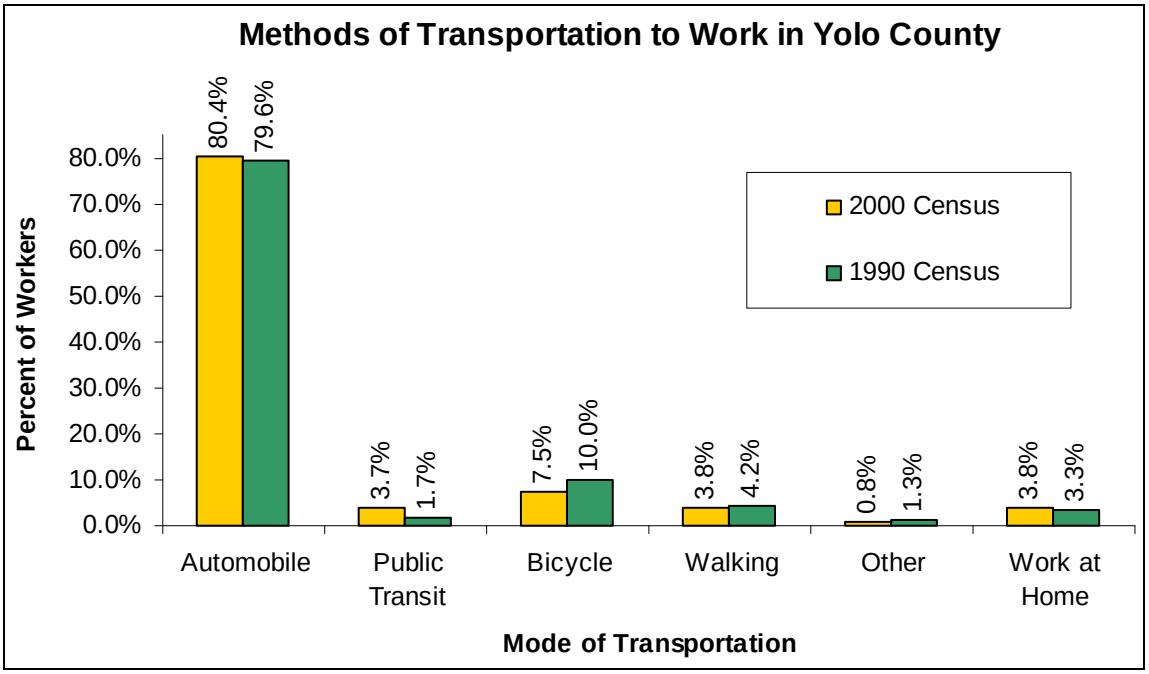
C. TRANSPORTATION AND CIRCULATION

This section describes potential impacts to the transportation system associated with adoption of the Yolo County 2030 Countywide General Plan. The impact analysis examines the roadway, transit, bicycle, pedestrian, rail, ports, and aviation components of the overall transportation system. To provide a context for the impact analysis, this section begins with a description of the environmental setting. The setting describes the existing physical and operational conditions for the transportation system components. Following the setting is the regulatory framework influencing the transportation system and providing the basis for impact significance thresholds used in the impact analysis. Next, a summary of the proposed General Plan policies that affect the transportation system are described. The section concludes with the impact analysis findings and recommended mitigation measures.

1. Setting

a. Existing Conditions. Yolo County's preservation of agricultural land and concentration of growth within incorporated cities have created a unique transportation system compared to the rest of the Sacramento region. Although most travel in the County is by automobile, the relatively short distance between cities and focus on non-auto modes of transportation have promoted the use of facilities and services related to transit, bicycles, and pedestrians. According to the 2000 U.S. Census, about 80 percent of all working County residents traveled from home to work by automobile, of which 13 percent traveled in a carpool of 2 or more persons. Bicycling to work accounted for the next highest share (almost 8 percent), while transit and walking each accounted for about 4 percent. By comparison, approximately 94 percent of all working trips in the Sacramento region were by automobile based on the 2000 U.S. Census. The following illustrative diagram compares 2000 Census data and 1990 Census data for Yolo County, methods of transportation to work.



(1) Roadway Network. The roadway network within the unincorporated parts of the County is a grid-based system of rural two-lane roads that connects individual communities and provides access to agricultural fields. Urban development is mainly concentrated in the eastern and southern portions of the County within the incorporated cities of Davis, West Sacramento, Winters, and Woodland. Interstate 80, I-5, and I-505 are the primary transportation corridors extending through the County and serve all of the County's major population centers. Other state highways, County arterials, and a network of local public and private roads constitute the remainder of the roadway system.

Physical Conditions. The major routes in the regional roadway system are shown according to operational classification in Figure IV.C-1 and the number of lanes for each of these roadways is shown in Figure IV.C-2. The classifications in Figure IV.C-1 indicate the operational hierarchy of the roadway system. The state highway network serves primarily intercity and intercounty regional travel while the County's roadways serve local trips. Notable exceptions are County Roads 31, 98, and 102, and Old River Road, which have higher traffic volumes than some of the state highways and also serve intercity and intercounty trips.

State highways in Yolo County are listed below and include freeways, expressways, and conventional highways, which are operated and maintained by Caltrans.

- State Route (SR) 16
- SR 45
- SR 84
- SR 113
- SR 128

Interstate and U.S. numbered routes are also part of the state highway system, which is maintained by Caltrans. The unincorporated portion of Yolo County has three Interstate routes (I-5, I-80, and I-505). U.S. 50, located in West Sacramento, provides a connection from I-80 to downtown Sacramento.

- **I-80** is a principal east/west route in Yolo County, providing connections to the San Francisco Bay Area and Sacramento County. I-80 is a major commute route between residential areas in the greater Sacramento area and the San Francisco Bay Area employment centers and is a major truck route between the San Francisco Bay Area, Sacramento, and the Tahoe Basin and points east. A direct influence on the high truck volumes is the industrial development that is occurring in the West Sacramento area, consisting of truck distribution centers, truck terminals, and services to the Port of Sacramento. From the Solano County line to the Sacramento County line, I-80 is a six-lane freeway that connects the City of Davis and the City of West Sacramento.
- **I-5** is an important north/south route that in Yolo County primarily provides for the transportation of goods by trucks. Woodland is the primary trucking center for the agricultural and warehousing industry along I-5 and generates high truck traffic during the harvest seasons. From the Sacramento County line to the Colusa County line, I-5 is a four-lane freeway and provides connections to the communities of Dunnigan, Zamora, and Yolo.
- **I-505** is a south to north freeway serving as a major connection for goods movement and interregional travel between I-80 near the City of Vacaville and I-5 in the northern part of Yolo County. I-505 is a four-lane freeway from the Solano County line to I-5 and provides a connection to the City of Winters.

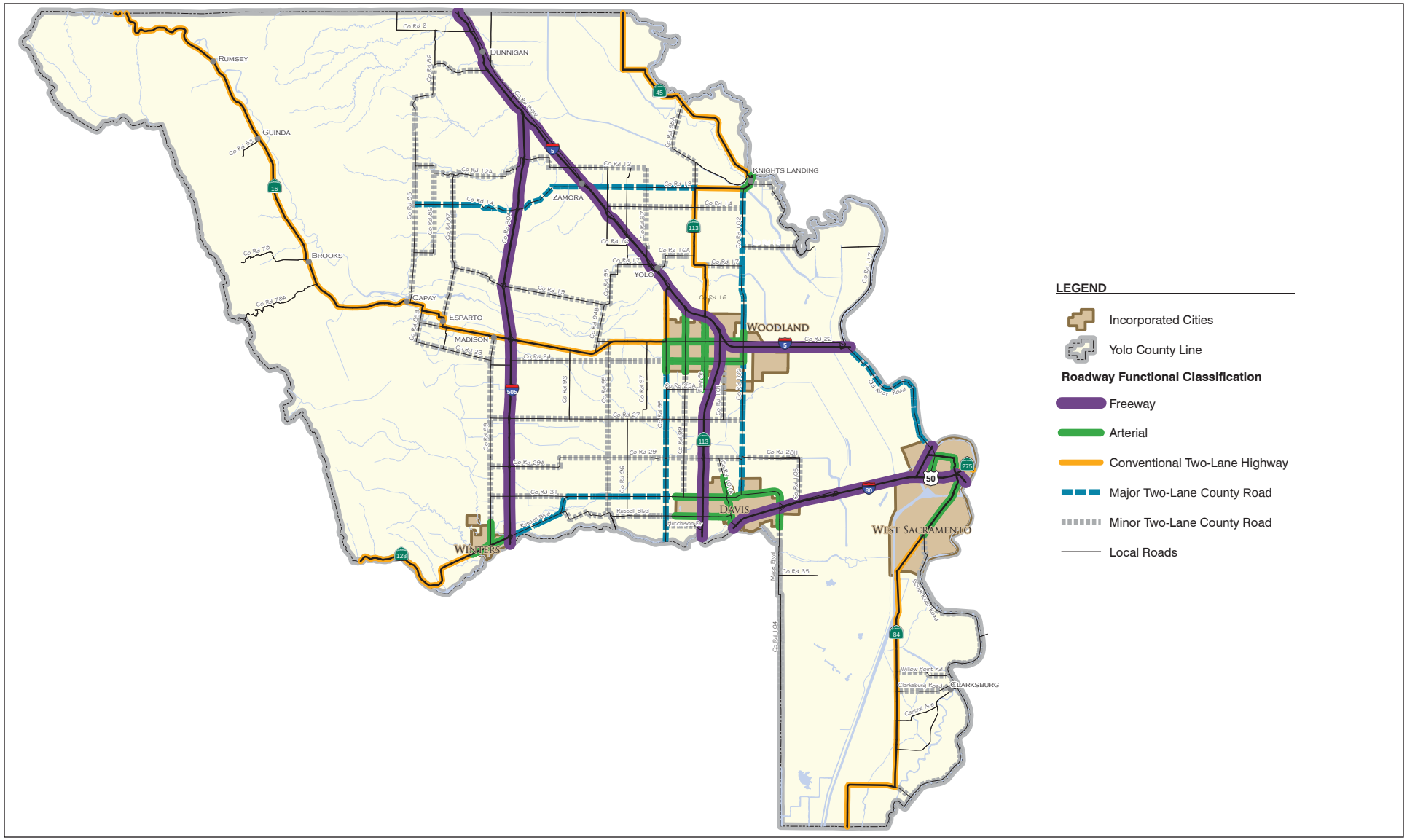


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FIGURE IV.C-1

Yolo County 2030 Countywide General Plan EIR

Existing Study Roadway Functional Classification

SOURCE: FEHR & PEERS, 2009.

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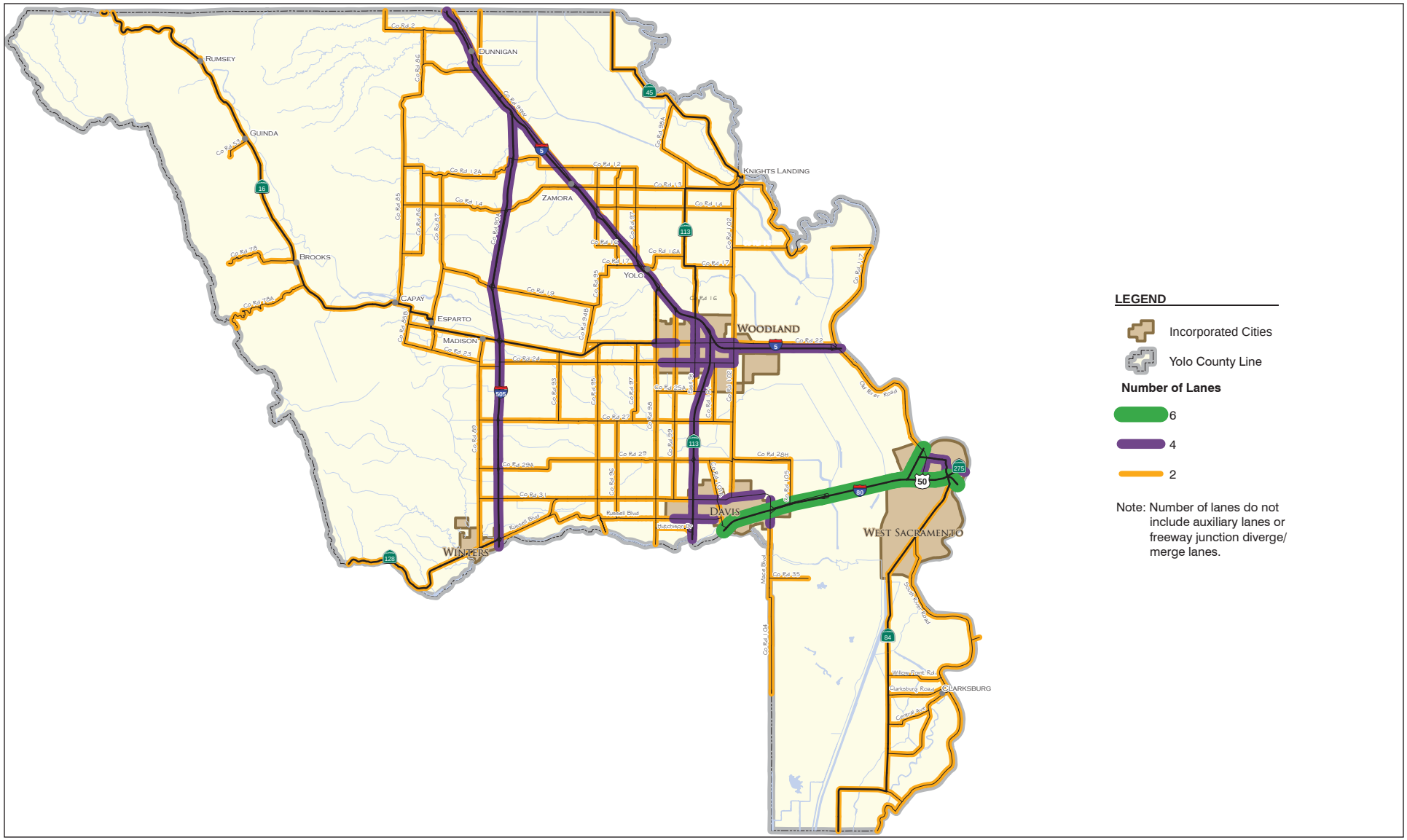

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FIGURE IV.C-2

Yolo County 2030 Countywide General Plan EIR

Existing Study Roadway Number of Lanes

SOURCE: FEHR & PEERS, 2009.

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- **SR 16** serves east-west traffic through the western rural area of Yolo County, including the communities of Rumsey, Guinda, Brooks, Capay, Esparto, Madison, Monument Hills, and the City of Woodland. SR 16 also provides connection to the Cache Creek Resort Casino located near the town of Brooks. North of Rumsey, SR 16 passes though the Cache Creek Regional Park area and is one of the routes used by trucks to access Colusa and Lake Counties. SR 16 extends east as a two-lane conventional highway from the Colusa County line to the Woodland city limits, then north to the connection at I-5.
- **SR 113** serves as an important link for agricultural and commercial traffic to I-5 and I-80. The segment between Davis and Woodland is a four-lane freeway that terminates at I-5. SR 113 continues from I-5 in Woodland as a two-lane conventional highway north to the town of Knights Landing and continues into Sutter County.
- **SR 128** serves local traffic in the City of Winters and recreational traffic from the greater Sacramento area traveling to Lake Berryessa and Napa Valley. SR 128 extends as a two-lane conventional highway from the Solano/Napa County line to I-505 in Winters.

Two other state highways in Yolo County (SR 45 and SR 84) serve mainly local and agricultural traffic within the County. SR 84 is a two-lane conventional highway that extends from the Solano County line to West Sacramento City limits. SR 45 is also a two-lane conventional highway that extends from the Colusa County line to Knights Landing.

Major County roads are also part of the regional roadway system and typically provide the connections to the highway and freeway system. County Roads 98 and 102 are key County roadways carrying more than 500 p.m. peak hour trips. These two roadways are heavily used by motorists traveling between Davis and Woodland. County Road 31 carries approximately 400 p.m. peak hour trips, and connects the Cities of Davis and Winters. Similarly, Old River Road carries approximately 400 p.m. peak hour trips, and connects the Cities of West Sacramento and Woodland. The County roads included in this study are listed in Appendices A and B along with existing (2007) a.m. and p.m. peak hour traffic count volumes.

The County maintains an extensive roadway system that provides a high level of access compared to the relatively low levels of traffic on most roadways. Currently, the County maintains approximately 800 miles of roadways in the unincorporated areas, of which Figure IV.C-1 shows only the major routes in the County's regional roadway system.

Traffic Operations. The analysis of traffic operations was conducted based on roadway segments representative of the County's overall transportation network. Traffic volumes on the selected roadway segments are used to determine the overall usage and congestion. Note that the roadway segment analysis is based on traffic counts taken at a single location or link, which was intended to be representative of the entire segment. A link connects two intersections; a segment is a series of links. The segments used in this analysis were developed based on where a series of links had common physical and traffic conditions.

Traffic operations on the study roadway segments were measured using a qualitative measure called level of service (LOS). LOS is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as

speed, travel time, traffic interruptions, and freedom to maneuver. The LOS grades are generally defined as follows:

- **LOS A** represents free-flow travel with an excellent level of comfort and convenience and the freedom to maneuver.
- **LOS B** has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.
- **LOS C** has stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic stream.
- **LOS D** represents high-density, but stable flow. Users experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience.
- **LOS E** represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.
- **LOS F** is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.

The LOS was calculated for each roadway segment in the regional roadway system to evaluate the quality of traffic conditions. Traffic counts used for this analysis represent year 2007 conditions. LOS was determined by comparing traffic volumes for selected roadway segments with peak-hour LOS capacity thresholds. These thresholds are shown in Table IV.C-1 and were calculated based on the methodology contained in the Highway Capacity Manual (HCM) (Transportation Research Board 2000). The HCM methodology is the prevailing measurement standard used throughout the United States.

It should be noted that this traditional methodology used to analyze the roadway system does not consider the potential impact on walking, bicycling, and transit. Pedestrians, bicyclists, and transit riders are all users of the roadway system but may not be fully recognized in the traffic operations analysis and the calculation of LOS. The LOS thresholds in Table IV.C-1 are based on driver's comfort and convenience. Identifying the need for roadway improvements based on the resulting roadway LOS can have unintended impacts to other modes such as increasing the walking time for pedestrians. In evaluating the roadway system, a lower vehicle LOS may be desired when balanced against other community values related to resource protection, social equity, economic development, and consideration of pedestrians, bicyclists, and transit users.

Most County roads operate at LOS A, B, or C, which represents stable conditions for vehicle operations, during the p.m. peak hour. Roadway segments of County Roads 98 and 102 between Davis and Woodland operate at LOS C, at which point users can be substantially affected by other drivers on the roadway. On state facilities, I-80 between Davis and West Sacramento operates at LOS F in the peak direction during the peak hours. Users are forced to reduced speeds and breakdowns in traffic flow can occur due to minor disturbances.

The existing a.m. (freeways only) and p.m. peak hour LOS results are shown graphically for the regional roadway system in Figures IV.C-3 and IV.C-4, respectively. LOS is calculated using 2007 traffic count data, including counts from the County and City Public Works Departments, and Caltrans (refer to Appendices A and B for a complete list of counts).

The transportation analysis is based on the p.m. peak hour because it represents the highest hourly volume during a typical weekday. This volume is used to design future roadways because of its regular weekday occurrence. Using a higher or lower volume hour could lead to inadequate designs or designs that are underused. The one exception to exclusive use of the p.m. peak hour is for the freeway roadway system. These roadways serve a high volume of commuter traffic during both the a.m. and p.m. peak hours. In some cases, the a.m. peak-hour volumes on freeways, which also occur on a regular basis, are higher than p.m. peak-hour volumes. Further, the freeway system is divided such that improvements can be made to only one direction if needed. Therefore, analyzing the a.m. peak hour was considered necessary to identify potential impacts that may occur only during this time period. The a.m. and p.m. peak-hours were determined countywide based on the highest level of traffic for one hour during the peak morning and afternoon periods.

Table IV.C-1: Operational Class and Peak Hour Level-of-Service Thresholds

Operational Class	Peak Hour Level-of-Service Capacity Threshold				
	A	**B**	**C**	**D**	**E**
Minor Two-Lane Highway	90	200	680	1,410	1,740
Major Two-Lane Highway	120	290	790	1,600	2,050
Four-Lane, Multilane Highway [a]	1,070	1,760	2,530	3,280	3,650
Two-Lane Arterial	-	-	970	1,760	1,870
Four-Lane Arterial, Undivided	-	-	1,750	2,740	2,890
Four-Lane Arterial, Divided	-	-	1,920	3,540	3,740
Six-Lane Arterial, Divided	-	-	2,710	5,320	5,600
Eight-Lane Arterial, Divided	-	-	3,720	7,110	7,470
Two Freeway Lanes [a]	1,110	2,010	2,880	3,570	4,010
Two Freeway Lane + Auxiliary Lane [a]	1,410	2,550	3,640	4,490	5,035
Three Freeway Lanes [a]	1,700	3,080	4,400	5,410	6,060
Three Freeway Lanes + Auxiliary Lane [a]	2,010	3,640	5,180	6,350	7,100
Four Freeway Lanes [a]	2,320	4,200	5,950	7,280	8,140

[a] LOS capacity threshold is for one direction.

– LOS is not achievable because of type of facility.
Source: Fehr & Peers 2009.

Policy CIR 7 of the 1983 Yolo County General Plan sets forth the LOS thresholds for the County roadways. This policy reads as follows "Yolo County shall require a service level of "C" for all County roads. Service level "C" is "a stable flow of traffic and a relatively satisfactory operating speed." This policy establishes that roadways operate no worse than LOS C within the unincorporated areas of the County. Roadways within incorporated cities were analyzed based on the local jurisdiction roadway LOS thresholds. State highway and freeway facilities were analyzed based on Caltrans LOS thresholds contained in the individual transportation or route concept reports for each facility. In addition to the jurisdiction LOS standard, roadways were analyzed based on the Yolo County Congestion Management Program (CMP) (Updated March 1996), where applicable.

