
6.14 TRANSPORTATION AND CIRCULATION

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INTRODUCTION

This section describes potential impacts to the transportation system associated with implementation of the Draft Sutter County General Plan (proposed General Plan). The impact analysis examines the vehicular, transit, bicycle, pedestrian, and aviation components of the overall transportation system. The proposed General Plan includes policies related to streets and highways, transit, rail transportation, bikeways and pedestrians, air travel and airports and green house gas reduction.

Several letters were received in response to the NOP (see Appendix B). A letter submitted by Caltrans requested that the EIR identify impacts and mitigation measures to State Route (SR) 20, SR 70, SR 99 and SR 113 and at ramp intersections. The analysis in this section includes an evaluation of existing and future conditions for roadway segments along those State Routes, but does not address individual intersections given the type of project and scale of this analysis. A letter submitted by the City of Yuba City requested that the EIR identify impacts and mitigation measures to existing and planned roadways and state roadways within Yuba City, as well as bicycle and pedestrian connections between Sutter County and Yuba City and the potential for a bypass alternative around the city limits to address potential impacts to SR 99. The analysis in this section includes an evaluation of existing and future conditions for roadway segments along roadways within the City of Yuba City, but does not address a potential bypass around the city limits given the focus of this analysis on facilities within the unincorporated portions of the county.

A letter from the South Placer County Regional Transportation Authority noted that Placer Parkway is designed to connect SR 99 at Sankey Road to SR 65 at Whitney Ranch Parkway. The proposed roadway network included within the General Plan assumes Placer Parkway. A letter submitted by Placer County requested the analysis include impacts to Placer County roads from vehicles traveling from Sutter County to roadways within Placer County. This section includes a discussion regarding potential impacts to the requested roadways based on a model generated traffic volume difference plot showing the increases in traffic volume attributable to the proposed project. Placer County also requested the proposed General Plan address regional and commuter transit services between Sutter County and Placer County/City of Roseville. While the analysis in this section does not address the specifics of the transit comments raised in the letter, the analysis does address transit through adopted goals, policies and implementation measures.

Information referenced to prepare this section is based on the *2008 Sutter County Technical Background Report* (TBR), Sutter County Public Works documents, the Sacramento Area Council

of Governments (SACOG) Metropolitan Transportation Plan (MTP), the SACOG regional travel model and adopted Transportation Concept Reports (TCRs) prepared by Caltrans for area state highways. The TBR is available electronically on the County's website (<http://www.co.sutter.ca.us/pdf/cs/ps/gp/tbr/tbr.pdf>) and on CD at the back of this document.

ENVIRONMENTAL SETTING

Sutter County has a comprehensive transportation system to serve the diverse travel needs of the policy area. It includes State highways, local roads, urban arterials, rural highways and streets, bus transit services, freight rail and airports. This section describes the existing physical transportation system and its current usage. This description is organized by the countywide transportation system component beginning with the regional roadway system and including public transportation, bikeway, pedestrian, and aviation facilities.

State Roadways

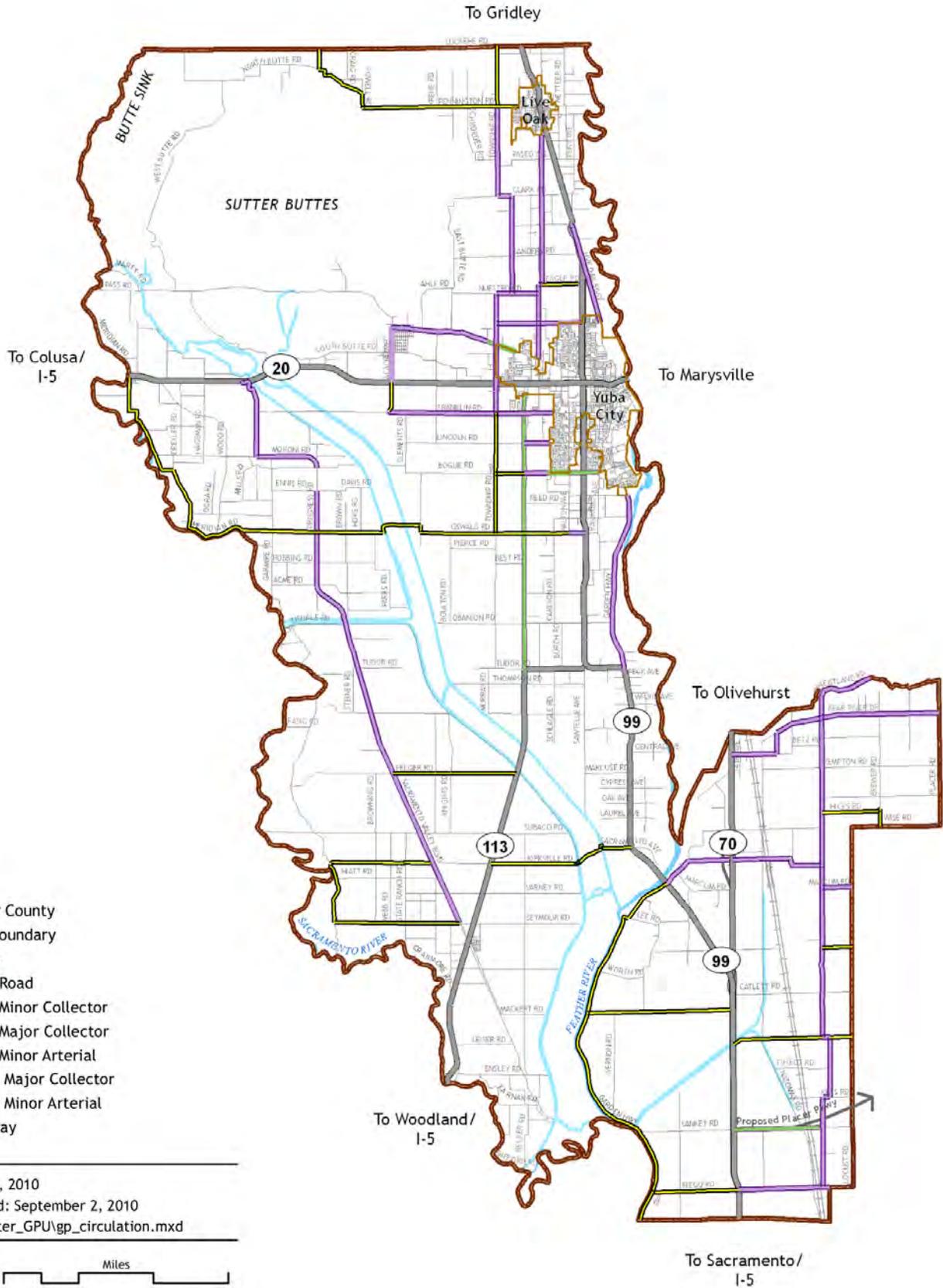
Freeways and Expressways. Freeways and expressways serve both inter-regional and intra-regional circulation needs. These facilities are typically accessed by collector or arterial roadways and have few or no at-grade crossings. These facilities have the highest carrying capacity with the maximum speed limits allowed by law.

Regional Roadway System

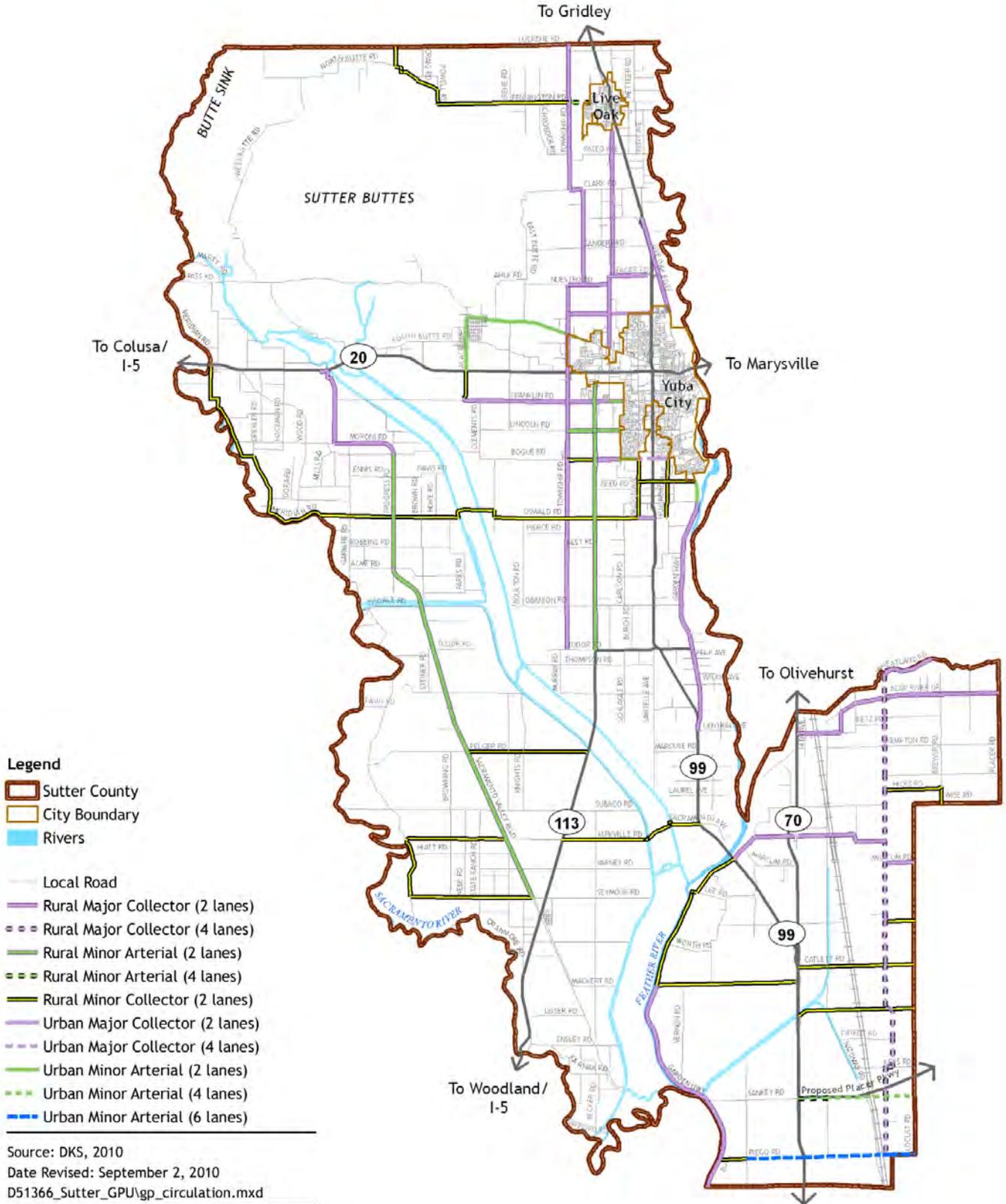
The major routes in the regional roadway system are shown according to functional classification in Figure 6.14-1. This highway network plays an important role in regional travel by connecting to and complementing the local street network. The larger highway and arterial classifications predominantly serve through travel rather than local trips. Smaller roads function as collectors funneling traffic from local streets to the highways and arterials. The General Plan analysis assumed the roadway improvements (as shown in Table 6.14-9). Existing roadway classifications are based on existing approved California Roadway System maps. Table 6.14-12 shows future Sutter County Roadway Improvements while Table 6.14-1 shows proposed functional roadway classifications shown in Figure 6.14-2.

Major County Roads

Sutter County's streets and highways are organized in a hierarchy according to their functional classification. This hierarchy recognizes the distinct stages which are involved in making a trip; primary movement on highways and arterials, collection/distribution on collectors, and access with termination on local streets. In addition, the streets are also classified as rural and urban to reflect the areas and the type of traffic the streets serve. It is necessary to understand that the service provided by the rural and urban roadways is different in character. Often rural roadways serve dual functions, such as, distribution as well as termination/access.

