existing deficiencies in the roadway, transit, and pedestrian/bicycle systems based on the current City policies, plans, and standards. Table 4.2-7 summarizes the existing deficiencies based, in part, on the peak hour LOS and rate of accidents at intersections, daily volume-to-capacity ratios on roadways, and unmet pedestrian and bicycle needs.

4.2.3 IMPACTS AND MITIGATION MEASURES

METHODOLOGY

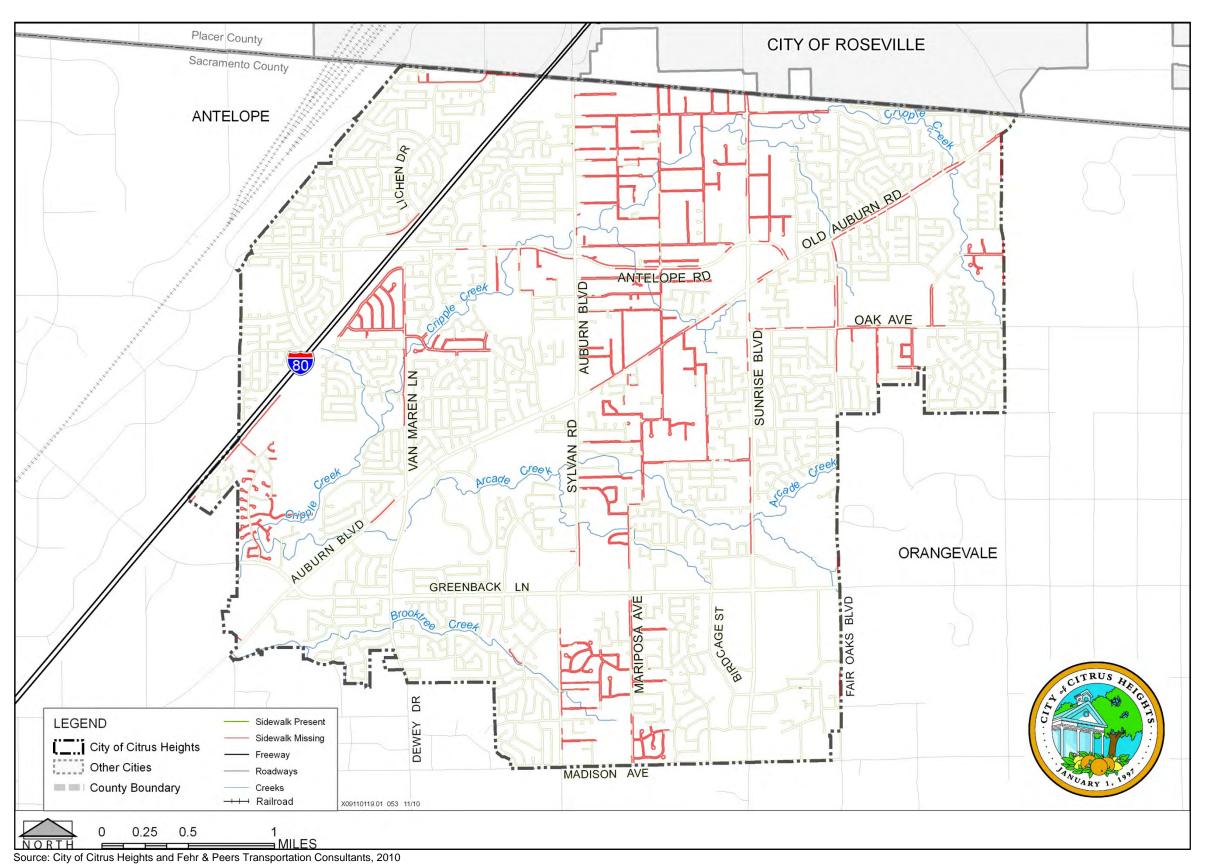
The project being analyzed is adoption and implementation of the Draft General Plan and GGRP. The Draft General Plan includes a land use diagram (Exhibit 3-3 and Draft General Plan, Map 1), circulation diagram (Draft General Plan, Map 5), estimates of future population and non-residential development, narrative text, and goals and policies which provide an outline of the City's desired direction. Among the 2010 revisions to the CEQA Guidelines were changes related to the environmental checklist questions embodied in most CEQA documents. For example, the 2010 revisions delete the question about parking capacity and provide much more holistic direction regarding LOS analysis. According to the Natural Resources Agency's "Final Statement of Reasons for Regulatory Action," to support revisions to the CEQA Guidelines in 2010, there is a change in focus from looking at an increase in vehicular traffic at a given location to the effect of a project on the overall circulation system. According to the Natural Resources Agency, "[t]his change is appropriate because an increase in traffic, by itself, is not necessarily an indicator of a potentially significant environmental impact" (Natural Resources Agency, 2009). The recent changes to the CEQA Guidelines recognize that each lead agency has the discretion to choose its own metric of analysis of impacts to its transportation system. Vehicular level of service measured using traditional methods may or may not be an applicable measure of the actual effectiveness of the transportation system.

Analysis of the roadway system was performed using the Sacramento Area Council of Governments' (SACOG's) SACMET regional travel demand forecasting model (SACOG 2002). To evaluate the impacts of implementing the Draft General Plan, the traffic study used estimates of future land use within the planning area pursuant to the Draft General Plan. The study identified the anticipated future amount of vehicular traffic, assigned traffic to the

planned circulation system, and determined resulting LOS for roadway segments. The study included estimates of development outside of the planning area from the regional model that could directly affect traffic on Citrus Heights streets. Impacts are characterized relative to existing conditions. Trip generation associated with Draft General Plan land uses is provided in Table 4.2-8.

The effects of implementing the Draft General Plan were compared to environmental baseline conditions (i.e., existing conditions) to determine impacts. This comparison focused on select performance measures including vehicle miles of travel (VMT) and LOS for the roadway system. For non-motorized modes and transit, the Draft General Plan policies were reviewed for internal consistency and whether the policies addressed the existing deficiencies identified in Table 4.2-7.

Table 4.2-7 Existing Transportation System Deficiencies (2009)					
Facility	Description of Deficiency				
Roadway System					
Sunrise Boulevard from Antelope Road to Old Auburn Road	This four-lane segment has numerous full-access driveways and currently carries approximately 37,000 vehicles per day, which results in LOS F operating conditions.				
Old Auburn Road from Sylvan Road to Sunrise Boulevard	This two-lane segment has numerous full-access driveways and currently carries approximately 18,000 vehicles per day, which results in LOS F operating conditions. The lack of positive access control results in frequent vehicle conflicts in the center left-turn lane.				
Greenback Lane/Auburn Boulevard Intersection Greenback Lane/San Juan Avenue Intersection Greenback Lane/Sunrise Boulevard Intersection Greenback Lane/Fair Oaks Boulevard Intersection Madison Avenue/Sunrise Boulevard Intersection	Heavy traffic volumes on Greenback Lane result in long delays and queuing during peak periods, which results in unacceptable LOS E at the Sunrise Boulevard and Fair Oaks Boulevard intersections based on the current policy. Heavy traffic on all approaches at the Madison Avenue/Sunrise Boulevard intersection results in LOS F operations. Stop-and-go traffic conditions on Greenback Lane contribute to the accidents as well as increased greenhouse gasses and criteria air pollutants.				
Madison Avenue/San Juan Avenue Intersection Auburn Boulevard/Antelope Road Intersection Sunrise Boulevard/Old Auburn Road Intersection	These intersections are heavily utilized during morning and evening peak hours, which results in LOS E operations.				
Bicycle/Pedestrian System					
Citywide	Lack of a continuous on-street Class II bicycle lane system, especially on segments of Sunrise Boulevard, Auburn Boulevard and Fair Oaks Boulevard.				
Citywide	Under-utilization of parks, greenbelts, and power line easements to accommodate bicycle travel.				
Citywide	Lack of a continuous sidewalk along key pedestrian corridors including Sunrise Boulevard, Fair Oaks Boulevard, Old Auburn Road, Van Maren Lane, Twin Oaks Avenue, and Antelope Road as shown on Exhibit 4.2-7.				