Under existing conditions, all of the study roadway segments in the unincorporated County operate acceptably based on the 1983 General Plan LOS policy and applicable CMP LOS thresholds. As part of the existing conditions analysis, select roadway segments in each incorporated city were also analyzed under existing conditions. The following location in the City of West Sacramento currently operates at an unacceptable LOS based on the applicable CMP LOS threshold.

- Jefferson Boulevard – Gregory Avenue to U.S. 50 (LOS D during the p.m. peak hour compared to the CMP threshold of LOS C)

Refer to Appendix C for a complete list of a.m. (freeway only) and p.m. peak hour roadway LOS. The jurisdiction and CMP LOS thresholds are also listed for each roadway where applicable.

Traffic Safety. The recent accident history for Yolo County roadways was researched to identify locations with high accident rates. Accident data, especially accident rates, are used to determine locations where the combination of physical geometrics, traffic controls, and driver behavior may contribute to a safety problem. Many city and County agencies use accident data to determine necessary roadway or intersection modifications to improve traffic safety. In some cases, accidents are caused by driver behavior and can not be corrected solely by safety improvements.

The County maintains a database of all accidents that have occurred outside of incorporated cities, and Caltrans maintains an accident database for state facilities. Figure IV.C-5 shows the number of accidents on Yolo County roadways by location, including fatalities, for an approximately 3½-year period from February 2001 to June 2004. The highest concentration of accidents occurred along Russell Boulevard and County Road 98 in the southern part of the County, and Old River Road and South River Road in the eastern part of the County. For accidents that occurred within 200 feet of a County intersection, the most frequent types of accidents were broadside and hit-object collisions.

Accident data on the state facilities was provided by Caltrans for two separate three-year periods from July 2000 to June 2003 and from April 2005 to March 2008. Table IV.C-2 shows a summary of the accident history on state facilities located within Yolo County.

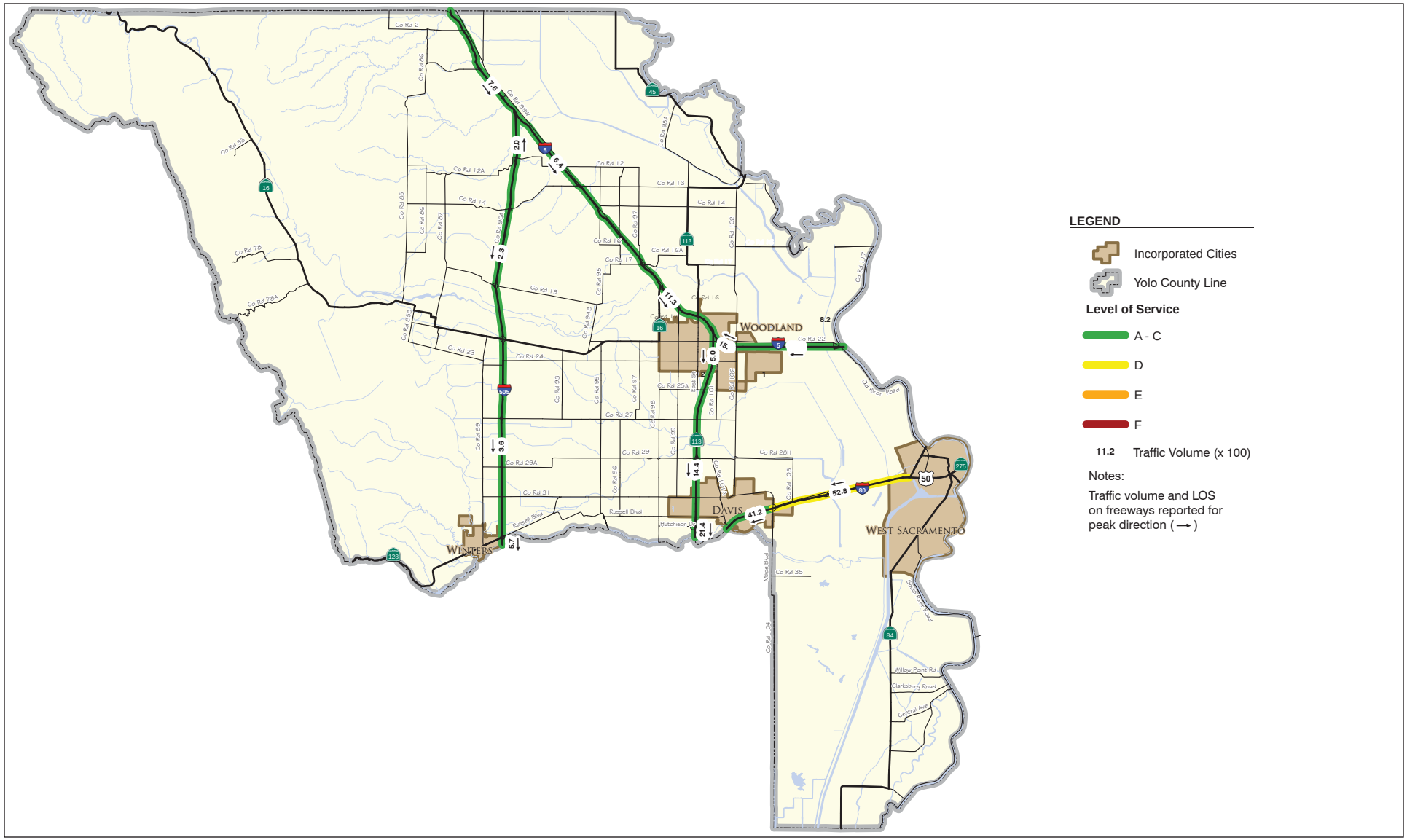

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FIGURE IV.C-3

Yolo County 2030 Countywide General Plan EIR

Existing AM Peak Hour Roadway Traffic Volumes and LOS

SOURCE: FEHR & PEERS, 2009.

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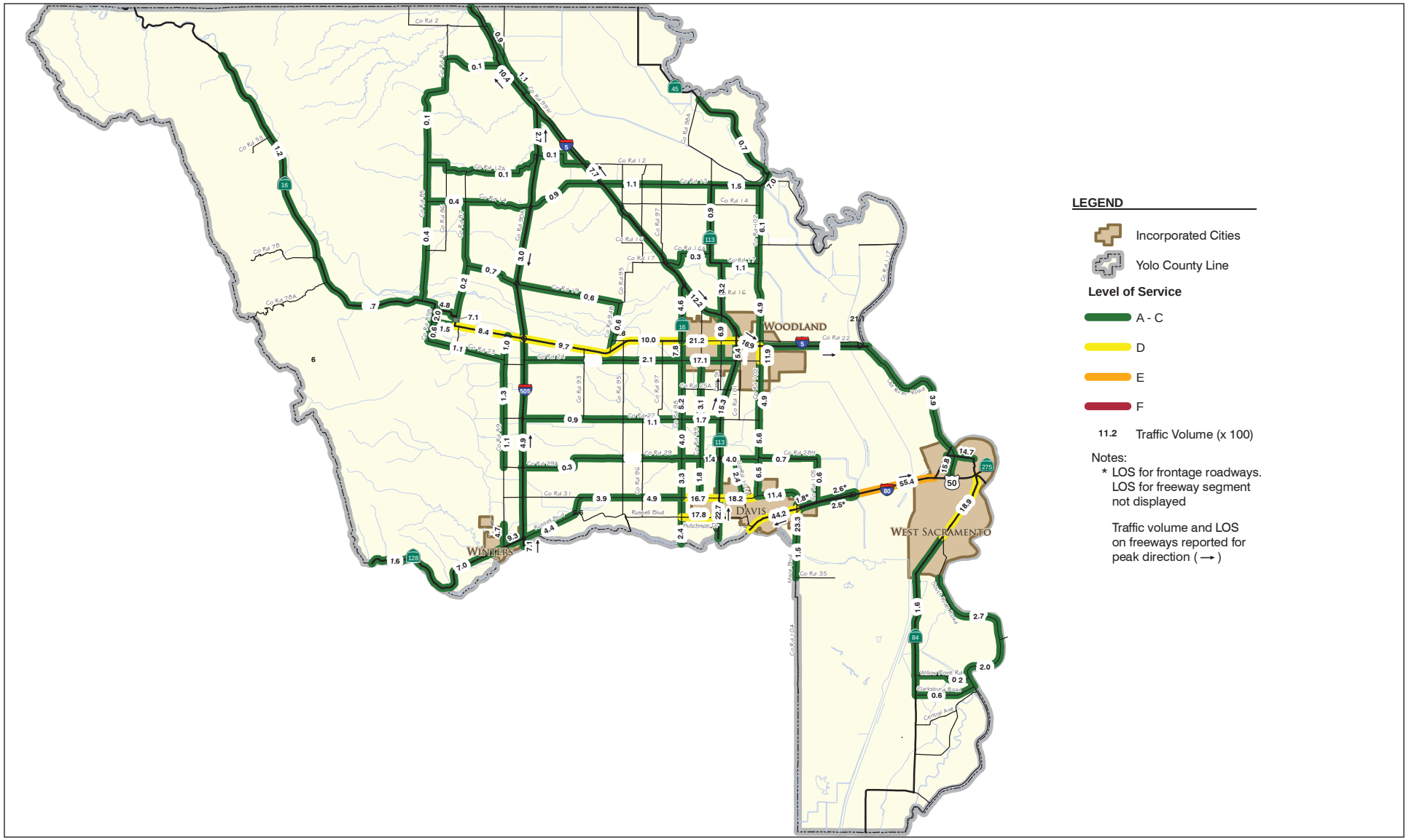

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FIGURE IV.C-4

Yolo County 2030 Countywide General Plan EIR

Existing PM Peak Hour Roadway Traffic Volumes and LOS

SOURCE: FEHR & PEERS, 2009.

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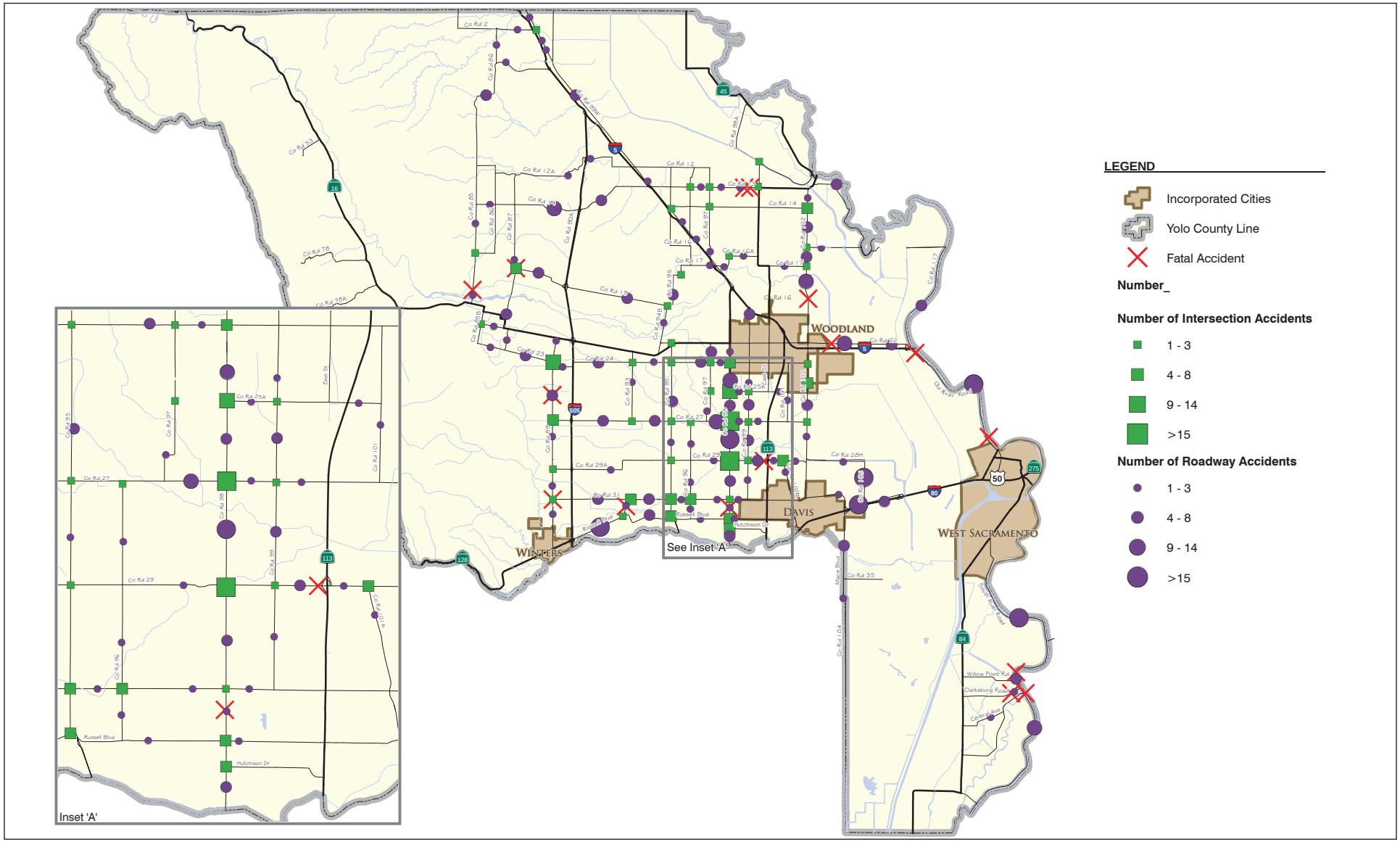

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FIGURE IV.C-5

Yolo County 2030 Countywide General Plan EIR

Existing Vehicle Accident Data on County Roads (February 2001 to June 2004)

SOURCE: FEHR & PEERS, 2009.

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Table IV.C-2: State Facilities Accident History

Location	July 1, 2000 to June 30, 2003				April 1, 2005 to March 31, 2008			
	Total Accidents	Total Fatalities	Actual Accident Rate[a]	Average Accident Rate[a]	Total Accidents	Total Fatalities	Actual Accident Rate[a]	Average Accident Rate[a]
I-5—Colusa County Line to Sacramento County Line	288	8	0.30	0.53	355	9	0.34	0.54
SR 16—Colusa County Line to I-5	341	8	1.57	1.22	330	5	1.13	1.24
SR 45 -State Route 113 to Colusa County Line	18	0	2.29	1.78	16	2	1.66	1.66
I-80—Solano County Line to Sacramento County Line	914	4	0.60	0.94	965	8	0.59	0.98
SR 84—Solano County Line to West Sacramento City Limits	25	2	1.32	1.45	24	1	1.16	1.38
SR 113—Solano County Line to Sutter County Line	98	1	0.33	0.77	99	5	0.29	0.78
SR 128—Solano County Line to I-505	76	4	2.12	1.94	91	3	2.35	1.93
I-505—Solano County Line to I-5	84	4	0.27	0.50	93	3	0.26	0.51

[a] Accidents per million vehicle-miles.
Shading indicates an actual accident rate that is higher than the average accident rate for similar roadway facilities.
Source: Caltrans District 3 TASAS Table B, July 1, 2000 to June 30, 2003 and April 1, 2005 to March 31, 2008.

Table IV.C-2 shows that SR 16, SR 45, and SR 128 had higher accident rates per million vehicle miles then the average accident rate on similar roadway facilities for the three-year period between July 2000 and June 2003. The most recent available accident data for the three-year period between April 2005 and March 2008 reveals that the average accident rate per million vehicle miles on SR 16 and SR 45 have decreased as traffic volumes on these roadways have increased, and is lower than the average accident rate on similar roadway facilities. However, the average accident rate on SR 128 during the three-year period between April 2005 and March 2008 is still greater than the average accident rate on similar roadway facilities.

(2) Public Transportation. Public transportation in Yolo County consists of the following services and facilities:

- public bus service,
- commercial bus service,
- taxi service,
- vanpools and carpools, and
- park-and-ride facilities.

The Yolo County Transportation District (YCTD) operates YOLOBUS, which serves the residents of Yolo County and provides regional, intercity, and local fixed-route services throughout the County. For the fixed-route service, 10 routes are local (within Yolo County), and eight routes provide commuter route service to Sacramento County and Solano County (see Figure IV.C-6). In fiscal year 2003–2004, the YCTD served approximately 1.2 million riders. Route 42, which provides primarily commuter service to Sacramento and Sacramento International Airport to/from Woodland and Davis, experienced the highest ridership with a monthly average of approximately 43,900.

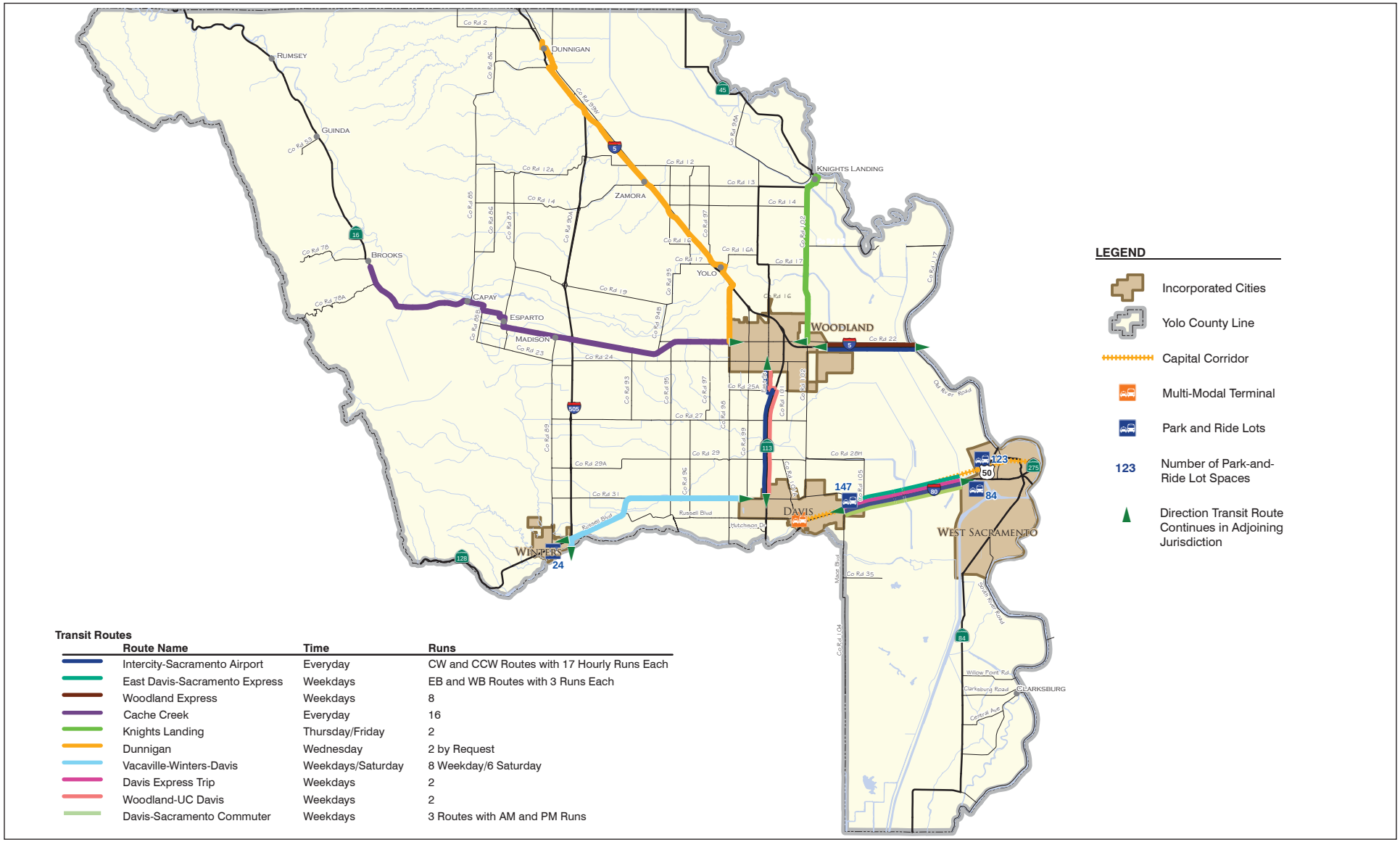
The YCTD also provides paratransit through YOLOBUS Special, which provides local city, intercity, and rural County service. These services provide on-demand, door-to-door transportation primarily for elderly and disabled passengers. The paratransit service is in addition to the approximate ¾-mile route deviations that can be requested on some of the local fixed-routes. Paratransit ridership during the fiscal year 2003–2004 was approximately 14,400.

Commercial bus service is provided by Greyhound, which provides over 3,600 service locations within North America. Greyhound provides limited service bus stops with stops in Davis and Woodland. Service at these bus stops may vary by schedule, day, week, carrier, or season, and no Greyhound ticketing or baggage facilities are available at these locations. These limited service bus stops provide connections to full-service stations located in the San Francisco Bay Area and the greater Sacramento area.

Taxi services are provided by several local companies located in Davis, Woodland, West Sacramento, and Knights Landing and are available on demand or by reservation.

The Yolo Transportation Management Association (TMA) sponsors carpools and vanpools that operate within Yolo County and to/from surrounding areas. The Yolo TMA has an incentive program for both carpool and vanpool members. Formal and informal carpools are offered by organizations such as Cache Creek Resort Casino, Yolo County, City of Davis, and University of California at Davis (UCD). Formal vanpools are organized and operated by Enterprise Rideshare within Yolo County. Companies that operate vanpools include UCD, UCD Medical Center, Caltrans, and the Franchise Tax Board.

Park-and-ride lots provide a place for commuters in single-occupant vehicles to transfer to public transit or carpools. Yolo County has four park-and-ride facilities with three along I-80 and one near I-505 in the City of Winters (see Figure IV.C-6 for lot locations and transit service availability).