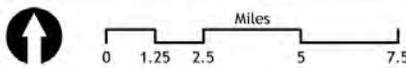


EXISTING FUNCTIONAL CLASSIFICATION CIRCULATION DIAGRAM
Figure 6.14-1



- Legend**
- Sutter County
 - City Boundary
 - Rivers
 - Local Road
 - Rural Major Collector (2 lanes)
 - Rural Major Collector (4 lanes)
 - Rural Minor Arterial (2 lanes)
 - Rural Minor Arterial (4 lanes)
 - Urban Major Collector (2 lanes)
 - Urban Major Collector (4 lanes)
 - Urban Minor Arterial (2 lanes)
 - Urban Minor Arterial (4 lanes)
 - Urban Minor Arterial (6 lanes)

Source: DKS, 2010
Date Revised: September 2, 2010
D51366_Sutter_GPU\gp_circulation.mxd



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TABLE 6.14-1			
PROPOSED FUNCTIONAL ROADWAY CLASSIFICATIONS			
Functional Classification	Road	From	To
Freeway	SR 99	Sacramento County Line	SR 70 / SR 20 to north of Eager Rd.
Expressway	SR 20	Sutter Bypass	Yuba City
	SR 70	SR 99	Yuba County Line
	SR 99	SR 70	SR 20 north of Eager Rd. to Butte County Line
	SR 113	Yolo County Line	SR 99
Rural Arterial	SR 20	Sutter Bypass	Colusa County Line
Urban Minor Arterial	Acacia Ave.	SR 20	Butte House Rd.
	Butte House Rd.	Yuba City limits	Township Rd.
	Franklin Rd.	SR 99	Garden Highway
	Garden Highway	Yuba city limits	Barry Rd.
	Lincoln Rd.	Jones Rd.	Walton Ave.
	Live Oak Blvd.	Yuba City limits	Pease Rd.
	Riego Rd.	Powerline Rd.	Placer County line
	Sankey Rd.	Pacific Ave.	Pleasant Grove Rd.
Urban Collector	Walton Ave.	City of Yuba City	
	Bogue Rd.	Garden Highway	SR 99
	Bogue Rd.	SR 99	Walton Ave.
	Hooper Rd.	Colusa Frontage Rd.	Butte House Rd.
	Pease Rd.	Tierra Buena Rd.	Live Oak Blvd.
	Richland Rd.	Clark Ave./Bunce Rd.	Walton Ave.
Rural Minor Arterial	Tierra Buena	Hooper Rd.	Butte House Rd.
	George Washington Blvd.	SR 113	SR 20
	Lincoln Rd.	Walton Ave.	West of Township Rd.
	Pennington Rd.	Live Oak city limits	Township Rd.
	Progress Rd.	McClatchy Rd.	Acme Rd.
Major Rural Collector	Reclamation Rd.	SR 113	Acme Rd.
	Bear River Dr.	Placer County Line	Pleasant Grove Rd.
	Franklin Rd.	El Margarita Rd.	Acacia Ave.
	Garden Highway	Riego Rd.	W. Catlett Rd.
	Larkin Rd.	Eager Rd.	Live Oak city limits
	Live Oak Blvd.	Pease Rd.	SR 99
	Nicolaus Ave.	Pleasant Grove Rd.	SR 99
	Oswald Rd.	Railroad Ave.	SR 99
	Pease Rd.	Township Rd.	Tierra Buena Rd.
	Township Rd.	Tudor Rd.	Butte County line
Minor Rural Collector	Walton Ave.	Oswald Rd.	Bogue Rd.
	Broadway	SR 99	Walton Ave.
	Catlett Rd.	Placer County Line	SR 99 / SR 70
	El Margarita Rd.	Franklin Rd.	Yuba city limits
	Railroad Ave.	Oswald Rd.	Bogue Rd.
	Sankey Rd.	Pleasant Grove Blvd.	Placer County line
	Stewart Rd.	Garden Highway	Walton Ave.

Source: DKS Associates, 2010.

The following is a brief discussion of different types of roadways classified by the function they serve. The first two classifications serve both rural and urban areas by providing travel on important, usually high volume, corridors.

Urban Roadways

- **Urban Minor Arterial.** The minor arterial street system should interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system. The minor arterial street system includes all arterials not classified as a principal and contains facilities that place more emphasis on land access than the higher system, and offer a lower level of traffic mobility. Such facilities may carry local bus routes and provide intra-community continuity, but ideally should not penetrate identifiable neighborhoods. This system should include urban connections to rural collector roads where such connections have not been classified as urban principal arterials. The spacing of minor arterial streets may vary from 1/8 - 1/2 mile in the central business district to 2 - 3 miles in the suburban fringes, but should normally be not more than 1 mile in fully developed areas.
- **Urban Collector.** The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid which forms a logical entity for traffic circulation.
- **Urban Local.** The local street system comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through, traffic movement usually is deliberately discouraged.

Rural Roadways

- **Rural Minor Arterial Road System.** The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics: (1) link cities and larger towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county service; (2) be spaced at such intervals, consistent with population density, so that all developed areas of the state are within a reasonable distance of an arterial highway; and (3) provide (because of the two characteristics defined immediately above) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to-through movement.

- **Rural Collector Road System.** The rural collector routes generally serve travel of primarily intra-county rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average.

In order to define more clearly the characteristics of rural collectors, this system should be subclassified according to the following criteria:

- **Rural Major Collector Roads.** These routes should: (1) provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, critical facilities, etc.; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intra-county travel corridors.
- **Rural Minor Collector Roads.** These routes should: (1) be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; (2) provide service to the remaining smaller communities; and (3) link the locally important traffic generators with their rural hinterland.
- **Rural Local Road System.** The rural local road system should have the following characteristics: (1) serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified as part of the principal arterial, minor arterial, or collector systems.

Roadway Level of Service

To quantitatively evaluate traffic operating conditions and to provide a basis for comparison of operating conditions, roadway level of service (LOS) were determined. LOS as defined in the 2000 Highway Capacity Manual (HCM) is "a quantitative measure describing operational conditions within a traffic stream." LOS definitions generally describe these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions and comfort and convenience. Six levels of service are defined and given letter designations, from "A" to "F", with LOS "A" representing the best operating conditions and LOS "F" the worst. Tables 6.14-2 through 6.14-6 present the characteristics associated with each LOS grade for urban street segments, rural highways, expressways, and freeways.

Traffic operations on urban street segments are primarily controlled by traffic signals (Table 6.14-2). Intersection spacing is typically less than two miles apart and traffic along the entire roadway is influenced by signals due to traffic "platooning." The concept of "platooning" is the existence of signal systems in urban street networks which creates traffic

streams that are organized into “platoons of vehicles.” Platooning describes a group of vehicles traveling together as a group, either voluntarily or involuntarily because of signal control, geometrics, or other factors. Regular access to roadside commercial and residential development is common. These elements increase the potential for traffic conflicts.

Traffic operations on Expressways are less controlled by traffic signals and more controlled by traffic density (Table 6.14-3). Intersection spacing is typically more than two miles apart and traffic between signals is less influenced by platoons because platoons break up between intersections. There is normally very limited access provided to roadside commercial and residential development. This reduces the potential for traffic conflicts. Traffic operations on two lane rural highways is controlled by the limited ability to pass slower vehicles (Table 6.14-4). The ability to pass is limited by the volume of vehicles traveling in the opposite direction. Speed is decreased as the percent of time following slower vehicles increases. Platoons develop behind slower moving vehicles.

TABLE 6.14-2	
LEVELS OF SERVICE DEFINITIONS – URBAN STREET SEGMENTS	
Service Levels	Description
A	Completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles and operations are constrained only by geometric features of the highway and by driver preference. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.
B	Indicates free-flow, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver, minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.
C	The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. On multilane highways with a free-flow speed above 50 miles per hour (mph), the travel speeds reduce somewhat. Minor disruptions can cause serious local deterioration in service and queues will form behind any significant traffic disruption.
D	The ability to maneuver is severely restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	Operations at or near capacity, an unstable level. The densities vary, depending on the free-flow speed. Vehicles are operating with the minimum spacing for maintaining uniform flow. Disruptions cannot be dissipated readily, often causing queues to form and service to deteriorate to LOS F. For the majority of multilane highways with free-flow speeds between 45 and 60 mph, passenger-car mean speeds at capacity range from 42 to 55 mph but are highly variable and unpredictable.
F	Forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points-and on sections immediately downstream-appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.
Source: Transportation Research Board (TRB), <i>2000 Highway Capacity Manual</i> , Special Report, 2009.	

TABLE 6.14-3

ROADWAY LEVELS OF SERVICE DEFINITIONS - EXPRESSWAYS

Service Levels	Description
A	Completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles and operations are constrained only by geometric features of the highway and by driver preference. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.
B	Indicates free-flow, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver, minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.
C	The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. On multilane highways with a free-flow speed above 50 mph, the travel speeds reduce somewhat. Minor disruptions can cause serious local deterioration in service and queues will form behind any significant traffic disruption.
D	The ability to maneuver is severely restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	Operations at or near capacity, an unstable level. The densities vary, depending on the free-flow speed. Vehicles are operating with the minimum spacing for maintaining uniform flow. Disruptions cannot be dissipated readily, often causing queues to form and service to deteriorate to LOS F. For the majority of multilane highways with free-flow speeds between 45 and 60 mph, passenger-car mean speeds at capacity range from 42 to 55 mph but are highly variable and unpredictable.
F	Forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points-and on sections immediately downstream-appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

Source: Transportation Research Board (TRB), *2000 Highway Capacity Manual*, Special Report, 2009.

TABLE 6.14-4

ROADWAY LEVELS OF SERVICE DEFINITIONS – RURAL HIGHWAYS

Service Levels	Description
A	Motorists are able to travel at their desired speed. Would result in average speeds of 55 mph on Class I highways. The passing frequency required to reach these speeds has not reached a demanding level, so that passing demand is well below passing capacity, and platoons of three or more cars are rare. Drivers are delayed by no more than 35 percent of their travel time by slower moving vehicles.
B	Traffic flow of 50 mph or slightly higher on level terrain Class I highways. The demand for passing to maintain the desired speed becomes significant and approximates the passing capacity at the lower level of LOS B. Drivers are delayed by platoons up to 50 percent of the time.
C	Further increases in flow, resulting in noticeable increases in platoon formation, platoon size, and frequency of passing impediments. The average speed still exceeds 45 mph on level terrain Class I highways, even though unrestricted passing demand exceeds passing capacity. At higher volumes the chaining of groups of vehicles (platoons) and significant reductions in passing capacity occur. Although traffic flow is stable, it is susceptible to congestion due to turning traffic and slow moving vehicles. Percent time spent following may reach 65 percent.
D	Unstable traffic flow. Two opposing traffic streams begin to act separately at higher volume levels, as passing becomes extremely difficult. Passing demand is high, but passing capacity approaches zero. Mean platoon sizes of 5 to 10 vehicles are common, although speeds of 40 mph still can be maintained under base conditions on Class I highways. Turning vehicles and roadside distractions cause major shock waves in the traffic stream. Motorists are delayed in groups of vehicles (platoons) nearly 80 percent of the time.
E	Traffic flow conditions have a percent time-spent-following greater than 80 percent on Class 1 highways. Speeds may drop below 40 mph. Passing is virtually impossible, and platooning becomes intense, as slower vehicles or other interruptions are encountered. The highest volume attainable defines the capacity of the highway.
F	Represent heavily congested flow with traffic demand exceeding capacity. Volumes are lower than capacity and speeds are highly variable.

Source: Transportation Research Board (TRB), *2000 Highway Capacity Manual*, Special Report, 2009.

TABLE 6.14-5

ROADWAY LEVELS OF SERVICE DEFINITIONS - FREEWAYS

Service Levels	Description
A	Free-flow operations. Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed at this level.
B	Represents reasonably free-flow operations and free-flow speeds are maintained. The ability to maneuver within the traffic stream is only slightly restricted and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
C	Flow with speeds at or near the free-flow speed of the freeway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial. Queues may be expected to form behind any significant blockage.
D	Speeds begin to decline slightly with increasing flows and density begins to increase somewhat more quickly. Freedom to maneuver within the traffic stream is more noticeably limited and the driver experiences reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
E	Operation at capacity. Operations at this level are volatile, because there are virtually no usable gaps in the traffic stream. Vehicles are closely spaced, leaving little room to maneuver within the traffic stream at speeds that still exceed 49 mph. Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption and any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited and the level of physical and psychological comfort afforded the driver is poor.
F	Breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points.

Source: Transportation Research Board (TRB), *2000 Highway Capacity Manual*, Special Report, 2009.

TABLE 6.14-6

ROADWAY LEVELS OF SERVICE THRESHOLDS

Roadway	LOS C	LOS D	LOS E
Rural - Two Lane	7,000 - 10,600	10,600 - 16,400	16,400 - 25,200
Urban - Three Lane	15,330 - 17,520	17,520 - 19,700	19,700 - 21,900
Urban - Five Lane	30,660 - 35,040	35,040 - 39,420	39,420 - 43,800
Expressway - Four Lane	29,100 - 41,800	41,801 - 53,500	53,501 - 59,500
Freeway - Four Lane	33,700 - 48,400	48,401 - 60,000	60,001 - 67,400
Freeway - Six Lane	51,800 - 73,900	73,901 - 90,900	90,901 - 101,800

Source: DKS Associates, September 2009, Table 12, Land Use Alternatives Analysis, Sutter County General Plan.

LOS is commonly dictated by a facility's "volume to capacity" or V/C ratio. V/C ratios are a measure of the proportion of the roadway's capacity that is being used by traffic, and are simply the traffic volumes on the roadway divided by the roadway's capacity. For example, a V/C ratio of 1.00 represents complete utilization of the roadway's capacity. LOS represents the roadway's service rating, corresponding to a range of V/C ratios.

Roadway Capacity

The capacity of a roadway segment is the maximum rate at which vehicles can be expected to traverse a point or section of a facility during a given period of time. The HCM contains standard procedures for highway capacity analysis and LOS determination for most types of roadway facilities.

The HCM defines levels of service for freeways and rural expressways (multi-lane highways) as functions of the density of vehicles on the road; density is usually expressed in units of vehicles per miles per lane. Vehicular density correlates to quality of service as a vehicle's freedom to maneuver and proximity to other vehicles is captured by vehicular density.

For rural two-lane roadways, the HCM defines percent-time delayed as the primary measure for determining the levels of service. Percent-time delayed is the average percentage of time that vehicles are delayed while traveling in platoons because of the inability to pass. Passing demand increases rapidly as traffic volumes increase, while passing capacity in the opposing lane declines as volumes increase. Thus, unlike other types of uninterrupted flow facilities, normal traffic flow in one direction influences flow in the other direction on two-lane facilities. Motorists are forced to adjust their individual travel speeds as volumes increase, and as the ability to pass declines. In conjunction with this, terrain, shoulder width, percent of heavy vehicles and available access points are relevant factors.

For rural two-lane roads, the HCM presents an estimated maximum average daily traffic (ADT) volume of 25,200 for level terrains and a threshold of 10,600 ADT for LOS "D". This is based on a "K" factor of 10 percent and other standard assumptions for directionality of flow (60-40 percent), heavy vehicle percentage (9 percent), passing opportunity, and roadway geometrics.