Existing Pedestrian Facilities Exhibit 4.2-7

4.2-25

Table 4.2-8 Trip Generation Summary					
Scenario	Daily Trips				
2005 Existing Conditions	435,550				
2035 Draft General Plan Projected Conditions	495,460				
Source: Fehr & Peers Transportation Consultants, 2010					

THRESHOLDS OF SIGNIFICANCE

For the purpose of this analysis, the following thresholds of significance have been used to determine whether implementing the Draft General Plan and GGRP would result in a significant impact. A transportation impact is considered significant if the project would do any of the following:

- ► 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;
- ▶ Substantially increase hazards due to a design feature or incompatible uses;
- ▶ Result in inadequate emergency access; or
- ► Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

No roadway segment or intersection in Citrus Heights is identified in a county congestion management program. This issue will not be discussed further in this EIR.

Citrus Heights is not located near an airport or within an Airport Land Use Compatibility Plan, so the planning area is not located within an area that would be affected by air traffic operations. Furthermore, the Draft General Plan does not contain policies or components that would result in a change in air traffic patterns. For these reasons, this impact is not further addressed in this EIR.

The Draft General Plan does not propose the development of new roads, intersections, or similar infrastructure or features that would create or promote the creation of dangerous design features, such as sharp curves or dangerous intersections or incompatible uses. Therefore, this impact is not further addressed in this EIR.

IMPACT ANALYSIS

IMPACT Increase in Travel Demand. The City anticipates an increase in vehicle miles traveled (VMT) with implementation of the Draft General Plan compared to existing conditions. An increase in travel demand is not in itself an adverse physical environmental impact, but rather causes a variety of impacts. The full range of impacts related to travel demand is analyzed and reported throughout the environmental topic sections of this EIR. This impact is considered less than significant.

The analysis of this impact addresses overall growth and travel demand as measured by VMT. Table 4.2-9 compares VMT estimates and forecasts to provide context for potential changes in long-range travel demand. As shown in the table, VMT is projected to increase from 1,397,344 to 1,829,043 per weekday between 2005 and 2035, an increase of nearly 500,000 over existing conditions. Traditional traffic models are not designed to fully capture the benefits of land use, transportation, and urban design policies that reduce VMT. Extensive research has shown that various planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle trips. Mixing complementary uses in a neighborhood setting increases internal trip "capture." Many different

Table 4.2-9 VMT Comparison - 2005 Existing Conditions and Draft General Plan						
Scenario	Population	Employment	Weekday VMT	VMT/Population ¹	VMT/Employment	VMT/ (Population + Employment)
2005 Conditions	84,600	25,390	1,397,344	16.51	55.04	12.70
2035 Current General Plan	100,480	31,970	1,835,248	18.26	57.41	13.86
2035 Draft General Plan	100,480	31,970	1,829,043	18.20	57.21	13.81

Notes:

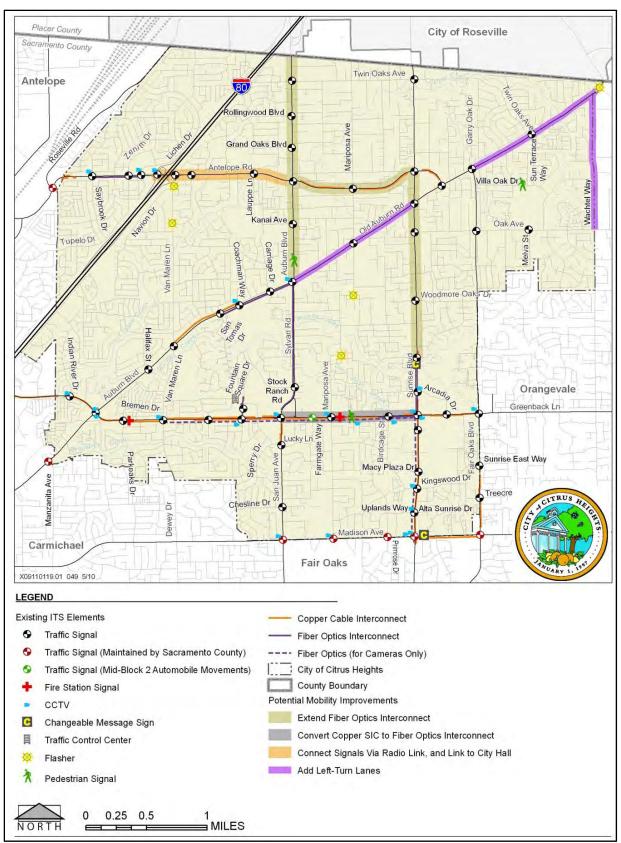
Source: SACMET Regional Travel Demand Forecasting Model 2010

urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities. This increases the relative attractiveness of non-automobile modes of travel, and can promote mode shifts. The VMT analysis conducted to support the Draft General Plan and this EIR may overestimate VMT and volumes along certain segments. This is because the VMT calculations were derived from a travel demand model without modifications that capture VMT reductions that may be available to the City under the Draft General Plan related to: shifts in travel to transit, bike, and walk modes; mode shifts or shorter trips from improved multi-modal transportation connectivity; mode shifts or shorter trips related to more compact and mixed-use development patterns; and other factors. As such, the VMT analysis in this section can be considered conservative (erring on the high side), since it does not account for localized VMT reduction benefits.

The Draft General Plan proposes to improve traffic operations through the use of Intelligent Transportation Systems (ITS). Exhibit 4.2-8 displays the City's planned mobility improvements. The VMT analysis conducted to support the Draft General Plan and this EIR does not fully take into account the traffic flow effects of proposed ITS improvements or the potential trip suppression effects of future congestion on regional roadways. However, the results are useful for comparing the direction and magnitude of change in VMT that is expected between 2005 and 2035.

Increase in travel demand is not itself an adverse physical environmental impact, but rather causes a variety of impacts. Since transportation is the largest source of ozone in the region, the largest source of greenhouse gases (GHGs) in Sacramento County, and the largest source of GHGs in California, travel demand increases lead to air quality and climate change impacts (Sacramento County 2009, ARB 2010). Transportation is also a major source of toxic air contaminants and particulate matter. Traffic is a major source of noise in the planning area, and therefore increases in travel demand lead to noise impacts. Transportation is the largest user of energy in California, as well, and therefore impacts related to energy use relate closely to travel demand (U.S. Energy Information Administration 2010, Laurence Berkeley National Laboratory 2005). The full range of impacts related to travel demand is analyzed and reported throughout the environmental topic sections of this EIR.

¹ Population was derived by using SACOG household forecasts and a population/household ratio of 2.36 for 2005 and 2.55 for 2035 according to US Census and DOF data.



Source: City of Citrus Heights and Fehr & Peers Transportation Consultants, 2010

Planned Mobility Improvements

Exhibit 4.2-8

Draft General Plan Policies and Actions

The following Draft General Plan policies and actions address the potential for unacceptable transportation impacts associated with VMT.

Policies

- ▶ 13.1: Improve mobility in the Sunrise MarketPlace area to provide adequate access for vehicles, transit, bicycles and pedestrians.
- ▶ 13.2: Create convenient connections across Sunrise Boulevard for vehicles, bicycles, pedestrians and transit.
- ▶ 13.3: Promote installation of additional, distinctive transit stops at key activity areas and encourage covered shelters at existing and new stops.
- ▶ 13.4: Facilitate the development of new buildings in areas currently devoted to parking to shorten distances between buildings and foster better pedestrian connections between shopping centers.
- ▶ 29.1: When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.
- ▶ 29.4: Support safe, complete and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
- ▶ 29.6: Collaborate with neighboring jurisdictions when updating the General Plan and preparing the Capital Improvement Program to work toward providing a regional Complete Streets transportation network for all modes.
- ▶ 29.7: Develop a transportation financing program that will fully fund the planned expansion of the existing transportation network and comply with Policies 29.1 and 29.2. This program will combine federal and state transportation funds with local funding sources that provide the means by which new development consistent with the general plan will fully mitigate its cumulative transportation impacts. This approach to transportation finance is intended to streamline development review for those projects consistent with the general plan.
- ▶ 30.1: Improve aesthetic features along the City's roadways and maintain landscaping in an efficient and timely manner especially when it enhances the walking and biking environment.
- ▶ **30.2:** Require public street right-of-way dedications and improvements as development occurs. Ultimate right-of-way and improvements should be installed at the time of development, except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function.
- ▶ 31.1: Strive to increase fixed-route and demand responsive (i.e., paratransit) transit service coverage and frequency to Citrus Heights residents and employees.
- ▶ 31.2: Strive to provide public transit that is an attractive, convenient, dependable and safe alternative to the automobile.
- ▶ 31.3: Consider express commuter bus service between Citrus Heights and major employment and transit centers.

