

## 4 CIRCULATION ELEMENT



Westbound County Road 29, near North Davis Meadows

Source: Olesya Tribukait

*This element focuses on mobility. County roadways and highways carry agricultural equipment, local trips and through traffic. This element seeks to ensure appropriate accessibility yet balance the issues of safety, levels of service, air quality and greenhouse gases and smart growth. A new level of service policy differentiates between the rural and urban areas, reinforces smart growth and recognizes the diversity of the County. The goals and policies emphasize multiple modes of travel and encourage non-vehicular trips. This element also takes an innovative approach to agricultural needs by designating primary routes for farm-to-market trips, other industrial and commercial trucking, and intra- and inter-county travel. This minimizes congestion elsewhere on the roadway network thus allowing for safe and efficient use by agricultural equipment and local traffic. The County must prioritize its scarce transportation resources and this element is organized to facilitate that allocation.*

## **A. Introduction**

### **1. Context**

The Circulation Element provides the framework for Yolo County decisions concerning the countywide transportation system, which consists of various transportation modes, including roads, transit, bike, pedestrian, rail, aviation and ports. It also provides for coordination with the incorporated cities within the county, the Yolo County Transportation District (YCTD), the Sacramento Area Council of Governments (SACOG) and State and federal agencies that fund and manage the County's transportation facilities. The Circulation Element reflects the urban and rural diversity of the unincorporated areas of Yolo County and establishes standards that guide development of the transportation system.

### **2. Contents**

This element addresses transportation, circulation and mobility issues throughout Yolo County including:

1. Comprehensive and coordinated transportation systems (Goal CI-1)
2. Mode and user equity (Goal CI-2)
3. Service thresholds (Goal CI-3)
4. Environmental impacts (Goal CI-4)
5. System integration (Goal CI-5)
6. Accessible transit (Goal CI-6)
7. Truck and rail operations (Goal CI-7)
8. Port of West Sacramento (Goal CI-8)
9. Air transport (Goal CI-9)
10. Transportation within the Delta (Goal CI-10)

The subsection for each of these topics is formatted as follows: Background Information, Policy Framework and Implementation Program. Within the Policy Framework and Implementation Program sections, policies and actions related to climate change are denoted with the symbol "🌐".

### **3. Background Information**

The roadway network within the unincorporated parts of the county is primarily rural in character, serving small communities and agricultural uses through a system of State freeways and highways, county roads (including arterials, collectors and local streets) and private roads. Interstate 80, Interstate 5 and Interstate 505 are the primary



transportation corridors extending through the county and serve all of the county's major population centers including Davis, West Sacramento, Winters and Woodland.

Detailed background information relevant to this element is contained in Chapter Four (Transportation and Circulation) of the Yolo County General Plan Update Background Report, dated January 2005.

#### 4. Roadway Level of Service

Level of service is a general measure of traffic operating conditions whereby a letter grade, from Level of Service (LOS) A to F, is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with the driving experience as well as speed, travel time, traffic interruptions and freedom to maneuver a typical vehicle. The level of service thresholds for roadways is based on traffic volume thresholds. Level of service does not represent the perspective of other roadway users such as pedestrians, bicyclists, or transit users, and therefore, is not the only measure of roadway performance used by the County. Policy CI-3.6 requires "complete" streets as part of the roadway network, in order to accommodate all users. The level-of-service grades for roadways are generally defined as follows (capacity ranges are identified for each level of service; however the actual capacity of a roadway depends on the roadway type):

- **LOS A** represents free-flow travel with an excellent level of comfort and convenience and the freedom to maneuver for motorists. LOS A generally represents utilization of less than 30 percent of roadway capacity.
- **LOS B** has stable operating conditions for motorists, but the presence of other vehicles on the road causes a noticeable, though slight, reduction in comfort, convenience and maneuvering freedom for drivers. LOS B generally represents utilization of 30 to 50 percent of roadway capacity.
- **LOS C** has stable operating conditions for motorists, but the operation of individual motorists is substantially affected by the interaction with other vehicles in the traffic stream. LOS C generally represents utilization of 40 to 70 percent of roadway capacity.
- **LOS D** represents high-density but stable flow for motorists, however they will experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience. LOS D generally represents utilization of 60 to 90 percent of roadway capacity.
- **LOS E** represents operating conditions at or near capacity for motorists. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver for motorists is difficult. Unstable operation is frequent and minor disturbances in traffic flow can cause breakdown conditions. LOS E generally represents utilization of 80 to 100 percent of roadway capacity.

- **LOS F** is used to define forced or breakdown conditions for motorists. This condition exists wherever the volume of vehicular traffic demand exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.

These definitions of level of service for motorists are contained in the Highway Capacity Manual (HCM) (Transportation Research Board, 2000). The HCM methodology is the prevailing measurement standard at this time throughout the United States.

### **5. State Transportation Planning**

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, level of service 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 Interstate 5, Interstate 80, Interstate 505, State Route 16, State Route 45, State Route 84, State Route 113 and State Route 128. A limitation of these reports is that they do not consider funding availability.

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 Interstate 5 through Yolo County. The concept report for Interstate 5 is currently being updated.

In addition to the concept report, a Corridor System Management Plan (CSMP) has been developed for Interstate 5 (*State Route 99 & Interstate 5 Corridor System Management Plan*, Caltrans, May 2009), which addresses the segment between the Sacramento County line and the City of Woodland in Yolo County. CSMPs are 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.

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 Interstate 80 through Yolo County. In addition to the concept report, a CSMP has been developed for Interstate 80 (*Interstate 80 and Capital City Freeway Corridor System Management Plan*, Caltrans, May 2009). This document identifies the addition of HOV lanes between Mace Boulevard (in Davis) and Enterprise Drive (in West Sacramento) along Interstate 80 in both directions.

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

The State Route 16 Transportation Concept Report (Caltrans, December 2004) identifies the 20-year concept and ultimate facility for State Route 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 State Route 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 Interstate 5. The concept report also identifies the need for a traffic signal at the State Route 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 (May 2009) that identifies safety improvements for State Route 16 from near the town of Brooks to Interstate 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 will not provide capacity-enhancing improvements.

The Route Concept Report, State Route 45 (Caltrans, March 1990) contains the 20-year improvement concept for State Route 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 State Route 84 through year 2024. State Route 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 State Route 113. The concept facility for the section between Interstate 80 and Interstate 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 Interstate 5 and the Yolo/Sutter County line is to maintain the

existing two-lane conventional highway. The concept LOS is E for State Route 113 through Yolo County. The concept report identifies County Road 102 between Woodland and Knights Landing as a more direct route than the existing State Route 113 alignment. The report notes that improvements would be required for both State Route 113 and County Road 102 before an exchange between Caltrans and Yolo County would occur.

The State Route 128 Transportation Concept Report (Caltrans, January 2001) contains the 20-year improvement concept for State Route 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.

## **6. Regional Transportation Planning**

SACOG is responsible for regional transportation planning in Yolo County. The 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 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.

## **7. Local Planning**

Transportation planning in Yolo County is the responsibility of the County; the cities of Davis, West Sacramento, Winters and Woodland; and the Yolo County Transportation District. Documents relevant to the unincorporated area of Yolo County that provide guidance for local transportation planning are described below.



a. Circulation Diagram

The Circulation Element Diagram (Figure CI-1 A and B) depicts the proposed circulation system to support existing, approved and planned development in unincorporated Yolo County through 2030 (as provided for on the Land Use Diagram, Figure LU-1).

Generally, the Circulation Element Diagram does not show roads that do not contribute to regional circulation. Such roads may, however, be locally significant and therefore reflected in the MTP or within the Circulation Elements of the cities of Davis, West Sacramento, Winters and/or Woodland. Examples include College Street and Kentucky Avenue in the City of Woodland and West Capitol Avenue in the City of West Sacramento.

b. Vehicular Circulation

The circulation system for Yolo County is shown using a set of roadway classifications, developed to guide the County's long range transportation planning and programming. The following describes the classification of the County roadway system in the unincorporated area, as identified on Figure CI-2 (A and B).

c. Freeway

Freeways are intended to serve both intra-regional and inter-regional travel. They provide no access to adjacent properties, but rather are fed traffic from county roadways by access ramps at interchanges. Freeways provide connections to other regional highways and are capable of carrying high traffic volumes. Examples include Interstate 5, Interstate 80, Interstate 505 and portions of State Route 113.