A typical daily volume assumed to correspond with peak hour capacity (i.e., LOS "E" to LOS "F" threshold) of a roadway would be calculated as follows:

- 1,800 vehicles per hour per lane (an average urban saturation flow rate),
- x 0.50 fraction of time right-of-way is given (g/c) in the case of major cross streets,
- x 100/60 total volume/greater direction volume (@ 60:40 directionality),
- x 1/0.10 daily volume/peak hour volume,
- = 15,000 vehicles per day (vpd) per two lanes (theoretical capacity).

The 15,000 vpd capacity threshold is based on ideal conditions and may vary depending on various conditions. To reflect traffic operating conditions in the urbanized areas of Sutter County and the city of Yuba City, the Levels of Service thresholds were calibrated in the

Traffic Impact Fee Study for Sutter County/Yuba City, 1993. Table 6.14-6 lists the Levels of Service thresholds and capacities for various roadway facilities.

Local governments adopt LOS standards for roadways under their jurisdiction. Generally, LOS "C" or "D" is considered adequate, although some communities adopt higher or lower standards depending on the circumstances and the needs of the community. Sutter County currently uses LOS "D" as the minimum acceptable standard for its roadways. This policy is modified as part of the General Plan and is included under the heading "Proposed Sutter County General Plan Goals and Policies."

Existing Levels of Service on county roadways are shown in Table 6.14-7.

Roadway Name	From	To	Lanes	Volume	LOS
SR 20	Colusa County Line	Sutter Bypass	2	7,200	C
	Sutter Bypass	Acacia Ave.	2	7,200	C
	Acacia Ave.	Humphrey Rd.	2	9,500	C
	Humphrey Rd.	Township Rd.	4	9,500	A
	Township Rd.	George Washington Blvd	4	12,200	A
	George Washington Blvd	Yuba City Limits	4	17,500	A
SR 70	Junction 99	Nicolaus Ave	2	18,700	E
	Nicolaus Ave	Yuba County Line	2	19,200	E
SR 99	Sacramento County Line	Riego Rd	4	39,500	C
	Riego Rd.	Sankey Rd.	4	33,500	C
	Sankey Rd.	Howsley Rd.	4	33,500	C
	Howsley Rd.	SR 70	4	33,500	C
	Junction 70	Garden Highway	2	16,200	D
	Garden Highway	Sacramento Ave	2	17,400	E
	Sacramento Ave	Tudor Rd.	2	17,600	E
	Tudor Rd.	Junction Route 113	2	14,400	D
	Junction Route 113	O'Banion Rd.	2	17,300	E
	O'Banion Rd.	Oswald Rd.	4	17,300	A
	Oswald Rd.	Barry Rd.	4	19,600	B
	Barry Rd.	Bogue Rd.	4	21,100	B
	Bogue Rd.	Lincoln Rd.	4	26,500	B
	Lincoln Rd.	Franklin Rd.	4	26,500	B
	Franklin Rd.	Bridge Street	4	36,000	C
	Bridge Street	Junction Route 20	4	21,800	B
	Junction Route 20	Queens Ave	4	20,300	A
	Queens Ave	Pease Ave	4	20,300	A
	Pease Ave	Eager Rd.	4	20,300	A
	Eager Rd.	End Freeway	4	17,800	A
End Freeway	Encinal Rd.	2	17,800	E	
Encinal Rd.	Live Oak Blvd	2	19,900	E	
Live Oak Blvd	Paseo Ave	2	15,600	D	
Paseo Ave	Live Oak City Limits	2	15,600	D	
Live Oak City Limits	Pennington Rd.	2	15,600	C	
Pennington Rd.	Live Oak City Limits	2	15,600	C	
Live Oak City Limits	Butte County line	2	15,600	D	

TABLE 6.14-7

EXISTING ROADWAY SEGMENT LEVELS OF SERVICE

Roadway Name	From	To	Lanes	Volume	LOS
SR 113	Yolo County Line	Knights Rd.	2	7,400	C
	Knights Rd.	Del Monte Ave.	2	7,400	C
	Del Monte Ave.	Sutter Bypass	2	5,500	B
	Sutter Bypass	George Washington Blvd	2	5,800	B
Acacia Ave	George Washington Blvd	Junction Route 99	2	3,850	B
	Butte House Rd.	SR 20	2	4,660	B
Bear River Rd.	SR 20	Franklin Rd.	2	1,070	A
	Swanson Rd.	Pleasant Grove Rd.	2	990	A
Bogue Rd.	Pleasant Grove Rd.	Placer County Line	2	1,040	A
	Township Rd.	George Washington Blvd	2	934	A
	George Washington Blvd	Sanborn Rd.	2	2,410	A
Broadway	Walton Ave.	Railroad Ave.	2	5,070	A
	Clark Rd.	Encinal Rd.	2	850	A
Butte House Rd.	Encinal Rd.	Nuestro Rd.	2	1,610	A
	Acacia Ave	Howlett Rd.	2	2,450	A
	Howlett Rd.	Township Rd.	2	4,370	A
Catlett Rd.	Township Rd.	Royo Ranchero Dr.	2	4,120	A
	SR 70/99	Pleasant Grove Rd.	2	620	A
El Margarita Rd.	Pleasant Grove Rd.	Brewer Rd.	2	200	A
	Imperial Way	Franklin Rd.	2	2,320	A
Franklin Rd.	Acacia Ave.	Township Rd.	2	1,070	A
	Township Rd.	George Washington Blvd	2	2,620	A
	George Washington Blvd	El Margarita Rd.	2	5,140	B
	El Margarita Rd.	Walton Ave.	2	8,110	C
Garden Highway	Stewart Rd.	Messick Rd.	2	5,230	B
	Messick Rd.	O'Banion Rd.	2	4,290	B
	O'Banion Rd.	Tudor Rd. - SR 99	2	4,280	B
	SR 99	Catlett Rd.	2	520	A
	Catlett Rd.	Riego Rd	2	150	A
George Washington	Riego Rd	Sacramento County limit	2	200	A
	SR 20	Franklin Rd.	2	7,420	C
	Franklin Rd.	Lincoln Rd.	2	4,280	B
	Lincoln Rd.	Bogue Rd.	2	3,390	A
	Bogue Rd.	Oswald Rd.	2	3,940	B
Howsley Rd.	Oswald Rd.	Tudor Rd. - SR 113	2	3,040	A
	SR 70-99	Pleasant Grove Rd.	2	2,270	A
Larkin Rd.	Pleasant Grove Rd.	Placer County Line	2	1,380	A
	Butte County Line	Live Oak City Limits	2	2,990	A
	Live Oak City Limits	Paseo Ave	2	1,500	A
	Paseo Ave	Clark Rd.	2	1,500	A
	Clark Rd.	Encinal Rd.	2	1,450	A
Lincoln Rd.	Encinal Rd.	Eager Rd.	2	1,390	A
	Holey Rd.	Sanborn Rd.	2	1,040	A
Live Oak Blvd	George Washington Blvd	Ohleyer Rd.	2	3,673	B
	SR 99	Yuba City Limits	2	6,620	B
Moroni - McGrath Rd	Tarke Rd.	Progress Rd.	2	1,270	A
Nicolaus Rd.	SR 99	SR 70	2	1,470	A
	SR 70	Pleasant Grove Rd.	2	1,220	A

TABLE 6.14-7

EXISTING ROADWAY SEGMENT LEVELS OF SERVICE

Roadway Name	From	To	Lanes	Volume	LOS
Oswald Rd.	Schlag road	George Washington Blvd	2	590	A
	George Washington Blvd	Walton Ave.	2	1,360	A
	Walton Ave.	SR 99	2	2,150	A
	Meridian Rd.	Hughes Rd.	2	200	A
Pease Rd.	Township Rd.	Tierra Buena Rd.	2	810	A
	Tierra Buena Rd.	SR 99	2	1,670	A
Pennington Rd.	Powell Rd.	Live Oak City Limits	2	1,790	A
Pleasant Grove Rd.	Yuba County Line	Nicolaus Ave	2	3,140	A
	Nicolaus Ave	Catlett Rd.	2	3,000	A
	Catlett Rd.	Howsley Rd.	2	2,330	A
	Howsley Rd.	Sankey Rd.	2	1,210	A
	Sankey Rd.	Riego Rd.	2	1,750	A
	Riego Rd.	Sacramento County limit	2	1,180	A
Progress Rd.	McClatchy Rd.	Acme Rd.	2	1,010	A
Railroad Ave.	Bogue Rd.	Stewart Rd.	2	2,250	A
	Stewart Rd.	Berry Rd.	2	1,320	A
Reclamation Rd.	Progress Rd.	Pelger Rd.	2	1,060	A
	Pelger Rd.	SR 113	2	1,890	A
Riego Rd.	Garden Highway	Powerline Rd.	2	650	A
	Powerline Rd.	SR 70-99	2	650	A
	SR 70-99	Pacific Ave.	2	9,900	C
	Pacific Ave.	Placer County Line	2	9,900	C
Rio Oso Rd.	SR 70	Swanson Rd.	2	1,060	A
Sankey Rd.	SR 70-99	Pacific Ave.	2	1,180	A
	Pacific Ave.	Pleasant Grove Rd.	2	1,080	A
Swanson Rd.	Rio Oso Rd.	Bear River Rd.	2	980	A
Tarke Rd.	SR 20	Moroni Rd.	2	890	A
Tierra Buena Rd.	Eager Rd.	Pease Ave	2	2,180	A
	Pease Ave	Butte House Rd.	2	2,360	A
Township Rd.	Butte County Line	Pennington Rd.	2	1,730	A
	Pennington Rd.	Paseo Ave	2	1,920	A
	Nuestro Rd.	Pease Ave	2	1,540	A
	Pease Ave	Butte House Rd.	2	2,349	A
	SR 20	Franklin Rd.	2	3,330	A
	Franklin Rd.	Lincoln Rd.	2	1,530	A
	Lincoln Rd.	Bogue Rd.	2	1,906	A
	Bogue Rd.	Oswald Rd.	2	750	A
	Oswald Rd.	O'Banion Rd.	2	380	A
O'Banion Rd.	Tudor Rd.	2	220	A	
West Catlett Rd.	Garden Highway	SR 70-99	2	300	A

Source: DKS Associates, 2010.

Freeways and Expressways

Freeways and expressways serve both inter-regional and intra-regional circulation needs. These facilities are typically accessed by collector or arterial roadways and have few or no at-grade crossings. These facilities have the highest carrying capacity.

Traffic operations on freeways are only controlled by the ability to maneuver (Table 6.14-5). If there are no traffic signals or stop signs and access is fully controlled and only provided at interchanges.

For four-lane freeways, the HCM presents an estimated maximum ADT of 67,400 for level terrain and a threshold of 48,400 ADT for LOS "D". This is based on a K factor (design hour factor, i.e., the proportion of ADT expected to occur in the design hour, usually the PM peak hour) of 10 percent and other standard assumptions for directionality of flow (60 to 40 percent), heavy vehicle percentage (9 percent), passing opportunity, and roadway geometrics.

For four-lane expressways (multi-lane highways), the HCM prescribes an estimated maximum ADT of 59,500 for level terrain and a threshold of 41,800 ADT for LOS "D". This is based on a K factor of 10 percent and other standard assumptions for directionality of flow (60-40 percent), heavy vehicle percentage (9 percent), passing opportunity, and roadway geometrics. Levels of Service thresholds and capacities for freeway and expressway facilities are listed in Table 6.14-6.

Existing Levels of Service on freeways are shown in Table 6.14-7.

Future Roadway Projects

A portion of SR 99, between Central Avenue and SR 113, known as the 'Tudor Bypass project,' is currently under construction to widen the roadway from two lanes to four lanes and bypass the community of Tudor.

Public Transportation System

Yuba Sutter Transit operates local bus service, as well as commuter runs to downtown Sacramento.

Local Services

Yuba-Sutter Transit offers scheduled local fixed route service from 6:30 a.m. to 6:30 p.m. weekdays and from 8:30 a.m. to 5:30 p.m. on Saturdays. No service is available on Sundays. Six routes provide service to Yuba City, Marysville, Linda, and Olivehurst. Buses operate every 30 to 60 minutes. Convenient timed transfers are available at Yuba College; the North

Beale Road Transit Center; the Yuba County Government Center; Alturas and Shasta Streets; and, the Walton Terminal.

Rural Services

The Foothill Route, Live Oak Route, and Wheatland Route provide rural transit services from selected rural cities and communities to the Marysville/Yuba City urban area where transfers can be made to other services. Services are provided via a combination of advance reservation and scheduled services.

City of Sacramento Services

Transit services to the city of Sacramento are provided via two routes - the Sacramento Commuter Express and the Sacramento Midday Express. The Sacramento Commuter Express offers frequent commute-hour service between Marysville/Yuba City and key stops in downtown Sacramento with stops in Yuba City, Marysville, Olivehurst, and Plumas Lake. The Sacramento Midday Express offers late morning, noon and early afternoon service each weekday between Yuba City/Marysville and downtown Sacramento from stops in Yuba City, Marysville, Olivehurst, and Plumas Lake.

Other Services

Needs of seniors and persons with qualifying disabilities are provided via Dial-A-Ride and Paratransit Services. Other Transit Providers include airport transportation services via the North Valley Shuttle with daily scheduled service from Marysville with return service to Yuba City and Super Shuttle (on-demand service from Yuba and Sutter counties). Greyhound provides intercity services via their Marysville Terminal.