- ▶ 31.4: Require new development to provide transit enhancements, where appropriate, that decrease transit travel times, improve access to transit stops, or improve the amenities, security, or travel information at transit stops.
- ▶ **32.1:** Evaluate and utilize technologies that can improve the performance, reliability, and safety of the transportation system (such as signal coordination, centralized traffic control, red-light cameras, and real-time travel information).
- ► 53.2: Minimize the impacts of vehicle emissions on air quality.

Actions

- **13.1.A.** Support the mobility, pedestrian enhancement, and way-finding signage concepts identified in the Sunrise MarketPlace Revitalization Blueprint.
- **13.1.B.** Support free shopping shuttle service at Sunrise MarketPlace.
- **13.1.C.** Establish a well connected grid-pattern street network, which provides connectivity among district land uses and linkages to surrounding residential neighborhoods.
- **13.2.A.** Install separated sidewalks along major arterials and plant and maintain trees to reinforce a pedestrian friendly atmosphere.
- **13.2.B.**Explore options for creating pedestrian crossings on Greenback Lane and Sunrise Boulevard between the major shopping centers, including a bridge connector.
- **13.2.C.** Provide bike lanes and bicycle parking facilities in the Sunrise MarketPlace.
- **13.4.A.** Consider establishment of a maximum parking ratio for the MarketPlace area that recognizes the value of land for additional development that can increase shopping and employment opportunities while also improving the convenience of walking, bicycling, and using transit.
- **13.4.B.** Help broker private efforts to develop new commercial space that enhances connections between shopping centers.
- **29.1**.**A.** Update the Capital Improvement Program annually to incorporate necessary circulation system improvements.
- **29.1.B.** Evaluate projects to ensure that the safety, comfort, and convenience of pedestrians and bicyclists are given equal level of consideration to drivers.
- **29.1.C.** Consider ways to increase and improve travel choices when reviewing development or transportation infrastructure projects.
- **29.1.D.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade.
- **29.1.E.** Improve the existing street network to minimize travel times and improve mobility for transit, bicycle, and walking trips between new projects and surrounding land uses to reduce vehicle trips.
- **29.2.A.** Modify the existing traffic impact fee program to include a mitigation fee designed to reduce vehicle trips and vehicle miles of travel per capita within the City to avoid or minimize the need to expand existing roadway capacity. This program should include a multi-modal (Complete Streets) capital improvement

program (CIP) and, in conjunction with public funding, provide full funding for the City's circulation element improvements.

- **29.4.A.** Modify the existing street network to enable direct physical connections within neighborhoods and between neighborhoods, neighborhood-commercial areas, and commercial-commercial areas, including connections accessible only by pedestrians and bicycles on existing cul-de-sac streets.
- 29.4.B. Provide direct connection from residential areas to neighborhood parks and open space.
- **29.4.C.** Where feasible, provide pedestrian crosswalks on all intersection approaches.
- **29.4.D.** Develop and implement an ADA Transition Plan that focuses on compliant sidewalk improvements that provide continuous pedestrian access where compatible with the surrounding area.
- **29.4.E.** Develop and implement a Pedestrian Master Plan (PMP) that indicates which streets in addition to arterials and collectors will install sidewalks and what other pedestrian facilities and amenities (such as 'resting spots') are needed to complete the pedestrian network shown in Map 9. Sidewalk widths and shade coverage should also be addressed in the context of the adjacent land use, vehicle volumes, and vehicle speeds.
- **29.4.F.** Implement the Bikeway Master Plan (BP) and complete the proposed bikeway network shown in Draft General Plan Map 8 (Exhibit 4.2-6 of this EIR) within 10 years and prioritize projects that close existing gaps in the network.
- **29.4.G.** Develop and implement a Safe Routes to School Plan. This effort should complement the ADA Transition Plan, the PMP, and the BP.
- **30.1.A.** Install improvements along roadway segments as identified on Draft General Plan Map 4 (Exhibit 4.2-8 of this EIR).
- **30.1.B.** Update the Capital Improvement Program annually to incorporate aesthetic improvements on roadways. Seek additional funding for roadway maintenance to provide safe, functional and attractive streets and roads.
- **30.2.A.** The City shall develop and adopt ultimate right-of-way dimensions for public roadways through a plan line study or equivalent. This study/plan should also address key complete streets issues such as intersection and access spacing, lane widths, land use context, landscaping, transit, and non-motorized vehicles.
- **31.2.A.** As funding allows, construct attractive bus shelters at appropriate locations throughout the City.
- **32.1.A.** Prepare and implement an Intelligent Transportation System master plan that strives to achieve the following objectives:
- Regulate operating speeds on City streets that balance the City's desire to minimize air pollution and greenhouse gas emissions, reduce the severity of collisions (especially for bicyclists and pedestrians), and provide stable traffic flows (e.g., 40 miles-per-hour or lower on arterial streets, 30 miles-per-hour or lower on collector streets).
- Connect all City traffic signals to the traffic control center to coordinate signal operations and improve incident response.

- Reduce transit travel or wait times.
- Improve traveler information about travel choices and travel times.

Greenhouse Gas Reduction Plan Measures and Actions

The following GGRP measures and actions address the potential for unacceptable transportation impacts associated with VMT.

Measures

- ▶ **3-1.A:** Continue to implement the smart-growth principles established in SACOG's Metropolitan Transportation Plan to the extent feasible.
- ▶ **3-1.B:** Work with SACOG's Community Design and CalTrans' Safe Routes to School programs to identify grant opportunities to improve public transit, bicycle and pedestrian networks to serve the community center, libraries, schools, recreational areas and other public gathering spaces.
- ▶ **3-2.A:** Develop rideshare infrastructure to facilitate participation by those travelling from Citrus Heights to major employment centers such as Downtown Sacramento or Roseville.
- ▶ **3-2.B:** Work with employers to offer incentives and services to increase use of alternatives to single-occupant autos (commute trip reduction programs such as parking cash-out, transit subsidy).
- ▶ **3-3.A:** Conduct a parking management study to monitor implementation of revised 2006 parking standards (CHMC 106.36.080).
- ▶ **3-5.A:** Maximize pedestrian and bicycle use through high-quality design, enhanced infrastructure, and enforcing bike and pedestrian travel rights.
- ▶ **3-5.B:** Increase bicycle infrastructure by requiring bicycle parking in new development, retrofitting parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities, and participating in a regional bikesharing program.
- ▶ **3-6.A:** Conduct a public transit gap study analyzing strategies to increase transit use and funding sources for transit improvements. Work with regional transit agencies to provide bus route coverage to underserved areas.
- ▶ **3-6.B:** Work with Regional Transit, E-Tran, Roseville Transit, Amtrak and other transit agencies to develop a regional pass system.

Actions

- **3-1.A.A.** Collaborate with adjacent cities and other regional partners to promote SACOG's smart-growth principles to develop and support alternative transportation.
- **3-1.B.A.** Work with SJUSD to develop an outreach program that promotes alternative travel modes for school-related trips.
- **3-2.A.A.** Create rideshare-designated parking spaces near bus stops, employment centers and commercial areas (e.g., Sunrise MarketPlace, Auburn Boulevard).
- **3-2.A.B.** Amend the Zoning Code to require preferential parking spaces within new or substantially improved commercial, employment and civic projects designated for carpool and/or vanpool use.

- **3-2.A.C.** Provide information for employers about potential benefits of car-share programs and the presence of local car rental opportunities.
- **3-2.B.A.** Develop an outreach program to City employers and collaborate with them to identify various commuter trip reduction programs for their employees.
- **3-3.A.A.** Conduct a feasibility study to evaluate shared parking opportunities for compatible adjacent land uses (e.g., offices next to commercial or multi-family residential uses).
- **3-3.A.B.** Evaluate opportunity areas to reduce travel speeds and improve pedestrian use (e.g., Auburn Boulevard Specific Plan).
- **3-3.A.C.** Conduct a parking management study to identify vacant or underused parking lots and spaces to convert them to other uses such as park-and-ride lots, motorcycle parking, and shared parking spaces.
- **3-5.A.A.** Re-evaluate the Bicycle Master Plan. Conduct a citywide gap analysis to identify missing links in the bicycle network and prioritize filling gaps to enhance bike travel.
- **3-5.A.B.** Adopt a Pedestrian Master Plan and implement near-term improvements. Conduct a citywide pedestrian walkway analysis to identify locations with physical obstacles within sidewalks, walkways, and trails such as utility poles and prioritize removing these barriers to encourage pedestrian use.
- **3-5.B.A.** Continue to implement City bicycle parking standards (CHMC 106.36.060) for new development and identify ways to retrofit existing development to match these requirements.
- **3-5.B.B.** Identify areas lacking adequate bike parking. Retrofit parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities.
- **3-5.B.C.** Partner with transit agencies and adjacent cities to develop a regional bikeshare program.
- **3-6.A.A.** In collaboration with regional transit agencies, evaluate potential to add public transit service types, including Bus Rapid Transit and community or neighborhood shuttles to regional rail stops.
- **3-6.A.B.** Ensure that the streetscape improvements for the Phase 1 New San Juan High School improvements implement pedestrian, bike, and public transit amenities.
- **3-6.B.A.** Partner with SACOG and local transit agencies to develop a regional transit pass program.