Transit Routes

Route Name	Time	Runs
Intercity-Sacramento Airport	Everyday	CW and CCW Routes with 17 Hourly Runs Each
East Davis-Sacramento Express	Weekdays	EB and WB Routes with 3 Runs Each
Woodland Express	Weekdays	8
Cache Creek	Everyday	16
Knights Landing	Thursday/Friday	2
Dunnigan	Wednesday	2 by Request
Vacaville-Winters-Davis	Weekdays/Saturday	8 Weekday/6 Saturday
Davis Express Trip	Weekdays	2
Woodland-UC Davis	Weekdays	2
Davis-Sacramento Commuter	Weekdays	3 Routes with AM and PM Runs

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FIGURE IV.C-6

Yolo County 2030 Countywide General Plan EIR

Existing Transit Routes and Park-and-Ride Lots

SOURCE: FEHR & PEERS, 2009.

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Caltrans owns three, and Caltrans and the City of Davis own one jointly. The park-and-ride lot near Mace Boulevard in Davis has three designated electric vehicle spaces, eight bike racks, a covered transit shelter, and complies with the Americans with Disabilities Act (ADA). These parking sites are intended to encourage ridesharing by providing a safe, attractive, and convenient place to leave a personal vehicle in order to use public transportation or another form of ridesharing.

(3) Bicycle and Pedestrian Circulation. The bicycle and pedestrian transportation system in Yolo County is composed of local and regional bikeways and trails. Yolo County is a favorable area for bicycling because of its flat terrain, mild climate, and relatively short distance between cities. In addition, the City of Davis and UCD have an extensive network of bicycle facilities with good connections to the County's bicycle network. Bicycles are widely used for commuting in the County. According to the 2000 U.S. Census, the number of bicycle trips to work by County residents was approximately 5,630 per average weekday. Pedestrian trips to work in 2000 were approximately 2,830 per average weekday.

Bikeways are classified into the following three types (also refer to Figure IV.C-7):

- Class I—off-street bike paths.
- Class II—on-street bike lanes marked by pavement striping.
- Class III—on-street bike routes that share the road with motorized vehicles.

The County of Yolo Bicycle Transportation Plan (BTP) was updated by the Yolo County Transportation Advisory Committee in December 2006. The Board of Supervisors adopted the plan on November 28, 2006. According to the Yolo County BTP, five major bikeways exist within the unincorporated area, with a Class I path along I-80 and Russell Boulevard, and Class II bike lanes along County Road 32A, County Road 102, County Road 99, County Road 31, and Russell Boulevard (see Figure IV.C-8).

The County has developed a Parks and Open Space Master Plan (January 2006) that includes descriptions and resources of hiking trails within the unincorporated parts of the County.

(4) Passenger Rail. Amtrak provides commercial bus service along with passenger train service. Amtrak offers round-trip train service from the downtown Davis train station on Second Street (see Figure IV.C-6) that links Davis to the San Francisco Bay Area and downtown Sacramento. The station is open 7 days a week for ticket sales and baggage service. Free short- (less than 2 hours) and long-term parking is provided for Amtrak passengers. Trains that stop in Davis include the Coast Starlight (1 daily round trip), California Zephyr (1 daily round trip), and the Capitol Corridor (12 weekday round trips and 9 weekend round trips). In addition, Davis is served by Amtrak commercial buses connecting to and from San Joaquin trains in Stockton (6 daily round trips).

The Capitol Corridor is an intercity passenger train service that provides service between San Jose, Oakland/San Francisco, and Sacramento/Placer County along a 170-mile rail corridor. The Capitol Corridor Joint Powers Authority (CCJPA) is a partnership among the six local transit agencies in the eight-County service area that shares the administration and management of the Capitol Corridor. The San Francisco Bay Area Rapid Transit District (BART) provides day-to-day management support to

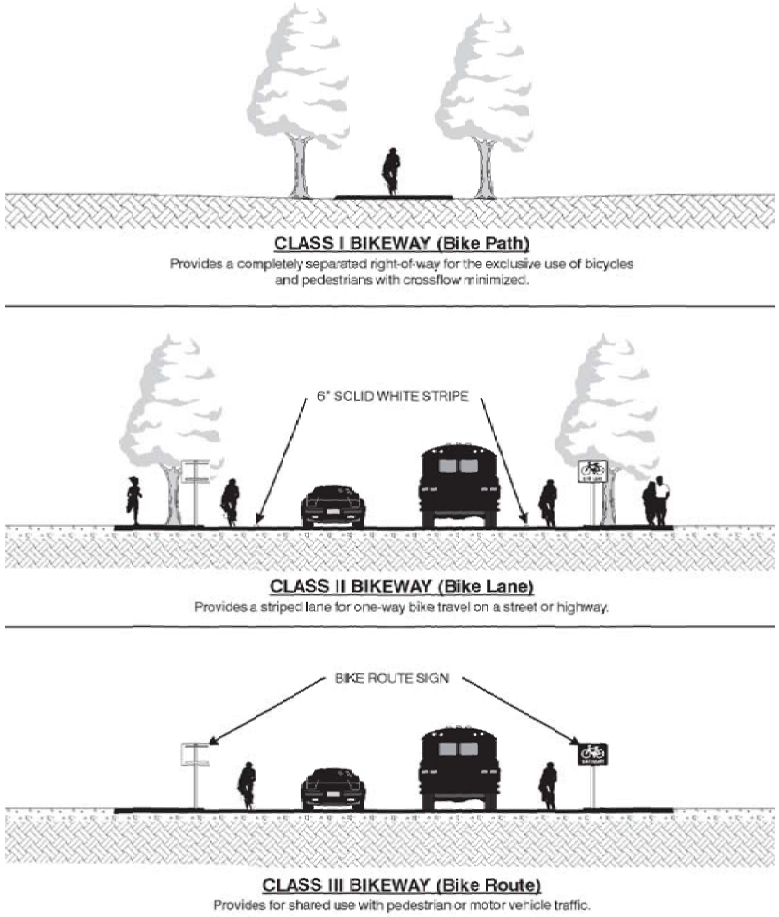

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FIGURE IV.C-7

Yolo County 2030 Countywide General Plan EIR

General Bikeway Classifications

NOT TO SCALE

SOURCE: FEHR & PEERS, 2009.

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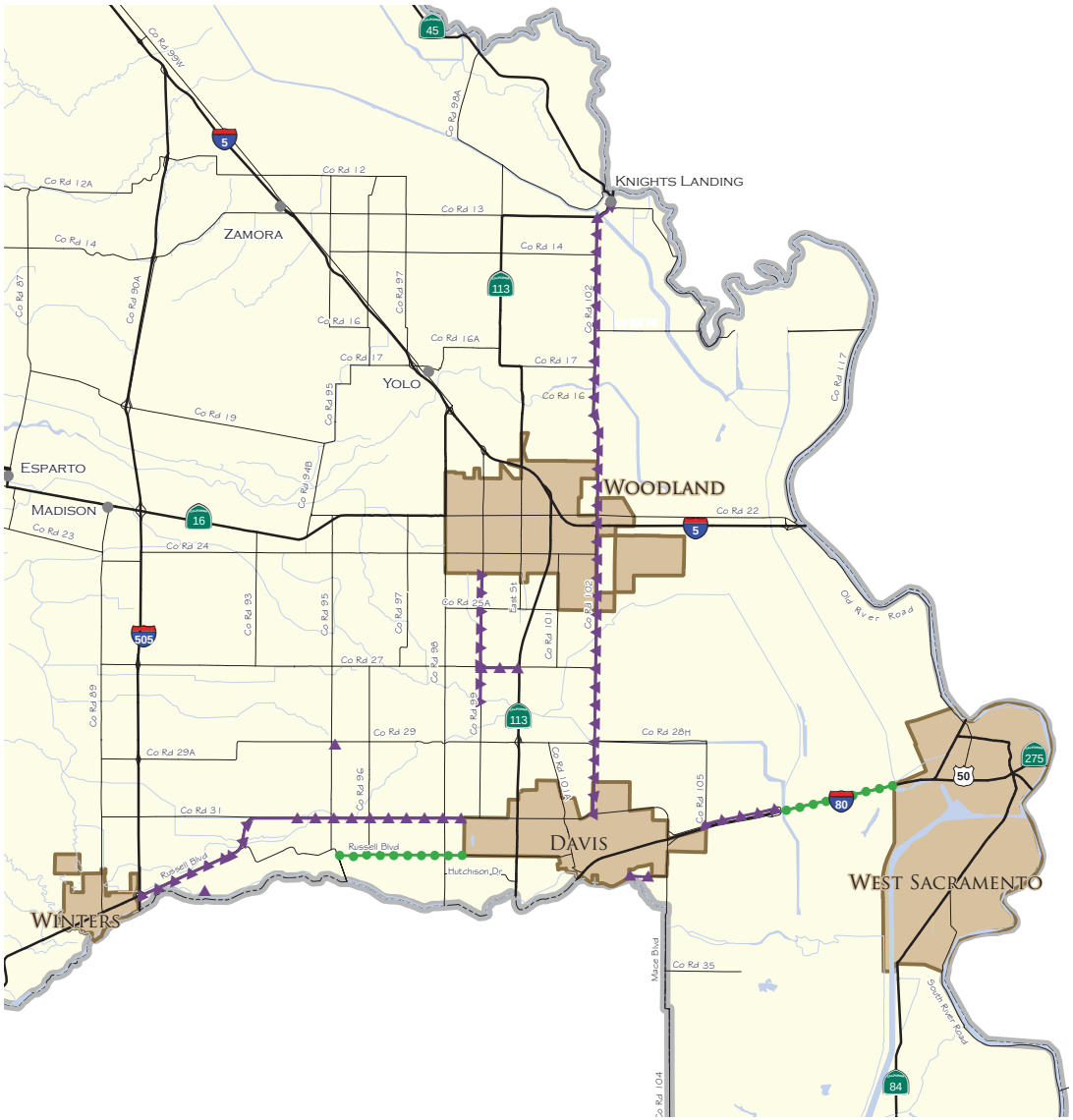

LEGEND

- Incorporated Cities
- Yolo County Line

Bikeways

- Existing Class I Path
- Existing Class II Lane

Source: *County of Yolo Bicycle Transportation Plan* (Yolo County Transportation Advisory Commitee, December 2006)

Note: Not field verified

LSA

NOT TO SCALE

FIGURE IV.C-8

Yolo County 2030 Countywide General Plan EIR

Existing Bikeway Facilities

SOURCE: FEHR & PEERS, 2009.

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the CCJPA along with the partners who help deliver the Capitol Corridor service, that include Amtrak, Union Pacific Railroad, and Caltrans. Between 1998 and 2003, ridership has increased 146 percent to approximately 1.14 million riders, and revenue has more than doubled to $12.8 million. In 2003, service was expanded by 33 percent on weekdays for a total of 24 daily trips between Sacramento and Oakland/San Francisco.

(5) Rail/Highway Freight. Yolo County is served by three freight railways including Union Pacific Railroad, Sierra Northern Railroad, and California Northern (Figure IV.C-9). Union Pacific Railroad serves 23 states in the western two-thirds of the United States. Transported commodities include chemicals, coal, food and food products, truck trailers and containers, forest products, grain and grain products, metals and minerals, and automobiles and parts. In Yolo County, the Union Pacific operates a railroad line connecting Davis to West Sacramento and provides services within the Port of Sacramento.

The Sierra Northern Railroad operates a railroad line that runs from West Sacramento to Woodland (approximately 16 miles long) known as the Sacramento River Train. The company primarily transports agriculturally related freight products, most of which originates or terminates outside of California. Passenger excursions are also provided from May to October.

California Northern operates 254 miles of track within California linking freight customers in Northern California with the Union Pacific Railroad. The company operates a 110-mile-long railroad line that runs from the City of Davis in Yolo County to the town of Tehama near Red Bluff. Transported goods include lumber, wine, beer, food products, agricultural products, steel pipe, manufactured goods, and construction materials.

All state and national highways within Yolo County have been designated as truck routes by Caltrans (see Figure IV.C-9). All Interstates and some roadway segments of the state highways are included in the National Network for Service Transportation Assistance Act of 1982 (STAA). Trucks are defined as heavy freight vehicles that meet the STAA definitions as found in the California State Vehicles Code. Roadway segments of SR 16, SR 128, SR 45, and SR 84 are part of the California Legal Network, which limits larger trucks allowed under the STAA network. No County roadways within the unincorporated parts of Yolo County are designated as truck routes.

(6) Port of West Sacramento. The Port of Sacramento is located in West Sacramento in the southeast part of Yolo County (see Figure IV.C-9). The Sacramento-Yolo Port District Commission includes representatives from the City of West Sacramento and Yolo County. Facilities and terminals located at the port include five docking bays (each 600 feet long), a Union Pacific rail yard that services the port, and commodity handling facilities, including bulk rice and bulk grain elevators, bulk commodities bagging facility, and dry bulk cargo warehousing. The port reported a total of approximately 736 thousand tons transported for the 2004 fiscal year compared to approximately 855 thousand tons in 2003.

San Francisco Bay is located approximately 79 nautical miles southwest of the Port of Sacramento. Ship access to the port is provided from San Francisco Bay up the Sacramento River and through the Sacramento Deep Water Ship Channel, a 30-foot-deep human-made canal. This route provides a direct and unrestricted passage to the port.

(7) Aviation. Yolo County has four general aviation airports (Figure IV.C-9). The Yolo County Airport is owned and operated by the County. Watts-Woodland Airport and Borges-Clarksburg Airport are both privately owned, and the University Airport is owned and operated by UCD. The airports are used by local residents and visitors as well as government agencies, including UCD. A brief summary of physical and operational conditions at each airport is provided below and is based on data provided by http://www.airnav.com.

The Yolo County Airport, located southwest of the City of Woodland, is the largest airport in the County in terms of runway size. It has a single runway approximately 6,000 feet long and 100 feet wide. About 70 aircraft are based at the field. Ten of the aircraft are multi-engine, and three are jet airplanes. Aircraft operations average about 165 per day with 50 percent for transient general aviation, 50 percent for local general aviation, and less than 1 percent for air taxi purposes. The Yolo County Airport Master Plan was updated by P&D Consultants, Inc. in May 1998.

The Watts-Woodland Airport, located west of the City of Woodland, has a single runway (approximately 3,800 feet long and 60 feet wide). About 67 aircraft are based at the airport; 13 are multi-engine planes. Approximately 82 aircraft operations occur per day with 43 percent for transient general aviation, 43 percent for local general aviation, and 13 percent for air taxi purposes. The Watts-Woodland Airport Comprehensive Land Use Plan was developed by the Airport Land Use Commission in December 1988 and was amended in December 1992.

The Borges-Clarksburg Airport, located north of the town of Clarksburg, has a single runway approximately 2,300 feet long and 90 feet wide and 19 based aircraft, mostly single-engine planes. Approximately 57 aircraft operations occur per week with 33 percent for transient general aviation and 67 percent for local general aviation.

The University Airport, located west of the City of Davis, has a single runway approximately 1,200 feet long and 50 feet wide. A total of 62 aircraft are based at the airport, with most being single-engine planes. Approximately 67 aircraft operations occur per day with 41 percent for transient general aviation, 49 percent for general aviation, 10 percent for air taxi, and less than 1 percent for military purposes.

b. Regulatory Framework. Transportation policies, laws, and regulations that would apply to the General Plan Circulation Element are summarized below. This information provides a context for the impact discussion related to the plan's consistency with applicable regulatory conditions.

(1) State. Caltrans has completed transportation or route concept reports for a number of state freeways and highways in Yolo County. These reports identify long-range improvements for specific state freeway and highway corridors and establish the "concept," or desired, LOS for specific corridor segments. The reports also identify long-range improvements needed to bring an existing facility up to expected standards needed to adequately serve 20-year traffic forecasts. Additionally, the reports identify the ultimate design concept for conditions beyond the immediate 20-year design period. Yolo County freeways and highways that have concept reports are I-5, I-80, I-505, SR 16, SR 45, SR 84, SR 113, and SR 128. A limitation of these reports is that they do not consider funding availability.

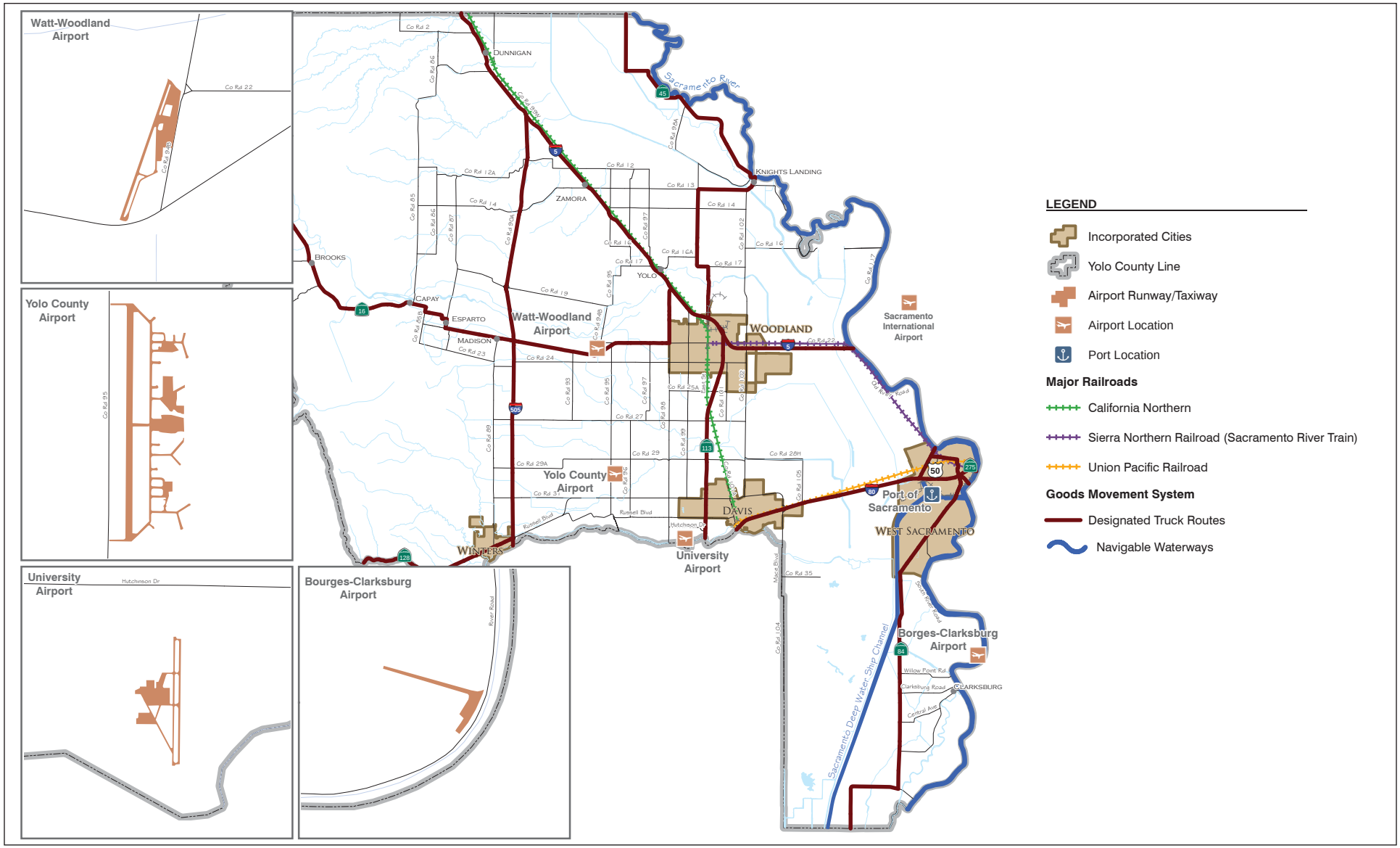

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FIGURE IV.C-9

Yolo County 2030 Countywide General Plan EIR

Existing Goods Movement and Aviation Facilities

SOURCE: FEHR & PEERS, 2009.

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The Interstate 5 Transportation Concept Report (Caltrans, April 1997) identifies the 20-year concept (through 2016) for the corridor as maintaining the existing four-lane freeway from the Yolo/ Sacramento County line to the Yolo/Colusa County line. The ultimate facility concept (beyond 2016) for the corridor is a six-lane freeway through Yolo County. Caltrans has established a concept LOS of D for I-5 through Yolo County. The concept report for I-5 is currently being updated.

The Interstate 80 Transportation Concept Report (Caltrans, January 2001) identifies the 20-year concept and ultimate facility for the corridor as widening the existing six lanes through Yolo County (including the Yolo Causeway) to include high occupancy vehicle lanes in both directions. The concept also includes increasing transit service and implementing traffic operation systems such as ramp metering and changeable message signs along the corridor. Caltrans has established a concept LOS of E for I-80 through Yolo County. In addition to the concept report, a Corridor System Management Plan (CSMP) is currently being developed for I-80, which is intended to provide for "the integrated management of travel modes and roadways to facilitate the efficient and effective mobility of people and goods within California's most congested transportation corridors." This document identifies the addition of HOV lanes between Mace Boulevard (in Davis) and Enterprise Drive (in West Sacramento) along I-80 in both directions.

The Interstate 505 Transportation Concept Report (Caltrans, June 2007) identifies the 20-year concept and ultimate facility for I-505 as maintaining the existing four-lane freeway. Caltrans has established a concept LOS of D for I-505.