Auxiliary lanes are also a part of the freeway system. An auxiliary lane is an additional lane on a freeway that connects between two interchanges from an on-ramp to an off-ramp.

d. Arterial

Arterial roadways are fed by local and collector roads and provide intra-community circulation and connection to regional roadways. Arterials within the unincorporated areas generally represent the "main street" of communities and are usually part of the regional highway system. Although their primary purpose is to move traffic, arterial roadways often provide access to adjacent properties. Examples include State Route 113 through the town of Knights Landing, State Route 16 through the towns of Guinda, Capay, Esparto, and Madison, and County Roads 6 and 99W through the town of Dunnigan.

FIGURE CI-1A CIRCULATION DIAGRAM WEST

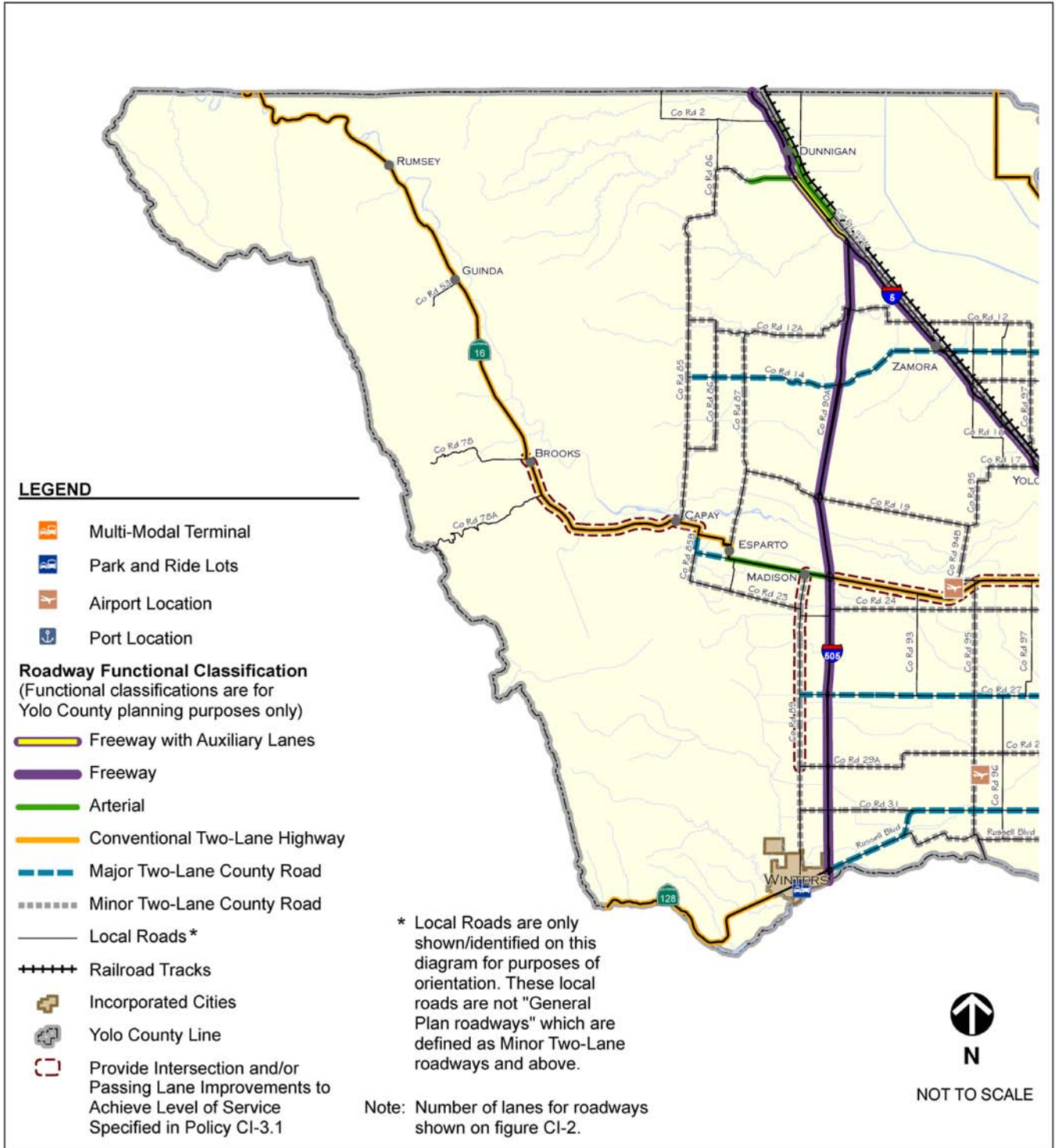






FIGURE CI-1B CIRCULATION DIAGRAM EAST

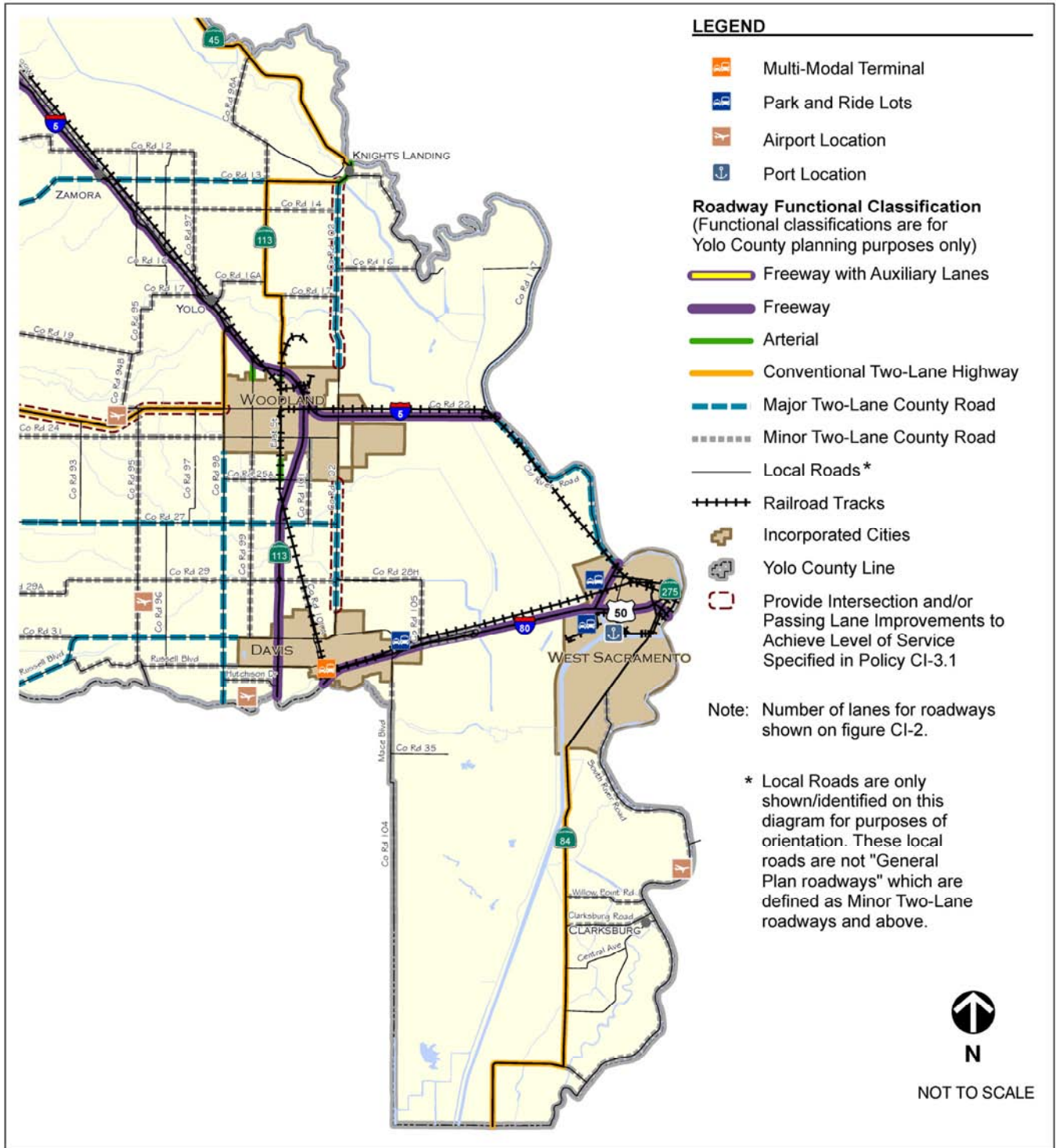
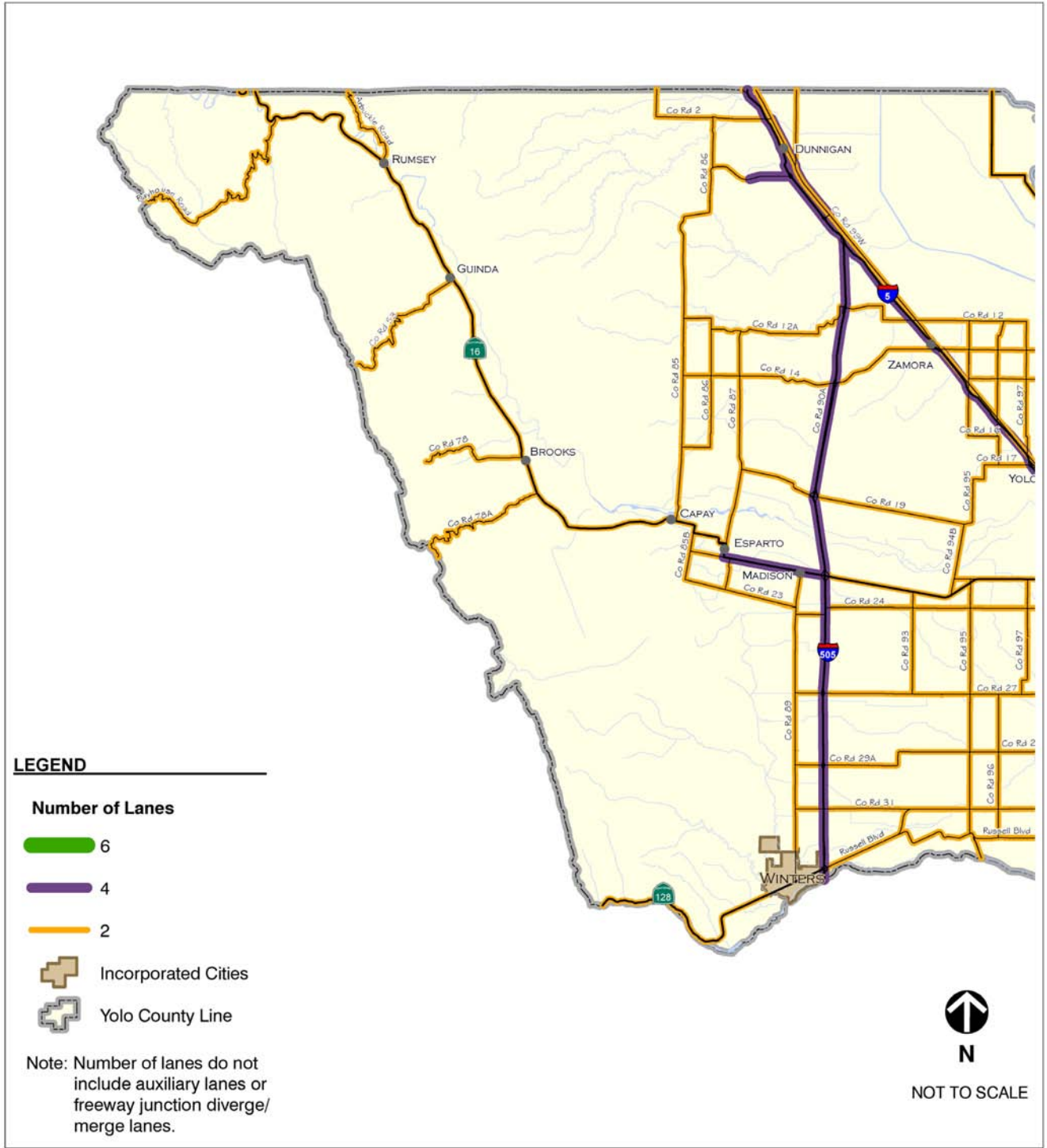


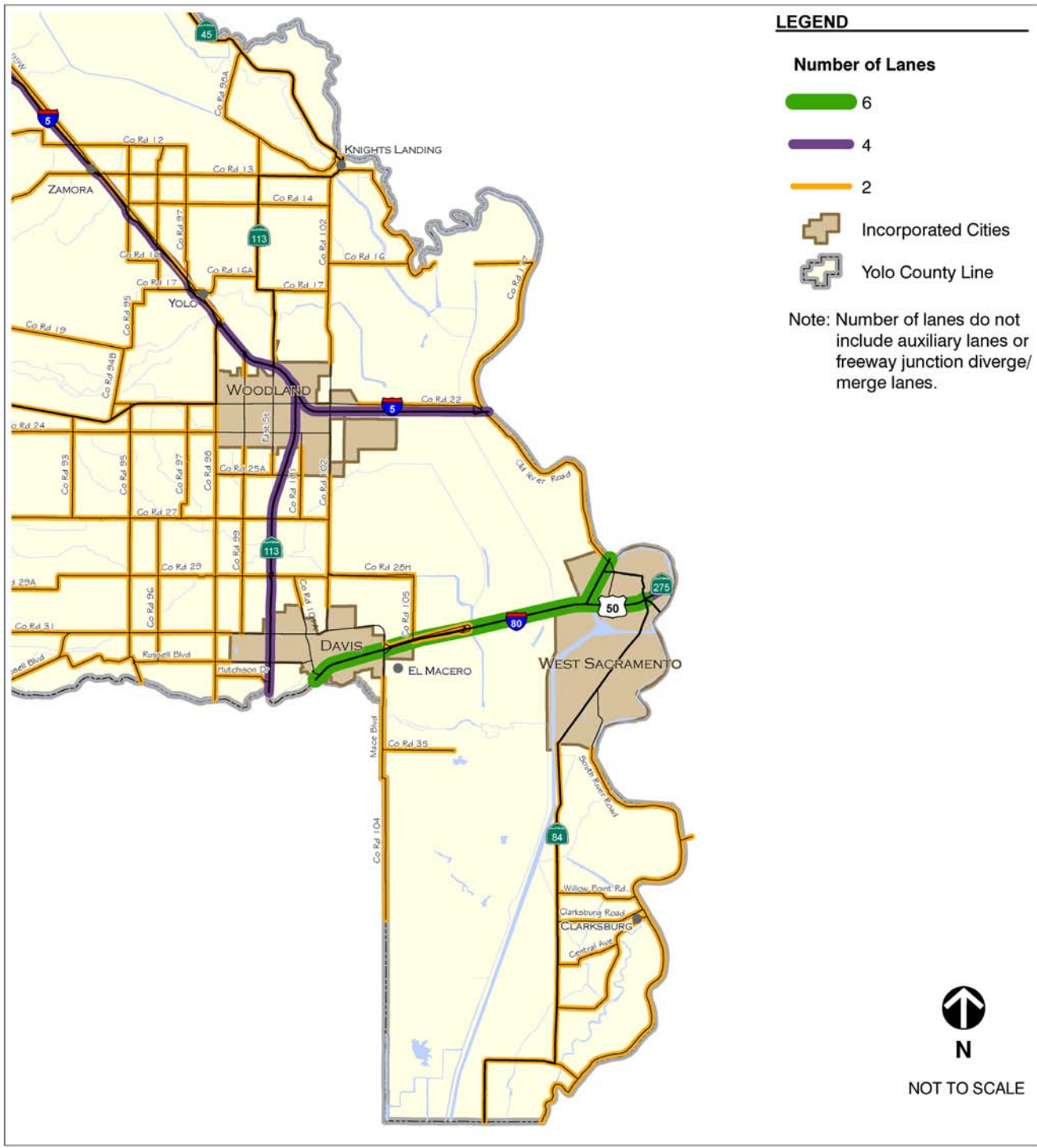
FIGURE CI-2A ROADWAY NUMBER OF LANES WEST



Source: Fehr & Peers, 2008.