Bikeways

Officially designated bicycle facilities are classified as Class I, Class II, and Class III. They are defined as the following:

- Class I: Off-street bike trails or paths that are physically separated from streets or roads used by motorized vehicles.
- Class II: On-street bike lanes with signs, striped lane markings, and pavement legends.
- Class III: On-street bike routes marked by signs and shared with motor vehicles and pedestrians. Optional four-inch edge lines painted on the pavement.

In 1998, Sutter County adopted the Yuba-Sutter Bikeway Master Plan (Plan) and approved an update in 2002. The focus of the Plan is to provide bikeway connections between the

incorporated cities, adjacent counties and major regional destinations. The Plan calls for 395 miles of bikeway facilities connecting each city in Sutter and Yuba County and providing regional connections to Butte, Colusa, Nevada, Placer, Sacramento, and Yolo counties. Other plans for additional bike lanes include the proposed Sutter Pointe Specific Plan, which proposes 34 miles of Class I Bike Paths and 18 miles of Class II bike lanes.

Pedestrian Facilities

In rural, unincorporated Sutter County, most of the roadway infrastructure was constructed without an emphasis on pedestrian infrastructure, so existing pedestrian facilities are limited. Future development projects, including the Sutter Pointe Specific Plan, include enhanced pedestrian facilities. Sidewalks are provided on the majority of non-rural residential area streets within Live Oak and Yuba City.

Railways

Passenger Facilities

Passenger rail service in Sutter County is provided by Amtrak's daily Coast Starlight route that travels between Seattle and Los Angeles. Current stops along the route include Sacramento and Chico. An Amtrak bus stop is provided on I Street between 8th and 9th in Marysville.

Freight Facilities

Freight service in Sutter County is served by a variable number of trains each day on Union Pacific Railroad (UP) tracks located in the southeastern portion of Sutter County, between SR 70 and the Placer and Sacramento County lines, and on tracks located in the northern portion of the county from the Butte County line north of Live Oak to north of Yuba City. The UP tracks serve two Amtrak trains each day.

Aviation System

The Sutter County Airport is a general aviation airport located just south of Yuba City and is operated by the Sutter County Public Works Department. Because Sacramento International Airport (SMF) is the major commercial airport for the Sacramento region, no commuter airlines use the Sutter County airport. The airport has a single paved runway 3,040 feet in length and 75 feet wide. No control tower is located at this airport. A major portion of the airport operations are a result of agricultural aircraft involved in crop dusting activities. The County adopted a master plan for airport operations in 1968.

Sacramento International Airport is located in the northwest portion of Sacramento County, and is owned and operated by Sacramento County. It is the only airport in the region that provides regularly scheduled passenger service. The airport is served by 14 major carriers

and one commuter airline, with over 150 scheduled departures daily. Cargo service is also accommodated at the airport, along with general aviation. The airport has two parallel runways, each 8,600 feet long. In 2007, over 10.7 million passengers were accommodated. The airport is currently expanding its terminal facilities.

REGULATORY CONTEXT

Existing transportation policies, laws, and regulations that would apply to the Mobility section of the proposed General Plan are summarized below.

Federal

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

State

Caltrans

The *Guide for the Preparation of Traffic Impact Studies* (California Department of Transportation [Caltrans] 2002) identifies circumstances under which Caltrans determines that a traffic impact study would be required. The document also details information that is to be included in the study, analysis scenarios, and guidance on acceptable analysis methodologies.

In addition to the guidelines, Caltrans prepares TCRs for each of its facilities. A TCR is a long-term planning document that each Caltrans district prepares for every state highway or portion thereof in its jurisdiction. This document usually represents the first step in Caltrans' long-range corridor planning process. The purpose of a TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period. These are indicated in the "route concept." In addition to the 20-year route concept level, the TCR includes an "ultimate concept," which is the ultimate goal for the route beyond the 20-year planning horizon. Ultimate concepts must be used cautiously, however, because unforeseen changes in land use and other variables make forecasting beyond 20 years difficult.

Regional

Sacramento Area Council of Governments

SACOG is an association of local governments in the six-county Sacramento Region. Its members include the counties of Sacramento, El Dorado, Placer, Sutter, Yolo and Yuba as well as 22 cities. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the

region's long-range transportation plan, SACOG assists in planning for transit, bicycle networks, clean air, and airport land uses. SACOG also maintains a regional model that is used for developing long-range travel forecasts.

Metropolitan Transportation Plan for 2035

The MTP 2035 is a long-range planning document for identifying and programming roadway improvements throughout the Sacramento region (Sacramento Area Council of Governments [SACOG] 2008). The MTP2035 invests \$42 billion over 28 years, proactively linking transportation, land use, and air quality. The MTP gives individuals more options for travel, with substantial investments to enable people to walk, bike, or use transit in our communities. The MTP2035 focuses on six principles: Smart Land Use, Environmental Quality & Sustainability, Financial Stewardship, Economic Vitality, Access & Mobility, and Equity & Choice.

Local

Sutter County 2015 General Plan

The County's 2015 General Plan, adopted in 1996, contains policies and implementation measures relevant to Transportation and Circulation. The 2015 General Plan focused on future roadway improvements needed to accommodate build out of the 1996 plan. The 2015 General Plan includes policies focusing on roadways and vehicular circulation, transit, non-motorized transportation and air transportation. Upon approval of the proposed General Plan, all policies and implementation measures in the 2015 General Plan would be superseded. Therefore, they are not included in this analysis.

The 1998 Yuba-Sutter County Bikeway Master Plan

In 1998, Sutter County adopted the Yuba-Sutter Bikeway Master Plan and approved an update in 2002. The focus of the Plan is to provide bikeway connections between the incorporated cities, adjacent counties and major regional destinations.

IMPACTS AND MITIGATION MEASURES

The transportation impact analysis is focused on circulation effects that would occur from increased travel demand associated with development under the circulation diagrams, policies, and implementation measures provided in the proposed General Plan. The proposed circulation diagram for the General Plan is shown in Figure 6.14-2.

Methods of Analysis

Impacts to roadway capacity, freeways and expressways, bikeways and transit facilities are based upon a comparison of the change between the Existing Conditions and Cumulative plus Project conditions described below in the Analysis Scenarios section. Traffic impacts to roadways are based on the change in LOS between existing conditions and traffic projected under the Cumulative plus Project conditions. The change between the Existing and Future traffic conditions, were determined using the SACOG SACMET traffic demand forecast model and evaluated under the Cumulative plus Project analysis. This model is used throughout the region to predict future travel conditions, including roadway operating conditions and transit ridership. The model version used in this analysis is taken from SACOG's preparation of the 2007 MTP (SACMET 07). Land use and transportation network databases were modified to reflect the specific characteristics of the General Plan. Outside the unincorporated county, land use is based upon SACOG's projections for the 2035 Metropolitan Area.¹

The transportation impacts of the General Plan have been evaluated under the adjusted buildout scenario described within Chapter 3, Project Description. Brief descriptions with information specific to the transportation analysis are also included below. Table 6.14-8 summarizes the development levels associated with the General Plan and compares calculated trip generation and vehicle miles of travel.

Land Use Type	Existing Vehicle Trip Generation Rate	2009 (Existing Conditions) Land Use	General Plan Adjusted Buildout Proposed Land Use¹
Households	9.24 per du	9,769 du	23,183 du
Commercial	22.11 per ksf	1,359,519 sf	7,244,847 sf
Industrial	3.49 per ksf	3,279,679 sf	15,097,752 sf
		2009 (Existing Conditions)	General Plan Adjusted Buildout Proposed General Plan
	Total Trips	131,710	426,913
	Total VMT	1,319,592	3,938,151
	Average Trip Length	10.02 miles	9.22 miles
Note:			
1. This is based on the adjusted buildout scenario.			
Source: DKS Associates, 2010.			

As discussed in Chapter 3, Project Description, full buildout of the General Plan, assuming the maximum holding capacity of the land is not reasonable to assume would occur within

¹ Land uses within unincorporated Sutter County factored in the 2035 model include 22,382 residential dwelling units, 12.8 million square feet (msf) of industrial, 4.3 msf of commercial, and 1.5 msf of mixed use commercial.

the twenty year planning horizon of this General Plan. Therefore, based on current market demand and historic growth rates an adjusted rate of development for the plan has been prepared. However, the effects of future development beyond the planning horizon of the General Plan is also analyzed in the impact analysis under the full buildout analysis.

Analysis Scenarios

Existing Conditions

Evaluation of existing conditions is based on existing traffic counts, goals and policies contained in the existing 1996 General Plan, and the existing roadway network.

Cumulative No Project – 1996 General Plan Alternative

For the purposes of comparison, a review of the No Project scenario is included in a number of the project tables. No Project conditions are based upon the land use and transportation network of the 1996 General Plan, including the 1996 policies, roadway network and land use diagram. A reduced version of the Sutter Pointe development and its transportation system were included in this scenario (full buildout of Phase 1 and Phase A). Compared to existing conditions, the 1996 General Plan would add over 13,500 additional dwelling units (an increase of 140 percent over 2009 base year levels) and over 22,500 jobs (an increase of 360 percent).

Cumulative Plus Project - Proposed General Plan (adjusted reduced buildout)

The proposed General Plan is based on the land use and transportation networks included in the plan. The amount of development is based on the adjusted buildout scenario (described in Chapter 3, Project Description and section 6.1, Introduction to the Analysis). A reduction in the amount of development that would occur within the county over the next 20 years is assumed. This assumption is based on the concept that “buildout” of the proposed Sutter County General Plan would not occur for many years beyond the 2030 horizon year (if at all). For the purposes of this EIR, analysis of development that is speculative and not reasonably foreseeable may result in impacts that are overstated and incorrect. For this reason, the EIR analyzes development based upon accepted market based growth projections adjusted to the General Plan horizon year of 2030, or adjusted buildout scenario.

Development of Phase 1 and Phase A of the Sutter Pointe Specific Plan assumed for the No Project was also assumed in Cumulative plus Project conditions. Compared to the No Project Alternative, the proposed General Plan would slightly reduce household growth and increase the number of employees throughout the unincorporated county. Compared to No Project conditions, there is a decrease of over 200 dwelling units (a decrease of 1 percent) and an increase of over 250 jobs (an increase of 1 percent).

Results of Transportation System Analyses

Regional Performance Measure Results

A comparison of transportation performance measures between the proposed General Plan (Plus Project) and 2009 conditions is shown in Table 6.14-9. The table compares the performance of several measures for the six county region and unincorporated Sutter County. The plus Project condition assumes the adjusted buildout of development in unincorporated Sutter County. The performance measure results in Table 6.14-9 indicate the proposed General Plan would increase vehicle travel relative to existing conditions, including daily vehicle miles traveled (VMT), average vehicle trip distance, and daily VMT per household and employee in both Unincorporated Sutter County and the six-county region compared to 2009 conditions.

Mode Share Results

Unincorporated Sutter County mode share results provide an indication of whether the proposed General Plan would increase transit, bicycle, and pedestrian travel. The projected level of travel by mode is shown in Table 6.14-10 for 2009 conditions, No Project conditions and the proposed General Plan. As shown in the table, under the proposed General Plan there would be an increase in people using transit compared to current conditions.

Roadway Segment Analysis – Unincorporated Sutter County

Table 6.14-11 summarizes existing roadway volumes and LOS in unincorporated Sutter County. All study roadway segments currently operate at LOS “C” or better and meet the County’s current LOS “D” goal.

Roadway Segment Analysis – Freeways

Freeways were also evaluated using a segment analysis based on daily traffic volumes and capacities. Table 6.14-11 summarizes existing roadway volumes and LOS on the freeway system. Portions of all of the Sutter County freeways exhibit LOS “E” conditions, including sections of SR 70 and SR 99.

Roadway Segment Analysis – Outside Unincorporated Sutter County

Table 6.14-12 summarizes levels of service for roadways in adjacent jurisdictions that were projected to potentially deteriorate with implementation of the proposed General Plan. Roadways were selected based upon preparation of a model generated traffic volume difference plot showing the increase in traffic volumes attributable to the proposed General Plan.

TABLE 6.14-9

COMPARISON OF REGIONAL TRANSPORTATION PERFORMANCE MEASURES

	Unincorporated Sutter County				Six County Region			
	2009 Base Year	2030 No Project	General Plan Adjusted Buildout	Percent Change ¹	2009 Base Year	2030 No Project	General Plan Adjusted Buildout	Percent Change ¹
Households	9,769	23,434	23,182	137%	770,493	1,257,961	1,257,709	63%
Employment	6,246	28,915	29,183	367%	1,001,169	1,559,150	1,559,418	56%
Daily Vehicle Trips	131,603	395,109	430,653	227%	14,093,728	22,359,162	22,359,162	58%
Daily Person Trips	169,575	460,108	500,638	195%	10,871,118	17,464,810	17,482,826	61%
Daily Vehicle Miles Traveled (VMT)	1,319,592	3,995,965	3,938,151	198%	110,488,501	170,180,125	169,425,493	53%
Average Vehicle Trip Distance	10.0	10.1	9.1	-9.0%	7.8	7.6	7.6	-2.5%
Daily VMT per Household	135.1	170.5	169.9	25%	143.4	135.3	134.7	6.0%
Daily VMT per Employee	211.3	138.2	134.9	-36%	110.4	109.1	108.6	-1.6%

Notes:
1. The percent change is comparing the difference between 2009 conditions (existing) and the proposed General Plan.
Source: DKS Associates, 2010.