The State Route 16 Transportation Concept Report (Caltrans, December 2004) identifies the 20-year concept and ultimate facility for SR 16 as maintaining the existing two-lane conventional highway with the addition of passing lanes, left-turn lanes, and bicycle facilities in some sections where feasible. Caltrans has established a concept LOS of C for SR 16 between the Yolo/Colusa County line and Mossy Creek Bridge (located north of the Town of Brooks) and LOS D from Mossy Creek Bridge to I-5. The concept report also identifies the need for a traffic signal at the SR 16/County Road 89 intersection within the community of Madison. Caltrans has also prepared the State Route 16 Safety Improvement Project Draft Environmental Impact Report/Environmental Assessment (December 2005) that identifies safety improvements for SR 16 from near the town of Brooks to I-505 (excluding the towns of Capay and Esparto). The project would generally provide 12-foot wide lanes, 8-foot wide shoulders, and left-turn lanes at appropriate locations. The Safety Improvement Project is not anticipated to provide capacity-enhancing improvements.

The Route Concept Report, State Route 45 (Caltrans, March 1990) contains the 20-year improvement concept for SR 45. Through Yolo County, the concept LOS is D. The concept and ultimate facility would maintain the existing two-lane roadway.

The Draft State Route 84 Transportation Concept Report (Caltrans, July 2005) contains the 20-year improvement concept for SR 84 through year 2024. SR 84 is a two-lane conventional highway extending 15.7 miles south from the City of West Sacramento limits to the Solano County line. The concept LOS is B, and no improvements other than routine maintenance are planned for this route.

The State Route 113 Transportation Concept Report (Caltrans, May 2000) contains the 20-year improvement concept for SR113. The concept facility for the section between I-80 and I-5 is to maintain the existing four-lane freeway, with the ultimate facility identified as a six-lane freeway.

The concept and ultimate facility for the section between I-5 and the Yolo/Sutter County line is to maintain the existing two-lane conventional highway. The concept LOS is E for SR 113 through Yolo County.

The State Route 128 Transportation Concept Report (Caltrans, January 2001) contains the 20-year improvement concept for SR 128. Through Yolo County, the concept LOS is E. The concept and ultimate facility would maintain the existing two-lane conventional highway status. The concept report acknowledges the mountainous terrain and high cost of widening that limit potential improvements.

(2) Regional. SACOG is responsible for regional transportation planning in Yolo County. The Draft Final Metropolitan Transportation Plan for 2035 (MTP2035) (SACOG, March 2008) is a federally mandated long-range fiscally constrained transportation plan for the six-County area that includes El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba counties.

Most of this area is designated a federal non-attainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties and agencies must be consistent with the MTP. A project is considered consistent if it is contained in the MTP and is included in the computer modeling of transportation and air quality impacts by SACOG. In addition, any regionally significant transportation project planned for a city or County must be included in the MTP because of its potential effect on travel demand and air pollution. The SACOG Board of Directors approved the Draft Final MTP2035 on March 20, 2008.

The 2007/09 Metropolitan Transportation Improvement Program (MTIP) (SACOG 2006) is a list of transportation projects and programs to be funded and implemented over the three-year period. SACOG submits this document to Caltrans and amends the program on a quarterly cycle. The MTIP and its amendments are subject to air quality conformity analysis under federal regulations, which limits the use of federal funds for regionally significant, capacity-increasing roadway projects.

The *Yolo County Congestion Management Program (Revised March 1996)* identifies in Figure 1 of the document a list of LOS thresholds for major roadway segments. The segments are arranged according to jurisdiction and the LOS threshold varies.

The Yolo County CMP was most recently updated by YCTD in March 1996. Congestion management plans were one of the key requirements of voter approved transportation funding in June 1990. The purpose of these plans is to improve the planning and decision-making relationship between land use, transportation, and air quality. Under this purpose, the Yolo County CMP sets LOS standards for roadway operations and transit operations in the County. The applicable LOS standards for this EIR are presented in Appendices A and B.

YCTD is currently in the process of updating the Yolo County CMP. The update will include revisions to the LOS standards and more emphasis on the concept of “complete streets”. The CMP has provided the opportunity for YCTD to work with jurisdictions in Yolo County to obtain both federal and local development funding toward roadway and transit improvements.

(3) Local. The *Yolo County Bicycle Transportation Plan* (December 2006) contains a system of existing and planned bikeway facilities to provide for transportation and recreational bicycle travel. Nine specific policies were developed to accomplish the following overall goal:

> Page 2 It is the goal of Yolo County to provide for and encourage the development of an integrated system of bikeway facilities. These facilities would provide for safe and convenient travel for bicyclists throughout the County. The County recognizes the benefits of improved air quality, improved energy efficiency, reduced traffic congestion, and improved personal fitness that can be realized by encouraging bicycle travel for transportation and recreation.

2. Draft 2030 Countywide General Plan for Yolo County

The following is a list of relevant Draft General Plan policies and actions related to transportation and circulation.

Land Use and Community Character Element

- Policy CC-2.10: Strive to achieve a minimum jobs/housing balance of 1.2 jobs for every dwelling unit on average within each unincorporated community.
- Policy CC-3.3: Ensure that jobs are created concurrent with housing. Include requirements to ensure a reasonable ongoing balance between housing and jobs and/or other mechanisms to constrain housing to stay balanced with job creation through build-out of the area. Each phase of housing shall be required to be accompanied by balanced job-generating development. Strive to match overall wages to home prices.
- Policy CC-3.4: Encourage developers to show significant net benefit to the community, after accounting for all mandated capital and operational costs, including but not limited to the items listed in Table LU-10 (Community Planning Guidelines) to provide minimum quality of life services and sustainability standards.
- Policy CC-3.5: In addition to Table LU-10, achieve the following within the Dunnigan Specific Plan growth boundary:
  - A. Ensure the creation of a centrally located downtown area through the community planning process.
  - B. Locate housing away from Interstate 5 and connect new residential neighborhoods to the Hardwood Subdivision. Smaller lots and higher densities shall be located on the valley floor, while larger lots and lower densities shall be located in the poorer hill soils. Schools should be centrally located.
  - C. Concentrate commercial and industrial uses between Interstate 5 and County Road 99W.
  - D. Continue to concentrate new commercial trucking uses at the County Road 8 and Interstate 5 interchange.
  - E. Plan future land uses to direct the majority of new trips onto the County Road 6/Interstate 5 interchange, instead of the County Road 8/Interstate 5 interchange. This works to buffer the interchange of Interstates 5 and 505, keeps dense and intense land uses close to the existing downtown and makes the most efficient use of transportation infrastructure funds, since the County Road 6 interchange will require improvements regardless of the mix of land uses planned for Dunnigan.
  - F. Avoid biological impacts to sensitive species and habitats, to the greatest feasible extent and fully mitigated where they occur, particularly inside designated critical habitat for the California tiger salamander.
  - G. Preserve the Tehama-Colusa Canal as Dunnigan's western boundary and as an important source of future water. Plan for development outside of the federal-designated critical habitat for the California tiger salamander, located to the northwest. Maintain Bird Creek as Dunnigan's southern boundary and

as an important riparian habitat and open space area. Maintain the County Road 99W (railroad tracks) as the eastern boundary, with the exception of Old Town.

H. Develop an internal road system that directs local trips to local roadways, rather than the freeways, to the greatest practical extent.

I. Reserve locations for future rail stations to promote rail connectivity to other cities.

- Policy CC-3.9: In addition to Table LU-10, achieve the following within the Madison Specific Plan growth boundary:

  A. Policies to ensure the creation of a downtown area will be required.

  B. The sewer ponds shall be moved and improved.

  C. Workforce housing shall be the focus of the residential development.

  D. Storm drainage impacts affecting the entire growth area shall be resolved. To address some of the existing needs in the community, infrastructure (drainage, sewer and water) service and facilities could benefit from a cooperative arrangement between the Madison and Esparto County Service Districts. Additional infrastructure improvements are to be gained through development agreements with recommended highway commercial development.

  F. Existing conditions in this community are not acceptable. New development shall not proceed until, at minimum, the items in Table LU-10 have been addressed (or are reasonably expected to be addressed by the time such development is completed).

- Policy CC-3.11: Achieve the following within the Elkhorn Specific Plan growth boundaries:

  A. The goal for this location is a regional conference center and hotel facility, with appropriate general commercial development and industrial research and development uses, capitalizing on the existing natural amenities and riverfront.

  B. The Specific Plan shall emphasize aesthetic standards that recognize the importance of this site as the "visual gateway" to Yolo County along Interstate 5.

  C. The property shall be required to buildout from north to south. New construction and/or development shall be consistent with this General Plan, including but not limited to: satisfaction of levels of service for public services and facilities, protection of biological resources, protection against unreasonable geotechnical risk and/or exposure to hazards, exposure to noise, fiscally beneficial to the general fund, net public benefit, sustainable design, architectural excellence, jobs/housing balance and match, flood protection, water supply, sewer/septic service and protection of significant visual and/or aesthetic features.

- Policy CC-4.38: Each community shall have a "town center" where the public has access to meeting and event space (e.g., school, library, fire department, community center, social organization, etc.).

Circulation Element

- Policy CI-3.1: Maintain Level of Service (LOS) C or better for roadways and intersections in the unincorporated County. In no case shall land use be approved that would either result in worse than LOS C conditions, or require additional improvements to maintain the required level of service, except as specified below. The intent of this policy is to consider level of service as a limit on the capacity of the County's roadways.

  - Interstate 5 (County Road 6 to Interstate 505) – LOS D is acceptable, assuming that one additional auxiliary lane is constructed in each direction through this segment. The County will secure a fair share towards these improvements from planned development.

- Interstate 5 (Interstate 505 to Woodland City Limit) – LOS D is acceptable.
- Interstate 5 (Woodland City Limit to Sacramento County Line) – LOS F is acceptable. The County will secure a fair share towards intersection improvements from planned development at the Elkhorn site.
- Interstate 80 (Davis City Limit to West Sacramento City Limit) – LOS F is acceptable.
- State Route 16 (County Road 78 to County Road 85B) – LOS D is acceptable.
- State Route 16 (County Road 85B to County Road 21A) – LOS E is acceptable.
- State Route 16 (County Road 21A to Interstate 505) – LOS D is acceptable, assuming that this segment is widened to four lanes with intersection improvements appropriate for an arterial roadway. The County will secure a fair share towards these improvements from planned development. Caltrans and the Rumsey Band of Wintun Indians shall be encouraged to establish a funding mechanism to pay the remainder.
- State Route 16 (Interstate 505 to County Road 98) – LOS D is acceptable, assuming that passing lanes and appropriate intersection improvements are constructed. The County will secure a fair share towards these improvements from planned development. Caltrans and the Rumsey Band of Wintun Indians shall be encouraged to establish a funding mechanism to pay the remainder.
- State Route 113 (Sutter County Line to County Road 102) – LOS F is acceptable.
- State Route 113 (County Road 102 to Woodland City Limits) – LOS D is acceptable.
- State Route 128 (Interstate 505 to Napa County Line) – LOS D is acceptable.
- Old River Road (Interstate 5 to West Sacramento City limits) – LOS D is acceptable.
- South River Road (West Sacramento City Limit to the Freeport Bridge) – LOS D is acceptable.
- County Road 6 (County Road 99W to the Tehama Colusa Canal) – LOS D is acceptable, assuming this segment is widened to four lanes. The County will secure a fair share towards these improvements from planned development.
- County Road 32A (County Road 105 to Interstate 80) – LOS D is acceptable.
- County Road 99W (County Road 2 to County Road 8) – LOS D is acceptable, assuming that this segment is widened to four lanes. The County will secure a fair share towards these improvements from planned development.
- County Road 102 (County Road 13 to County Road 17) – LOS D is acceptable, assuming that passing lanes and appropriate intersection improvements are constructed. The County will secure a fair share towards these improvements from planned development.
- County Road 102 (County Road 17 to the Woodland City Limit) - LOS E is acceptable, assuming that passing lanes and appropriate intersection improvements are constructed. The County will secure a fair share towards these improvements from planned development.
- County Road 102 (Woodland City Limit to Davis City Limit) – LOS D is acceptable.

Additional exceptions to this policy may be allowed by the Board of Supervisors on a case-by-case basis, where reducing the level of service would result in a clear public benefit. Such circumstances may include, but are not limited to, the following:

- Preserving agriculture or open space land;
- Enhancing the agricultural economy;

  - Preserving scenic roadways/highways;
  - Preserving the rural character of the County;
  - Avoiding adverse impacts to alternative transportation modes;
  - Avoiding growth inducement; or
  - Preserving downtown community environments.

- Policy CI-3.3: A) Consider the following objectives when making decisions to expand or modify the State highway system in Yolo County:
  - Minimize impacts to the environment.
  - Minimize increases in greenhouse gases and air pollutants.
  - Minimize increases in VMT.
  - Minimize long-distance commute trips.
  - Fully utilize existing capacity while maintaining stable flows and speeds.
  - Provide facilities for all users including pedestrians, bicyclists, carpool users and transit riders.

  B) Consider the following objectives when making decisions to expand the County road system in Yolo County:
  - Minimize impacts to the environment.
  - Promote designs that result in a decrease of greenhouse gases and air pollutants.
  - Promote designs that decrease Vehicle Miles Traveled (VMT) and long-distance commute trips.
  - Fully utilize existing capacity in accordance with adopted Levels of Service.
  - Provide facilities for all users including pedestrians, bicyclists, carpool users and transit riders, where appropriate.
- Policy CI-3.6: Incorporate the concept of "complete" streets which requires more complete consideration of all users of the street. Develop roadway cross-sections for community and rural areas, addressing the following factors as applicable: number of travel lanes, lane width, medians, drainage control, shoulder width, parking lanes, bike lanes, fire and emergency response standards, curb and gutter design, landscaped strip and sidewalk width. In general it is intended that roadway cross-sections in the County be as narrow as possible (particularly in community areas) while still meeting recommended safety standards, the requirements of the General Plan, and the needs of users.
- Policy CI-3.10: Upgrade the existing County road system to be consistent with current County design standards (such as horizontal curvature, site distance, etc.) as transportation funding allows. Roadways that require design improvements to accommodate projected future traffic, as identified in Table CI-1, shall have the highest priority to be upgraded. Safety shall be a key factor in prioritizing specific projects.

  These roadways also represent targeted trucking corridors for agricultural ("farm-to-market") transport and other goods movement. By attracting truck trips to these corridors, other roadways throughout the County are more available for movement of agricultural equipment and farm workers thus supporting more efficient and safe agricultural operations countywide.

  Exceptions to design standards may be allowed where circumstances warrant special treatment of the roadway including, but not limited to, the following:
  - Extraordinary construction costs due to terrain, roadside development, or unusual right-of-way needs.

  - Environmental constraints that may otherwise preclude road improvement to the adopted standards.
  - Exceptions to the level of service policy specified in Policy CI-3.1.
- Policy CI-3.11: Require new development to finance and construct all off-site circulation improvements necessary to mitigate a project's transportation impacts (including public transit, pedestrian and bicycle mobility, safety and level of service-related impacts).
- Policy CI-3.12: Collect the fair share cost of all feasible transportation improvements necessary to reduce the severity of cumulative transportation impacts (including public transit, pedestrian and bicycle mobility, safety and level of service-related impacts).
- Policy CI-9.3: Protect airports from incompatible features, such as height obstructions (including trees that extend into the safety clearance area) and safety impediments (such proximate concentrations of waterfowl).
- Policy CI-10.1: Ensure that the levee improvements made to implement State law or policy address the continued maintenance and improvement of South River Road.
- Policy CI-10.2: Work with West Sacramento to re-use the abandoned railroad that extends from the city limits to Clarksburg for the proposed California Delta Trail System.
- Action CI-A3: Update the Bicycle Transportation Plan, including the California Delta Trail, a dedicated multi-purpose bikeway between Woodland and Davis, and other potential routes along levees, abandoned railroads, waterways, transmission right-of-ways and willing landowners. (Policy CI-5.1, Policy CI-5.2, Policy CI-5.6, Policy CI-5.11, Policy CI-5.15)
- Action CI-A6: Develop a transit plan as a part of each Specific Plan. Condition future development to provide right-of-way or public easements for identified transportation and circulation facilities including bikeways, trails and transit facilities. The transit plan shall include future targets for public transportation ridership, levels of service and measurable steps to achieve the targets. Ensure implementation through the Dunnigan Specific Plan, and other applicable specific plans in each community. (Policy CI-2.1, Policy CI-2.2, Policy CI-2.3, Policy CI-5.1, Policy CI-5.5, Policy CI-5.6, Policy CI-5.8, Policy CI-5.11, Policy CI-5.12, Policy CI-5.14, Policy CI-5.15, Policy CI-6.1, Policy CI-6.2, Policy CI-6.5, Policy CI-6.9, Policy CI-6.11)
- Action CI-A11: Review airport Comprehensive Land Use Plan (CLUP) updates for consistency with the General Plan text and land uses. (Policy CI-9.3)
- Action CI-A12: Submit planned County transportation improvements to SACOG for consideration in subsequent updates of the MTP and MTIP. (Policy CI-1.4)
- Action CI-A13: Work with Caltrans and the Rumsey Band of Wintun Indians to fund necessary improvements to State Route 16 that would maintain the identified Levels of Service for each roadway segment. (Policy CI-3.1)

The Circulation Element identifies the following planned roadway capacity expansion projects needed to accommodate the anticipated land use through 2030 based on the LOS thresholds and other policies of the Draft General Plan.

- County Road 6 – Widen to a four-lane arterial between County Road 99W and the Tehama Colusa Canal.
- County Road 21A – Upgrade to a major two-lane County road standard between County Road 85B and State Route 16.
- County Road 85B – Upgrade to a major two-lane County road standard between State Route 16 and County Road 21A.
- County Road 99W – Widen to a four-lane arterial between County Road 2 and County Road 8.

- Interstate 5 – Widen to provide freeway auxiliary lanes in both directions between County Road 6 and Interstate 505.
- State Route 16 – Widen to a four-lane arterial between County Road 21A and Interstate 505.

The following roadways were identified as needing spot improvements for portions of the identified segment including but not limited to intersection control and lane configuration improvements, passing lanes and/or wider travel lanes and shoulders:

- County Road 89 between State Route 16 and County Road 29A.
- County Road 102 between County Road 13 and Woodland City Limit.
- County Road 102 between Woodland City Limit and Davis City Limit.
- State Route 16 between County Road 78 and County Road 85B.
- State Route 16 between Interstate 505 and County Road 98.

3. Impacts and Mitigation Measures

This section describes the transportation analysis of the Draft General Plan and identifies potential impacts and mitigation measures that would be associated with the adoption of the Draft General Plan. Quantitative roadway impact analysis was conducted for 2030 conditions. A discussion of the transportation analysis methodology is included below, followed by the significance criteria, impact statements, and mitigation measures.

a. Transportation Analysis Methodology. The transportation analysis for the roadway system followed the methodology described below. For other components of the transportation system, the policy framework and implementation program for the Draft General Plan were evaluated against the significance criteria.

A modified version of SACOG's regional SACMET travel demand forecasting (TDF) model was used to forecast future traffic volumes for the Yolo County Draft General Plan. The modifications were specific to Yolo County to ensure that the model accurately estimated traffic volumes and could be used in the analysis process to determine the number of lanes for major roadway segments based on anticipated future population and employment growth. Appendix C includes detailed documentation of the transportation modeling and analysis steps including a detailed summary of the model validation. The following provides a summary of the overall process.

Land use inputs for the SACMET model were developed with County staff based on the land use contained in the *County of Yolo Revised Draft 2030 Countywide General Plan* (January 20, 2009). This version of the SACMET model includes the four Counties of El Dorado, Sacramento, Placer, and Yolo. For the incorporated cities in Yolo County and counties outside of Yolo County, the land use estimates developed by SACOG were used. The modeling also included the planned Cache Creek Casino expansion as described in the *Cache Creek Destination Resort Project Final TEIR (AES, September 2008)*. The 2030 land use for unincorporated Yolo County was developed based on typical SACMET input assumptions and was allocated to traffic analysis zones (TAZs). A map of the SACMET TAZs in Yolo County is contained in Appendix C. The TAZs are geographic polygons used to organize land use input data for the TDF model. The TAZs are defined by natural borders such as roads, waterways, and topography and typically represent areas of homogenous travel behavior.

Appendix C includes the SACMET base year validation results for a.m. and p.m. peak hour conditions.

The land use forecasts for 2030 were input to the modified SACMET TDF model, and the model was run to generate a.m. and p.m. peak hour traffic volume forecasts. The modified SACMET TDF model was initially run using the existing roadway network to identify potential roadway segment deficiencies based on the LOS capacity thresholds shown in Table IV.C-1 and the 1983 General Plan policy threshold of LOS "C" on all County roadways.

Mitigation testing was performed through an iterative process where LOS deficiencies are eliminated by expanding roadway network capacity in the TDF model. The goal of the iterative process is to identify mitigation actions that eliminate identified LOS deficiencies resulting in a list of potential roadway capacity expansion projects for the Draft General Plan. In some cases, eliminating LOS deficiencies was not possible or desirable because the physical roadway expansion necessary to provide an acceptable LOS were considered infeasible because of constraints such as terrain, sensitive habitat, cultural resources, and right-of-way. For these locations, the LOS policy (Policy CI-3.1) in the 2030 Draft General Plan was modified to allow a lower LOS.

b. Significance Criteria. Implementation of the Draft General Plan would have a significant impact on transportation and circulation if it causes any of the following outcomes:

- Result in increased vehicle miles of travel (VMT)
- Result in traffic operations below LOS C for Yolo County roadways, which is minimum acceptable threshold according to the 1983 General Plan
- Result in traffic operations below the minimum acceptable thresholds on roadways outside Yolo County's jurisdiction (i.e., Caltrans, the Yolo County CMA, and the incorporated cities of Davis, West Sacramento, Winters, and Woodland)
- Create demand for public transit unable to be met by planned services and facilities
- Disrupt existing, or interfere with planned, transit services or facilities
- Disrupt existing, or interfere with planned, bicycle or pedestrian facilities
- Result in transportation network changes that would prevent the efficient movement of agricultural vehicles within the County or transport vehicles traveling to and from the Port of Sacramento
- Result in a change in air traffic patterns, including an increase in traffic levels or a change in location that results in substantial safety risks
- Create additional vehicle, bicycle, or pedestrian travel on roadways or other facilities that do not meet current County design standards
- Substantially conflict with applicable plans, policies and regulations of other agencies and jurisdictions where such conflict would result in an adverse physical change in the environment
- Result in new policies that would result in significant adverse physical impacts as compared to the 1983 General Plan policies

c. Impacts Analysis. The following section provides an evaluation and analysis for the potential impacts of the Draft General Plan for each of the criteria of significance listed above.