FIGURE CI-2B ROADWAY NUMBER OF LANES EAST



Source: Fehr & Peers, 2008.

e. Conventional Two-Lane Highway

Conventional two-lane highways are identified for State-maintained highway facilities and are used as primary connections between major traffic generators or as primary links in State and national highway networks. Such routes often have sections of many miles through rural environments without traffic control interruptions. Some local access to parcels may be provided, particularly in rural areas. Examples include State Route 16 between the town of Esparto and the Yolo/Colusa County line, and State Route 45 between the town of Knights Landing and the Yolo/Colusa County line.

f. Four-Lane County Road/Highway

By strict definition, such a facility is not a highway; it functions primarily as a collector facility. County roads serve travel that is primarily intra-county rather than of regional or statewide importance. A four-lane county road provides additional capacity in high traffic demand sections of a major county road and/or conventional two-lane highway. Currently the County does not have any four-lane county roads or highways.

g. Major Two-Lane County Road/Highway

By strict definition, such a facility is not a highway; it functions primarily as a collector facility. Major two-lane county roads serve travel that is primarily intra-county rather than of regional or statewide importance. Major two-lane county roads carry traffic between communities and/or other areas of the County, compared with minor two-lane roads which support local traffic. These facilities are shown on the Circulation Element Diagram where they provide regional network continuity, or may serve through-traffic demand where projected volumes do not warrant a four-lane roadway. Examples include County Road 102, County Road 98, County Road 31 and County Road 27.

h. Minor Two-Lane County Road/Highway

By strict definition, such a facility is not a highway; it functions primarily as a collector facility. Minor two-lane county roads primarily provide access to adjacent land and travel over relatively short distances. Minor two-lane county roads primarily carry local traffic, as compared with major two-lane roads which carry intra-county traffic. Examples include County Road 12A and County Road 29.

i. Local Roads

Local roads primarily provide service to adjacent land uses and connect with other local and county roads. Local roads are typically developed as two-lane undivided roadways. Local roads are only shown on the Circulation Element Diagram for orientation purposes and are not considered General Plan Roadways (which are defined as minor two-lane county roads/highways and higher functional classifications).



j. Other Considerations

Although maintained and operated by Caltrans, the freeways and highways shown on the Circulation Element Diagram are an integral part of the countywide transportation system. Coordination between Yolo County, Caltrans, SACOG and local jurisdictions concerning the planning and construction of improvements to these facilities is essential to meeting regional traffic needs.

### 8. Planned Roadway Improvements

The Circulation Element Diagram displays the roadway functional classification and improvements needed to accommodate the anticipated land use through 2030, assuming the level of service thresholds and other policies of this General Plan. The regional SACOG *SACMET* transportation model was used to develop the travel demand forecasts needed to determine the future roadway network improvements, which are summarized below:

- 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.

## 9. Bicycle and Pedestrian Circulation

Yolo County is a favorable area for bicycling because of its flat terrain, mild climate and relatively short distances between cities and unincorporated communities. Bikeways within Yolo County are classified into the following three types:

- Class I – off-street bike paths.
- Class II – on-street bike lanes marked by pavement striping. In agricultural areas, designation of Class II facilities should consider movement of agricultural equipment.
- Class III – on-street bike routes that share the road with motorized vehicles.

The Yolo County Bicycle Transportation Plan (BTP) identifies three proposed Class I bike paths and additional Class II and III bikeways. The additional bikeways will complete the existing gaps between the four incorporated cities and will provide additional connectivity to the expanding communities of Esparto, Madison and Dunnigan. With the anticipated expansion and the increased number of students in Madison and Esparto, future updates to the BTP should evaluate the feasibility of a Class I bike path to connect the two communities. The latest BTP shows the existing and proposed bikeways in unincorporated Yolo County and is incorporated into this circulation element by reference (see Figures CI-3A and 3B).

Future pedestrian facilities will typically depend on new developments that are required to construct sidewalks and other amenities. Intra-county hiking trails that connect communities and/or significant features are considered in the policies of the Conservation and Open Space Element.



Students riding Yolobus

Source: UC Davis

## 10. Transit

The YCTD Short Range and Long Range Transit Plans provide the vision, goals and framework for public transportation services in Yolo County. Figure CI-4 (A and B) shows existing transit. The YCTD Short Range Transit Plan (SRTP) presents the short-range (five to seven years) enhancements to current transit services under the following three growth scenarios:

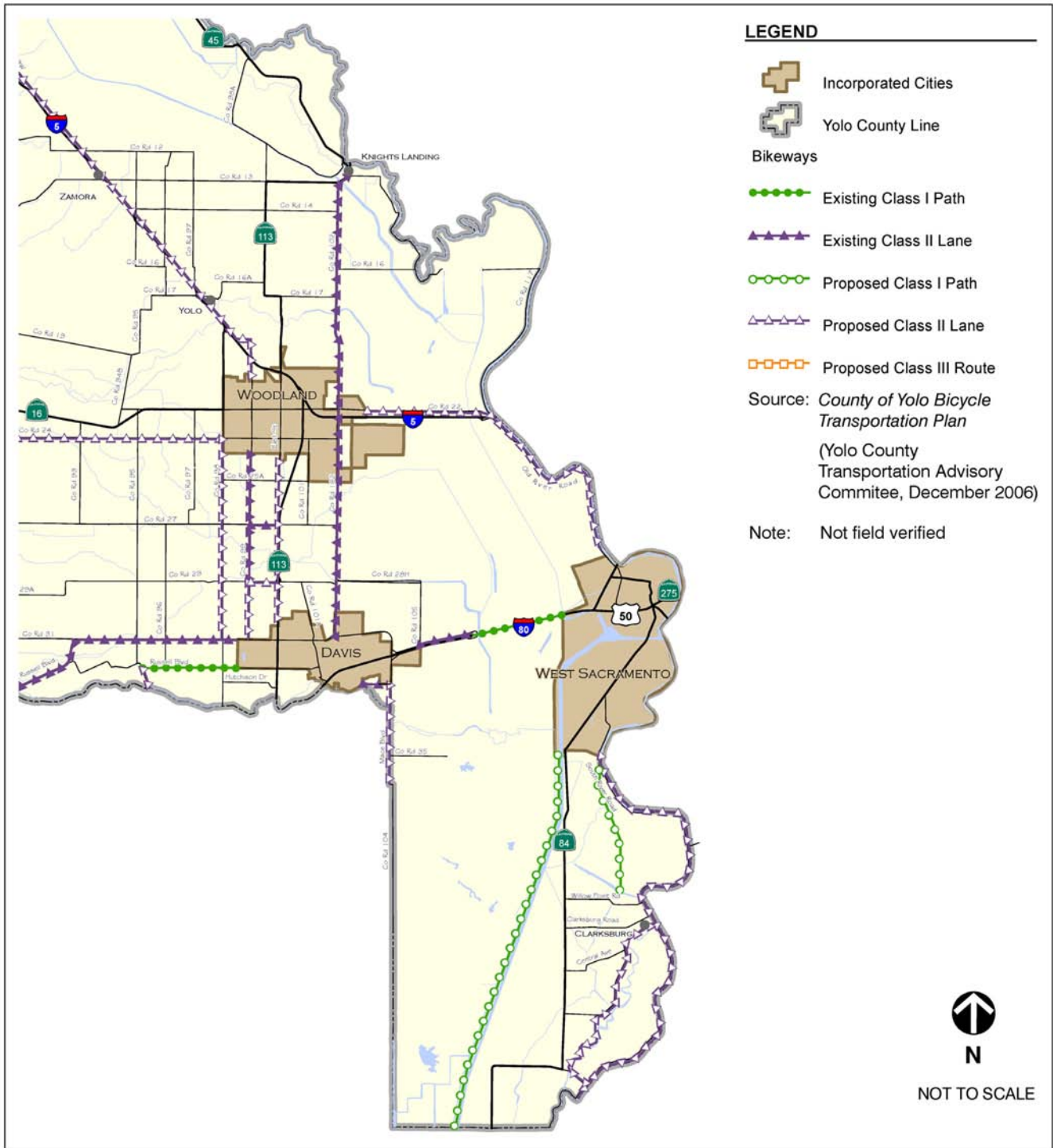
- Base – Assumes no significant increase in operating revenue.
- Growth – Presents the level of service design necessary to meet SACOG's ridership goal of 3.8 percent.