Conclusion

The Draft General Plan and GGRP include a variety of policies, measures and actions that promote infill development, integrate land use and transportation planning, manage travel demand, improve jobs-housing balance, enhance non-automobile travel modes, mix land uses, and promote compact development. Among other benefits, these strategies would reduce travel demand. However, traditional traffic models are not designed to fully capture the benefits of land use, transportation, and urban design policies that reduce VMT. Extensive research has shown that various planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Many different urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities. This increases the relative attractiveness of non-automobile modes of travel, and can promote mode shifts. The analysis conducted to support the Draft General Plan and this EIR may overestimate VMT and traffic volumes along certain segments because the VMT calculations were derived from a travel demand model without modifications that capture VMT reductions that may be available to the City under the Draft General Plan related to: shifts in travel to transit, bike, and walk modes; mode shifts or shorter trips from improved multi-modal transportation connectivity; mode shifts

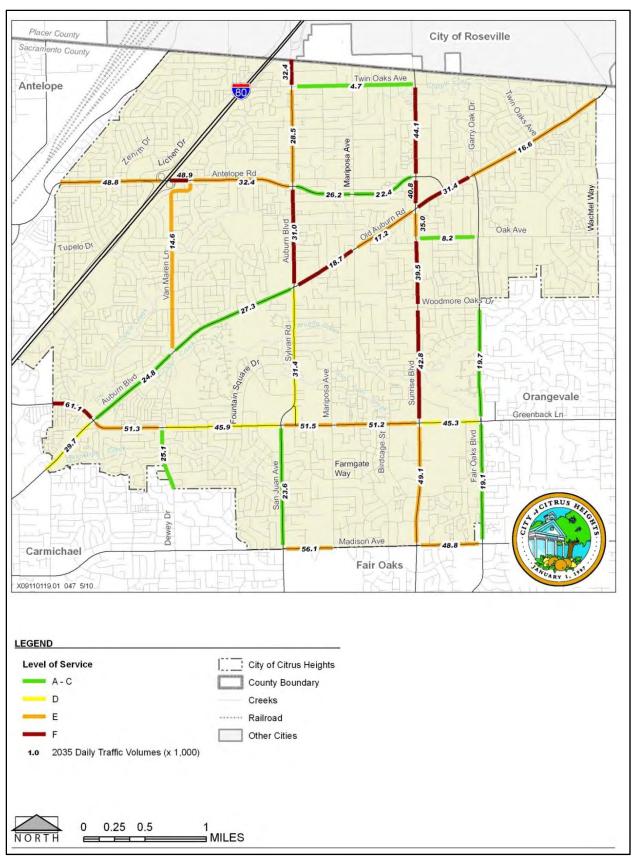
or shorter trips related to more compact and mixed-use development patterns; and other factors. As such, the analysis in this section can be considered conservative (erring on the high side), since it does not account for localized VMT reduction benefits.

The Draft General Plan and GGRP include numerous policies, actions, and measures designed to reduce VMT. There is no generally accepted methodology for quantifying the reductions in VMT that will occur with the implementation of these policies, actions, and measures. Nonetheless, implementation of these programs is expected to reduce VMT by an unquantifiable amount. Furthermore, this EIR comprehensively addresses impacts related to increase in travel demand in other sections of this EIR (air quality, greenhouse gases and climate change, noise, etc.), and since there are no other impacts related to travel demand beyond those which are comprehensively addressed elsewhere, the impact related to increase in travel demand is considered **less than significant**.

MPACT A.2-2Reduced Capacity of the Transportation System. Increased travel demand within the planning area, in combination with regional growth, would add traffic to roadways which experience congestion under existing conditions, and which would be congested in future years. Implementation of the Draft General Plan will also require new transportation funding mechanisms or programs that are not yet in place. The lack of sufficient funding could limit the City's ability to expand the existing transportation network and to comply with the Draft General Plan transportation policies in a timely manner. This impact is considered **significant**.

The analysis of this impact addresses the capacity of the transportation system relative to anticipated increases in travel demand, as measured by LOS. Roadway traffic effects of implementing the Draft General Plan were evaluated by forecasting 2035 daily traffic volumes and assessing LOS using the same methodology that was used for existing conditions, including the City's current LOS D threshold. With regional growth and future land uses in the planning area consistent with the Draft General Plan, the following 19 roadway segments would exceed LOS D (see Exhibit 4.2-9 and Table 4.2-10). These results are based on the proposed Draft General Plan roadway system, which does not include major widening projects (e.g., widening Sunrise Boulevard from four to six lanes between Greenback Lane and the north City limits).

- 1. LOS C to LOS E Antelope Road: West City limits to I-80
- 2. Worsen LOS F Antelope Road: I-80 to Van Maren Lane
- 3. LOS D to LOS F Auburn Boulevard: North City Limits to Twin Oaks Avenue
- 4. LOS D to LOS F Auburn Boulevard: Antelope Road to Old Auburn Road
- 5. LOS D to LOS F Greenback Lane: West City Limits to Auburn Boulevard
- 6. LOS C to LOS E Greenback Lane: Auburn Boulevard to Dewey Drive
- 7. LOS D to LOS E Greenback Lane: San Juan Avenue to Mariposa Avenue
- 8. LOS C to LOS E Madison Avenue: San Juan Avenue to Mariposa Avenue
- 9. LOS C to LOS E Madison Avenue: Sunrise Boulevard to Fair Oaks Boulevard
- 10. LOS E to LOS F Sunrise Boulevard: Twin Oaks Avenue to Antelope Road
- 11. Worsen LOS F Sunrise Boulevard: Antelope Road to Old Auburn Road
- 12. LOS D to LOS E Sunrise Boulevard: Old Auburn Road to Oak Avenue
- 13. LOS D to LOS F Sunrise Boulevard: Oak Avenue to Woodmore Oaks Drive
- 14. Worsen LOS F Sunrise Boulevard: Woodmore Oaks Drive to Greenback Lane
- 15. LOS D to LOS E Sunrise Boulevard: Greenback Lane to Madison Avenue
- 16. Worsen LOS E Van Maren Lane: Antelope Road to Auburn Boulevard
- 17. Worsen LOS F Old Auburn Road: Auburn Boulevard to Mariposa Avenue
- 18. LOS D to LOS E Old Auburn Road: Mariposa Avenue to Sunrise Boulevard
- 19. Worsen LOS F Old Auburn Road: Sunrise Boulevard to Fair Oaks Boulevard



Source: Fehr & Peers Transportation Consultants, 2010

Roadway Traffic Volumes and LOS (2035 with Draft General Plan)