The results of the transportation analysis are described in this section for the Draft General Plan. For the roadway system, the results of the analysis include 2030 conditions with the circulation diagram improvements assumed in place.

For the transit, bicycle, pedestrian, goods movement, and aviation systems, the analysis was limited to a review of the General Plan policy framework and implementation program associated with the Draft General Plan. If a potential inconsistency was discovered, a significant impact was identified.

(1) Result in Increased Vehicle Miles of Travel. Transportation is a major contributor to greenhouse gas emissions. According to the US Environmental Protection Agency (EPA), the transportation sector was responsible for nearly 28 percent of all greenhouse gas (GHG) emissions in the United States in 2006[1] and in California transportation is responsible for about 38 percent of GHG emissions in 2004[2]. Transportation is the direct result of population and employment growth, which generates vehicle trips to move goods, provide public services, and connect people with work, school, shopping, and other activities.

While a number of factors influence daily trip making, the following variables are some of the most influential when it comes to how individuals travel:

- Income
- Age
- Household size
- Workers per household
- Autos available
- Access to transit
- Comfort and convenience of travel modes

Growth in travel (especially vehicle travel) is due in large part to urban development patterns (i.e., the built environment). Over the last half century, homes have been built further from workplaces, schools have been located further from neighborhoods they serve, and other destinations, including shopping, have been isolated from where people live and work. A significant portion of new development since World War II has been planned and built in a pattern that is dependent on the use of cars as the primary mode of travel. As a larger share of the built environment has become automobile dependent, vehicle trips and distances have increased, and walking and public transit use have declined. Population growth has been responsible for only a quarter of the increase in vehicle

[1] *Inventory of U.S. Greenhouse Gas Emissions And Sinks: 1990-2006*, Unites States Environmental Protection Agency, #430-R-08-005, April 2008.

[2] California Air Resources Board (CCARB). http://www.climatechange.ca.gov/inventory/index.html. September 2008.

travel over the last couple of decades. A larger share of the increase can be traced to the effects of a changing built environment, namely to longer trips and people driving alone[3].

A performance measure used to quantify the amount of travel is vehicle miles traveled (VMT). VMT is a useful performance measure, since the amount of travel and conditions under which the travel occurs directly relate to how much fuel vehicles burn.[4] One combusted gallon of gas from a vehicle is equal to approximately 24 pounds of carbon dioxide. Given today's average fuel mileage of vehicles (i.e., approximately 22 miles per gallon), one mile of travel equates to about one pound of carbon dioxide. As a result, increases in VMT directly cause increases in greenhouse gas emissions and air pollution.

VMT measurement has one primary limitation: it is not directly observed. Methods do not exist that can measure the trip distances of all vehicles on a given day. VMT is typically an output from travel demand models and is calculated based on the number of cars multiplied by the distance traveled by each car. As such, the VMT estimate is dependent on the level of detail in the network and other variables related to vehicle movement through the network. The volume and distance of traffic depends on land use types, density/intensity, and patterns as well as the supporting transportation system. Exhibit IV.C-1 shows the basic relationship between land use, trips, and their length. A travel demand model attempts to represent this relationship when forecasting vehicle trips and VMT.

Although the calculation of VMT is simply the number of cars multiplied by the distance traveled by each car, VMT performance measures can be reported differently. Following are some examples of how VMT is reported for a specific area, such as the unincorporated area of Yolo County:

- VMT per household – This performance measure is the total VMT generated by an area divided by the total households in the area. This estimate is simply a ratio and includes VMT generated by trips to work, shopping, and other activities that originate from households outside of the specific area that are not associated with households within the area.
- VMT generated per household – This performance measure includes VMT associated with all of the households in a specific area and does not include the VMT associated with vehicle trips to work, shopping, and other activities that originate from households outside of the specific area. This estimate also does not include VMT from commercial vehicle trips.

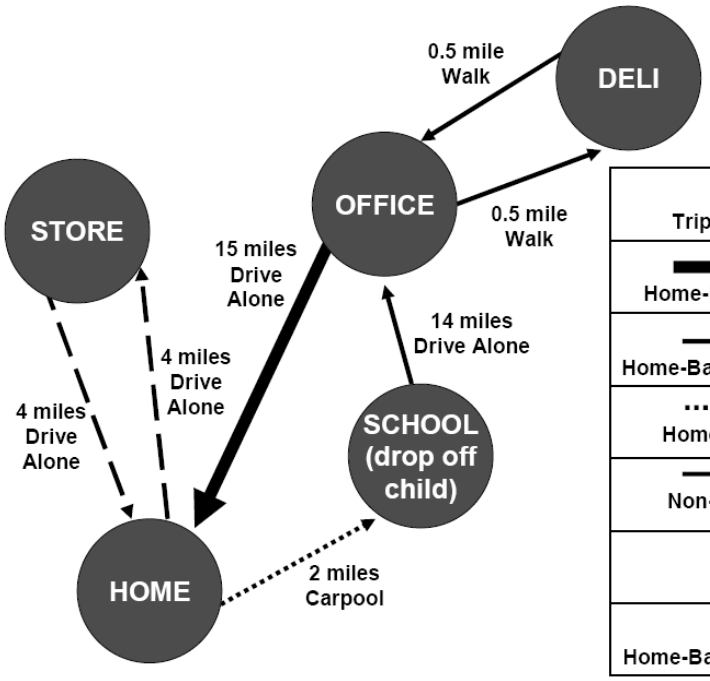
As shown in Exhibit IV.C-1, the VMT generated per household may include all trips associated with a household (i.e., all trip purposes) or only trips that begin or end at a household (i.e., only home-based trip purposes).

For the purposes of the VMT analysis for Yolo County, the performance measure of VMT generated per household for all trip purposes was used. This approach focuses on the VMT generated by new population growth and indirectly includes VMT related to employment and other non-residential growth. This approach was used since most new growth in the unincorporated areas of the County under the Draft General Plan would include communities with a balanced mix of residential and non-residential land uses. One notable exception is the planned development in Elkhorn, which includes

[3] "Growing Cooler: The Evidence on Urban Development and Climate Change" published by the Urban Land Institute, 2008.

[4] Conditions influencing the amount of fuel consumed per VMT include the speed of travel, congestion stops and starts, length of trip, layover between trips, and the vehicle type and fuel economy.

Exhibit IV.C-1: Mapping Vehicle Miles Traveled (VMT)



Trip Purpose	Vehicle Miles Traveled
Home-Based Work	15 miles
Home-Based Shopping	8 miles
Home-Based Other	2 miles
Non-Home-Based	14 miles
Total VMT for All Purposes	39 miles
Total VMT for Home-Based Purposes	25 miles

all employment growth and no new residential growth. For this area, a change to the Draft General Plan policy for the Elkhorn Specific Plan area is identified to include residential land use to support the workforce as part of the planned development under the mitigation measures.

To calculate the VMT for Yolo County, several options were considered, including the use of travel demand models as discussed below. As a starting point, the SACMET travel demand model was used to forecast VMT and other performance measures for base year (2005) and Draft General Plan conditions. The resulting VMT shown in Table IV.C-3 is based on all trips with an origin and/or destination in Yolo County (including the incorporated cities). This method of calculating VMT accounts for travel within the SACMET regional model[5] for trips with an origin or destination in both the unincorporated and incorporated areas of Yolo County; however, it does not include trips that have both an origin and destination outside of Yolo County, such as interstate truck traffic or tourists passing through the County.

[5] The SACMET regional model includes El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties.

Table IV.C-3: Regional Transportation Performance Measures for Entire Yolo County

Performance Measure[a]	Base Year (2005) Conditions		Draft General Plan	
	Entire County (Including Cities)[b]	Unincorporated Only[d]	Entire County (Including Cities)[b]	Unincorporated Only[d]
Households	68,907	6,900	110,060	20,958
Population	186,050	23,265	297,160	64,700
Employment	119,855	20,818	193,995	53,154
Daily Vehicle Trips	1,082,655	-	2,207,293	-
Daily VMT[c]	6,467,891	-	12,934,803	-

[a] Regional transportation performance measures based on all trips from Yolo County including unincorporated and incorporated areas.

[b] The household, population, and employment totals reported for the entire County are based on the SACMET model TAZ boundaries and not the County boundaries; therefore the totals may be different from what is reported for the County. Population estimates for the entire County calculated using the total households in SACMET model multiplied by 2.7 persons per household based on 2008 data from the State of California Department of Finance.

[c] VMT = Vehicle Miles Traveled (from both unincorporated and incorporated areas of Yolo County within SACMET model area).

[d] Household (assuming 5 percent vacancy rate of dwelling units), population, and employment information for unincorporated areas based on Revised Public Draft 2030 Countywide General Plan, January 20, 2009.

Source: Fehr & Peers, 2009.

As shown in Table IV.C-3, the daily VMT for the entire County (including unincorporated and incorporated areas) based on the SACMET model is projected to grow by 100 percent in the future. However, the unincorporated portion of the total population and employment in the County under the Draft General Plan is only 24 percent. Also useful to note is the countywide population and employment growth are only 60 percent, compared with the 100 percent increase in VMT. Much of the increase in VMT results from the 28 percent higher trip generation per person, in spite of the fact that VMT per trip declines about two percent[6]. Determining the percentage of VMT for only the unincorporated area is difficult due to the limitations of the travel demand model. Specific limitations of the travel demand model related to the calculation of VMT include the following:

- The structure of the travel demand model is set up so that land uses are represented by areas known as traffic analysis zones (TAZs). TAZs in the model overlap between the unincorporated areas and the incorporated cities, making it difficult to isolate the VMT associated with only the unincorporated area of the County.
- The model combines trips from both residential and non-residential land uses before assigning vehicle trips, which makes it difficult to determine the VMT associated with only the new residential population being added.
- The regional scale of the model and its limited sensitivity to built environment variables such as land use density and diversity can overstate vehicle trips and VMT for areas that follow "smart growth" land use patterns (i.e., compact, mixed-use, pedestrian accommodating communities).

The traditional use of travel demand models, such as the SACMET, is to identify the need for transportation network capacity expansion. However, as the limitations above state, traditional travel demand models are not fully sensitive to built environment variables. Research has been conducted to

[6] Based on the data in Table IV.C-3, the 2005 vehicle trips per capita is 5.82 (1,082,655 vehicle trips divided by the population of 186,050), while the 2030 vehicle trips per capita is 7.43 (2,207,293 vehicle trips divided by the population of 297,160). The 2005 VMT per vehicle trip is 5.97, while the 2030 VMT per vehicle trip is 5.86.

determine the change in VMT due to built environment variables, including density, diversity, design, and destination—the 4Ds. Each of these variables is described below:

- Density – residential and non-residential development per acre
- Diversity – mix of residential, retail, and employment land uses
- Design – connectivity and walkability of the transportation network
- Destination Accessibility – location relative to the major regional attractions

Applying the 4D variables as part of the planning process for smart growth areas would improve the accuracy of the VMT estimate and would likely result in reduced VMT compared to traditional methods. Considering this and the limitations of the travel demand model, the County sought an alternative method to estimate unincorporated Yolo County VMT. The new SACOG travel demand model, called SACSIM, was selected, which is a state of the art activity-based travel demand model. This new type of model simulates people and their activity patterns (i.e., why they travel) to estimate regional travel performance measures. In contrast, the traditional SACMET travel demand model uses land use data and trip generation rates to estimate regional performance measures. While both models produce similar performance measures, the SACSIM model includes greater detail that recognizes local factors, such as local street connectivity and mixing of land uses, which influences the availability of walking, bicycling, and transit choices to reduce VMT.

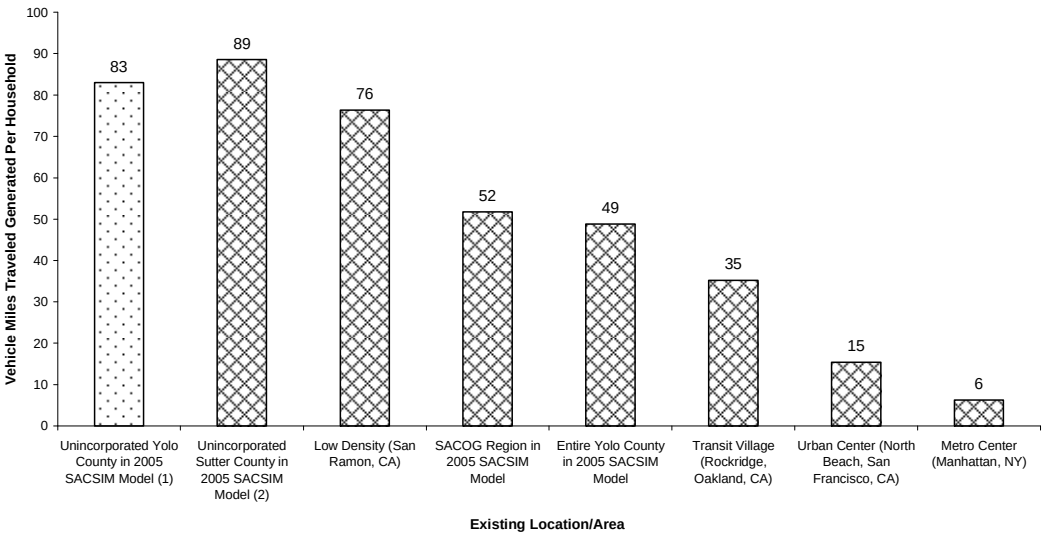
To provide a more complete picture of VMT generated by the Draft General Plan and to provide a better explanatory context, an independent estimate of VMT for the unincorporated area of Yolo County was developed based on empirical data and regional forecasts from SACOG's SACSIM model. Exhibit IV.C-2 shows the general relationship between VMT and land use patterns. The VMT generated per household reported includes all trips associated with a household (i.e., all trip purposes).

As shown in Exhibit IV.C-2, the VMT for the unincorporated area of Yolo County is estimated to be 83 miles generated per household per weekday under 2005 conditions. The unincorporated areas of Yolo County are rural and have limited services and employment for residents in each town and community. Given these conditions in the unincorporated areas, residents need to travel to the cities for work, shopping, recreation, and other services or activities. The unincorporated area of Sutter County has a similar rural environment, and, as a result, has a similar VMT generated per household as unincorporated Yolo County.

Other land use patterns that are more urban, such as Rockridge in Oakland and North Beach in San Francisco, have a lower VMT generated per household since these areas include complementary land uses that are in closer proximity, more opportunities for shorter trips that encourage walking and bicycling, and higher densities of development that support enhanced transit service.

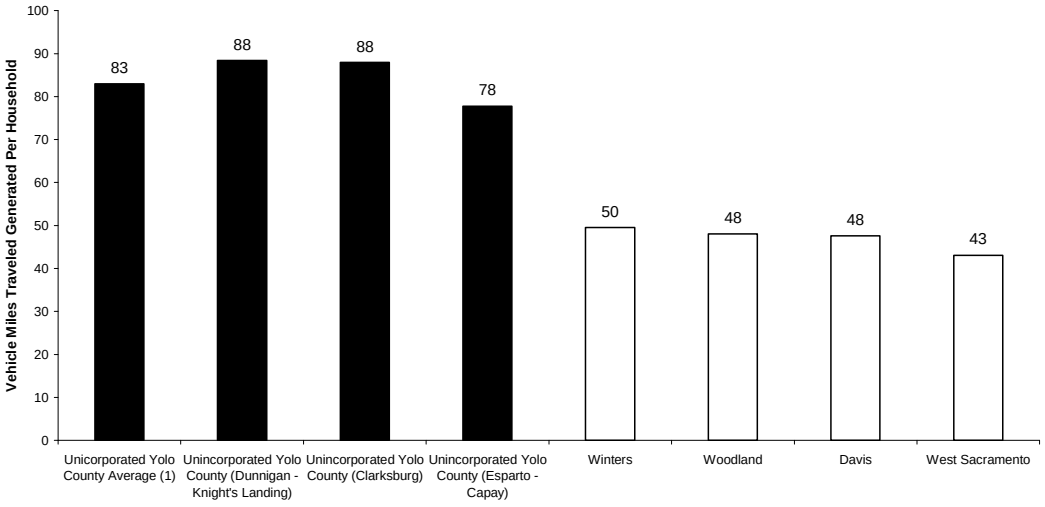
Exhibit IV.C-3 shows a more specific relationship of VMT estimates for rural (represented by the dark shading) versus urban (represented by the light shading) areas of Yolo County in 2005.

Exhibit IV.C-2: Comparison of Daily Vehicle Miles by Land Use Pattern



Notes: (1) Yolo County unincorporated area VMT calculated based on a weighted average of Dunnigan-Knight's Landing, Clarksburg, and Esparto-Capay regional analysis districts (RADs).
(2) Sutter County unincorporated area VMT calculated based on a weighted average of South Sutter, Meridian-Robbins, Sutter, and Tudor RADs.
Source: Data based on annual auto miles from presentation on *Density: Benefits, Concerns; The Community Decides* (Density & Equity Panel EcoCity World Summit 2008 San Francisco, 25 April, Dr. John Holtzclaw) and 2000 Census data for capita per household. SACOG data is based on RADs and estimated based on the SACSIM07 regional travel demand simulation model (SACOG, 2009).

Exhibit IV.C-3: 2005 Daily Vehicle Miles of Travel For Yolo County

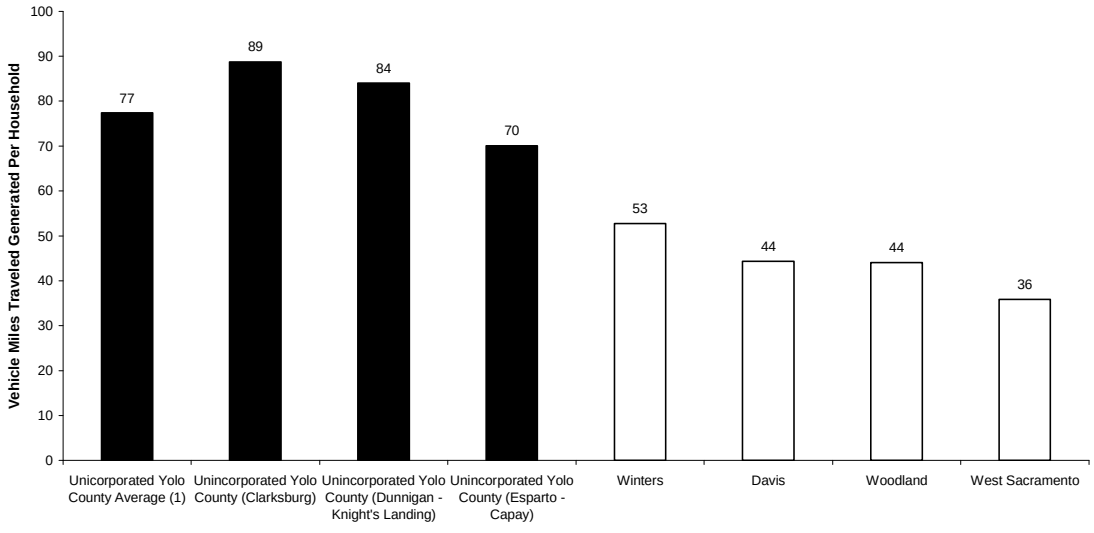


Notes: (1) Yolo County unincorporated area VMT calculated based on a weighted average of Dunnigan-Knight's Landing, Clarksburg, and Esparto-Capay regional analysis districts (RADs).
Source: SACOG, 2009. All SACOG data is based on RADs and estimated based on the SACSIM07 regional travel demand simulation model.

As shown in Exhibit IV.C-3, the unincorporated area (represented by the dark shading) has a substantially higher VMT generated per household than the incorporated city areas (represented by the light shading). The unincorporated areas include low density development, limited services and employment for residents, few opportunities for walking and biking trips, and infrequent transit service. As a result, a majority of trips from the unincorporated areas are by vehicle over long distances to the cities for work, shopping, recreation, and other services or activities. By comparison, the incorporated areas include higher density development in close proximity that promotes shorter trip lengths and walking, bicycling, and transit trips.

Exhibit IV.C-4 shows how VMT is projected to change assuming existing growth patterns with some influence due to increased emphasis on smart growth land use patterns occurring in the SACOG region for the unincorporated areas of the County in 2035. As shown, the average weekday VMT for the unincorporated areas, is estimated to decrease from 83 in 2005 to 77 in 2035. This is a result of some additional employment and services being provided in the unincorporated towns and communities. However, the VMT for the unincorporated areas, assuming the Draft General Plan is not implemented, is approximately 75 percent greater than the VMT generated per household for the Cities of Davis and Woodland.

Exhibit IV.C-4: 2035 Daily Vehicle Miles of Travel For Yolo County



Notes: (1) Yolo County unincorporated area VMT calculated based on a weighted average of Dunnigan-Knight's Landing, Clarksburg, and Esparto-Capay regional analysis districts (RADs).
Source: SACOG, 2009. All SACOG data is based on RADs and estimated based on the SACSIM07 regional travel demand simulation model.

The Draft General Plan includes policies that are intended to create sustainable towns and communities with housing, jobs, and services that are similar to other mature communities in the County. By creating full-service communities designed around sustainable principles, the Draft General Plan will help reduce VMT and greenhouse gas emissions, not just for new growth but for existing development as well. Instead of the estimated VMT of 77 miles generated per household per day for the unincorporated County by Year 2035, the Draft General Plan is expected to result in communities that can achieve much lower levels of VMT, similar to that of mature communities in the County such as the Cities of Davis and Woodland.