TABLE 6.14-10

COMPARISON OF GENERAL PLAN MODE SHARE

Mode	Number of Person Trips				Percent Mode			
	2009 ¹	2030 No Project	General Plan Adjusted Buildout	Percent Change ²	2009 ¹	2030 No Project	General Plan Adjusted Buildout	Percent Change ²
Drive Alone	73,392	205,690	223,022	204%	43.3%	44.7%	44.5%	8.4%
Carpool	75,486	191,441	212,699	182%	44.5%	41.6%	42.5%	11%
Transit	2,396	6,184	6,293	163%	1.4%	1.3%	1.3%	1.8%
Walk/Bike	4,649	9,137	9,616	107%	2.7%	2.0%	1.9%	5.2%
Trucks	13,652	47,656	49,008	259%	8.1%	10.4%	9.8%	2.8%
Total	169,575	460,108	500,638	195%	100.0%	100.0%	100.0%	0.00%

Note:
1. Existing conditions.
2. The percent change evaluates the difference between existing conditions and the proposed General Plan.
Source: DKS Associates, 2010.

TABLE 6.14-11

ROADWAY SEGMENT LEVELS OF SERVICE –2030 ADJUSTED BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout ¹	
							Volume	LOS	Volume	LOS
SR 20	Colusa County Line	Sutter Bypass	2	7,200	C	2	11,730	D	11,070	D
	Sutter Bypass	Acacia Ave.	2	7,200	C	4	20,240	B	28,040	B
	Acacia Ave.	Humphrey Rd.	2	9,500	C	4	20,900	B	24,600	B
	Humphrey Rd.	Township Rd.	4	9,500	A	4	20,230	B	23,520	B
	Township Rd.	George Washington Blvd	4	12,200	A	4	21,800	B	22,970	B
	George Washington Blvd	Yuba City Limits	4	17,500	A	4	27,600	B	28,170	B
SR 70	Junction 99	Nicolaus Ave	2	18,700	E	4	38,570	C	35,690	C
	Nicolaus Ave	Yuba County Line	2	19,200	E	4	35,320	C	34,040	C
SR 99	Sacramento County Line	Riego Rd	4	39,500	C	6	106,640	F	103,420	F
	Riego Rd.	Sankey Rd.	4	33,500	C	6	75,640	D	69,320	C
	Sankey Rd.	Howsley Rd.	4	33,500	C	6	65,930	C	58,980	C
	Howsley Rd.	SR 70	4	33,500	C	6	64,680	C	58,100	C
	Junction 70	Garden Highway	2	16,200	D	4	23,850	B	20,790	B
	Garden Highway	Sacramento Ave	2	17,400	E	4	24,710	B	22,440	B
	Sacramento Ave	Tudor Rd.	2	17,600	E	4	24,910	B	22,640	B
Tudor Rd.	Junction Route 113	2	14,400	D	4	9,930	A	9,050	A	

TABLE 6.14-11

ROADWAY SEGMENT LEVELS OF SERVICE –2030 ADJUSTED BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout ¹	
							Volume	LOS	Volume	LOS
	Junction Route 113	O'Banion Rd.	2	17,300	E	4	11,250	A	9,670	A
	O'Banion Rd.	Oswald Rd.	4	17,300	A	4	20,900	B	21,140	B
	Oswald Rd.	Barry Rd.	4	19,600	B	4	22,670	B	23,610	B
	Barry Rd.	Bogue Rd.	4	21,100	B	4	23,550	B	24,760	B
	Bogue Rd.	Lincoln Rd.	4	26,500	B	6	31,810	B	35,730	B
	Lincoln Rd.	Franklin Rd.	4	26,500	B	6	32,860	B	35,700	B
	Franklin Rd.	Bridge Street	4	36,000	C	6	46,470	B	48,660	B
	Bridge Street	Junction Route 20	4	21,800	B	6	30,050	A	30,670	A
	Junction Route 20	Queens Ave	4	20,300	A	4	29,150	B	28,450	B
	Queens Ave	Pease Ave	4	20,300	A	4	29,720	B	28,670	B
	Pease Ave	Eager Rd.	4	20,300	A	4	30,010	B	29,070	B
	Eager Rd.	End Freeway	4	17,800	A	4	26,320	B	24,590	B
	End Freeway	Encinal Rd.	2	17,800	E	4	26,320	B	24,590	B
	Encinal Rd.	Live Oak Blvd	2	19,900	E	4	26,960	B	25,000	B
	Live Oak Blvd	Paseo Ave	2	15,600	D	4	22,990	B	21,430	B
	Paseo Ave	Live Oak City Limits	2	15,600	D	4	21,650	B	20,920	B
	Live Oak City Limits	Pennington Rd.	2	15,600	C	4	21,100	B	20,460	B
	Pennington Rd.	Live Oak City Limits	2	15,600	C	4	20,600	B	20,890	B
Live Oak City Limits	Butte County line	2	15,600	D	4	20,600	B	20,890	B	
SR 113	Yolo County Line	Knights Rd.	2	7,400	C	4	10,910	A	6,040	A
	Knights Rd.	Del Monte Ave.	2	7,400	C	4	10,910	A	6,040	A
	Del Monte Ave.	Sutter Bypass	2	5,500	B	4	9,010	A	4,140	A
	Sutter Bypass	George Washington Blvd	2	5,800	B	4	4,540	A	4,400	A
	George Washington Blvd	Junction Route 99	2	3,850	B	4	3,710	A	2,640	A
Acacia Ave	Butte House Rd	SR 20	2	4,660	B	2	7,480	A	11,960	B
	SR 20	Franklin Rd.	2	1,070	A	2	1,200	A	3,750	B
Bear River Rd.	Swanson Rd.	Pleasant Grove Rd.	2	990	A	2	6,980	B	6,210	B
	Pleasant Grove Rd.	Placer County Line	2	1,040	A	2	7,470	C	6,410	B
Bogue Rd.	Township Rd.	George Washington Blvd	2	934	A	2	1,970	A	2,820	A
	George Washington Blvd	Sanborn Rd.	2	2,410	A	2	3,090	A	3,400	A
	Walton Ave.	Railroad Ave.	2	5,070	A	2	4,670	A	6,540	A
Broadway	Clark Rd.	Encinal Rd.	2	850	A	2	2,330	A	1,910	A
	Encinal Rd.	Nuestro Rd.	2	1,610	A	2	2,700	A	3,060	A

TABLE 6.14-11

ROADWAY SEGMENT LEVELS OF SERVICE –2030 ADJUSTED BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout ¹	
							Volume	LOS	Volume	LOS
Butte House Rd.	Acacia Ave	Howlett Rd.	2	2,450	A	2	7,590	A	4,770	A
	Howlett Rd.	Township Rd.	2	4,370	A	2	10,470	B	12,730	B
	Township Rd.	Royo Ranchero Dr.	2	4,120	A	2	8,480	B	10,530	B
Catlett Rd.	SR 70/99	Pleasant Grove Rd.	2	620	A	2	3,470	A	3,320	A
	Pleasant Grove Rd.	Brewer Rd.	2	200	A	2	2,030	A	1,950	A
El Margarita Rd.	Imperial Way	Franklin Rd.	2	2,320	A	2	1,710	A	1,710	A
Franklin Rd.	Acacia Ave.	Township Rd.	2	1,070	A	2	1,180	A	2,330	A
	Township Rd.	George Washington Blvd	2	2,620	A	2	1,600	A	1,740	A
	George Washington Blvd	El Margarita Rd.	2	5,140	B	2	4,450	B	4,730	B
	El Margarita Rd.	Walton Ave.	2	8,110	C	2	15,010	B	16,050	C
Garden Highway	Stewart Rd.	Messick Rd.	2	5,230	B	2	6,270	A	7,110	A
	Messick Rd.	O'Banion Rd.	2	4,290	B	2	6,630	A	5,850	A
	O'Banion Rd.	Tudor Rd. - SR 99	2	4,280	B	2	16,070	C	14,680	B
	SR 99	Catlett Rd.	2	520	A	2	700	A	400	A
	Catlett Rd.	Riego Rd	2	150	A	2	170	A	90	A
	Riego Rd	Sacramento County limit	2	200	A	2	3,130	A	2,610	A
George Washington	SR 20	Franklin Rd.	2	7,420	C	2	5,350	A	5,140	A
	Franklin Rd.	Lincoln Rd.	2	4,280	B	2	1,710	A	1,720	A
	Lincoln Rd.	Bogue Rd.	2	3,390	A	2	1,250	A	1,210	A
	Bogue Rd.	Oswald Rd.	2	3,940	B	2	3,090	A	3,680	B
	Oswald Rd.	Tudor Rd. – SR 113	2	3,040	A	2	2,380	A	2,380	A
Howsley Rd.	SR 70-99	Pleasant Grove Rd.	2	2,270	A	2	3,580	B	3,410	A
	Pleasant Grove Rd.	Placer County Line	2	1,380	A	2	4,240	B	4,150	B
Larkin Rd.	Butte County Line	Live Oak City Limits	2	2,990	A	2	4,430	B	4,390	B
	Live Oak City Limits	Paseo Ave	2	1,500	A	2	5,430	B	5,940	B
	Paseo Ave	Clark Rd.	2	1,500	A	2	6,300	B	5,990	B
	Clark Rd.	Encinal Rd.	2	1,450	A	2	4,790	B	4,880	B
	Encinal Rd.	Eager Rd.	2	1,390	A	2	3,500	A	3,610	B
Lincoln Rd.	Holleyer Rd.	Sanborn Rd.	2	1,040	A	2	2,290	A	2,630	A
	George Washington Blvd	Ohleyer Rd.	2	3,673	B	2	3,340	A	3,710	B
Live Oak Blvd	SR 99	Yuba City Limits	2	6,620	B	2	6,870	B	7,560	C
Moroni - McGrath Rd	Tarke Rd.	Progress Rd.	2	1,270	A	2	2,670	A	1,920	A

TABLE 6.14-11

ROADWAY SEGMENT LEVELS OF SERVICE –2030 ADJUSTED BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout ¹	
							Volume	LOS	Volume	LOS
Nicolaus Rd.	SR 99	SR 70	2	1,470	A	2	2,320	A	2,530	A
	SR 70	Pleasant Grove Rd.	2	1,220	A	2	6,650	B	7,640	C
Oswald Rd.	Schlag Rd.	George Washington Blvd	2	590	A	2	4,290	B	6,260	B
	George Washington Blvd	Walton Ave.	2	1,360	A	2	4,090	B	4,910	B
	Walton Ave.	SR 99	2	2,150	A	2	4,320	A	4,730	A
	Meridian Rd.	Hughes Rd.	2	200	A	2	170	A	180	A
Pease Rd.	Township Rd.	Tierra Buena Rd.	2	810	A	4	540	A	560	A
	Tierra Buena Rd.	SR 99	2	1,670	A	4	1,030	A	1,000	A
Pennington Rd.	Powell Rd.	Live Oak City Limits	2	1,790	A	4	2,770	A	2,470	A
Pleasant Grove Rd.	Yuba County Line	Nicolaus Ave	2	3,140	A	4	10,720	A	10,430	A
	Nicolaus Ave	Catlett Rd.	2	3,000	A	4	7,380	A	6,840	A
	Catlett Rd.	Howsley Rd.	2	2,330	A	4	5,110	A	4,430	A
	Howsley Rd.	Sankey Rd.	2	1,210	A	4	2,200	A	1,510	A
	Sankey Rd.	Riego Rd.	2	1,750	A	4	10,350	A	9,760	A
	Riego Rd.	Sacramento County limit	2	1,180	A	4	15,640	B	15,560	B
Progress Rd.	McClatchy Rd.	Acme Rd.	2	1,010	A	2	2,410	A	1,660	A
Railroad Ave.	Bogue Rd.	Stewart Rd.	2	2,250	A	2	2,550	A	3,070	A
	Stewart Rd.	Berry Rd.	2	1,320	A	2	1,480	A	2,070	A
Reclamation Rd.	Progress Rd.	Pelger Rd.	2	1,060	A	2	2,590	A	1,020	A
	Pelger Rd.	SR 113	2	1,890	A	2	6,250	B	3,030	A
Riego Rd.	Garden Highway	Powerline Rd.	2	650	A	2	3,280	A	3,080	A
	Powerline Rd.	SR 70-99	2	650	A	6	33,200	B	32,800	B
	SR 70-99	Pacific Ave.	2	9,900	C	6	54,040	D	54,000	D
	Pacific Ave.	Placer County Line	2	9,900	C	6	35,040	B	35,470	B
Rio Oso Rd.	SR 70	Swanson Rd.	2	1,060	A	2	6,050	B	5,670	B
Sankey Rd.	SR 70-99	Pacific Ave.	2	1,180	A	4	17,650	B	17,470	B
	Pacific Ave.	Pleasant Grove Rd.	2	1,080	A	4	20,610	B	20,580	B
Swanson Rd.	Rio Oso Rd.	Bear River Rd.	2	980	A	2	5,970	B	5,590	B
Tarke Rd.	SR 20	Moroni Rd.	2	890	A	2	3,250	A	1,660	A
Tierra Buena Rd.	Eager Rd.	Pease Ave	2	2,180	A	2	4,620	B	4,480	B
	Pease Ave	Butte House Rd.	2	2,360	A	2	5,850	A	5,600	A
Township Rd.	Butte County Line	Pennington Rd.	2	1,730	A	2	2,690	A	2,340	A
	Pennington Rd.	Paseo Ave	2	1,920	A	2	3,200	B	3,210	B
	Nuestro Rd.	Pease Ave	2	1,540	A	2	2,530	A	2,830	A
	Pease Ave	Butte House Rd.	2	2,349	A	2	2,440	A	2,930	A
	SR 20	Franklin Rd.	2	3,330	A	2	4,230	A	3,940	A
	Franklin Rd.	Lincoln Rd.	2	1,530	A	2	3,580	B	3,500	A
	Lincoln Rd.	Bogue Rd.	2	1,906	A	2	4,500	B	5,570	B

TABLE 6.14-11

ROADWAY SEGMENT LEVELS OF SERVICE –2030 ADJUSTED BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout ¹	
							Volume	LOS	Volume	LOS
	Bogue Rd.	Oswald Rd.	2	750	A	2	3,340	A	4,460	B
	Oswald Rd.	O'Banion Rd.	2	380	A	2	920	A	830	A
	O'Banion Rd.	Tudor Rd.	2	220	A	2	220	A	80	A
West Catlett Rd.	Garden Highway	SR 70-99	2	300	A	2	1,380	A	580	A

Note:
1. This is based on the adjusted reduced buildout scenario.
Source: DKS Associates, 2010.