FIGURE CI-3A EXISTING AND PROPOSED BIKEWAYS – WEST



FIGURE CI-3B EXISTING AND PROPOSED BIKEWAYS – EAST







- Future – Improvement concepts beyond the five to seven year window.

According to the SRTP, future demand for public transit is anticipated to come primarily from the incorporated cities, with the exception of the Cache Creek Casino Resort, the employees of which constitute a substantial portion of the ridership on routes along State Route 16. The SRTP improvements in the unincorporated area of the County are summarized by each growth scenario below.

- Base Scenario

- No improvements are recommended for the “base” case.

- Growth Scenario

- Add an additional AM and PM peak trip between the cities of Winters and Davis.
- Add two additional midday roundtrips between Cache Creek Casino Resort and the City of Woodland.

- Future Scenario

- Increase bus frequency to 60 minutes and extend the PM operating service between the cities of Winters and Vacaville.
- Increase bus frequency to 60 minutes along the Highway 16 corridor between Cache Creek Casino Resort, Capay, Esparto and Madison.
- Provide more regular service (on weekends) to Knights Landing.
- Increase service to University of California at Davis if demand arises.

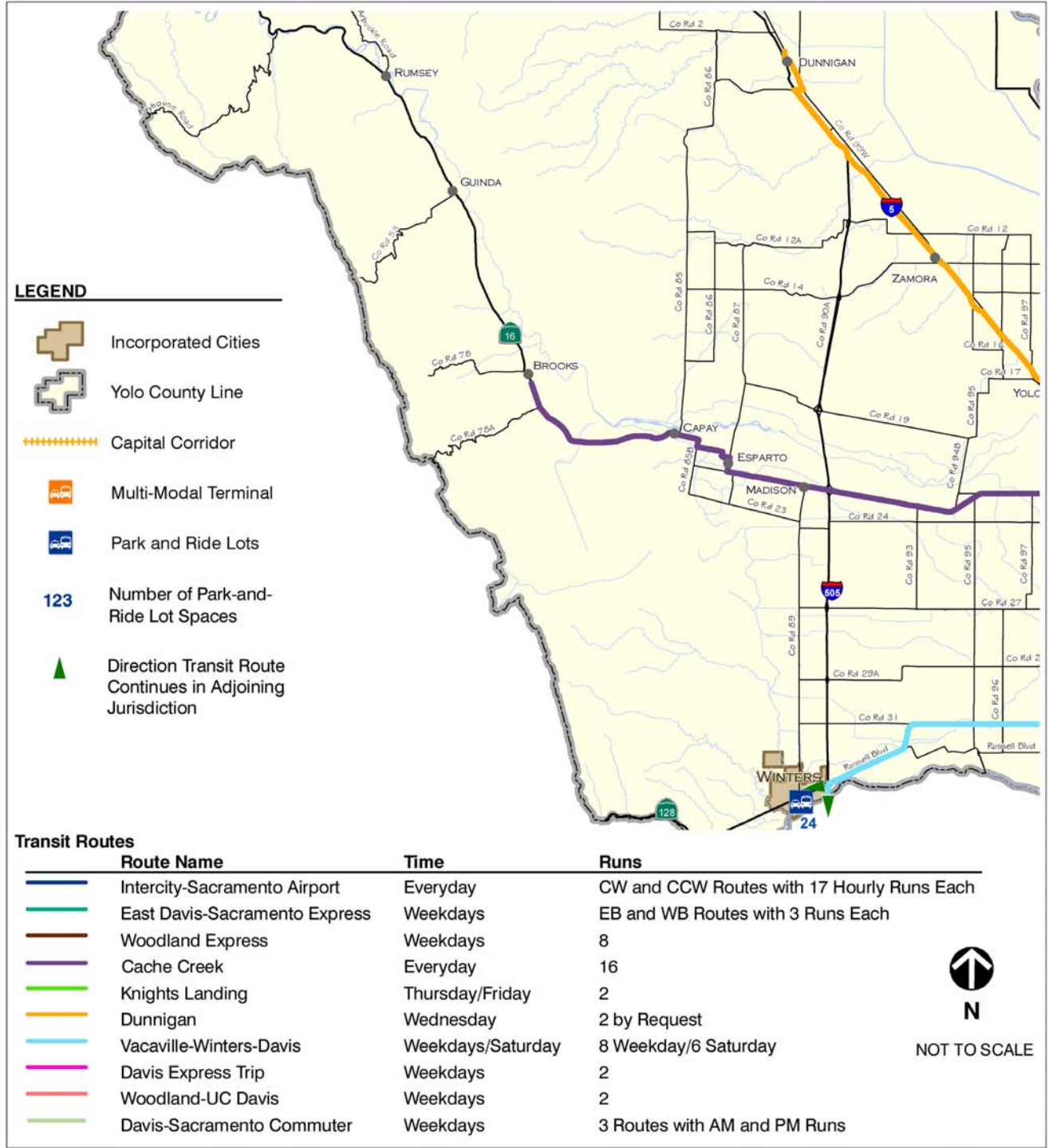
Future YCTD Transit Plan updates should monitor and consider whether growth in the developing communities of Dunnigan, Esparto and Madison require future increases in service frequency and new routes. The SRTP also identifies several potential park-and-ride lot locations in the incorporated cities to facilitate ridesharing and transit trips (see Figures CI-4A and B).

## 11. Goods Movement

SACOG’s *Draft Regional Goods Movement Study-Phase II White Papers* (January 10, 2007) evaluated the following topics that relate to goods movement within the region:

- Consequence of changes in land use on goods movement.
- Growing the logistics sector (increasing the number of businesses that receive, process, store and move goods).
- Potential for changing goods movement from trucking and rail to other alternatives, such as pipelines, air and shipping.