To illustrate how the Draft General Plan can achieve mature sustainable communities, the following provides a discussion related to each of the 4Ds. The potential reduction in VMT for each of the 4D variables is based on available research[7].

- Density of development plays a role in the VMT generated by a community. Based on available research, doubling of neighborhood density would be expected to result in approximately a five percent reduction in VMT. The target average density of residential development in the Specific Plan areas of the Draft General Plan is eight dwelling units per acre. The existing average residential density in the unincorporated communities is 1.6 dwelling units per acre[8]. Therefore, the higher densities in the Specific Plan areas (assuming non-residential densities are equally increased) could result in a 20 percent reduction in VMT[9].
- Diversity of residential, retail, and employment land uses can result in a five percent reduction in VMT with a doubling in the mix of uses compared to the regional average. Policies of the Draft General Plan require the Specific Plan areas to ensure that jobs are created concurrent with housing and that there is a match of overall wages to home prices (Policy CC-3.3). The Draft General Plan also establishes minimum quality of life services and sustainability standards for each Specific Plan area (Policy CC-3.4). As an example, the existing jobs to housing ratio in Dunnigan is 0.39, while the Draft General Plan includes a mix of land uses with a more balanced jobs to housing ratio of 1.3 with build-out of the Dunnigan Specific Plan area[10].
- Design of the transportation network can result in a three percent reduction in VMT with a doubling of street connectivity and walkability compared to the regional average. The Draft General Plan requires sustainable design standards as part of community planning in the unincorporated area, including maximum block lengths of 600 feet and incorporation of a grid street network that provides travel for all modes (Policy CC-2.16). Walkability will also be enhanced due to the relatively small footprints of the future growth areas in the Draft General Plan. As an example, the largest planned growth area, the Dunnigan Specific Plan, is one and a half miles by three miles.
- Destination accessibility can be defined by the travel time to regional activity centers for employment and shopping. Doubling of destination accessibility compared to the regional average can reduce VMT up to 20 percent. The policies of the Draft General Plan include

[7] R. Ewing and R. Cervero. "Travel and the Built Environment." *Transportation Research Board*, Vol. 1780, 2001, pp. 87-114.

[8] The existing residential density of 1.6 dwelling units per acre is based on existing (2007) dwelling units in the unincorporated communities of 4,333 (7,263 total dwelling units minus 2,930 dwelling units outside community areas) divided by the total estimated existing (2007) residential acres of 2,660.5 in the community areas.

[9] Residential density would increase by 400 percent, resulting in a 5 percent reduction for every 100 percent increase.

[10] The existing jobs to housing ratio of 0.39 is based on 133 existing jobs and 340 existing dwelling units. The Draft 2030 General Plan jobs to housing ratio of 1.3 is based on 11,333 estimated jobs and 8,621 estimated dwelling units.

creating town centers in each community (Policy CC-4.38) and ensuring that employment is provided concurrently with housing (Policy CC-3.3). Although some travel will likely occur to other major destinations, the policies of the Draft General Plan are intended to reduce the need for longer distance automotive travel.

The majority of planned growth in the Draft General Plan has been identified as Specific Plan areas including the communities of Dunnigan, Knights Landing, Madison, and Elkhorn. The Specific Plan process will allow the opportunity to refine and balance the planned land uses to maximize the reduction of VMT. The following impact and mitigation measure discussion includes a new VMT threshold policy that incorporates the 4D variables as part of the Specific Plan process.

Impact CI-1: Build-out of the Draft General Plan could result in increased vehicle miles of travel. (S)

The Draft General Plan includes new population and employment growth that will generate additional VMT, which will result in increased air pollutant and greenhouse gas emissions as well as additional energy consumption due to vehicle travel. The Draft General Plan includes policies that are expected to reduce the growth of VMT generated per household, but will not eliminate the growth in total VMT.

Based on the average VMT of 83 miles generated per household per weekday under 2005 conditions for the unincorporated area, the existing approximately 6,900 households (as shown in Table IV.C-3) generate 573,000 miles per day. Full service cities in Yolo County such as Davis and Woodland are estimated to have 44 VMT generated per household per weekday by 2035. With the new policies recommended under Mitigation Measure CI-1 below, new growth in Specific Plan areas would be planned and designed to achieve a maximum of 44 VMT generated per household per weekday under the Draft General Plan. As a result, the approximately 21,000 total households in the unincorporated area under the Draft General Plan (as shown in Table IV.C-3) are estimated to generate the following VMT:

- Based on the 44 VMT generated per household per weekday threshold for the Specific Plan communities of Dunnigan, Knights Landing, and Madison, the 10,631 households in the Specific Plan communities would generate 467,800 miles per day.
- Based on the average of 77 VMT generated per household per weekday for the remaining unincorporated areas outside of the Specific Plan communities (consistent with the SACSIM model estimate by 2035), the 10,327 households would generate 795,200 miles per day. The 77 VMT per household estimate may not capture the effect of some Draft General Plan policies such as striving for a minimum jobs/housing balance (Policy CC-2.10) and requiring sustainable design standards as appropriate, including maximum block lengths of 600 feet and incorporation of a grid street network that provides travel for all modes (Policy CC-2.16), in each unincorporated community. Therefore, the actual VMT generated from these areas could be lower.

The total VMT generated under the Draft General Plan for the unincorporated area is estimated to be approximately 1,263,000 miles per day (or a net increase of 690,000 miles per day compared to existing conditions). The resulting average unincorporated area VMT generated per household would be 60 miles per weekday, which represents a reduction of approximately 28 percent in VMT

generated per household compared to 2005 conditions. The estimated VMT under the Draft General Plan takes into account the reduction in existing household travel with more employment and services provided in each Specific Plan area.

To minimize VMT effects of the new growth in the Draft General Plan, a new policy is recommended to establish a maximum threshold of 44 VMT generated per household per weekday in the Specific Plan areas. This threshold is based on what is projected for the Cities of Woodland and Davis by 2035. While larger by comparison to the unincorporated growth areas, they include a land use pattern and transportation system representative of a mature and sustainable community similar to that anticipated in the Draft General Plan. In these communities, residents have multiple choices for travel, such as transit, bicycling, and walking, which is important to note since the VMT threshold is not intended to reduce personal mobility, but instead increase travel choices through both land use and transportation actions.

The SACSIM model estimates that SACOG's Preferred Blueprint Scenario, which is part of the Metropolitan Transportation Plan for 2035, would have an average VMT of 49 miles of travel generated per household per weekday in 2035 for the entire six-County region. Achieving a VMT of 44 miles generated per household per weekday for the unincorporated area Specific Plans of Yolo County by 2035 would be an improvement over the projected VMT generated per household estimated for the regional average under the Preferred Blueprint Scenario.

The Draft General Plan includes policies that focus on reducing VMT for the entire unincorporated area of the County. The proposed VMT threshold can help to reduce the VMT produced by the unincorporated area of the County but would be difficult to apply on a parcel-by-parcel basis versus an area-wide approach. Therefore, the VMT threshold is proposed to be applied to the Specific Plan areas where the majority of planned development would occur and where the proposed land uses can be refined and balanced to reduce VMT through the Specific Plan process. The following mitigation measure is recommended for the Specific Plan areas of the Draft General Plan:

> Mitigation Measure CI-1a: The Draft General Plan shall be amended to include the following new policy in the Circulation Element.
>
> Policy CI-#: The Dunnigan Specific Plan shall incorporate a maximum of 44 vehicle miles of travel (VMT) generated per household per weekday through implementation of all feasible actions including but not limited to specifications contained in Policies CC-3.3 through CC-3.6. As part of the specific plan implementation, the VMT performance shall be monitored at each phase. If VMT performance exceeds the threshold in this policy, then additional actions shall be implemented and may include, but are not limited to, the following types of actions:
>
> - Promote ride sharing programs by, for example, designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a Web site or message board for coordinating rides.

- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (*e.g.*, electric vehicle charging facilities and conveniently located alternative fueling stations).
- Increase the cost of driving and parking private vehicles by, for example, imposing parking fees.
- Build or fund a transportation center where various public transportation modes intersect.
- Provide shuttle service to public transit.
- Provide public transit incentives such as free or low-cost monthly transit passes.
- Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.
- Incorporate bicycle-friendly intersections into street design.
- For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, for example, locked bicycle storage or covered or indoor bicycle parking.
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
- Work with the school district to create and expand school bus services.
- Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.
- Provide education and information about public transportation.
- Consider unique transportation incentives such as free bikes, re-charging stations for electric vehicles, alternative fuel filling stations, plug-in hybrid car-sharing, and carpool concierge services.

Achievement of the VMT threshold shall be measured based on the build-out of the plan area phases using a travel demand forecasting model that is sensitive to built environment variables including but not limited to the 4Ds (density, diversity, design, and destination).

Mitigation Measure CI-1b: The Draft General Plan shall be amended to include the following new policy in the Circulation Element.

Policy CI-#: Other Specific Plan areas allowed under the Draft General Plan shall strive to achieve the VMT threshold of 44 miles generated per household per weekday to the extent feasible, using the same methods described above.

Reasonableness checks were performed for the Dunnigan Specific Plan area to determine if the threshold of 44 VMT generated per household could be achieved. Based on the long distance between the Dunnigan Specific Plan area and other regional attractions such as the City of Woodland, approximately 80 percent of trips would need to be internalized to achieve the VMT threshold unless a high level of carpool and transit use occurs for off site trips. Therefore, it is essential that the prescriptive policies in the Draft General Plan for the Specific Plan areas are implemented (Policies CC-3.3 through CC-3.13) to achieve the VMT threshold, especially matching jobs to housing in Policy CC-3.3. To further ensure that jobs are created concurrently with housing, the following mitigation measure is recommended:

> Mitigation Measure CI-1c: Implement Mitigation Measure LU-4c that amends Policy CC-3.3 in regards to achieving a jobs/housing balance in the Specific Plan areas.

The Elkhorn Specific Plan would not include residential development as part of the Draft General Plan. The following mitigation measure would ensure that land uses in the Elkhorn Specific Plan area accommodate workforce housing to reduce total VMT of the Specific Plan area. To further implement the VMT threshold identified in Mitigation Measure CI-1a, it is recommended that the Draft General Plan be amended to include the following new policies and changes to existing policies:

> Mitigation Measure CI-1d: Implement Mitigation Measure LU-4d that amends Policy CC-3.11 for the Elkhorn Specific Plan area.
>
> Mitigation Measure CI-1e: The Draft General Plan shall be amended to include the following new policy in the Circulation Element.
>
> Policy CI-#: Require Specific Plan areas to establish mode split goals for walking, bicycling, and transit trips in development of the required transit plan (per Action CI-A6) for each area. Bi-annual household surveys should be conducted to ensure identified model split goals are being achieved as the Specific Plan areas build out.
>
> While implementation of the policies and actions included in the Draft General Plan and the identified mitigation measures above would reduce VMT generated by new development, the Draft General Plan would still result in an increase in VMT. This impact would remain significant and unavoidable. (SU)

(2) Result in Increased Peak Hour Traffic Volumes. Figures IV.C-10 and IV.C-11 display the a.m. and p.m. roadway segment LOS for the Draft General Plan, respectively. Morning (a.m.) peak-hour LOS is reported for the freeway segments, while evening (p.m.) peak-hour LOS is reported for the major County roadway system. As discussed in the setting, the General Plan transportation analysis is based on the p.m. peak hour because it represents the highest hourly volume during a typical weekday. The one exception to exclusive use of the p.m. peak hour is for freeway segments. Freeways typically have high peaking of directional commuter traffic during the a.m. and p.m. peak hours. In some cases, the existing a.m. peak-hour volumes, which also occur on a regular basis, are higher than p.m. peak-hour volumes. Further, freeway segments are divided where improvements can be made to only one direction if desired. Therefore, analyzing the a.m. peak hour was considered necessary to identify potential freeway impacts that may occur only during this time period.

In some cases, the peak direction on freeway segments changed between existing and the Draft General Plan conditions. An example is Interstate 5 (County Road 102 to Sacramento County Line) and Interstate 80 (County Road 32A to U.S. 50) during the a.m. peak hour. In these cases the existing a.m. peak direction is away from downtown Sacramento but under the Draft General Plan the a.m. peak direction is towards Downtown Sacramento. Growth in traffic is occurring in both directions; however, traffic growth towards Downtown Sacramento is growing at a greater rate. A similar change in peak directionality occurs on Interstate 80 (County Road 32A to U.S. 50) during the p.m. peak hour.

Table IV.C-4 shows a comparison of the a.m. peak hour traffic volumes and LOS results for existing (2007) conditions and the Draft General Plan.

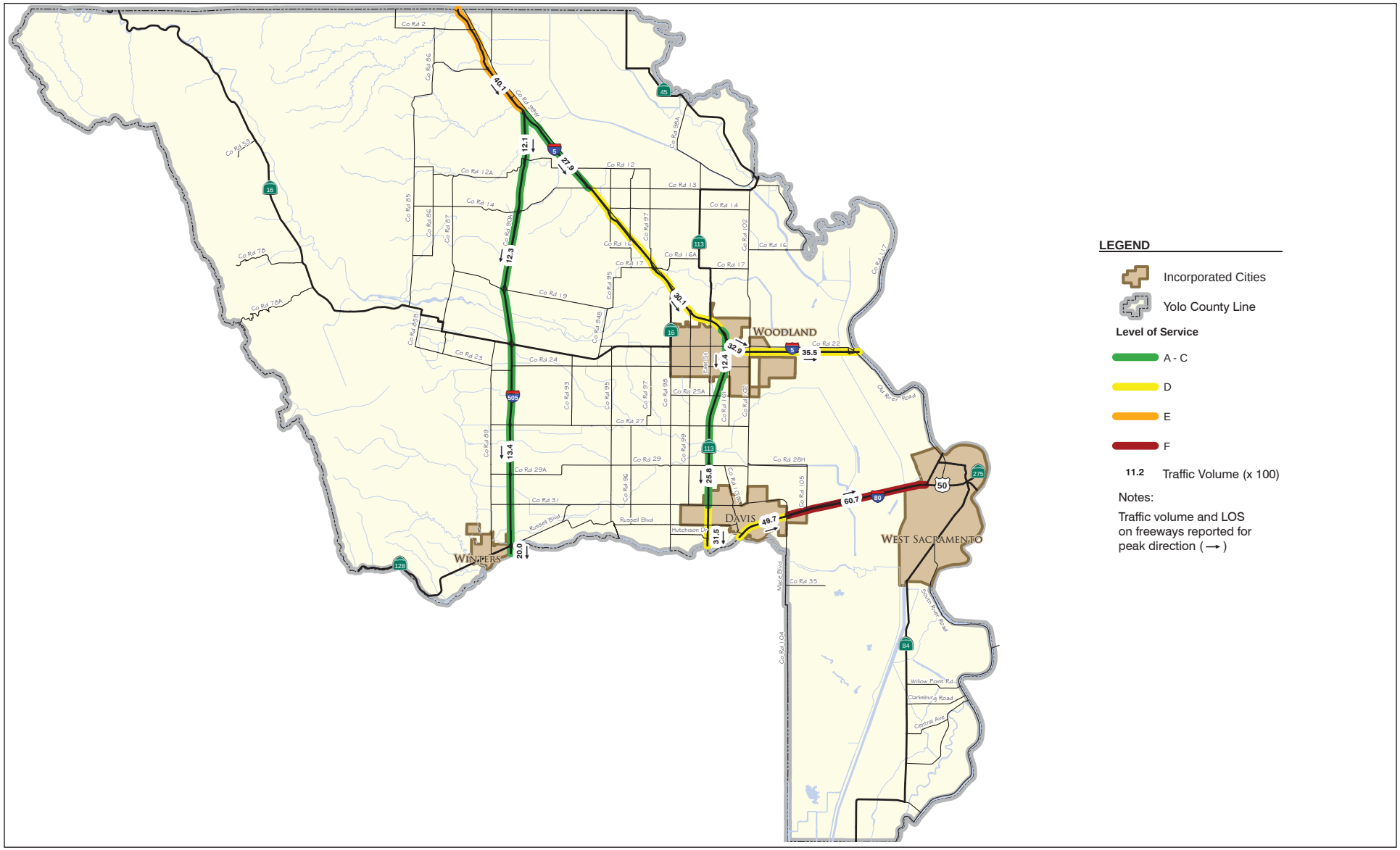
Table IV.C-5 shows a comparison of the p.m. peak hour traffic volumes and LOS results for existing (2007) conditions and the Draft General Plan.

Table IV.C-4: AM Peak Hour Traffic Forecasts and LOS

		Existing Conditions (2007)		Draft 2030 General Plan	
Roadway	**Segment**	**AM Peak Hour Volume**	**LOS [a]**	**AM Peak Hour Volume**	**LOS**
Interstate 5 Northbound	1. Colusa County Line to Interstate 505	700	A	2,230	C
	2. Interstate 505 to County Road 13	500	A	1,410	B
	3. County Road 13 to State Route 113 (East)	1,060	A	2,240	C
	4. State Route 113 (East) to County Road 102	1,520	B	2,030	C
	5. County Road 102 to Sacramento County Line	1,820	B	3,500	D
Interstate 5 Southbound	1. Colusa County Line to Interstate 505	760	A	4,010	E
	2. Interstate 505 to County Road 13	640	A	2,790	C
	3. County Road 13 to State Route 113 (East)	1,130	B	3,010	D
	4. State Route 113 (East) to County Road 102	1,350	B	3,290	D
	5. County Road 102 to Sacramento County Line	1,690	B	3,550	D
Interstate 505 Northbound	1. Solano County Line to State Route 128	330	A	1,230	B
	2. State Route 128 to State Route 16	320	A	780	A
	3. State Route 16 to County Road 14	200	A	800	A
	4. County Road 14 to Interstate 5	200	A	820	A
Interstate 505 Southbound	1. Solano County Line to State Route 128	570	A	2,000	B
	2. State Route 128 to State Route 16	360	A	1,340	B
	3. State Route 16 to County Road 14	230	A	1,230	B
	4. County Road 14 to Interstate 5	130	A	1,210	B
Interstate 80 Eastbound	1. Solano County Line to Mace Boulevard	4,110	C	4,970	D
	2. County Road 32A to U.S. 50	5,160	D	6,070	F
Interstate 80 Westbound	1. Solano County Line to Mace Boulevard	4,120	C	4,320	C
	2. County Road 32A to U.S. 50	5,280	D	5,900	E
State Route 113 Northbound	1. Solano County Line to Covell Boulevard	1,030	A	1,940	B
	2. Covell Boulevard to Gibson Road	770	A	1,570	B
	3. Gibson Road to Interstate 5	430	A	790	A
State Route 113 Southbound	1. Solano County Line to Covell Boulevard	2,140	C	3,150	D
	2. Covell Boulevard to Gibson Road	1,440	B	2,580	C
	3. Gibson Road to Interstate 5	500	A	1,240	B

[a] LOS (Level of Service) based on peak hour roadway segment thresholds developed using the Highway Capacity Manual methodology.

Source: Fehr & Peers, 2009.



LSA

FIGURE IV.C-10

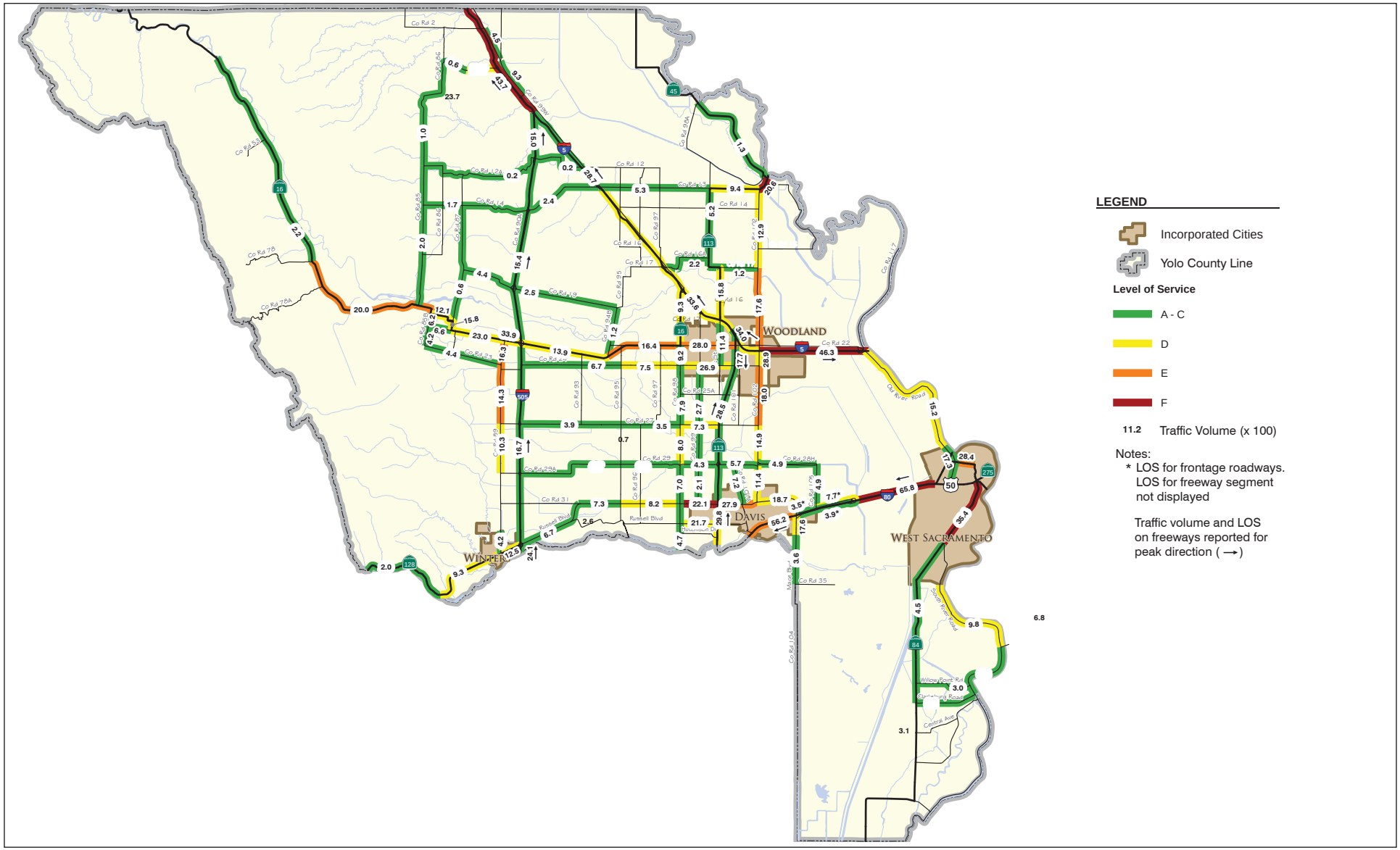
Yolo County 2030 Countywide General Plan EIR

Draft 2030 General Plan AM Peak Hour Roadway Traffic Volumes and LOS

NOT TO SCALE

SOURCE: FEHR & PEERS, 2009.