TABLE 6.14-12

ROADWAY SEGMENT LEVELS OF SERVICE - ADJACENT JURISDICTIONS

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Adjusted Buildout	
							Volume	LOS	Volume	LOS
SR 20/Colusa Ave	Sutter St	14 th St	4	41,000	C	6	42,000	C	45,100	C
SR 70/E St	1 st St	N. Beale Rd	4	59,000	F	4	95,900	F	98,200	F
Bridge St	SR 99	Gray Ave	4	18,220	B	4	20,900	B	22,300	B
S. Walton	Lincoln Rd	Bogue Rd	2	80,800	F	4	82,200	F	84,600	F
Twin Cities Bridge/5 th St	2 nd St	14 th St	2	33,040	F	6	72,100	C	74,800	D

Source: DKS Associates, 2010.

Results of Roadway System Analyses

Existing Conditions

For the transportation analysis, the determination of roadway operating conditions focuses on the roadway segment evaluation, which is an appropriate level of detail for a General Plan analysis. The analyses are based upon daily traffic count data collected from both the State and the County, number of traffic lanes between intersections, and roadway characteristics. In this methodology, the major roadway network was divided into seven “capacity class” categories for an LOS determination, as shown in Table 6.14-5. The capacity class categories are based upon the existing functional classifications of the facility. Development of the roadway capacities is discussed above in the Environmental Setting section.

Proposed Sutter County General Plan Goals and Policies

The following goals and policies from the proposed General Plan are relevant to Transportation and Circulation within the entire policy area are listed below.

MOBILITY ELEMENT (M)

Multimodal Transportation Network

Goal M 1 Plan for a balanced, multimodal transportation network suitable to the rural nature of Sutter County.

Policies

- M 1.1 **Multi-Modal Roadways.** Design County roads to support multimodal transportation options serving automobiles, transit, trucks, bicycles, and pedestrians.
- M 1.2 **Transportation Improvements.** Consider all transportation improvements as opportunities to enhance safety, access, and mobility for all travelers including people with special needs, recognizing bicycle, pedestrian, and transit modes as integral elements of the transportation system.
- M 1.3 **Right-of-Ways.** Secure adequate right-of-way to allow for the planning, design, and operation of transportation systems that provide safe access for all users.
- M 1.4 **New Development.** Plan for new development to provide “complete streets” that connect to existing and planned transportation systems.

Streets and Highways

Goal M 2 Provide for the long-range planning and development of the County’s roadway system and the safe, efficient, and reliable movement of people and goods throughout Sutter County.

Policies

- M 2.1 **Functional Classification.** Plan, design, and regulate roadways in general accordance with the circulation diagram contained within this element and the California Road System [CRS] Functional Classification System as updated and approved by the Federal Highway Administration, unless otherwise addressed in an adopted specific plan or community plan.
- M 2.2 **Right-of-Way.** Require that road right-of-way dedications be wide enough to accommodate all necessary road improvements to handle forecasted travel volume[s] at or above adopted service level standards.
- M 2.3 **Road Dedication and Improvement.** Dedicate and improve all roads consistent with this element and in accordance within the County’s improvement/design standards. Exceptions shall only be permitted in accordance with the County’s improvement standards.

- M 2.4 **Intersection and Driveway Spacing.** Maximize intersection and driveway spacing on roadways. Driveway encroachments shall be minimized in accordance with the County's improvement standards.
- M 2.5 **Level of Service on County Roads.** Develop and manage the County roadway segments and intersections to maintain LOS D or better during peak hour, and LOS C or better at all other times. Adjust for seasonality. These standards shall apply to all County roadway segments and intersections, unless otherwise addressed in an adopted specific plan or community plan.
- M 2.6 **Mitigation by New Development.** Require new development projects to analyze their local traffic impacts and to construct and implement the improvements necessary to fully mitigate their local impacts to traffic capacity, structural sections and intersection geometrics.
- M 2.7 **Regional Improvements.** Require new development projects to analyze traffic impacts on the regional transportation system (i.e. facilities that provide regional connectivity to the new development) and require a fair share contribution to regional transportation improvements.
- M 2.8 **City Coordination.** Coordinate with the cities of Yuba City and Live Oak to provide acceptable and compatible levels of service on roadways that cross County/City boundaries and when establishing future road alignments within the cities' spheres of influence.
- M 2.9 **External Development Mitigation.** Coordinate with the cities and neighboring counties to require new development within those jurisdictions to analyze and fully mitigate their impacts to Sutter County roadways through construction of improvements and/or fair share funding of improvements within Sutter County.
- M 2.10 **Agency Coordination.** Maintain ongoing coordination with Caltrans, SACOG and other jurisdictions to address local and regional transportation issues.
- M 2.11 **State Highways.** Support projects that will improve traffic flows and safety on State Highways.
- M 2.12 **Major Highway Projects.** Continue participation in the planning and preservation of right-of-way for the Placer Parkway Project, and as appropriate, other major highway projects to improve traffic flows and safety within Sutter County.
- M 2.13 **Main Arterials.** Encourage the City of Yuba City and Caltrans to explore the feasibility of synchronizing signalized intersections on Highway 20, Highway 99, and other main arterials to improve traffic flows.
- M 2.14 **Parallel Roads.** Develop local roads parallel to State Highways, where feasible, to reduce congestion and increase traffic safety on state facilities.

M 2.15 **Farm to Market Connectivity.** Improve and maintain County roadways to provide a network of agricultural truck transportation corridors and to facilitate farm-to-market connectivity.

Transit

Goal M 3 Promote a safe and efficient transit system to reduce congestion and provide viable alternatives to automobile use.

Policies

M 3.1 **Transit Service for Residents.** Support development of transit facilities in strategic locations, including areas of concentrated activity, density, and intensity.

M 3.2 **Transit in New Development.** Require new, large-scale developments to facilitate the provision of adequate transit service for users and to coordinate with local transit agencies to situate transit service and stops at locations that are convenient and accessible to users.

M 3.3 **Transit Integration.** Support multi-modal stations at appropriate locations to integrate transit with other transportation modes.

M 3.4 **Reduce Vehicle Miles Traveled.** Implement, as appropriate, reduction measures in the Climate Action Plan targeted to facilitate the reduction in vehicle miles traveled and help to reduce greenhouse gas emissions. Such measures include implementing the conceptual transit plan for the Sutter Pointe Specific Plan area, which provides phased transit service.

Rail Transportation

Goal M 4 Promote a safe and efficient rail system for the movement of passengers and freight.

Policies

M 4.1 **Protect Rail Facilities.** Protect and enhance existing rail facilities to support the transportation of agricultural goods and other materials within and through Sutter County.

M 4.2 **Rail Spurs.** Support opportunities to provide rail spurs within industrial areas.

M 4.3 **Transit Stops.** Support opportunities to provide additional transit stops to provide passenger service along existing rail lines.

Bikeways and Pedestrians

Goal M 5 Provide a comprehensive system of facilities for non-motorized transportation.

Policies

- M 5.1 **Bicycle and Pedestrian Master Plan.** Prepare a Bicycle and Pedestrian Master Plan that supports implementation of a comprehensive and safe system of commuter and recreational routes for pedestrians and cyclists.
- M 5.2 **Encourage Use of Bicycle and Pedestrian Facilities.** Implement, as appropriate, the reduction measures in the Climate Action Plan targeted to encourage the use of bicycle and pedestrian facilities. Such measures may include siting development in proximity to bicycle lanes, eliminating impediments to bicycle and pedestrian circulation, providing adequate bicycle parking, and implementing incentive programs for bicycle and pedestrian facility use within the Sutter Pointe Specific Plan area.
- M 5.3 **New Development.** Require new development to construct and/or fund bicycle and pedestrian facilities.
- M 5.4 **Abandoned Rail Lines.** Support the conversion of rails lines considered for abandonment into bike-pedestrian paths or other similar uses, where practical.
- M 5.5 **Bridges.** Identify opportunities to add bicycle lanes and pedestrian facilities on existing or new bridges during restriping or major renovations.

Air Travel and Airports

Goal M 6 Promote the continued use and improvement of general and agricultural aviation facilities within the parameters of compatible surrounding land use and public safety.

Policies

- M 6.1 **Protection from Incompatible Uses.** Protect public and private airports from conflicting land use patterns to the extent practicable.
- M 6.2 **New Development.** Restrict new development around airports to insure safe airport operations.
- M 6.3 **Airport Safety Zones.** Limit land uses in airport safety zones to those listed in the applicable airport comprehensive land use plan [CLUP].
- M 6.4 **Sutter County Airport.** Support Sutter County Airport's continued use as a general aviation facility.

Green House Gas Reduction

Goal M 7 Employ strategies that reduce the use of fossil fuels, reduce greenhouse gas emissions caused by transportation, and improve air quality.

Policies

- M 7.1 **New Development.** Implement, as appropriate, the reduction measures in the Climate Action Plan targeted to reduce greenhouse gas emissions caused by automobile use. Such measures may include the following: reducing employee based automobile trips; adopting a comprehensive parking program for public and private parking lots that facilitate carpooling and alternative transportation use; managing transportation flow; increasing the use of carpooling; and expanding the use of renewable fuels and low emission vehicles.
- M 7.2 **New Development.** Require that new development projects avoid or mitigate environmental impacts to the transportation system.
- M 7.3 **Regional Objectives.** Support regional air quality and greenhouse gas reduction goals through effective management of the Sutter County's transportation system to reduce congestion and maintain a high level of service.
- M 7.4 **County Employees.** Promote carpooling, the use of public transit, and the use of alternative modes of transportation for County employees.
- M 7.5 **Emission Reduction Programs for Employers.** Encourage employers to offer programs, facilities, and incentives to their employees that would reduce the use of fossil fuels and reduce greenhouse gas emissions.

Implementation Programs

- M 1-A Complete Streets. Design County roads and condition development as necessary to implement "complete streets" concepts and legislation to achieve an integrated transportation system where practical.
- M 2-A Develop and update circulation plans, as necessary to support the General Plan Land Use Diagram and to address existing conditions. Follow approved Federal Highway Administration Functional Classification System guidelines to classify County road segments based on this element and supporting circulation plans.
- M 2-B Condition new development to provide rights-of-way and other dedications and easements consistent with circulation plans, and County improvement standards.
- M 2-C Prepare and adopt a capital improvement program [CIP] that includes transportation improvements to achieve the adopted level of service standards, improve safety, and satisfy improvement standards. The CIP will be based on adopted circulation plans and updated as necessary. The CIP will be used in the review and approval of development proposals.
- M 2-D Prepare and adopt a traffic impact fee and allocation methodology to fund the improvements in the CIP. Lead Agency: Public Works.
- M 2-E Condition new development to finance and construct appropriate circulation improvements necessary to mitigate a project's transportation impacts including pedestrian and bicycle mobility, safety, and level of service-related impacts.

Collect the fair share cost of required circulation improvements through established fees, and/or construction estimates of needed improvements, as appropriate, where construction is not practical at the time of development.

- M 2-F Actively participate in regional transportation planning and funding efforts to improve the current and future streets and highways serving the County.
- M 3-A Coordinate with local transit agencies to ensure that residents have convenient transit service to workplaces, government services, shopping, and other destinations, as funding allows. Coordinate with Yuba-Sutter Transit in periodically reviewing and updating the transit plan for the County.
- M 3-B Cooperate with Yuba-Sutter Transit as they identify potential locations for rideshare facilities.
- M 3-C Condition new development to construct or fund transit stops and hubs with upgraded amenities such as pull-outs, sheltered stops, benches and lighting, where appropriate.
- M 4-A Require new development proposed adjacent to rail facilities to provide adequate setbacks, buffers, walls, landscaping, and other appropriate elements to mitigate impacts from and avoid conflicts with ongoing railroad operations.
- M 4-B Coordinate with the railroads on opportunities to provide railroad spurs, add transit stops, and utilize abandoned right-of-way. [New Implementation Program]
- M 5-A Identify and pursue available sources of funding for the planning, development and improvement of bikeways.
- M 5-B Participate, as appropriate, in the development of multi-jurisdictional funding applications for regional bikeways.
- M 5-C Condition new development to construct bicycle and pedestrian lanes/trails and associated facilities in and supporting the development project in accordance with the County's Bikeway and Pedestrian Master Plan and County improvement standards; and to the extent possible, connect these facilities to existing and planned bicycle lanes/trails.
- M 6-A Review new development and building permits within the County airport vicinity to insure compliance with County ordinances for the Airport Zoning. Coordinate with Yuba City to insure compliance within the City limits.
- M 6-B Review all new development projects within overflight zones affecting Sutter County for consistency with the applicable airport Comprehensive Land Use Plan [CLUP].
- M 6-C Manage the Sutter County Airport to insure its viable long term operation.