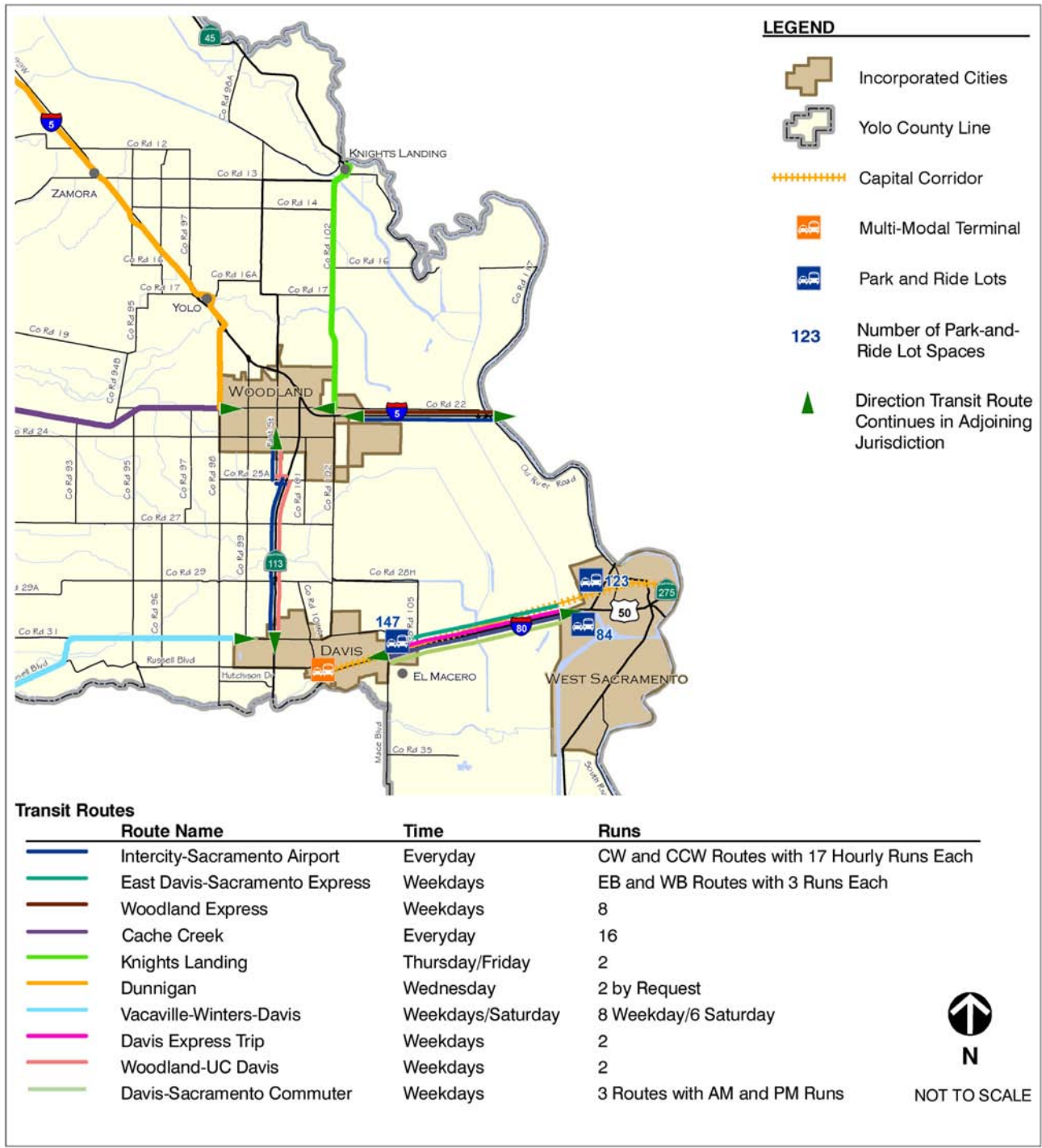
FIGURE CI-4A EXISTING AND PROPOSED TRANSIT ROUTES AND PARK-AND-RIDE LOTS WEST



Source: Fehr & Peers, 2008.



FIGURE CI-4B EXISTING AND PROPOSED TRANSIT ROUTES AND PARK-AND-RIDE LOTS



Source: Fehr & Peers, 2008.

EAST

- Metropolitan Transportation Plan projects that could potentially increase goods movement.

The study concluded the following:

- Adequate land is available for goods movement related uses in the SACOG region.
- The major new growth areas of Woodland, Metro Air Park and South Sutter should accommodate much of the anticipated demand for industrial uses.
- Employment in the manufacturing sector will continue to decline but growth is anticipated in the logistics sector although wage level growth is uncertain.
- The potential for shifting goods movement in the SACOG region from trucks to other modes such as air, rail and ship is limited. Modal shift is dependent on a wide range of factors, many of which are directly tied to market conditions that are difficult for one region to influence. As a strategy, modal shift would work best as a statewide or multi-region strategy. The MTP project list includes about 99 projects related to goods movement that represent an investment of \$2.5 billion. Another 238 projects have “minor” to “significant” goods movement benefits.

Phase III of the SACOG’s Goods Movement study will evaluate specific opportunities and develop a preferred goods movement plan.

In general, the SACOG study suggests that goods movement be considered directly in local and regional decisions regarding land use and transportation and that transportation projects with goods movement benefits be given additional priority for funding and implementation. Easing the movement of commodities through the region may result in congestion relief.

## **12. Port of West Sacramento**

As of September 2006, the Ports of West Sacramento and Oakland finalized a 10-year agreement that gives the Port of Oakland business management rights of the Port of West Sacramento. The Port of West Sacramento will retain executive authority but the Port of Oakland will direct maritime management and marketing services, commercial real estate advisory, management and development services, project management and advisory services, government and community advisory services and project finance and advisory services.

The future success of the Port of West Sacramento lies with the ability to compete with other ports and forms of goods movement. According to SACOG’s Regional Goods Movement Study, a “limited reevaluation report” will be prepared for dredging the Sacramento Deep Water Ship Channel from 30 to 35 feet. Dredging the Sacramento Deep Water Ship Channel to 35 feet would provide a competitive edge for attracting the



larger ships routinely docking at the Port of Stockton. The estimated price of dredging the channel is approximately \$80 million. Figure CI-5 provides the location of the Port of Sacramento.



Port of West Sacramento

Source: April Farnham-Morrison

Other opportunities to improve the economic outlook of the Port of West Sacramento include:

- Improving on-site infrastructure.
- Transporting goods by barge.
- Increasing shipment of bulk goods such as steel, lumber, construction materials, windmill equipment and power cells.

### 13. Rail

There are three remaining operational railroads in Yolo County: the Sierra Northern Railway and Sacramento River Train which connect Woodland and West Sacramento; the Union Pacific which connects Davis and West Sacramento; and the California Northern which connects Colusa County and Davis (see Figure CI-5).

- The Sierra Northern Railway provides freight traffic between Woodland and West Sacramento, including the Port of West Sacramento. The Sacramento River Train is operated by the Sierra Northern Railroad Company as an entertainment passenger train that runs from Woodland to West Sacramento.

FIGURE CI-5 EXISTING GOODS MOVEMENT AND AVIATION FACILITIES



Source: Fehr & Peers, 2008.



- The California Northern rail line is a freight line that runs through Davis and Woodland and along Interstate 5 past Dunnigan.
- Union Pacific (UP) operates a railroad connecting Davis to West Sacramento. The freight service carries commodities from the Port of Sacramento. This railroad also carries Amtrak passenger trains.

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 CI-4) that links Davis to the San Francisco Bay Area and downtown Sacramento. The station is open seven days a week for ticket sales and baggage service. Free short-term (more than two hours) and long-term parking is provided for Amtrak passengers. Trains that stop in Davis include the Coast Starlight, California Zephyr, and the Capitol Corridor. In addition, Davis is served by Amtrak commercial buses connecting to and from San Joaquin trains in Stockton.

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 the CCJPA along with the partners who help deliver the Capitol Corridor service, which include Amtrak, Union Pacific Railroad, and Caltrans.

More information on these railroads is also provided in the Noise section of the Health and Safety Element.

### **13. Airports**

There are four primary airports located within the unincorporated area (see Figure CI-5).

- The Yolo County Airport is a publicly owned facility, located approximately three miles west of Davis. It has a number of hangers for the storage of private planes, as well as aircraft maintenance and sales, fueling, parachuting and visitor services. The Airport Master Plan (1998) for this facility is currently undergoing an update.
- The Watts-Woodland Airport is a privately owned facility, located approximately 4 miles west of Woodland.
- The University Airport is a publicly owned facility, located approximately two miles southwest of Davis on the UC Davis campus. Aircraft owners affiliated with the University are the principal users.

- The Borges-Clarksburg Airport is a privately owned facility, located two miles northeast of Clarksburg.

In addition to the above airports, there are other privately owned airstrips in the unincorporated area that are primarily used for the benefit of the owner and are not available for use by the general public.

SACOG serves as the Airport Land Use Commission (ALUC) for Yolo County. The ALUC is responsible for developing and maintaining comprehensive land use plans (CLUPs) to protect public health and safety and ensure compatible land uses in the areas around each airport. Comprehensive land use plans have been prepared for the County Airport, Watts-Woodland and Borges-Clarksburg airports. An Airport Layout Plan (ALP) has been prepared by UC Davis for the University Airport.

At the State level, the Caltrans Division of Aeronautics produces the California Aviation System Plan System Requirements Element (December 2003). This report is updated every five years to identify and prioritize needed airport capacity and safety-related infrastructure enhancements that impact the safety and effectiveness of the California Aviation Transportation System.

Caltrans' recommended enhancements for public airports in Yolo County include extending and widening both the Watts-Woodland and University Airport runways and providing 24-hour on-site automated weather service at these two airports and the Yolo County Airport. Automated weather service at the County Airport was installed in 2004. The Borges-Clarksburg Airport was not included in the report since it is privately owned and operated.