Exhibit 4.2-9

Table 4.2-10						
Roadway Level of Service (2035 with Draft General Plan)						
Location De la Control De la C	Average Volume	Classification	LOS			
1. Twin Oaks Avenue – between Mariposa Avenue and Sunrise Boulevard	4,700	2 Lane Low Access Control	A			
2. Antelope Road – between City limits and Interstate 80	48,800	6 Lane Moderate Access Control	E			
3. Antelope Road – between Interstate 80 and Van Maren Lane	48,900	4 Lane Moderate Access Control	F			
4. Antelope Road – between Van Maren Lane and Auburn Boulevard	32,400	4 Lane Moderate Access Control	<u>E</u>			
5. Antelope Road – between Mariposa Avenue and Sunrise Boulevard	22,400	4 Lane Moderate Access Control	В			
6. Auburn Boulevard – between Greenback Lane and Van Maren Lane	24,800	4 Lane Moderate Access Control	В			
7. Auburn Boulevard – between Van Maren Lane and Sylvan Road	27,300	4 Lane Moderate Access Control	C			
8. Auburn Boulevard – between Old Auburn Road and Antelope Road	31,000	4 Lane Low Access Control	F			
9. Auburn Boulevard – between Antelope Road and Twin Oaks Avenue	28,500	4 Lane Low Access Control	E			
10. Auburn Boulevard – just north of Twin Oaks Avenue	32,400	4 Lane Low Access Control	F			
11. Old Auburn Road – between Sylvan Road and Mariposa Avenue	18,700	2 Lane Low Access Control	F			
12. Old Auburn Road – east of Fair Oaks Boulevard	16,600	2 Lane Moderate Access Control	E			
13. Greenback Lane – between City limits and Auburn Boulevard	61,100	6 Lane High Access Control	F			
14. Greenback Lane – between Auburn Boulevard and Dewey Drive	51,300	6 Lane Moderate Access Control	Е			
15. Greenback Lane – between Dewey Drive and San Juan Drive	45,900	6 Lane Moderate Access Control	D			
16. Greenback Lane – between Mariposa Avenue and Sunrise Boulevard	51,200	6 Lane Moderate Access Control	Е			
17. Greenback Lane – between Sunrise Boulevard and Fair Oaks Boulevard	45,300	6 Lane Moderate Access Control	D			
18. Madison Avenue – between San Juan Avenue and Mariposa Avenue	56,100	6 Lane High Access Control	Е			
19. Madison Avenue – between Sunrise Boulevard and Fair Oaks Boulevard	48,800	5 Lane High Access Control	Е			
20. San Juan Avenue – north of Madison Avenue	23,600	4 Lane Low Access Control	С			
21. Sylvan Road - between Greenback Lane and Auburn Boulevard	31,400	4 Lane Moderate Access Control	D			
22. Sunrise Boulevard – between Madison Avenue and Greenback Lane	49,100	6 Lane Moderate Access Control	Е			
23. Sunrise Boulevard – between Greenback Lane and Woodmore Oaks Drive	42,800	4 Lane Moderate Access Control	F			
24. Sunrise Boulevard – between Oak Avenue and Old Auburn Road	35,000	4 Lane Moderate Access Control	Е			
25. Sunrise Boulevard – between Old Auburn Road and Antelope Road	40,800	4 Lane Low Access Control	F			
26. Sunrise Boulevard – between Antelope Road and Twin Oaks Avenue	44,100	4 Lane Moderate Access Control	F			
27. Fair Oaks Boulevard – between Greenback Lane and Woodmore Oaks Drive	19,700	3 Lane Moderate Access Control	С			
28. Oak Avenue – between Sunrise Boulevard and Fair Oaks Boulevard	8,200	2 Lane Low Access Control	A			
29. Van Maren Lane – between Auburn Boulevard and Interstate 80	14,600	2 Lane Low Access Control	Е			
Source: Fehr & Peers Transportation Consultants, 2010						

This outcome is due to a combination of local and regional population and employment growth plus insufficient planned roadway capacity to accommodate forecasted traffic volumes. Local and regional population and employment growth would increase travel demand in the vicinity of the planning area. A comparison of forecast traffic volumes along local roadways compared to existing and planned roadway capacity identifies that LOS D conditions would be exceeded at the locations identified above.

Widening existing roadways to accommodate additional traffic would be inconsistent with other Draft General Plan policies. Roadway widening could adversely affect pedestrian and bicycle safety and convenience, induce travel demand, require substantial investment for relatively minor improvements in peak-hour conditions, thwart the City's efforts to provide complete streets and reduce GHG emissions, and lead to other undesirable consequences.

The Draft General Plan recognizes that evaluating transportation LOS requires consideration of all locally available modes. The Draft General Plan includes a complete streets policy approach, which explicitly considers the function of the transportation network for walking, bicycling, and using transit, as well as automobile travel. From the Draft General Plan Community Development Element, under "Transportation and Mobility",

"[vehicular] speeds should consider multiple operational objectives such as stability of flow, fuel consumption, air pollution and greenhouse gas emissions, and collision severity. Further, the City's roadway system should attempt to provide a high level of connectivity which increases the opportunity to connect places using multiple travel choices... The operation of the City's roadways will be managed in the future to balance a variety of objectives that consider all roadway users, recognizes constraints such as funding limitations, and addresses the tradeoffs of roadway operations with other community values such as safety, environmental protection, quality of life, and economic development. As such, the general plan transportation goals and policies ... introduce new performance measures and thresholds that will guide decision making about how to modify and enhance the existing transportation network in response to future population and employment growth."

Draft General Plan LOS Standard

To optimize the City's objectives for moving vehicular traffic during the peak hour with the various related environmental, social, and economic objectives, the Draft General Plan identifies LOS E as the City's standard for assessing roadway capacity. The standard would be used for both roadways and intersections during peak hours. The City provides some exceptions where LOS F would be allowed. Areas where LOS F is considered acceptable are those where expanding roadways to achieve better LOS would create other conflicts. Exceptions to LOS E are allowed for both roadway segments and intersections along the following streets:

- ► Sunrise Boulevard south City limits to north City limits;
- ► Greenback Lane west City limits to east City limits;
- ► Old Auburn Road Sylvan Road to Fair Oaks Boulevard;
- ► Antelope Road I-80 to Auburn Boulevard; and
- ► Auburn Boulevard Old Auburn Road to north City limits.

The Draft General Plan also provides the City with the flexibility to allow additional exceptions to the LOS standard where mitigation is infeasible or would conflict with other community values, such as:

- ▶ Impacts on general safety, particularly pedestrian, bicycle, and transit safety;
- ► The right-of-way needs and the physical impacts on surrounding private or public properties;
- ► The visual aesthetics of the required improvement and its impact on community identity and character;
- ► Environmental impacts, including air quality and noise impacts; and
- ► Impacts on quality of life as perceived by residents.

With the adoption of the Draft General Plan, including the revised LOS E standard and the exceptions described above, each of the 19 roadway segments listed previously would experience congestion during the peak hour that would be considered acceptable.

The City is not proposing changes to previously anticipated future population, housing, or travel demand characteristics as a part of this project. Impacts to on- and off-ramps to I-80 at Antelope Road and Greenback Lane would be addressed in the context of regional transportation system planning pursuant to the I-80 CSMP, described previously in the Regulatory Setting.

Draft General Plan Policies and Actions

The following Draft General Plan policies and actions address the potential for unacceptable transportation impacts associated with LOS.

Policies

- ▶ 13.1: Improve mobility in the Sunrise MarketPlace area to provide adequate access for vehicles, transit, bicycles and pedestrians.
- ▶ 13.2: Create convenient connections across Sunrise Boulevard for vehicles, bicycles, pedestrians and transit.
- ▶ 29.1: When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.
- ▶ 29.2: Measure customer satisfaction related to vehicle travel using LOS according to procedures in the latest version of the Highway Capacity Manual published by the Transportation Research Board. The City will strive to achieve LOS E or better conditions for City roadways and intersections during peak hours (these may include weekday AM, Mid-Day, and PM hours as well as Saturday Mid-Day or PM peak hours). The intent of the policy is to effectively utilize the roadway network capacity while balancing the desire to minimize potential adverse effects of vehicle travel on the environment and other modes.

Exceptions to LOS E are allowed for both roadway segments and intersections along the following streets:

- Sunrise Boulevard south City limits to north City limits
- Greenback Lane west City limits to east City limits
- Old Auburn Road Sylvan Road to Fair Oaks Boulevard
- Antelope Road I-80 to Auburn Boulevard
- Auburn Boulevard Old Auburn Road to north City limits

No road widening to provide additional vehicle capacity of the above listed streets will be permitted. Development projects that impact these locations according to the City's transportation impact study guidelines would require mitigation, including, but not limited to, the following items:

- actions that reduce vehicle trips or provide non-auto improvements to the transportation network or services
- lengthening of turn pockets
- signal timing modifications

Additional exceptions may be allowed by the City Council at both exempt and non-exempt locations where mitigation is infeasible or would conflict with other community values such as those listed below:

- impacts on general safety, particularly pedestrian, bicycle, and transit safety
- the right-of-way needs and the physical impacts on surrounding private or public properties
- the visual aesthetics of the required improvement and its impact on community identity and character
- environmental impacts including air quality and noise impacts
- impacts on quality of life as perceived by residents
- ▶ **29.3:** Require development proposals to analyze future transportation impacts and mitigate significant impacts consistent with Policies 29.1 and 29.2.
- ▶ 29.6: Collaborate with neighboring jurisdictions when updating the General Plan and preparing the Capital Improvement Program to work toward providing a regional Complete Streets transportation network for all modes.
- ▶ 29.7: Develop a transportation financing program that will fully fund the planned expansion of the existing transportation network and comply with Policies 29.1 and 29.2. This program will combine federal and state transportation funds with local funding sources that provide the means by which new development consistent with the general plan will fully mitigate its cumulative transportation impacts. This approach to transportation finance is intended to streamline development review for those projects consistent with the general plan.
- ▶ 29.8: Minimize the number of access points along arterial roadways, including by consolidating or relocating driveways to provide for more efficient traffic movement.
- ▶ 30.2: Require public street right-of-way dedications and improvements as development occurs. Ultimate right-of-way and improvements should be installed at the time of development, except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function.
- ▶ 32.1: Evaluate and utilize technologies that can improve the performance, reliability, and safety of the transportation system (such as signal coordination, centralized traffic control, red-light cameras, and real-time travel information).
- ▶ 53.2: Minimize the impacts of vehicle emissions on air quality.