- M 7-A Identify key areas where opportunities exist to promote greenhouse gas emission reduction through the financing of subsidies and facilities to support the use of alternative modes of transportation.
- M 7-B Encourage employers to provide telecommuting opportunities, alternative work schedules, incentives for use of public transit, and facilities to support alternative modes of transportation such as preferential parking for carpools and bicycle facilities.

Standards of Significance

Based on the LOS policy descriptions in the transportation setting, an impact to the roadway system is considered significant if implementation of the proposed General Plan would meet the following criteria.

Sutter County Roadways

- cause the existing or cumulative no project LOS for study locations to deteriorate from LOS D (or better) to LOS E (or worse);

Placer County Roadways

- cause the existing or cumulative no project LOS for study locations not within one-half mile of a state highway to deteriorate from LOS C (or better) to LOS D (or worse) or for study locations within one-half mile of a state highway to deteriorate from LOS D (or better) to LOS E (or worse);
- exacerbate the existing or cumulative no project LOS D (or worse) conditions such that the project would cause an increase in the volume to capacity ratio of one percent or greater for study locations not within one-half mile of a state highway or LOS E (or worse) conditions for study locations within one-half mile of a state highway; or
- cause or exacerbate LOS E or worse conditions on roadways within or on the boundary of the Placer Vineyards Specific Plan Area plan area, which includes roadway segments on Baseline Road (Pleasant Grove Road (South) to Walerga Road) and Watt Avenue (Baseline Road to Dyer Lane).

Yuba County Roadways

- change the LOS from acceptable (LOS C or better) to unacceptable (LOS D or worse) on study roadways within and controlled by Yuba County.
- exacerbate existing (or projected) roadway operations as follows:
- County Roadways: 0.05 or more increase in the v/c ratio.

Caltrans Facilities

- cause the existing or cumulative no project LOS for study locations to deteriorate from LOS E (or better) to LOS F;

Transit System

- create demand for public transit services or facilities greater than there is adequate capacity to accommodate;
- disrupt existing or interfere with planned transit services or facilities;
- create an inconsistency with the transit policies or standards of plans adopted by jurisdictions within the study area;

Bicycle and Pedestrian System

- disrupt existing or interfere with planned bicycle or pedestrian facilities that would discourage their use; and/or
- create an inconsistency with the bikeway or pedestrian policies or standards of plans adopted by the jurisdictions within the study area.

Impacts and Mitigation Measures

6.14-1 Implementation of the proposed General Plan could result in a deterioration of existing LOS on roadway segments in unincorporated Sutter County.

A base analysis of horizon year adjusted buildout conditions is shown in Table 6.14-11. As shown, all but four roadway segments located within the policy area would operate at LOS A or B with implementation of the proposed General Plan. Table 6.14-11 shows that three of the four road segments would operate at LOS C and one would operate at LOS D. The one segment projected to operate at LOS D would experience the same or slightly less traffic volumes with the proposed General Plan. Because the General Plan would not cause the LOS of roadway segments in the unincorporated county to go below LOS D, impacts would be *less than significant*.

Full Buildout Analysis

Based on full buildout conditions, a buildout analysis was prepared to show the implications of buildout of the general plan. As shown in Table 6.4-13, this additional demand would generate more vehicle trips and total VMT. It is likely this level of development would occur beyond the planning horizon of this general plan. If development beyond the level currently assumed for the General Plan were to occur without the provision of additional roads and capacity in the roadway network, the effects would be adverse. However, the proposed General Plan contains polices, including LOS goals and polices for road

performance, which require the provision of additional capacity commensurate with new development such that new development could not be allowed without provision of additional roads or capacity in the system. While it is reasonable to assume that in the post-horizon period additional growth would trigger additional capacity and roadway improvements, determination of the exact nature of those future effects is not known at this time and is, therefore, too speculative to analyze. Future planning efforts and environmental analysis would address this additional growth and the potential implications of this growth.

Mitigation Measure

None required.

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Full Buildout ¹	
							Volume	LOS	Volume	LOS
SR 20	Colusa County Line	Sutter Bypass	2	7,200	C	2	11,730	D	11,200	D
	Sutter Bypass	Acacia Ave.	2	7,200	C	4	20,240	B	29,310	C
	Acacia Ave.	Humphrey Rd.	2	9,500	C	4	20,900	B	24,590	B
	Humphrey Rd.	Township Rd.	4	9,500	A	4	20,230	B	23,410	B
	Township Rd.	George Washington Blvd	4	12,200	A	4	21,800	B	22,800	B
	George Washington Blvd	Yuba City Limits	4	17,500	A	4	27,600	B	27,690	B
SR 70	Junction 99	Nicolaus Ave	2	18,700	E	4	38,570	C	34,270	C
	Nicolaus Ave	Yuba County Line	2	19,200	E	4	35,320	C	32,630	C
SR 99	Sacramento County Line	Riego Rd	4	39,500	C	6	106,640	F	129,370	F
	Riego Rd.	Sankey Rd.	4	33,500	C	6	75,640	D	68,410	C
	Sankey Rd.	Howsley Rd.	4	33,500	C	6	65,930	C	58,530	C
	Howsley Rd.	SR 70	4	33,500	C	6	64,680	C	57,650	C
	Junction 70	Garden Highway	2	16,200	D	4	23,850	B	20,940	B
	Garden Highway	Sacramento Ave.	2	17,400	E	4	24,710	B	23,520	B
	Sacramento Ave.	Tudor Rd.	2	17,600	E	4	24,910	B	23,720	B
	Tudor Rd.	Junction Route 113	2	14,400	D	4	9,930	A	8,260	A
	Junction Route 113	O'Banion Rd.	2	17,300	E	4	11,250	A	5,880	A
	O'Banion Rd.	Oswald Rd.	4	17,300	A	4	20,900	B	23,640	B
	Oswald Rd.	Barry Rd.	4	19,600	B	4	22,670	B	27,410	B
	Barry Rd.	Bogue Rd.	4	21,100	B	4	23,550	B	29,050	B
	Bogue Rd.	Lincoln Rd.	4	26,500	B	6	31,810	B	41,690	B
	Lincoln Rd.	Franklin Rd.	4	26,500	B	6	32,860	B	41,460	B
Franklin Rd.	Bridge Street	4	36,000	C	6	46,470	B	53,290	C	

TABLE 6.14-13

ROADWAY SEGMENT LEVELS OF SERVICE – FULL BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Full Buildout ¹	
							Volume	LOS	Volume	LOS
	Bridge St.	Junction Route 20	4	21,800	B	6	30,050	A	32,440	B
	Junction Route 20	Queens Ave.	4	20,300	A	4	29,150	B	31,170	B
	Queens Ave.	Pease Ave.	4	20,300	A	4	29,720	B	31,420	B
	Pease Ave.	Eager Rd.	4	20,300	A	4	30,010	B	32,220	B
	Eager Rd.	End Freeway	4	17,800	A	4	26,320	B	26,310	B
	End Freeway	Encinal Rd.	2	17,800	E	4	26,320	B	26,310	B
	Encinal Rd.	Live Oak Blvd.	2	19,900	E	4	26,960	B	25,700	B
	Live Oak Blvd.	Paseo Ave.	2	15,600	D	4	22,990	B	21,840	B
	Paseo Ave.	Live Oak City Limits	2	15,600	D	4	21,650	B	20,300	B
	Live Oak City Limits	Pennington Rd.	2	15,600	C	4	21,100	B	20,750	B
	Pennington Rd.	Live Oak City Limits	2	15,600	C	4	20,600	B	20,920	B
	Live Oak City Limits	Butte County line	2	15,600	D	4	20,600	B	20,920	B
SR 113	Yolo County Line	Knights Rd.	2	7,400	C	4	10,910	A	3,820	A
	Knights Rd.	Del Monte Ave.	2	7,400	C	4	10,910	A	3,820	A
	Del Monte Ave.	Sutter Bypass	2	5,500	B	4	9,010	A	4,080	A
	Sutter Bypass	George Washington Blvd	2	5,800	B	4	4,540	A	3,810	A
	George Washington Blvd	Junction Route 99	2	3,850	B	4	3,710	A	2,870	A
Acacia Ave	Butte House Rd	SR 20	2	4,660	B	2	7,480	A	13,240	B
	SR 20	Franklin Rd.	2	1,070	A	2	1,200	A	3,260	A
Bear River Rd.	Swanson Rd.	Pleasant Grove Rd.	2	990	A	2	6,980	B	5,220	B
	Pleasant Grove Rd.	Placer County Line	2	1,040	A	2	7,470	C	4,970	B
Bogue Rd.	Township Rd.	George Washington Blvd	2	934	A	2	1,970	A	3,880	B
	George Washington Blvd	Sanborn Rd.	2	2,410	A	2	3,090	A	3,820	B
	Walton Ave.	Railroad Ave.	2	5,070	A	2	4,670	A	6,800	A
Broadway	Clark Rd.	Encinal Rd.	2	850	A	2	2,330	A	1,910	A
	Encinal Rd.	Nuestro Rd.	2	1,610	A	2	2,700	A	3,380	A
Butte House Rd.	Acacia Ave	Howlett Rd.	2	2,450	A	2	7,590	A	5,440	A
	Howlett Rd.	Township Rd.	2	4,370	A	2	10,470	B	12,640	B
	Township Rd.	Royo Ranchero Dr.	2	4,120	A	2	8,480	B	10,330	B
Catlett Rd.	SR 70/99	Pleasant Grove Rd.	2	620	A	2	3,470	A	4,780	B
	Pleasant Grove Rd.	Brewer Rd.	2	200	A	2	2,030	A	4,000	B
El Margarita Rd.	Imperial Way	Franklin Rd.	2	2,320	A	2	1,710	A	1,710	A

TABLE 6.14-13

ROADWAY SEGMENT LEVELS OF SERVICE – FULL BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Full Buildout ¹	
							Volume	LOS	Volume	LOS
Franklin Rd.	Acacia Ave.	Township Rd.	2	1,070	A	2	1,180	A	2,000	A
	Township Rd.	George Washington Blvd	2	2,620	A	2	1,600	A	1,680	A
	George Washington Blvd	El Margarita Rd.	2	5,140	B	2	4,450	B	4,590	B
	El Margarita Rd.	Walton Ave.	2	8,110	C	2	15,010	B	16,410	C
Garden Highway	Stewart Rd.	Messick Rd.	2	5,230	B	2	6,270	A	10,000	B
	Messick Rd.	O'Banion Rd.	2	4,290	B	2	6,630	A	6,860	A
	O'Banion Rd.	Tudor Rd. - SR 99	2	4,280	B	2	16,070	C	16,540	C
	SR 99	Catlett Rd.	2	520	A	2	700	A	490	A
	Catlett Rd.	Riego Rd	2	150	A	2	170	A	150	A
George Washington Blvd.	Riego Rd	Sacramento County limit	2	200	A	2	3,130	A	5,220	B
	SR 20	Franklin Rd.	2	7,420	C	2	5,350	A	4,890	A
	Franklin Rd.	Lincoln Rd.	2	4,280	B	2	1,710	A	1,650	A
	Lincoln Rd.	Bogue Rd.	2	3,390	A	2	1,250	A	1,150	A
	Bogue Rd.	Oswald Rd.	2	3,940	B	2	3,090	A	4,660	B
Howsley Rd.	Oswald Rd.	Tudor Rd. - SR 113	2	3,040	A	2	2,380	A	1,640	A
	SR 70-99	Pleasant Grove Rd.	2	2,270	A	2	3,580	B	4,910	B
Larkin Rd.	Pleasant Grove Rd.	Placer County Line	2	1,380	A	2	4,240	B	6,160	B
	Butte County Line	Live Oak City Limits	2	2,990	A	2	4,430	B	4,030	B
	Live Oak City Limits	Paseo Ave	2	1,500	A	2	5,430	B	6,970	B
	Paseo Ave	Clark Rd.	2	1,500	A	2	6,300	B	7,110	C
	Clark Rd.	Encinal Rd.	2	1,450	A	2	4,790	B	4,950	B
Lincoln Rd.	Encinal Rd.	Eager Rd.	2	1,390	A	2	3,500	A	4,230	B
	Holleyer Rd.	Sanborn Rd.	2	1,040	A	2	2,290	A	2,690	A
Live Oak Blvd	George Washington Blvd	Ohleyer Rd.	2	3,673	B	2	3,340	A	3,810	B
Moroni - McGrath Rd	SR 99	Yuba City Limits	2	6,620	B	2	6,870	B	9,100	C
Nicolaus Rd.	Tarke Rd.	Progress Rd.	2	1,270	A	2	2,670	A	1,450	A
	SR 99	SR 70	2	1,470	A	2	2,320	A	3,560	B
Oswald Rd.	SR 70	Pleasant Grove Rd.	2	1,220	A	2	6,650	B	10,650	D
	Schlag Rd.	George Washington Blvd	2	590	A	2	4,290	B	8,430	C
	George Washington Blvd	Walton Ave.	2	1,360	A	2	4,090	B	6,350	B
	Walton Ave.	SR 99	2	2,150	A	2	4,320	A	5,220	A
Pease Rd.	Meridian Rd.	Hughes Rd.	2	200	A	2	170	A	660	A
	Township Rd.	Tierra Buena Rd.	2	810	A	4	540	A	560	A
	Tierra Buena Rd.	SR 99	2	1,670	A	4	1,030	A	1,000	A