## ***B. Regulatory Framework***

### **1. State General Plan Requirements**

State law (Section 65302b of the Government Code) mandates that the circulation element contain the general location and extent of existing and proposed:

- Major thoroughfares;
- Transportation routes;
- Terminals;
- Military airports and ports; and
- Other public utilities and facilities.

State law provides that the County can address these items in any format and is required to address them only to the extent that they are relevant in the County. Section 65301a of the Government Code indicates that the General Plan may be adopted in any





format deemed appropriate or convenient by the Board of Supervisors, including the combining of elements. Section 65301c goes on to clarify that the County is required to address each of these items only to the extent that the subject of the element exists in the planning area.

In light of this, the County of Yolo has addressed all of the above items within this element, with the following exceptions:

- Military airports and ports are not addressed because the County has no such military facilities.
- Public utilities and facilities are addressed in the Public Facilities and Services Element.

The Circulation Element has been prepared in correlation with the Land Use and Community Character Element, which is another requirement of Government Code Section 65302b. The Circulation Element Diagram (Figure CI-1 A and B) depicts the proposed circulation system for unincorporated Yolo County to support existing and planned development through 2030 as defined in the Land Use and Community Character Element. Related policies can also be found in the Public Facilities and Services Element; Agricultural and Economic Development Element; Conservation and Open Space Element; and Health and Safety Element.

### C. Policy Framework

**GOAL CI-1      Comprehensive and Coordinated Transportation System. Plan, develop and maintain a comprehensive, coordinated transportation system to ensure the opportunity for safe, efficient and convenient movement of persons and goods.**

Policy CI-1.1      Ensure future county transportation routes are consistent with the planned improvements shown in the Circulation Element Diagram.

Policy CI-1.2      Preserve and continue to develop a fully-connected grid-based circulation system that distributes traffic evenly and avoids excessive concentrations of traffic in any given area. 🌐

Policy CI-1.3      Reduce the total vehicle miles of travel (VMT) per household by making efficient use of existing transportation facilities and by providing for more direct routes for pedestrians and bicyclists through

the implementation of “smart growth” and sustainable planning principles. 🌐

- Policy CI-1.4 Continue to work with Caltrans, SACOG, cities, and other regional agencies to achieve timely construction of freeway, interchange, highway and county road improvements that are consistent with this General Plan. The County shall assist Caltrans in implementing improvements to State Highway facilities that are required due to new growth and are consistent with this General Plan.
- Policy CI-1.5 Program and spend available transportation funds to maximize the use of federal and other matching sources.
- Policy CI-1.6 Maintain the county roadway network through a regular maintenance program that prioritizes improvement projects based on available funding.
- Policy CI-1.7 Coordinate with other local governments to maintain jointly -owned infrastructure (e.g. County Line Road, Freeport Bridge, Putah Creek bridges).
- Policy CI-1.8 Work with adjoining landowners to reduce roadway flooding.
- Policy CI-1.9 Establish road maintenance districts, where appropriate, to provide a stable source of funding for repairs and roadway improvements.
- Policy CI-1.10 Coordinate with appropriate entities to maintain the following as primary routes for emergency evacuation from Yolo County:
- Interstate 5 – North towards Redding and east into Sacramento.
  - Interstate 80 – East into Sacramento and west toward Solano County and the San Francisco Bay Area.
  - Interstate 505 – South to the junction of E/WB Interstate 80.
  - State Route 16 – West from Woodland into the Capay Valley and then north into Colusa County.
  - State Route 45 – North from Knights Landing into Colusa County.
  - State Route 84 – South from West Sacramento into Solano County with one crossing east into Sacramento County across the Sacramento River.
  - State Route 113/County Road 102 – North from Woodland into Sutter County and south from Davis into Solano County.



- State Route 128 – West from Winters into Napa County.
- County Road 22 – East from Woodland into West Sacramento and then into Sacramento at two locations across the Sacramento River.
- County Road 98 – South from Woodland into Solano County.

Policy CI-1.11 Coordinate with local governments and agencies to ensure that roadway maintenance and improvements do not affect other critical infrastructure.

Policy CI-1.12 CMP Consistency – 1) 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; 2) 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; 3) Coordinate with cities to consider opting out of the CMP pursuant to Section 65088.3 of the Government Code. (DEIR MM CI-4)

Policy CI-1.13 New sensitive land uses shall be buffered from freeways and high-traffic roads using setbacks consistent with Action CO-A106 in the Conservation and Open Space Element.

Policy CI-1.14 Improved access to the State Highway System to serve new development within Specific Plan areas shall be locally funded.

**GOAL CI-2**      **Mode and User Equity. Design and implement a circulation and transportation system that reflects the needs of all transportation types and users.**

Policy CI-2.1 When constructing or modifying roadways, plan for use of the roadway space by all users, including automobiles, trucks, alternative energy vehicles, agricultural equipment, transit, bicyclists, and pedestrians, as appropriate to the road classification and surrounding land uses. 🌐

- Policy CI-2.2 Encourage employers (including the County) to provide transit subsidies, bicycle facilities, alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking for carpools/vanpools. 🌐
- Policy CI-2.3 Ensure that, wherever feasible, public transit and alternative mode choices are a viable and attractive alternative to the use of single-occupant motor vehicles. 🌐
- Policy CI-2.4 The comfort, convenience, and safety of bicyclists and pedestrians are as important as, and should be balanced to the greatest feasible extent with, those same values for drivers. 🌐

<b>GOAL CI-3</b>	<b><u>Service Thresholds.</u> Balance the preservation of community and rural values with a safe and efficient circulation system.</b>
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- 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 planned capacity of the County's roadways.
- A. Interstate 5 (County Road 6 to Interstate 505) – LOS D is acceptable to the County, 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. LOS D is anticipated by Caltrans according to the Interstate 5 Transportation Concept Report 1996 to 2016 (Caltrans, April 1997).
  - B. Interstate 5 (Interstate 505 to Woodland City Limit) – LOS D is acceptable to the County. LOS D is anticipated by Caltrans according to the Interstate 5 Transportation Concept Report 1996 to 2016 (Caltrans, April 1997).
  - C. Interstate 5 (Woodland City Limit to Sacramento County Line) – LOS F is acceptable to the County. The County will secure a fair share towards intersection improvements from all feasible sources including planned development at the Elkhorn site. LOS C is anticipated by Caltrans according to the State Route 99 and



Interstate 5 Corridor System Management Plan (Caltrans, May 2009).

- D. Interstate 80 (Davis City Limit to West Sacramento City Limit) – LOS F is acceptable to the County. LOS F is anticipated by Caltrans according to the Interstate 80 and Capital City Freeway Corridor System Management Plan (Caltrans, May 2009).
- E. State Route 16 (County Road 78 to County Road 85B) – LOS D is acceptable.
- F. State Route 16 (County Road 85B to County Road 21A) – LOS E is acceptable.
- G. 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 provide funding for the project.
- H. 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 all feasible sources. Caltrans and the Rumsey Band of Wintun Indians shall be encouraged to establish a funding mechanism to pay the remainder.
- I. State Route 113 (Sutter County Line to County Road 102) – LOS F is acceptable to the County. The County will secure a fair share towards these improvements from planned development. LOS F is anticipated by Caltrans according to the State Route 113 Transportation Concept Report 1991-2019 (Caltrans, May 2000).
- J. State Route 113 (County Road 102 to Woodland City Limits) – LOS D is acceptable.
- K. State Route 128 (Interstate 505 to Napa County Line) – LOS D is acceptable.
- L. Old River Road (Interstate 5 to West Sacramento City limits) – LOS D is acceptable.
- M. South River Road (West Sacramento City Limit to the Freeport Bridge) – LOS D is acceptable.