- **13.1.A.** Support the mobility, pedestrian enhancement, and way-finding signage concepts identified in the Sunrise MarketPlace Revitalization Blueprint.
- **13.1.B.** Support free shopping shuttle service at Sunrise MarketPlace.
- **13.1.C.** Establish a well connected grid-pattern street network, which provides connectivity among district land uses and linkages to surrounding residential neighborhoods.
- **13.2.A.** Install separated sidewalks along major arterials and plant and maintain trees to reinforce a pedestrian friendly atmosphere.
- **13.2.B.** Explore options for creating pedestrian crossings on Greenback Lane and Sunrise Boulevard between the major shopping centers, including a bridge connector.
- **13.2.C.** Provide bike lanes and bicycle parking facilities in the Sunrise MarketPlace.
- **29.1.A.** Update the Capital Improvement Program annually to incorporate necessary circulation system improvements.

- **29.1.B.** Evaluate projects to ensure that the safety, comfort, and convenience of pedestrians and bicyclists are given equal level of consideration to drivers.
- **29.1.C.** Consider ways to increase and improve travel choices when reviewing development or transportation infrastructure projects.
- **29.1.D.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade.
- **29.1.E.** Improve the existing street network to minimize travel times and improve mobility for transit, bicycle, and walking trips between new projects and surrounding land uses to reduce vehicle trips.
- **29.2.A.** Modify the existing traffic impact fee program to include a mitigation fee designed to reduce vehicle trips and vehicle miles of travel per capita within the City to avoid or minimize the need to expand existing roadway capacity. This program should include a multi-modal (Complete Streets) capital improvement program (CIP) and, in conjunction with public funding, provide full funding for the City's circulation element improvements.
- **29.2.B.** The City shall develop and adopt transportation impact study guidelines within one year of General Plan adoption.
- **30.1.A.** Install improvements along roadway segments as identified on Draft General Plan Map 4 (Exhibit 4.2-8 in this EIR).
- **30.2.A.** The City shall develop and adopt ultimate right-of-way dimensions for public roadways through a plan line study or equivalent. This study/plan should also address key complete streets issues such as intersection and access spacing, lane widths, land use context, landscaping, transit, and non-motorized vehicles.
- **32.1.A.** Prepare and implement an Intelligent Transportation System master plan that strives to achieve the following objectives:
- Regulate operating speeds on City streets that balance the City's desire to minimize air pollution and greenhouse gas emissions, reduce the severity of collisions (especially for bicyclists and pedestrians), and provide stable traffic flows (e.g., 40 miles-per-hour or lower on arterial streets, 30 miles-per-hour or lower on collector streets).
- Connect all City traffic signals to the traffic control center to coordinate signal operations and improve incident response.
- Reduce transit travel or wait times.
- Improve traveler information about travel choices and travel times.

Greenhouse Gas Reduction Plan Measures and Actions

The following GGRP measures and actions address the potential for unacceptable transportation impacts associated with LOS.

Measures

▶ **3-1.A:** Continue to implement the smart-growth principles established in SACOG's Metropolitan Transportation Plan to the extent feasible.

- ▶ **3-1.B:** Work with SACOG's Community Design and CalTrans' Safe Routes to School programs to identify grant opportunities to improve public transit, bicycle and pedestrian networks to serve the community center, libraries, schools, recreational areas and other public gathering spaces.
- ▶ **3-2.A:** Develop rideshare infrastructure to facilitate participation by those travelling from Citrus Heights to major employment centers such as Downtown Sacramento or Roseville.
- ▶ **3-2.B:** Work with employers to offer incentives and services to increase use of alternatives to single-occupant autos (commute trip reduction programs such as parking cash-out, transit subsidy).
- ▶ **3-3.A:** Conduct a parking management study to monitor implementation of revised 2006 parking standards (CHMC 106.36.080).
- ▶ **3-5.A:** Maximize pedestrian and bicycle use through high-quality design, enhanced infrastructure, and enforcing bike and pedestrian travel rights.
- ▶ 3-5.B: Increase bicycle infrastructure by requiring bicycle parking in new development, retrofitting parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities, and participating in a regional bike sharing program.
- ▶ **3-6.A:** Conduct a public transit gap study analyzing strategies to increase transit use and funding sources for transit improvements. Work with regional transit agencies to provide bus route coverage to underserved areas.
- ▶ **3-6.B:** Work with Regional Transit, E-Tran, Roseville Transit, Amtrak and other transit agencies to develop a regional pass system.

- **3-1.A.A.** Collaborate with adjacent cities and other regional partners to promote SACOG's smart-growth principles to develop and support alternative transportation.
- **3-1.B.A.** Work with SJUSD to develop an outreach program that promotes alternative travel modes for school-related trips.
- **3-2.A.A.** Create rideshare-designated parking spaces near bus stops, employment centers and commercial areas (e.g., Sunrise MarketPlace, Auburn Boulevard).
- **3-2.A.B.** Amend the Zoning Code to require preferential parking spaces within new or substantially improved commercial, employment and civic projects designated for carpool and/or vanpool use.
- **3-2.A.C.** Provide information for employers about potential benefits of car-share programs and the presence of local car rental opportunities.
- **3-2.B.A.** Develop an outreach program to City employers and collaborate with them to identify various commuter trip reduction programs for their employees.
- **3-3.A.A.** Conduct a feasibility study to evaluate shared parking opportunities for compatible adjacent land uses (e.g., offices next to commercial or multi-family residential uses).
- **3-3.A.B.** Evaluate opportunity areas to reduce travel speeds and improve pedestrian use (e.g., Auburn Boulevard Specific Plan).

- **3-3.A.C.** Conduct a parking management study to identify vacant or underused parking lots and spaces to convert them to other uses such as park-and-ride lots, motorcycle parking, and shared parking spaces.
- **3-5.A.A.** Re-evaluate the Bicycle Master Plan. Conduct a citywide gap analysis to identify missing links in the bicycle network and prioritize filling gaps to enhance bike travel.
- **3-5.A.B.** Adopt a Pedestrian Master Plan and implement near-term improvements. Conduct a citywide pedestrian walkway analysis to identify locations with physical obstacles within sidewalks, walkways, and trails such as utility poles and prioritize removing these barriers to encourage pedestrian use.
- **3-5.B.A.** Continue to implement City bicycle parking standards (CHMC 106.36.060) for new development and identify ways to retrofit existing development to match these requirements.
- **3-5.B.B.** Identify areas lacking adequate bike parking. Retrofit parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities.
- **3-5.B.C.** Partner with transit agencies and adjacent cities to develop a regional bikeshare program.
- **3-6.A.A.** In collaboration with regional transit agencies, evaluate potential to add public transit service types, including Bus Rapid Transit and community or neighborhood shuttles to regional rail stops.
- **3-6.A.B.** Ensure that the streetscape improvements for the Phase 1 New San Juan High School improvements implement pedestrian, bike, and public transit amenities.
- **3-6.B.A.** Partner with SACOG and local transit agencies to develop a regional transit pass program.

The City has identified roadways that would experience congestion in excess of LOS D. As a part of the General Plan update, the City considered its comprehensive approach to transportation planning and facilities improvements. Adverse economic, environmental, and social effects make roadway widening infeasible for roadways that would have exceeded LOS D. In addition, if the City were to widen roadways to address these effects, the City would also be creating new conflicts with policies related to public transit, bicycle, and pedestrian mobility.