I:\CYK0701 yolo county\figures\EIR\Fig_IVC10.ai (4/2/09)



LSA

FIGURE IV.C-11

Yolo County 2030 Countywide General Plan EIR

Draft 2030 General Plan PM Peak Hour Roadway Traffic Volumes and LOS

NOT TO SCALE

SOURCE: FEHR & PEERS, 2009.

I:\CYK0701 yolo county\figures\EIR\Fig_IVC11.ai (4/2/09)

Table IV.C-5: PM Peak Hour Traffic Forecasts and LOS

Roadway	Segment	Existing Conditions (2007)		Draft 2030 General Plan	
		PM Peak Hour Volume	LOS[a]	PM Peak Hour Volume	LOS
Chiles Road/County Road 32B	1. Mace Boulevard to Webster Road	250	C	390	C
Clarksburg Road	1. State Route 84 to South River Road	60	A	310	C
County Road 6	1. County Road 86 to Dunnigan SP	10	A	60	A
	2. Dunnigan SP to Interstate 5	10	A	2,370	D
County Road 12A	1. County Road 85 to Interstate 505	10	A	20	A
County Road 12A/92/12	1. Interstate 505 to County Road 99W	10	A	20	A
County Road 13	1. Interstate 5 to State Route 113	110	A	530	C
County Road 14	1. County Road 85 to Interstate 505	40	A	170	B
	2. Interstate 505 to Interstate 5	90	A	240	B
County Road 16A	1. Interstate 5 to State Route 113	30	A	220	C
County Road 17	1. State Route 113 to County Road 102	110	B	120	B
County Road 19	1. County Road 87 to Interstate 505	70	A	440	C
	2. Interstate 505 to County Road 94B	60	A	250	C
County Road 21A	1. County Road 85B to State Route 16	150	B	660	C
County Road 23	1. County Road 85B to County Road 89	110	B	440	C
County Road 24	1. County Road 90 to County Road 95	80	A	670	C
	2. County Road 95 to County Road 98	210	C	750	D
County Road 27	1. Interstate 505 to County Road 95	90	B	390	C
	2. County Road 95 to County Road 98	110	B	350	C
	3. County Road 98 to State Route 113	170	B	730	D
County Road 28H	1. County Road 102 to County Road 105	70	A	490	C
County Road 29A/92E/29	1. Interstate 505 to County Road 95	30	A	70	A
County Road 29	1. County Road 95 to County Road 98	60	A	260	C
	2. County Road 98 to State Route 113	140	B	430	C
	3. State Route 113 to County Road 102	400	C	570	C
County Road 31	1. County Road 93A to County Road 95	390	C	730	C
	2. County Road 95 to County Road 98	490	C	820	D
County Road 32A	1. Mace Boulevard to County Road 105	180	B	350	C
	2. County Road 105 to Webster Road	260	C	770	D
County Road 85B	1. County Road 23 to County Road 21A	60	A	420	C
	2. County Road 21A to State Route 16	200	B	620	C
County Road 85	1. State Route 16 to County Road 12	40	A	200	B
County Road 85/8/86	1. County Road 12 to County Road 6	10	A	100	B
County Road 87	1. State Route 16 to County Road 14	20	A	60	A
County Road 89	1. County Road 29A to County Road 27	110	B	1,030	D
	2. County Road 27 to County Road 24A	130	B	1,430	E
	3. County Road 24A to State Route 16	100	B	1,630	E
County Road 94B	1. State Route 16 to County Road 19	60	A	120	B
County Road 98	1. Solano County Line to County Road 31	240	B	470	C
	2. County Road 31 to County Road 29	330	C	700	C
	3. County Road 29 to County Road 27	400	C	800	D
	4. County Road 27 to County Road 24	520	C	790	C
	5. County Road 24 to State Route 16	780	C	920	C
County Road 99	1. County Road 31 to County Road 27	180	B	210	C
	2. County Road 27 to Gibson Road	310	C	270	C
County Road 99W	1. County Road 8 to County Road 6	110	B	930	C
	2. County Road 6 to County Road 2	90	A	450	C
County Road 101A	1. Covell Boulevard to County Road 29	240	C	720	C

Table IV.C-5 *Continued*

Roadway	Segment	Existing Conditions (2007)		Draft 2030 General Plan	
		PM Peak Hour Volume	LOS[a]	PM Peak Hour Volume	LOS
County Road 102	1. Covell Boulevard to County Road 29	650	C	1,140	D
	2. County Road 29 to County Road 27	560	C	1,490	D
	3. County Road 27 to Gibson Road	490	C	1,800	E
	4. Gibson Road to Interstate 5	1,190	D	2,890	D
	5. Interstate 5 to County Road 17	490	C	1,760	E
	6. County Road 17 to State Route 113	610	C	1,290	D
County Road 105	1. County Road 32A to County Road 28H	60	A	490	C
Covell Boulevard	1. County Road 98 to State Route 113	1,670	D	2,210	F
	2. State Route 113 to County Road 102	1,820	D	2,790	E
	3. County Road 102 to Mace Boulevard	1,140	C	1,870	D
East Street	1. Gibson Road to Interstate 5	690	C	1,140	C
Gibson Road	1. County Road 98 to State Route 113	1,710	C	2,690	D
Harbor Boulevard	1. U.S. 50 to Reed Avenue	1,580	C	1,730	C
Jefferson Boulevard	1. Gregory Avenue to U.S. 50	1,890	D	3,540	F
Mace Boulevard	1. County Road 35 to County Road 32D	150	B	360	C
	2. County Road 32D to Interstate 80	2,330	D	1,760	D
Main Street	1. County Road 98 to State Route 113	2,120	D	2,800	E
Old River Road	1. County Road 127 to County Road 118	390	C	1,520	D
Railroad Avenue	1. State Route 128 to Winters City Limits	470	C	420	C
Reed Avenue	1. Interstate 80 to Jefferson Boulevard	1,470	C	2,840	E
Russell Boulevard	1. Interstate 505 to County Road 31	440	C	670	C
	2. County Road 98 to State Route 113	1,780	D	2,170	D
South River Road	1. Clarksburg Road to Freeport Bridge	200	C	680	C
	2. Freeport Bridge to Burrows Avenue	270	C	980	D
Willow Point Road	1. State Route 84 to South River Road	20	A	300	C
Interstate 5 Northbound	1. Colusa County Line to Interstate 505	1,040	A	4,370	F
	2. Interstate 505 to County Road 13	770	A	2,870	C
	3. County Road 13 to State Route 113 (East)	1,200	B	3,360	D
	4. State Route 113 (East) to County Road 102	1,280	B	3,400	D
	5. County Road 102 to Sacramento County Line	1,710	B	3,880	E
Interstate 5 Southbound	1. Colusa County Line to Interstate 505	810	A	2,780	C
	2. Interstate 505 to County Road 13	670	A	1,690	B
	3. County Road 13 to State Route 113 (East)	1,220	B	2,600	C
	4. State Route 113 (East) to County Road 102	1,690	B	2,980	D
	5. County Road 102 to Sacramento County Line	2,110	C	4,630	F
Interstate 505 Northbound	1. Solano County Line to State Route 128	710	A	2,410	C
	2. State Route 128 to State Route 16	490	A	1,670	B
	3. State Route 16 to County Road 14	290	A	1,540	B
	4. County Road 14 to Interstate 5	270	A	1,500	B
Interstate 505 Southbound	1. Solano County Line to State Route 128	560	A	1,620	B
	2. State Route 128 to State Route 16	460	A	1,130	B
	3. State Route 16 to County Road 14	300	A	1,100	A
	4. County Road 14 to Interstate 5	140	A	1,080	A
Interstate 80 Eastbound	1. Solano County Line to Mace Boulevard	4,320	C	4,610	D
	2. County Road 32A to U.S. 50	5,540	E	6,120	F

Table IV.C-5 *Continued*

Roadway	Segment	Existing Conditions (2007)		Draft 2030 General Plan	
		PM Peak Hour Volume	LOS[a]	PM Peak Hour Volume	LOS
Interstate 80 Westbound	1. Solano County Line to Mace Boulevard	4,420	D	5,620	E
	2. County Road 32A to U.S. 50	5,110	D	6,580	F
State Route 113 Northbound	1. Solano County Line to Covell Boulevard	2,270	C	2,980	D
	2. Covell Boulevard to Gibson Road	1,530	B	2,850	C
	3. Gibson Road to Interstate 5	540	A	1,280	B
State Route 113 Southbound	1. Solano County Line to Covell Boulevard	1,280	B	2,190	C
	2. Covell Boulevard to Gibson Road	850	A	2,130	C
	3. Gibson Road to Interstate 5	420	A	1,770	B
State Route 113	1. Interstate 5 to County Road 17	320	C	1,580	D
	2. County Road 17 to County Road 13	90	A	520	C
	3. County Road 13 to County Road 102	150	B	940	D
	4. County Road 102 to State Route 45	700	C	2,060	F
State Route 128	1. Napa County Line to County Road 86	160	B	200	B
	2. County Road 86 to Railroad Avenue	700	C	930	D
	3. Railroad Avenue to Interstate 505	930	C	1,250	D
State Route 16	1. Arbuckle Road to County Road 78	120	B	220	B
	2. County Road 78 to County Road 85B	670	C	2,000	E
	3. County Road 85B to County Road 87	480	C	1,210	D
	4. County Road 87 to County Road 21A	710	C	1,580	D
	5. County Road 21A to Madison	840	D	2,300	D
	6. Madison to Interstate 505	840	D	3,390	D
	7. Interstate 505 to County Road 94B	970	D	1,390	D
	8. County Road 94B to County Road 98	1,000	D	1,640	E
	9. Main Street to Interstate 5	460	C	930	D
State Route 45	1. State Route 113 to County Road 98A	70	A	130	B
State Route 84	1. Clarksburg Road to Gregory Avenue	160	B	450	C

[a] LOS (Level of Service) based on peak hour roadway segment thresholds developed using the Highway Capacity Manual methodology.

Source: Fehr & Peers, 2009.

The impacts identified due to increases in peak hour traffic volumes are based on cumulative conditions that include development from build-out of the Draft General Plan and traffic generated within and outside the rest of the SACOG region. Based on the modified SACMET model estimate of vehicle trips in Yolo County, build-out of the Draft General Plan would result in the unincorporated area generating only approximately 25 percent of the total vehicle trips generated in Yolo County (excluding regional through trips). Therefore, the impacts of planned development in the unincorporated area represent only a portion of the total vehicle trips on the roadway network. It is the intent of the County to mitigate the fair-share of impacts caused by planned development in the Draft General Plan but full mitigation will depend on the remaining fair-share for roadway improvements to be provided by other planned development in the region.

Impact CI-2: Build-out of the Draft General Plan would add vehicle trips to roadways that would operate below the 1983 Yolo County General Plan level of service (LOS) under cumulative conditions (S)

Policy CIR 7 of the 1983 Yolo County General Plan establishes a LOS C threshold for all County roads. Based on the LOS identified in Table IV.C-5, the following roadways are anticipated to operate worse than LOS C in the unincorporated County during the p.m. peak hour assuming build-out of the Draft General Plan combined with cumulative traffic generated within and outside the rest of the SACOG region:

- County Road 6 - Dunnigan Specific Plan to Interstate 5 (LOS D)
- County Road 24 – County Road 95 to County Road 98 (LOS D)
- County Road 27 – County Road 98 to State Route 113 (LOS D)
- County Road 31 – County Road 95 to County Road 98 (LOS D)
- County Road 32A - County Road 105 to Webster Road (LOS D)
- County Road 89 - County Road 29A to County Road 27 (LOS D)
- County Road 89 – County Road 27 to State Route 16 (LOS E)
- County Road 98 – County Road 29 to County Road 27 (LOS D)
- County Road 102 – Covell Boulevard to County Road 27 (LOS D)
- County Road 102 – Interstate 5 to County Road 17 (LOS E)
- County Road 102 - County Road 17 to State Route 113 (LOS D)
- Old River Road - County Road 127 to County Road 118 (LOS D)
- South River Road - Freeport Bridge to Burrows Avenue (LOS D)

The Draft General Plan accepts these lower LOS values. This reflects a change in policy for the unincorporated County to acknowledge that transportation planning based solely on roadway LOS, which considers only driver comfort and convenience, is not desirable since it fails to acknowledge other users of the circulation system and other community values. In evaluating the roadway system, a lower vehicle LOS may be desired when balanced against other community values related to resource protection, social equity, economic development, and consideration of pedestrians, bicyclists, and transit users. In addition, roadway LOS is directly linked to roadway infrastructure costs. A higher LOS results in higher expenditure of infrastructure dollars for wider roadways that do not necessarily serve all users of the circulation system and result in less than optimum utilization of the roadway. For example, LOS C on a typical two-lane County road represents about 40 percent utilization of the roadway's capacity. Furthermore wider roadways, in general, are inconsistent with maintaining rural character and aesthetics, cause greater impacts to biological resources and agricultural land, and discourage use by pedestrians and bicyclists.

Based on the considerations above, no mitigation measures are feasible to reduce the impact to the 1983 General Plan LOS policy to a less-than-significant level. Therefore this impact would remain significant and unavoidable (SU) in the context of the 1983 threshold.

As part of the EIR process, the modified SACMET model was updated to reflect the Woodland Gateway I and proposed Woodland Gateway II projects located east of County Road 102 and south of I-5. Based on the a.m. and p.m. peak hour roadway segment analysis results (which are shown in Tables IV.C-4 and IV.C-5, respectively), increases in traffic volumes on unincorporated County roadway segments occurred that were not identified during development of the Circulation Element for the Draft General Plan. The following modifications to Policy CI-3.1 are recommended due to increases in traffic volumes on unincorporated County roadways:

Mitigation Measure CI-2: Amend Policy CI-3.1 of the Draft General Plan as follows:

Policy CI-3.1: Maintain Level of Service (LOS) C or better for roadways and intersections in the unincorporated County. In no case shall land use be approved that would either result in worse than LOS C conditions, or require additional improvements to maintain the required level of service, except as specified below. The intent of this policy is to consider level of service as a limit on the capacity of the County's roadways.

- Interstate 5 (County Road 6 to Interstate 505) – LOS D is acceptable, assuming that one additional auxiliary lane is constructed in each direction through this segment. The County will secure a fair share towards these improvements from planned development.
- Interstate 5 (Interstate 505 to Woodland City Limit) – LOS D is acceptable.
- Interstate 5 (Woodland City Limit to Sacramento County Line) – LOS F is acceptable. The County will secure a fair share towards intersection improvements from planned development at the Elkhorn site.
- Interstate 80 (Davis City Limit to West Sacramento City Limit) – LOS F is acceptable.
- State Route 16 (County Road 78 to County Road 85B) – LOS D is acceptable.
- State Route 16 (County Road 85B to County Road 21A) – LOS E is acceptable.
- State Route 16 (County Road 21A to Interstate 505) – LOS D is acceptable, assuming that this segment is widened to four lanes with intersection improvements appropriate for an arterial roadway. The County will secure a fair share towards these improvements from planned development. Caltrans and the Rumsey Band of Wintun Indians shall be encouraged to establish a funding mechanism to pay the remainder.
- State Route 16 (Interstate 505 to County Road 98) – LOS D is acceptable, assuming that passing lanes and appropriate intersection improvements are constructed. The County will secure a fair share

towards these improvements from planned development. Caltrans and the Rumsey Band of Wintun Indians shall be encouraged to establish a funding mechanism to pay the remainder.

- State Route 113 (Sutter County Line to County Road 102) – LOS F is acceptable.
- State Route 113 (County Road 102 to Woodland City Limits) – LOS D is acceptable.
- State Route 113 (Solano County Line to Davis City Limits) – LOS D is acceptable.
- State Route 128 (Interstate 505 to Napa County Line) – LOS D is acceptable.
- Old River Road (Interstate 5 to West Sacramento City limits) – LOS D is acceptable.
- South River Road (West Sacramento City Limit to the Freeport Bridge) – LOS D is acceptable.
- County Road 6 (County Road 99W to the Tehama Colusa Canal) – LOS D is acceptable, assuming this segment is widened to four lanes. The County will secure a fair share towards these improvements from planned development.
- County Road 24 (County Road 95 to County Road 98) – LOS D is acceptable.
- County Road 27 (County Road 98 to State Route 113) – LOS D is acceptable.
- County Road 31 (County Road 95 to County Road 98) – LOS D is acceptable.
- County Road 32A (County Road 105 to Interstate 80) – LOS D is acceptable.
- County Road 98 (County Road 29 to County Road 27) – LOS D is acceptable.
- County Road 99W (County Road 2 to County Road 8) – LOS D is acceptable, assuming that this segment is widened to four lanes. The County will secure a fair share towards these improvements from planned development.
- County Road 102 (County Road 13 to County Road 17) – LOS D is acceptable, assuming that passing lanes and appropriate intersection improvements are constructed. The County will secure a fair share towards these improvements from all feasible sources ~~planned development~~.
- County Road 102 (County Road 17 to the Woodland City Limit) - LOS E is acceptable, assuming that passing lanes and appropriate

intersection improvements are constructed. The County will secure a fair share towards these improvements from all feasible sources ~~planned development~~.

- County Road 102 (Woodland City Limit to Davis City Limit) – LOS D is acceptable.

Additional exceptions to this policy may be allowed by the Board of Supervisors on a case-by-case basis, where reducing the level of service would result in a clear public benefit. Such circumstances may include, but are not limited to, the following:

- Preserving agriculture or open space land;
- Enhancing the agricultural economy;
- Preserving scenic roadways/highways;
- Preserving the rural character of the County;
- Avoiding adverse impacts to alternative transportation modes;
- Avoiding growth inducement;
- Preserving downtown community environments; or
- Right-of-way constraints determined by the Board of Supervisors to make the improvement infeasible.

No additional mitigation measures are feasible to reduce the impact to the 1983 General Plan LOS policy to a less-than-significant level. Therefore this impact would remain significant and unavoidable in the context of the 1983 threshold. (SU)

Impact CI-3: Build-out of the Draft General Plan would rely upon future roadway capacity expansion projects for which full funding is not ensured (S)

The Circulation Element of the Draft General Plan identifies future roadway capacity expansion projects, for which full funding is not ensured. Action CI-A23 will result in a regional roadway maintenance assessment. This addresses the operations and maintenance side of funding but not the capital costs. The Draft General Plan includes Policies CI-3.11 and CI-3.12 that require new development to finance and construct a project's off-site circulation improvements and pay a fair-share towards cumulative project impacts, using the Draft General Plan LOS and other relevant policies as the threshold for mitigation. This approach will be effective for ensuring that new development in the unincorporated County pays a fair share of planned improvements; however, these policies would not result in full funding for improvements because the funding share associated with regional through traffic or from sources not subject to discretionary review and conditioning by Yolo County would not be captured. Policy LU-6.4 calls for the County to negotiate with the cities to achieve mutually beneficial outcomes including development impact fees for funding of regional roadways, but there is no guarantee funds would be collected from the cities or other regional sources.

Therefore, the following mitigation measure is recommended to establish a regional roadway improvement fee program:

> Mitigation Measure CI-3a: The Draft General Plan shall be amended to include the following new action in the Circulation Element.
>
> Action CI-A#: Establish a regional funding mechanism to fund the planned roadway capacity expansion projects identified in the Circulation Element.
>
> Mitigation Measure CI-3b: The Draft General Plan shall be amended to include the following new action in the Circulation Element.
>
> Action CI-A#: Amend the existing County Facilities Services Assessment (FSA) Fee to include planned roadway projects identified in the Circulation Element.
>
> While implementation of the policies and actions included in the Draft General Plan and implementation of the above mitigation measure would ensure full funding for the planned roadway capacity expansion projects, there is no guarantee that other jurisdictions will participate in the program. Therefore, there is no assurance that full funding for the planned roadway improvements can be collected. For these reasons, this impact would be significant and unavoidable. (SU)

Impact CI-4: Build-out of the Draft General Plan would contribute vehicle trips to roadways projected to operate worse than the LOS thresholds identified in the Congestion Management Program (CMP) under cumulative conditions (S)

Build-out of the Draft General Plan combined with cumulative traffic generated within and outside the rest of the SACOG region would contribute trips to the following roadway segments projected to operate worse than the LOS thresholds identified in the CMP. The applicable LOS standards from the CMP for roadway segments in Tables IV.C-4 and IV.C-5 are presented in Appendix C:

- County Road 31 – County Road 95 to County Road 98 (LOS D under cumulative conditions, CMP threshold is LOS C)
- County Road 98 – County Road 29 to County Road 27 (LOS D under cumulative conditions, CMP threshold is LOS C)
- County Road 102 – Davis City Limits to Woodland City Limits (LOS D under cumulative conditions, CMP threshold is LOS C)
- County Road 102 – Woodland City Limits to County Road 17 (LOS E under cumulative conditions, CMP threshold is LOS C)
- County Road 102 - County Road 17 to State Route 113 (LOS D under cumulative conditions, CMP threshold is LOS C)

As stated in the CMP, if through monitoring it is determined that the LOS on any designated CMP streets or highway is worse than the adopted standard, the local jurisdiction must prepare a deficiency plan to address the problem. A deficiency plan must do all of the following:

- Identify the problem and its causes;
- Offer a list of actions that would solve the problem and estimates of their costs:
- Offer a list of improvements which, in lieu of solving the deficiency, would measurably improve traffic level of service on the CMP system and also improve air quality;
- Propose an action plan based on either item #2 or item #3 above, including an implementation schedule.