TABLE 6.14-13

ROADWAY SEGMENT LEVELS OF SERVICE – FULL BUILDOUT

Roadway Name	From	To	2009 Existing			2030 Conditions				
			# of Lanes	Volume	LOS	# of Lanes	No Project		General Plan Full Buildout ¹	
							Volume	LOS	Volume	LOS
Pennington Rd.	Powell Rd.	Live Oak City Limits	2	1,790	A	4	2,770	A	2,560	A
Pleasant Grove Rd.	Yuba County Line	Nicolaus Ave	2	3,140	A	4	10,720	A	10,070	A
	Nicolaus Ave	Catlett Rd.	2	3,000	A	4	7,380	A	7,380	A
	Catlett Rd.	Howsley Rd.	2	2,330	A	4	5,110	A	5,170	A
	Howsley Rd.	Sankey Rd.	2	1,210	A	4	2,200	A	1,310	A
	Sankey Rd.	Riego Rd.	2	1,750	A	4	10,350	A	10,630	A
	Riego Rd.	Sacramento County limit	2	1,180	A	4	15,640	B	18,740	B
Progress Rd.	McClatchy Rd.	Acme Rd.	2	1,010	A	2	2,410	A	1,190	A
Railroad Ave.	Bogue Rd.	Stewart Rd.	2	2,250	A	2	2,550	A	5,050	A
	Stewart Rd.	Berry Rd.	2	1,320	A	2	1,480	A	4,210	A
Reclamation Rd.	Progress Rd.	Pelger Rd.	2	1,060	A	2	2,590	A	750	A
	Pelger Rd.	SR 113	2	1,890	A	2	6,250	B	2,650	A
Riego Rd.	Garden Highway	Powerline Rd.	2	650	A	4	3,280	A	5,610	A
	Powerline Rd.	SR 70-99	2	650	A	6	33,200	B	77,260	F
	SR 70-99	Pacific Ave.	2	9,900	C	6	54,040	D	91,530	F
	Pacific Ave.	Placer County Line	2	9,900	C	6	35,040	B	52,650	D
Rio Oso Rd.	SR 70	Swanson Rd.	2	1,060	A	2	6,050	B	5,320	B
	SR 70-99	Pacific Ave.	2	1,180	A	4	17,650	B	24,750	B
Sankey Rd.	Pacific Ave.	Pleasant Grove Rd.	2	1,080	A	4	20,610	B	33,150	C
Swanson Rd.	Rio Oso Rd.	Bear River Rd.	2	980	A	2	5,970	B	5,240	B
Tarke Rd.	SR 20	Moroni Rd.	2	890	A	2	3,250	A	1,640	A
Tierra Buena Rd.	Eager Rd.	Pease Ave	2	2,180	A	2	4,620	B	5,530	B
	Pease Ave	Butte House Rd.	2	2,360	A	2	5,850	A	6,210	A
Township Rd.	Butte County Line	Pennington Rd.	2	1,730	A	2	2,690	A	2,410	A
	Pennington Rd.	Paseo Ave	2	1,920	A	2	3,200	B	3,350	B
	Nuestro Rd.	Pease Ave	2	1,540	A	2	2,530	A	3,490	B
	Pease Ave	Butte House Rd.	2	2,349	A	2	2,440	A	3,560	A
	SR 20	Franklin Rd.	2	3,330	A	2	4,230	A	4,920	A
	Franklin Rd.	Lincoln Rd.	2	1,530	A	2	3,580	B	4,580	B
	Lincoln Rd.	Bogue Rd.	2	1,906	A	2	4,500	B	6,380	B
	Bogue Rd.	Oswald Rd.	2	750	A	2	3,340	A	5,440	B
	Oswald Rd.	O'Banion Rd.	2	380	A	2	920	A	1,260	A
O'Banion Rd.	Tudor Rd.	2	220	A	2	220	A	-	A	
West Catlett Rd.	Garden Highway	SR 70-99	2	300	A	2	1,380	A	630	A

Note:
1. This is based on the full buildout scenario.
Source: DKS Associates, 2010.

6.14-2 Implementation of the proposed General Plan could result in a deterioration in LOS on roadway segments located in adjacent jurisdictions.

The traffic analysis included preparation of a model generated traffic volume difference plot showing the increase in traffic volumes attributable to the proposed General Plan. Major routes with an increase in traffic volume in adjacent jurisdictions are shown in Table 6.14-12. Traffic generated under the adjusted buildout scenario would result in traffic impacts to the SR 70/E Street segment from 1st Street to North Beale Road and on South Walton from Lincoln Road to Bogue Road in Sutter County. The LOS along these roadways is currently LOS F and the project would contribute additional traffic volumes that would further exacerbate the LOS. The proposed General Plan includes policy M 2.7, which requires new development projects to analyze traffic impacts on the regional transportation system (i.e., facilities that provide regional connectivity to new development) and require a fair share contribution to regional transportation improvements. Therefore, future development within the county would be required to conduct a traffic analysis to determine impacts to the regional transportation network. However, the General Plan does not include any policies that address impacts to roadways in adjacent jurisdictions. Even if the County requires payment of fees for improvements to roadways in other jurisdictions, the County cannot guarantee that the improvements would be constructed; therefore, this is considered a *significant impact*.

Full Buildout Analysis

Under full buildout conditions, additional growth in the years beyond 2030 would result in additional traffic on the roadway network outside of Sutter County's jurisdiction that could require additional capacity improvements. While it is reasonable to assume that in the post-horizon period additional growth would trigger additional capacity improvements, determination of the exact nature of these future effects is not known at this time, and therefore, is too speculative to analyze. Future planning efforts and environmental analysis would address this additional growth, if substantial growth beyond the anticipated growth in the General Plan were to occur, and the potential implications of this growth.

Mitigation Measure

Widening the impacted roadway segments is not under the control of Sutter County and requires coordination with adjacent jurisdictions. Future development would be required to conduct a traffic analysis to determine impacts to the regional transportation network and to pay a fair share contribution to regional transportation improvements if necessary. However, because Sutter County cannot guarantee implementation and/or timing of widening required to mitigate the two impacted roadway segments and there is no other feasible mitigation, the impact is considered *significant and unavoidable*.

None available.

6.14-3 Implementation of the proposed General Plan could increase traffic volumes on Caltrans facilities that serve the unincorporated county.

As shown in Table 6.14-11, all but two roadway segments would operate at LOS A, B, or C conditions under the proposed General Plan. One segment on SR 20 would operate at LOS D, and SR 99 between the Sacramento County Line and Riego Road degrades from LOS C under existing conditions to LOS F under adjusted buildout conditions. However, the proposed General Plan contains polices, including LOS goals and polices for road performance, and policies that require the County to coordinate with Caltrans and other jurisdictions on regional transportation issues. Specifically, policy M 2.10 (Agency Coordination) requires that the County maintain ongoing coordination with Caltrans, SACOG and other jurisdictions to address local and regional transportation issues. Policy M 2.11 (State Highways) requires that the County support projects that would improve traffic flows and safety on State Highways. Policy M 2.12 (Major Highway Projects) requires that the County continue to participate in planning and preservation of right-of-way for the Placer Parkway Project, and as appropriate, other major highway projects to improve traffic flows and safety within Sutter County.

However, because implementation of the proposed General Plan would increase traffic volumes on Caltrans facilities and based on the Caltrans LOS threshold would result in a *significant impact*.

Full Buildout Analysis

A full buildout analysis was prepared to show the implications of full buildout of the general plan. As shown in Table 6.4-13, this additional demand would occur beyond the 2030 planning horizon of the proposed General Plan, and would generate more vehicle trips and total VMT on Caltrans facilities. If development beyond the level currently assumed for the General Plan were to occur without the provision of additional capacity in the roadway network, the effects would be adverse.

While it is reasonable to assume that this additional growth would trigger additional capacity and roadway improvements, determination of the exact nature of those future effects is unknown and is, therefore, too speculative to analyze at this time. Future planning efforts and environmental analysis would address this additional growth and the potential implications of this growth.

Mitigation Measure

Widening the impacted roadway segments is not under the control of Sutter County and would require coordination with Caltrans. The proposed General Plan policies require future

development to conduct a traffic analysis to determine impacts to the regional transportation network and to pay a fair share contribution to regional transportation improvements if necessary. However, because Sutter County cannot guarantee implementation and/or timing of widening required to mitigate the impacted roadway segments and there is no other feasible mitigation, the impact is considered *significant and unavoidable*.

None available.

6.14-4 Implementation of the proposed General Plan could adversely affect transit facilities.

Table 6.12-10 indicates that the proposed General Plan would result in an increase in the number of countywide transit trips compared to existing conditions. The total number of transit trips is projected to increase to approximately 6,300 under the proposed General Plan, an increase of approximately 162% or over 3,000 transit trips countywide. Sutter County is a rural county without the population density that can support a viable transit system. However, the General Plan includes a number of policies to support the development and use of transit as future growth occurs. Specifically, the General Plan includes a goal to promote safe and efficient transit systems to reduce congestion and provide viable alternatives to automobile use. Proposed policy M 3.2 requires new, large-scale development projects to provide adequate transit service for users and to coordinate with local transit agencies to locate transit service and stops at locations that are convenient and accessible to transit users. Policy M 3.3 support the use of multi-modal stations at appropriate locations to integrate transit with other transportation modes and policy M 7.4 encourages county employees to carpool, use public transit, or other alternative modes of transportation. Policy M 7.5 encourages employers to offer programs, facilities, and incentives to their employees that would reduce the use of fossil fuels and reduce greenhouse gas emissions. The General Plan is encouraging and supporting the use of transit and requiring new development, such as the Sutter Pointe Specific Plan to include transit opportunities for new residents.

The proposed General Plan would increase transit trips by over 3,000 trips per day. It is anticipated that the increase in demand for transit would be generated by an increase in population. As indicated above, the General Plan includes policies to address transit associated with new development, which would constitute the majority of demand. This new development would be required to provide transit facilities and coordinate with local transit agencies to meet this increase in demand. Therefore, compliance with the General Plan policies would reduce the impact to *less than significant*.

Full Buildout Analysis

Under full buildout conditions, additional transit trips would be generated if development were to occur beyond level assumed at the planning horizon. The proposed General Plan

includes a number of policies aimed at encouraging transit use, as discussed above. While it is reasonable to assume that in the post-horizon period additional growth would trigger the need for additional transit services, such improvements would be speculative at this time because the exact nature of those future effects are unknown. Future planning efforts and environmental analysis would address this additional growth and the potential implications of this growth.

Mitigation Measure

None required.

6.14-5 Implementation of the proposed General Plan could adversely affect pedestrian or bicycle facilities.

Table 6.12-10 indicates that the proposed General Plan would result in an increase in the number of countywide pedestrian walk/bike trips of approximately 106 percent, when compared to existing conditions. The total number of walk/bike trips is projected to increase from approximately 4,649 under existing conditions to 9,616 under the proposed General Plan, an increase of approximately 4,900 walk/bike trips countywide. The proposed General Plan includes a number of policies aimed at encouraging new development provide bicycle and pedestrian facilities. Specifically proposed policy M 5.11 requires that the County prepare a Bicycle and Pedestrian Master Plan that supports implementation of a comprehensive and safe system of commuter and recreational routes for pedestrians and cyclists. In addition, policy M 5.3 requires new development to construct and/or fund bicycle and pedestrian facilities. Compliance with these policies would ensure that future pedestrian and bicycle facilities, such as sidewalks and bike lanes or bike paths would be constructed. As mentioned above, Sutter County is a rural county that does not have the population density that would support sidewalks in rural areas or bike paths. However, the goal is for future development to provide these facilities to provide future residents with the option to walk or ride their bikes in a safe environment.

Implementation of the proposed General Plan would not disrupt existing or interfere with planned bicycle or pedestrian facilities that would discourage their use; therefore, impacts would be *less than significant*.

Full Buildout Analysis

Under full buildout of the general plan, the additional population and development would generate additional pedestrian walk/bike trips beyond the 2030 planning horizon. Because the proposed General Plan includes a number of policies aimed at encouraging bicycle and pedestrian facilities associated with new development, it is reasonable to assume the post-horizon period impacts of additional growth would come with additional pedestrian

and bicycle facility infrastructure. However, the effects of new bicycle and pedestrians improvements are speculative at this time because the exact nature of those future effects is unknown. Future planning efforts and environmental analysis would address this additional growth and the potential implications of this growth.

Mitigation Measure

None required.

Growth Areas

There are several specific growth areas identified in the proposed General Plan. Please see Chapter 3, Project Description, for a description of these growth areas and their locations. The impact analysis above is the same for the identified growth areas as for the countywide analysis.

Sutter Pointe Specific Plan Area

A separate EIR was prepared for the Sutter Pointe Specific Plan project. The traffic analysis identified unacceptable traffic operations on the regional roadway network and unacceptable traffic operations on Sutter County roadways and roadways controlled by Caltrans. In addition, intersections in Placer and Sacramento County were also adversely impacted. Impacts occurred because the proposed project would contribute to traffic volumes that exceed the capacity of the regional roadway network or because the proposed project would increase traffic volumes resulting in unacceptable LOS conditions. The EIR identifies specific mitigation measures including constructing improvements or participating in numerous funding programs to improve impacted roadways and intersections.

Cumulative Impacts

Development of the policy area under the adjusted buildout scenario provides the cumulative analysis for the project. The 2035 MTP is compared to existing conditions where the change between the Existing and Future traffic conditions were determined using the SACOG SACMET traffic demand forecast model and evaluated under the Cumulative plus Project analysis. This model is used throughout the region to predict future travel conditions, including roadway operating conditions and transit ridership. The model version used in this analysis is taken from SACOG's preparation of the 2007 MTP (SACMET 07). Land use and transportation network databases were modified to reflect the specific characteristics of the General Plan. Outside the unincorporated county, land use is based upon SACOG's projections for the 2035 Metropolitan Area. Therefore, the cumulative impacts of the project were addressed in the impact analysis above.