The City has exercised its discretion by establishing in the Draft General Plan a new LOS standard, with exceptions. Use of this standard recognizes that LOS E and F conditions are acceptable at certain locations within the City due to other tradeoff factors. As identified in the Environmental Setting and summarized below in Table 4.2-11, physical factors associated with complete streets policies in the Draft General Plan (e.g., reducing right-of-way impacts, providing sufficient space for bicycles and pedestrians, encouraging transit use, and acknowledging that high levels of roadway utilization are desirable when traffic operations are managed through ITS).

Nevertheless, developing adequate transportation funding to implement the Draft General Plan remains a challenge. The current economic recession increases the difficulty of overcoming this challenge and could contribute to a lag or delay in implementing Policy 29.7, which requires the City to develop a transportation financing program that will fully fund the planned expansion of the existing transportation network and comply with Policies 29.1 and 29.2 in particular. Therefore, this impact is **significant**.

Mitigation Measures

No mitigation measures are available beyond policies, measures, and actions in the Draft General Plan and GGRP.

Table 4.2-11 Future Transportation System Deficiencies (2035) and Complete Streets Considerations				
Facility	Description of Deficiency	Complete Streets Considerations		
Roadway System				
Sunrise Boulevard from Antelope Road to Old Auburn Road	This four-lane segment has numerous full-access driveways and is projected to carry approximately 40,800 vehicles per day, which results in LOS F operating conditions.	This segment provides sidewalks on both sides of the street and Class II bike lanes. Expansion of the intersection at Old Auburn Road would result in adverse effects on other modes (i.e., longer pedestrian crossing distances).		
		Transit must operate in mixed-traffic lanes.		
Old Auburn Road from Sylvan Road to Sunrise Boulevard	This two-lane segment has numerous full-access driveways and is projected to carry approximately 18,000 vehicles per day, which results in LOS F operating conditions. The lack of positive access control would result in frequent vehicle conflicts in the center left-turn lane.	This segment lacks sidewalks and bike facilities. Roadway expansion at the Sunrise Boulevard intersection to improve LOS may affect other modes (see above).		
Greenback Lane/San Juan Avenue Intersection Greenback Lane/Sunrise Boulevard Intersection Greenback Lane/Fair Oaks Boulevard Intersection Madison Avenue/Sunrise Boulevard Intersection	Heavy projected traffic volumes on Greenback Lane would result in long delays and queuing during peak periods, which would result in unacceptable operations at the Sunrise Boulevard and Fair Oaks Boulevard intersections. Heavy traffic on all approaches at the Madison Avenue/Sunrise Boulevard intersection would result in unacceptable operations. Stop-and-go traffic conditions on Greenback Lane would contribute to accidents as well as increased GHGs and criteria air pollutants.	Intersection sizes may discourage pedestrian and bicycle use. Signalized control may offer opportunities to manage traffic flow and speeds to reduce emissions and reduce collision severity. Transit must operate in mixed-traffic lanes.		
Madison Avenue/San Juan Avenue Intersection Auburn Boulevard/Antelope Road Intersection Sunrise Boulevard/Old Auburn Road Intersection	These intersections would be heavily utilized during morning and evening peak hours, resulting in unacceptable operations.	Intersection sizes may discourage pedestrian and bicycle use. Signalized control may offer opportunities to manage traffic flow and speeds to reduce emissions and reduce collision severity. Transit must operate in mixed-traffic lanes.		

Table 4.2-11 Future Transportation System Deficiencies (2035) and Complete Streets Considerations			
Facility	Description of Deficiency	Complete Streets Considerations	
Bicycle/Pedestrian System			
Citywide	Lack of continuous on-street Class II bicycle lane system, especially on segments of Sunrise Boulevard, Auburn Boulevard and Fair Oaks Boulevard.	Consideration should be given as to proposed Class II bike lanes on 6-lane segments of Greenback Lane and Madison Avenue relative to Complete Streets objectives (i.e., speed differential between motorists and bicyclists is large on 6-lane arterials, indicating a need for separate rather than shared rights-of-way)	
Citywide	Under-utilization of parks, greenbelts, and power line easements to accommodate bicycle travel.		
Citywide	Lack of a continuous sidewalk along key pedestrian corridors including Sunrise Boulevard, Fair Oaks Boulevard, Old Auburn Road, Van Maren Lane, Twin Oaks Avenue, and Antelope Road as shown on Exhibit 4.2-7.		
Transit System			
Greenback Lane, Sunrise Boulevard, Sylvan Road, Auburn Boulevard, Antelope Road and Madison Avenue		Consideration for more enhanced bus stops on key routes including bus turnouts, bus shelters, trees for shade, route maps and appropriate signage to attract and promote both transit and pedestrian trips. Potential opportunities for enhanced transit lanes either on arterials or at intersections as well as demand-response shuttles to provide better residential connections from various neighborhoods to destinations or fixed-route transit centers/stops.	

Conclusion

The City has limited options to eliminate or reduce this impact without creating other adverse economic effects. Delaying or denying development projects until such time as the City has a transportation finance program that complies with Policy 29.7 may help reduce this impact, but could also exacerbate the problem by preventing development (otherwise consistent with the Draft General Plan) that could generate new property or sales taxes. Furthermore, physical constraints exist that would limit the City's ability to widen or expand roadway capacity, and such widening would be inconsistent with other Draft General Plan policies, including policies promoting complete streets and alternative modes of travel. Therefore, this impact is **significant and unavoidable.**

IMPACT Emergency Access. Implementation of the Draft General Plan would degrade LOS from current conditions on roadways used for emergency vehicle access, which could adversely affect access. This impact is considered less than significant.

As stated above under "Emergency Services Routes," the roadways most commonly used for emergency access in the planning area include Sunrise Boulevard, Greenback Lane, Madison Avenue, Dewey Drive, Oak Avenue, and Auburn Boulevard. Table 4.2-7 summarizes existing roadway deficiencies, including roadways currently operating at unacceptable LOS, including segments of Sunrise Boulevard, and intersections along Sunrise Boulevard, Greenback Lane, Madison Avenue, and Auburn Boulevard. As shown in Exhibit 4.2-9 and Table 4.2-10, with implementation of the Draft General Plan, several segments of these roads could experience LOS F operating conditions, which could adversely affect emergency traffic.

Draft General Plan Policies and Actions

Implementation of the following Draft General Plan policies and action would reduce the effect of degraded LOS on emergency response routes.

Policies

- 29.2: Measure customer satisfaction related to vehicle travel using level of service (LOS) according to procedures in the latest version of the Highway Capacity Manual published by the Transportation Research Board. The City will strive to achieve LOS E or better conditions for City roadways and intersections during peak hours (these may include weekday AM, Mid-Day, and PM hours as well as Saturday Mid-Day or PM peak hours). The intent of the policy is to effectively utilize the roadway network capacity while balancing the desire to minimize potential adverse effects of vehicle travel on the environment and other modes. Exceptions to LOS E are allowed for both roadway segments and intersections along the following streets:
 - Sunrise Boulevard south City limits to north City limits
 - Greenback Lane west City limits to east City limits
 - Old Auburn Road Sylvan Road to Fair Oaks Boulevard
 - Antelope Road I-80 to Auburn Boulevard
 - Auburn Boulevard Old Auburn Road to northern City limits

No road widening to provide additional vehicle capacity of the above listed streets will be permitted. Development projects that impact these locations according to the City's transportation impact study guidelines would require mitigation, including, but not limited to, the following items:

- actions that reduce vehicle trips or provide non-auto improvements to the transportation network or services
- lengthening of turn pockets
- signal timing modifications

Additional exceptions may be allowed by the City Council at both exempt and non-exempt locations where mitigation is infeasible or would conflict with other community values such as those listed below:

- impacts on general safety, particularly pedestrian, bicycle, and transit safety
- the right-of-way needs and the physical impacts on surrounding private or public properties
- the visual aesthetics of the required improvement and its impact on community identity and character
- environmental impacts including air quality and noise impacts
- impacts on quality of life as perceived by residents

▶ 32.1: Evaluate and utilize technologies that can improve the performance, reliability, and safety of the transportation system (such as signal coordination, centralized traffic control, red-light cameras, and real-time travel information).

Action

32.1.A. Prepare and implement an Intelligent Transportation System master plan that strives to achieve the following objectives:

- Regulate operating speeds on City streets that balance the City's desire to minimize air pollution and greenhouse gas emissions, reduce the severity of collisions (especially for bicyclists and pedestrians), and provide stable traffic flows (e.g., 40 miles-per-hour or lower on arterial streets, 30 miles-per-hour or lower on collector streets).
- Connect all City traffic signals to the traffic control center to coordinate signal operations and improve incident response.
- Reduce transit travel or wait times.
- Improve traveler information about travel choices and travel times.