YCTD is currently in the process of updating the Yolo County CMP. The update will include revisions to the LOS standards and more emphasis on the concept of "complete streets". In addition, Policy CI-3.3 of the Draft General Plan includes objectives to address air quality, especially greenhouse gas emissions, when considering roadway capacity expansion projects that was not contemplated at the time the CMP was developed. Therefore, the following mitigation measure is recommended to ensure ongoing consistency between the Draft General Plan and Yolo County CMP:

> Mitigation Measure CI-4a: The Draft General Plan shall be amended to include one of the following new actions in the Circulation Element.
>
> Action CI-A#: Coordinate with YCTD on the update to the Yolo County CMP to ensure consistency with the LOS policies established in the Yolo County Circulation Element.
>
> OR
>
> Action CI-A#: Monitor roadways identified in the Yolo County CMP and prepare a deficiency plan as outlined in the CMP when the CMP LOS thresholds are exceeded. The deficiency plan shall focus on modifications to the transportation system that reduce vehicle travel by accommodating more travel by walking, bicycling, and transit modes consistent with the Draft General Plan.
>
> OR
>
> Action CI-A#: Coordinate with the cities to opt out of the CMP pursuant to Section 65088.3 of the Government Code.
>
> While implementation of one of the actions identified in the above mitigation measure would ensure consistency between the Draft General Plan and Yolo County CMP, there is no guarantee that the LOS policies in the CMP will be updated or a deficiency plan would reduce the potential roadway impacts. Therefore, this impact would remain significant and unavoidable. (SU)

Impact CI-5: Build-out of the Draft General Plan would contribute vehicle trips to roadways projected to operate worse than the LOS thresholds of the incorporated Cities of Davis, West Sacramento, Winters, and Woodland under cumulative conditions (S)

The following applicable general plans were used to identify potential roadway impacts in the incorporated cities with implementation of the Draft General Plan.

City of Davis General Plan. Impacts to roadways and intersections within the City of Davis were evaluated based on the City's minimum LOS thresholds established by the *City of Davis General Plan (Adopted May 2001),* which identifies the following goal:

MOB 1.1, C Unless preempted by the County Congestion Management Plan, Level of Service 'E' for automobiles is sufficient for arterials and collectors (both intersection and segment operations) during peak traffic hours (e.g. rush hour). Level of Service 'D' for automobiles is sufficient for arterials, collectors and major intersections during non-peak traffic hours. (See Glossary and Definitions for definition of "Major Intersections). Neighborhood plans or corridor plans can allow for a level of service at peak times of 'F' if approved by the City Council. LOS 'F' is acceptable during peak hours in the Core Area. The reasons for adopting the new standards include:

- High LOS standards to achieve low levels of congestion are not necessarily linked to urban vitality and quality of life.
- The reduced standards would be consistent with community objectives of avoiding road widenings which would be unacceptable in terms of community character.
- High LOS standards make infill development more difficult because infill uses the capacities of streets and may cause traffic volumes to approach the capacities of streets.
- Allowing higher levels of congestion may encourage alternative modes of transportation.

City of West Sacramento General Plan. Impacts to roadways and intersections within the City of West Sacramento were evaluated based on the City's minimum LOS thresholds established by the *City of West Sacramento General Plan (Adopted December 2004),* which identifies the following goal:

Section III.2 The City shall endeavor to maintain a Level of Service " C " on all streets within the city**,** except at intersections and on roadway segments within one-quarter mile of a freeway interchange or bridge crossing of the Deep Water Ship Channel, barge canal, or Sacramento River, where a Level of Service "D" shall be deemed acceptable.

City of Winters General Plan. Impacts to roadways and intersections within the City of Winters were evaluated based on the City's minimum LOS thresholds established by the City of Winters General Plan Policy Document (Adopted May 1992), which identifies the following goal:

III.A.1. The City shall endeavor to maintain a Level of Service "C" or better, as defined by the *1985 Highway Capacity Manual* or subsequent revisions, on all streets and intersections within the city.

City of Woodland General Plan. Impacts to roadways and intersections within the City of Woodland were evaluated based on the City's minimum LOS thresholds established by the *City of Woodland General Plan Policy Document (Adopted December 2002),* which identifies the following goal:

3.A.2. The City shall develop and manage its roadway system to maintain LOS "C" or better on all roadways, except within one-half mile of state or federal highways and freeways and within the Downtown Specific Plan area. In these areas, the City shall strive to maintain LOS "D" or better. Exceptions to these level of service standards may be allowed in infill areas where the City finds that the improvements or other measures required to achieve the LOS standards are unacceptable because of the right-of-way needs, the physical impacts on surrounding properties, and/or the visual aesthetics of the required improvement and its impact on community character.

Based on Table IV.C-5, the following study roadway segments are anticipated to operate worse than the established LOS in the incorporated cities during the p.m. peak hour under cumulative conditions:

- County Road 102 – County Road 27 to Gibson Road (LOS E under cumulative conditions, City of Woodland threshold is LOS C)
- Covell Boulevard - County Road 98 to State Route 113 (LOS F under cumulative conditions, City of Davis threshold is LOS E)
- Jefferson Boulevard – Gregory Avenue to U.S. 50 (LOS F under cumulative conditions, City of West Sacramento threshold is LOS D)
- Main Street - County Road 98 to State Route 113 (LOS E under cumulative conditions, City of Woodland threshold is LOS D)
- Reed Avenue - Interstate 80 to Jefferson Boulevard (LOS E under cumulative conditions, City of West Sacramento threshold is LOS C)

The resulting LOS for each of the identified roadway segments is due to a combination of the cumulative traffic volumes assuming build-out of the Draft General Plan combined with cumulative traffic generated within and outside the rest of the SACOG region. The Draft General Plan includes Policy CI-3.12 that identifies the collection of the fair-share cost of all feasible transportation improvements to reduce the severity of cumulative transportation impacts. In addition, Policy LU-6.4 calls for the County to negotiate with the cities to achieve mutually beneficial outcomes including development impact fees for funding of regional roadways. These policies are crafted so that new County development pays a fair share portion of the cost for regional circulation improvements.

Mitigation Measure CI-5: None available.

While implementation of the policies and actions included in the Draft General Plan would ensure fair-share funding toward roadway impacts in the cities, there is no guarantee that the cities will agree to new funding mechanisms or construct roadway capacity expansion projects to reduce the identified impacts. Therefore, this impact would remain significant and unavoidable. (SU)

Impact CI-6: Build-out of the Draft General Plan would contribute vehicle trips on state highways that would operate worse than the Caltrans LOS threshold under cumulative conditions (S)

Caltrans recommended the following applicable LOS criteria to be used as part of the Yolo County General Plan Update based on the submitted NOP comment letter (November 20, 2008) and subsequent correspondence with La Nae Van Valen in Caltrans' Office of Transportation Planning (Re: Yolo County General Plan Update EIR, January 20, 2009):

- Caltrans considers the following to be significant impacts:
  - Project impacts that cause a highway or intersection to deteriorate beyond LOS E.

Based on Tables IV.C-4 and IV.C-5, the following study roadway segments are anticipated to operate worse than the LOS E standard identified by Caltrans under cumulative conditions:

- Interstate 5 Northbound – Colusa County Line to Interstate 505 (LOS F during the p.m. peak hour)
- Interstate 5 Southbound – County Road 102 to Sacramento County Line (LOS F during the p.m. peak hour)
- Interstate 80 Eastbound – County Road 32A to U.S. 50 (LOS F during the a.m. and p.m. peak hours)
- Interstate 80 Westbound – County Road 32A to U.S. 50 (LOS F during the p.m. peak hour)
- State Route 113 – County Road 102 to State Route 45 (LOS F during the p.m. peak hour)

The resulting LOS for each of the identified roadway segments is due to a combination of cumulative traffic assuming build-out of the Draft General Plan combined with cumulative traffic generated within and outside the rest of the SACOG region The Draft General Plan includes Policy CI-3.12 that identifies the collection of the fair-share cost of all feasible transportation improvements to reduce the severity of cumulative transportation impacts. In addition, the Draft General Plan includes widening of Interstate 5 between County Road 6 and Interstate 505 to include one auxiliary lane in each direction as planned capacity expansions (Policy CI-3.1). For the remaining three impacted segments, the Draft General Plan identifies LOS F as acceptable in Policy CI-3.1 due to right-of-way constraints and feasibility limitations to construct future improvements.

Policy CI-3.12 identifies the collection of the fair-share cost of feasible transportation improvements (based on the Draft General Plan) to reduce the severity of cumulative transportation impacts. Caltrans can accept direct fair-share cost contributions from developers and has a preferred fair-share cost calculation methodology contained in the *Guide for the Preparation of Traffic Impact Studies.* The following mitigation measure is recommended to further ensure potential County impacts to state facilities are mitigated:

> Mitigation Measure CI-6a: Implement Mitigation Measure LU-1b that amends Policy CC-3.5 of the Draft General Plan in regards to the need to identify interchange improvements on Interstate 5.
>
> Mitigation Measure CI-6b: Amend Policy CC-3.9 of the Draft General Plan as follows:
>
> Policy CC-3.9: In addition to Table LU-10, achieve the following within the Madison Specific Plan growth boundary:

G. The need for intersection and roadway improvements on State Route 16 between Madison and I-505 shall be identified as part of the Madison Specific Plan consistent with the policy thresholds of the Draft General Plan.

Mitigation Measure CI-6c: Implement Mitigation Measure LU-4d that amends Policy CC-3.11 of the Draft General Plan in regards to the need to identify freeway ramp improvements on Interstate 5.

Even with these mitigations and the polices and actions included in the Draft General Plan this impact would be significant and unavoidable. (SU)

The policies and actions included in the Draft General Plan and implementation of the above mitigation measure are intended to mitigate the County's impact to state facilities due to planned development in the Draft General Plan. However, implementation of future improvements on state facilities is uncertain because the future actions of Caltrans and Yolo County are unknown. Further, the planned development in the unincorporated area of the County only accounts for a portion of the need for future improvements on state facilities and the remaining cost of necessary improvements associated with regional through traffic or other jurisdictions would need to be collected.

Further, Policy CI-3.1 identifies a lower LOS on some state facilities than identified by Caltrans and Policy CI-3.3 includes other objectives, including minimizing greenhouse gases and air pollutants, to be considered by the County when deciding to expand or modify the State highway system. These policies consider other tradeoffs when considering improvements to state facilities, such as Interstate 80, that are expected to be severally congested in the future. The phenomenon where additional capacity leads to additional demand for travel is known as "induced travel." Induced travel occurs when the cost of travel is reduced (i.e., travel time reduction due to additional capacity) causing an increase in demand (more travelers using the improved facility). The reduction in travel time causes various responses by travelers, including diversion from other routes, changes in destinations, changes in mode, departure time shifts, and possibly the creation of new trips all together. For these reasons, this impact would be significant and unavoidable.

Impact CI-7: Build-out of the Draft General Plan could result in increased travel on roadways that do not meet current design standards (S)

The County of Yolo Improvement Standards (Department of Planning and Public Works, August 5, 2008) identify current County design standards, including roadway cross-sections, structural sections, and sight distance requirements. Vehicle, bicycle, and/or pedestrian travel are anticipated to increase on roadways that do not currently meet County design standards with build-out of the Draft General Plan. Policy CI-3.10 specifies upgrading the existing County road system to be consistent with current County design standards as transportation funding allows. In addition, a list of the highest priority roadways is identified to be upgraded.

The Draft General Plan also includes the creation of special districts in Specific Plan areas and other areas where appropriate to fund the operation and maintenance of County roads (Action CI-A22). However, implementation of upgrades to the County roadway system is limited by lack of funding sources . For these reasons, this impact would be significant and unavoidable.

Mitigation Measure CI-7: None available.

While implementation of the policies and actions included in the Draft General Plan would reduce the severity of this impact, no additional feasible mitigation measures are available. Therefore, this impact would remain significant and unavoidable. (SU)

Impact CI-8: Build-out of the Draft General Plan could result in increased travel on state facilities that do not meet current design standards. (S)

Caltrans has identified the need to upgrade State Route 16 between the Cache Creek Casino and Interstate 505 as identified in the *State Route 16 Safety Improvement Project (SIP) Draft EIR* (December 2005). Caltrans is currently in the process of updating the SIP, which is anticipated to generally include realignment of some segments of SR 16, and widening of SR 16 to accommodate 12-foot lanes, 8-foot shoulders, and 12 feet of clear recovery zone beyond the roadway shoulders.

With build-out of the Draft General Plan and other regional traffic, traffic volumes are anticipated to increase on this segment of State Route 16. Action CI-A13 identifies ongoing coordination between Yolo County, Caltrans, and the Rumsey Band of Wintun Indians to fund necessary improvements to State Route 16. Caltrans is in the process of updating the State Route 16 SIP and has a funding source to improve the highway to Caltrans standards. However, until improvements are constructed on State Route 16, planned development would add traffic to roadway segments of State Route 16 that do not meet current Caltrans design standards. For these reasons, this impact would be significant and unavoidable.

Mitigation Measure CI-8: None available.

While implementation of the policies and actions included in the Draft General Plan would reduce the severity of this impact, no additional feasible mitigation measures are available. Therefore, this impact would remain significant and unavoidable. (SU)

(3) Review of Transit, Bicycle, and Pedestrian Policies. A review of the Draft General Plan Circulation Element did not reveal potential internal policy inconsistencies or inconsistencies with other adopted plans or programs supporting the provision of transit, bicycle, and pedestrian facilities or services in Yolo County. The specific plans and programs against which the Draft General Plan was reviewed are listed in the Setting section above. The Draft General Plan incorporates the Bicycle Transportation Plan by reference and includes Action CI-A3 to update the plan every five years. Impacts to bicycle and pedestrian circulation with implementation of the Draft General Plan would be less-than-significant.

Action CI-A6 requires the development of a transit plan for each Specific Plan area. Implementation of these transit plans will occur through Policies CI-3.11 and CC-3.17. Policy CI-3.11 of the Draft General Plan requires new development to finance all off-site circulation improvements necessary to mitigate a project's transportation impacts including public transit. Policy CC-3.17 identifies the establishment of benefit assessment districts to fund community infrastructure and services that would fund, among other things, on-site public transit.

While implementation of the Draft General Plan would increase demand for public transit service to an area with limited available service, implementation of the policies and programs included in the Draft General Plan would result in a less-than-significant impact related to transit service.

(4) Review of Goods Movement Policies. A review of the Draft General Plan Circulation Element revealed no potential internal policy inconsistencies or discrepancies with other adopted plans or programs supporting the provision of goods movement, including the Port of Sacramento, facilities or services in Yolo County. Although some existing roadways will experience increased use during peak travel times, there will be multiple hours of the day with sufficient capacity to accommodate agricultural transport and other goods movement. Policy CI-3.10 identifies targeted transport corridors to upgrade existing County roads to current County design standards to accommodate projected future traffic and support agricultural travel. In addition, Policy CI-3.1 identifies LOS on the County's roadway system that takes into the account the rural environment and is intended to act as a cap on potential population and employment growth to protect the capacity of the roadway network. As a result, implementation of the Draft General Plan would result in a less-than-significant impact related to goods movement policy conflicts.

(5) Review of Aviation Policies. A review of the Draft General Plan Circulation Element revealed no potential internal policy inconsistencies or discrepancies with other adopted plans or programs supporting the provision of aviation facilities or services in Yolo County. In addition, demand for aviation facilities or services, which may increase slightly with population and employment growth in Yolo County is not expected to cause operational problems at airports in the County. The existing airports have relatively low levels of usage and could accommodate expected increases in usage.

Policy CI-9.3 identifies the need to protect airports from incompatible features, while Action CI-A11 identifies future reviews of airport Comprehensive Land Use Plan updates for consistency with the General Plan. The specific plans and programs against which the Draft General Plan was reviewed are listed in the Setting section above. As a result, implementation of the Draft General Plan would result in a less-than-significant impact related to aviation policy conflicts.

(6) Review of Proposed Alternative Sites. Policy CC-3.14 identifies three alternative sites (A, B, and C) near Clarksburg for development of a future winery-related agricultural industrial facility; however, only one site is intended to be developed. Sites A and B would each be approximately 100 acres and the main access to each site would be provided by State Route 84 south of Clarksburg. For the traffic impact analysis, development associated with Site A was assumed to occur. Site B is similar in size and is anticipated to generate a similar number of vehicle trips on State Route 84. Therefore, development of Site B instead of Site A is not anticipated to create additional traffic impacts and would be less-than-significant.

Site C would be 1,783 acres located north of Clarksburg with access on State Route 84. Development of this site would be approximately 17 times greater in area than Site A. It is anticipated that development of this site would generate additional vehicle trips on State Route 84 than analyzed for Site A. However, State Route 84 adjacent to Site C is anticipated to operate at LOS C during the PM peak hour under cumulative conditions. The additional project trips from Site C are not anticipated to cause a change in LOS on State Route 84 near the project site, therefore, this impact would be less-than-significant.

Policy CC-3.15 identifies two alternative sites for location of highway commercial or agricultural commercial uses along I-505 at either County Road 14 or County Road 12A; however, only one site is intended to be developed. Both sites would be similar in size and would be located near existing under-utilized interchanges on I-505. For the traffic impact analysis, development associated with the I-505/County Road 14 site was assumed to occur. I-505 adjacent to both alternative sites is anticipated to operate at LOS B or better during both the AM and PM peak hours under cumulative conditions. Therefore, development of the I-505/County Road 12A site instead of the I-505/County Road 14 site is not anticipated to cause additional traffic impacts and would be less-than-significant.

(7) Conflict with Plans or Policies of Other Agencies. SACOG provides transportation planning and funding for the region, which includes Yolo County. SACOG recently prepared an update to the region's long-range transportation plan, and prepared the *Environmental Impact Report for the Metropolitan Transportation Plan (MTP) for 2035*. This document identifies mitigation measure ENE-15 to adopt a "complete streets" policy that will require applicants for local funding programs administered by SACOG demonstrate that their project is multi-modal. Policy CI-3.6 in the Draft General Plan identifies incorporation of "complete streets" with consideration for all users in developing roadway cross-sections. In addition, Action CI-A12 calls for the County to submit planned transportation improvements to SACOG for consideration in subsequent updates of the MTP.

With the inclusion of Goal CI-10 and the associated policies that identify ongoing compatibility of transportation activities within the Delta Primary Zone, the Draft General Plan would not conflict with the Land Use and Resource Management Plan. As a result, implementation of the Draft General Plan would result in a less-than-significant impact related to transportation and circulation policy conflicts with these agencies.

(8) Conflict with 1983 General Plan Circulation Element Policies. Based on a review of the 1983 General Plan policies related to transportation and circulation in the Circulation Element, it was determined that the Draft General Plan policies would not result in a significant adverse physical impact. The Draft General Plan contains goals, policies and actions providing a transportation system to accommodate the future demand for all modes consistent with the policies of the 1983 General Plan. The one exception is Policy CI-3.1 of the Draft General Plan which allows a lower LOS on some roadways and identifies future roadway improvements not contemplated in the 1983 General Plan. The new LOS policy allows for a greater utilization of the roadway network and takes into consideration other objectives in the County, including the focus on promoting transit, bicycling, and walking. The Draft General Plan includes various policies with emphasis on non-vehicular travel, including Policy CI-3.6, which includes the concept of "complete streets" in developing roadway cross-sections to account for all users of the transportation system. Allowing a higher utilization of existing roadways also reduces the cost of future roadway investments and minimizes environmental impacts such as increased impervious surfaces.

The new LOS policy is also intended to limit vehicular trips. As identified in Policy CI-3.1, land use will not be approved that exceeds the identified LOS thresholds. This is a significant change from the 1983 General Plan LOS policy, wherein the policy establishes a trigger point for roadway capacity expansion.

The County has indicated that the new policy is an acknowledgment that transportation planning based solely on driver comfort is not an inclusive method of measuring impact. It does not

acknowledge other users of the circulation system or other community values. Roadway LOS is directly linked to roadway infrastructure costs. A low LOS results in higher expenditure of infrastructure dollars for wider roadways that do not necessarily serve all users of the circulation system and result in less than optimum utilization of the roadway. LOS C for example represents about 60 percent utilization of the roadway. Furthermore wider roadways, in general, are: detrimental to rural character and aesthetics, result in greater impacts to biological resources and agricultural land, make it more difficult and less safe for pedestrians and bicycle users to share the road, create induced traffic, adversely affect air quality and climate change goals; make infill and smart growth more expensive and difficult to implement, and do not recognize that congestion changes behavior and supports alternative transit modes.

Impact CI-9: Build-out of the Draft General Plan would result in an adverse physical environmental impact associated with an increase in traffic on roadways in comparison to the policies of the 1983 General Plan. (S)

Allowing a greater utilization of the existing transportation system will increase traffic on roadways that are currently used by agricultural equipment. The 1983 General Plan LOS policy maintained LOS C on all roadways, where the new LOS policy would allow a higher utilization of County roadways. With the increase in traffic volumes on some County roadways, there will be increased delays for agricultural equipment compared to the 1983 General Plan. For these reasons, this impact would be significant and unavoidable.

Mitigation Measure CI-9: None available.

While implementation of the policies and actions included in the Draft General Plan would reduce the severity of this impact, no additional feasible mitigation measures are available. Therefore, this impact would remain significant and unavoidable. (SU)