Conclusion

Implementation of Draft General Plan policies and actions would reduce traffic impacts in 2035 without future street widening projects through the use of ITS (as described in Policy 32.1 and Action 32.1-A), as well as provide for additional mitigation, if necessary, to benefit public safety (as described in Policy 29.2). Therefore, this is a **less-than-significant** impact.

IMPACT Conflicts with Adopted Plans and Policies for Non-Motorized Modes of Transportation and Public
 4.2-4 Transit. Implementation of the Draft General Plan and GGRP would not conflict with adopted plans, policies, or programs supporting non-motorized modes of transportation and public transit. Rather, implementation of these plans would expand opportunities for use of non-motorized modes. This impact is considered less than significant.

As described above under the analysis of Impact 4.2-1, the Draft General Plan promotes a complete streets approach, which considers all modes of transportation, including walking, bicycling, public transit, and automobile use. The City's existing General Plan focuses primarily on vehicular travel, and its programs promote roadway improvement projects, such as road widening, which would adversely affect pedestrian and bicycle safety. More recent planning strategies recognize the importance of other modes of travel aside from the automobile, and as a result, regional transportation plans, including the SACOG MTP and MTIP, both described above under "Regulatory Setting," urge local jurisdictions to move away from automobile dependency.

Although the Draft General Plan changes the policy approach from the existing General Plan, this brings the City's General Plan in line with more recent adopted plans utilizing these newer strategies, including the SACOG MTP and MTIP, and the City's recent Bikeway Master Plan. Overall, the Draft General Plan and GGRP include several policies, measures and actions that encourage planning for and use of public transit, bicycle, and pedestrian travel modes. Table 4.2-7 above identifies existing transportation deficiencies within Citrus Heights, including public transit and non-motorized modes and was used in the development of the Draft General Plan policies and actions to ensure that deficiencies were addressed.

Draft General Plan Policies and Actions

The following Draft General Plan policies and actions address public transit and non-motorized modes of transportation.

Policies

- ▶ 29.1: When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.
- ▶ 29.4: Support safe, complete and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
- ▶ 31.1: Strive to increase fixed-route and demand responsive (i.e., paratransit) transit service coverage and frequency to Citrus Heights residents and employees.
- ▶ 31.2: Strive to provide public transit that is an attractive, convenient, dependable and safe alternative to the automobile.
- ▶ 31.3: Consider express commuter bus service between Citrus Heights and major employment and transit centers.
- ▶ 31.4: Require new development to provide transit enhancements, where appropriate, that decrease transit travel times, improve access to transit stops, or improve the amenities, security, or travel information at transit stops.

- **29.1**.**A.** Update the Capital Improvement Program annually to incorporate necessary circulation system improvements.
- **29.1.B.** Evaluate projects to ensure that the safety, comfort, and convenience of pedestrians and bicyclists are given equal level of consideration to drivers.
- **29.1.C.** Consider ways to increase and improve travel choices when reviewing development or transportation infrastructure projects.
- **29.1.D.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade.
- **29.1.E.** Improve the existing street network to minimize travel times and improve mobility for transit, bicycle, and walking trips between new projects and surrounding land uses to reduce vehicle trips.
- **29.4.A.** Modify the existing street network to enable direct physical connections within neighborhoods and between neighborhoods, neighborhood-commercial areas, and commercial-commercial areas, including connections accessible only by pedestrians and bicycles on existing cul-de-sac streets.
- **29.4.B.** Provide direct connection from residential areas to neighborhood parks and open space.
- **29.4.C.** Where feasible, provide pedestrian crosswalks on all intersection approaches.

- **29.4.D.** Develop and implement an ADA Transition Plan that focuses on compliant sidewalk improvements that provide continuous pedestrian access where compatible with the surrounding area.
- **29.4.E.** Develop and implement a Pedestrian Master Plan (PMP) that indicates which streets in addition to arterials and collectors will install sidewalks and what other pedestrian facilities and amenities (such as 'resting spots') are needed to complete the pedestrian network shown in Map 9. Sidewalk widths and shade coverage should also be addressed in the context of the adjacent land use, vehicle volumes, and vehicle speeds.
- **29.4.F.** Implement the Bikeway Master Plan (BP) and complete the proposed bikeway network shown in Map 8 within 10 years and prioritize projects that close existing gaps in the network.
- **29.4.G.** Develop and implement a Safe Routes to School Plan. This effort should complement the ADA Transition Plan, the PMP, and the BP.
- **31.2.A.** As funding allows, construct attractive bus shelters at appropriate locations throughout the City.

Greenhouse Gas Reduction Plan Measures and Actions

The following GGRP measures and actions address public transit and non-motorized modes of transportation.

Measures

- ▶ **3-1.B:** Work with SACOG's Community Design and CalTrans' Safe Routes to School programs to identify grant opportunities to improve public transit, bicycle and pedestrian networks to serve the community center, libraries, schools, recreational areas and other public gathering spaces.
- ▶ **3-2.B:** Work with employers to offer incentives and services to increase use of alternatives to single-occupant autos (commute trip reduction programs such as parking cash-out, transit subsidy).
- ▶ **3-5.A:** Maximize pedestrian and bicycle use through high-quality design, enhanced infrastructure, and enforcing bike and pedestrian travel rights.
- ▶ **3-5.B:** Increase bicycle infrastructure by requiring bicycle parking in new development, retrofitting parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities, and participating in a regional bikesharing program.
- ▶ **3-6.A:** Conduct a public transit gap study analyzing strategies to increase transit use and funding sources for transit improvements. Work with regional transit agencies to provide bus route coverage to underserved areas.
- ▶ **3-6.B:** Work with Regional Transit, E-Tran, Roseville Transit, Amtrak and other transit agencies to develop a regional pass system.

- **3-1.B.A.** Work with SJUSD to develop an outreach program that promotes alternative travel modes for school-related trips.
- **3-2.B.A.** Develop an outreach program to City employers and collaborate with them to identify various commuter trip reduction programs for their employees.
- **3-5.A.A.** Re-evaluate the Bicycle Master Plan. Conduct a citywide gap analysis to identify missing links in the bicycle network and prioritize filling gaps to enhance bike travel.

- **3-5.A.B.** Adopt a Pedestrian Master Plan and implement near-term improvements. Conduct a citywide pedestrian walkway analysis to identify locations with physical obstacles within sidewalks, walkways, and trails such as utility poles and prioritize removing these barriers to encourage pedestrian use.
- **3-5.B.A.** Continue to implement City bicycle parking standards (CHMC 106.36.060) for new development and identify ways to retrofit existing development to match these requirements.
- **3-5.B.B.** Identify areas lacking adequate bike parking. Retrofit parking lots in underserved civic and commercial areas to include bike racks and bike parking facilities.
- **3-5.B.C.** Partner with transit agencies and adjacent cities to develop a regional bikeshare program.
- **3-6.A.A.** In collaboration with regional transit agencies, evaluate potential to add public transit service types, including Bus Rapid Transit and community or neighborhood shuttles to regional rail stops.
- **3-6.A.B.** Ensure that the streetscape improvements for the Phase 1 New San Juan High School improvements implement pedestrian, bike, and public transit amenities.
- **3-6.B.A.** Partner with SACOG and local transit agencies to develop a regional transit pass program.

Conclusion

The Draft General Plan and GGRP would not introduce policies, actions or measures that conflict with adopted plans, policies, or programs supporting alternative transportation. More specifically, these policies, actions, and measures address the following issues and deficiencies identified in Table 4.2-7.

- ▶ Widening of Sunrise Boulevard to six lanes between Greenback Lane and the northern City limits is not proposed, which improves the feasibility of implementing effective Class II bike lanes on this roadway.
- ▶ Policy 29.4 requires a number of actions to plan and implement non-motorized connections and facilities. New plans required by this policy include an American with Disabilities Act (ADA) Transition Plan, a Pedestrian Master Plan, and a Safe Routes to School Plan. The policy also requires implementation of the Bikeway Master Plan within 10 years.
- ▶ Policy 31.1 requires the development and implementation of a new long-range transit plan to identify service expansion, transit operating enhancements, and transit terminals within the transit enhancement areas designated in Map 10 of the Draft General Plan Policy Element.

The Draft General Plan and GGRP substantially enhance the City's approach to create complete streets and promote all forms of locally-available travel. The Draft General Plan and GGRP also promote implementation of City and regional non-motorized transportation and transit plans. Therefore, this impact would be **less than significant**.