- N. 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 all feasible sources.
- O. County Road 24 (County Road 95 to County Road 98 – LOS D is acceptable. (DEIR MM CI-2)
- P. County Road 27 (County Road 98 to State Route 113 – LOS D is acceptable. (DEIR MM CI-2)
- Q. County Road 31 (County Road 95 to County Road 98) – LOS D is acceptable. (DEIR MM CI-2)
- R. County Road 32A (County Road 105 to Interstate 80) – LOS D is acceptable.
- S. County Road 98 (County Road 29 to County Road 27) – LOS D is acceptable. (DEIR MM CI-2)
- T. 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 all feasible sources. (DEIR MM CI-2)
- U. 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. (DEIR MM CI-2)
- V. 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. (DEIR MM CI-2)
- W. County Road 102 (Woodland City Limit to Davis City Limit) – 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.
- X. 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:



1. Preserving agriculture or open space land;
2. Enhancing the agricultural economy;
3. Preserving scenic roadways/highways;
4. Preserving the rural character of the county;
5. Avoiding adverse impacts to alternative transportation modes;
6. Avoiding growth inducement; or
7. Preserving downtown community environments.
8. Where right-of-way constraints would make the improvements infeasible. (DEIR MM CI-2)

Policy CI-3.2 Identify specific level of service policies within Specific Plans and Community Area Plans based on the following conditions: 🌐

- A. Development shall occur consistent with applicable Land Use and Community Character Element policies.
- B. Development shall provide transit, bike and pedestrian facilities and amenities consistent with the applicable Circulation Element policies.
- C. New development shall utilize a grid pattern for all roadways.
- D. Level of service shall not be allowed to worsen beyond LOS E within the proposed Dunnigan Specific Plan except where specified in Policy CI-3.1.
- E. Level of service shall not be allowed to worsen beyond LOS E within the proposed Knights Landing Specific Plan except where specified in Policy CI-3.1.
- F. Level of service shall not be allowed to worsen beyond LOS E within the proposed Madison Specific Plan except where specified in Policy CI-3.1.
- G. Level of service shall not be allowed to worsen beyond LOS E within the Esparto Community Plan except where specified in Policy CI-3.1.
- H. Level of service shall not be allowed to worsen beyond LOS D within all other Community Plans and Specific Plans except where specified in Policy CI-3.1.

- I. Level of service shall not be allowed to worsen beyond LOS E within the Covell Specific Plan except where specified in Policy CI-3.1.
- J. Where roadway improvements are not needed due to the adoption of a lower level of service as described in Policy CI-3.1, developers shall be required to construct equivalent circulation and safety improvements for other modes of travel.
- K. Roadways shall be designed to reduce VMT.

## Policy CI-3.3

CEQA review for subsequent projects will analyze project traffic and circulation impacts using both the Yolo County General Plan policies and Caltrans policies (based on the CSMPs, TCCRs, or other guidelines) as applicable.

- A. Consider the following objectives, following consultation with Caltrans, when making decisions to expand or modify the State highway system in Yolo County:
  - 1. Minimize impacts to the environment.
  - 2. Minimize increases in greenhouse gases and air pollutants.
  - 3. Minimize increases in VMT.
  - 4. Minimize long-distance commute trips.
  - 5. Fully utilize existing capacity while maintaining stable flows and speeds.
  - 6. 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:
  - 1. Minimize impacts to the environment.
  - 2. Promote designs that result in a decrease of greenhouse gases and air pollutants.
  - 3. Promote designs that decrease Vehicle Miles Traveled (VMT) and long-distance commute trips.
  - 4. Fully utilize existing capacity in accordance with adopted Levels of Service.





5. Provide facilities for all users including pedestrians, bicyclists, carpool users and transit riders, where appropriate. 🌐

Policy CI-3.4 Define level of service consistent with the latest edition of the Highway Capacity Manual and calculate using the methodologies contained in that manual. At a minimum, weekday AM and PM peak hour traffic volumes will be used in determining compliance with the level of service standard. For recreational and other non-typical peak hour uses, weekday afternoon, weekday late evening, or weekends shall be considered.

Policy CI-3.5 Establish and implement additional programs to maintain established levels of service at intersections and along roadway segments as circumstances warrant, including the following:

- A. Collect and analyze traffic volume data and monitor current intersection and roadway segment levels of service on a regular basis. Use this information to update and refine the Yolo County General Plan travel-forecasting model so that estimates of future conditions are based upon local travel behavior and trends.
- B. Consider, on a case-by-case basis, how to shift travel demand away from the peak period, especially in those situations where peak traffic problems result from a few major generators (e.g. outlying employment locations). 🌐
- C. Perform routine, ongoing evaluation of the efficiency of the urban street traffic control system; with emphasis on traffic signal timing, phasing and coordination to optimize traffic flow along arterial corridors. Use traffic control systems to increase traffic efficiency (e.g. timing and phasing for turn movements, peak period and off-peak signal timing plans).


- Policy CI-3.6 Incorporate the concept of “complete” streets<sup>1</sup> 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-3.7 Consider designs for planned roadway capacity improvements that recognize the unique conditions associated with rural and agricultural areas in accordance with established standards including, but not limited to, the following:
- American Association of State Highway and Transportation Officials (AASHTO) publication “A Policy on Geometric Design of Highways and Streets;”
  - Caltrans’ Main Streets: Flexibility in Design and Operations;
  - Federal Highway Administration’s Flexibility in Highway Design;
  - 2007 California Fire Code; and
  - Institute of Transportation Engineers’ Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities

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<sup>1</sup> Complete streets include facilities and designs that enable safe access for all users (i.e. pedestrians, bicyclists, motorists, and transit riders) of all ages and abilities. Characteristics of complete streets include the following:

- A comprehensive, integrated, connected network.
- Balanced design to accommodate walking, cycling, transit, driving, parking, and deliveries.
- “Activating the street” with a variety of uses and activities that create a varied streetscape.
- Activating the street with design that relates well to the land uses bordering the street and allows for continuous activity.
- Pedestrian and biking facilities that promote safety and maximize access to bordering land uses.
- Aesthetically designed street lights that provide sufficient illumination of sidewalks.
- Consistent landscaping that includes street trees and landscaped medians and sidewalks.
- Sustainable design that minimizes runoff, minimizes heat island effects, responds to climate demands, and conserves scarce resources.
- Well maintained facilities.



Policy CI-3.8 Encourage development that is compact, so as to promote the efficient use of existing transportation facilities consistent with Policy CI-3.1. 

Policy CI-3.9 To the greatest feasible extent, require new development to construct safety improvements consistent with current design standards on existing roadways that are anticipated to accommodate additional traffic from planned development.

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:

- A. Extraordinary construction costs due to terrain, roadside development, or unusual right-of-way needs.
- B. Environmental constraints that may otherwise preclude road improvement to the adopted standards.
- C. 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, and impacts to the State Highway System). For mitigation to be considered feasible, it must be consistent with the policies of the General Plan. 

TABLE CI-1 **ROADWAYS AND TARGETED TRUCKING CORRIDORS WITH HIGHEST PRIORITY FOR IMPROVEMENTS**

Roadway	Segment	
	From	To
County Road 6	County Road 88	Interstate 5
County Road 13	County Road 14	State Route 113
County Road 14	County Road 85	County Road 13
County Road 19	County Road 90A	County Road 94B
County Road 21A	County Road 85B	State Route 16
County Road 22 (Old River Road)	Interstate 5	West Sac City Limits
County Road 23	County Road 85B	County Road 89
County Road 24	County Road 95	County Road 98
County Road 27	County Road 89	County Road 102
County Road 28H	County Road 102	County Road 105
County Road 31	County Road 93A	County Road 98
County Road 32/Russell Blvd	Interstate 505	County Road 31
County Road 32A	Davis City Limit	Interstate 80
County Road 85	County Road 14	State Route 16
County Road 85B	State Route 16	County Road 23
County Road 89	State Route 16	Winters City Limit
County Road 94B	County Road 19	State Route 16
County Road 95	State Route 16	County Road 31
County Road 98	State Route 16/Main Street	Solano County Line
County Road 99W	Colusa County Line	State Route 16
County Road 102	State Route 113	Woodland City Limit
County Road 102	Woodland City Limit	Davis City Limit
County Road 105	County Road 28H	County Road 32A
Clarksburg Road	State Route 84	South River Road



- 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-3.13 Ensure that transportation and circulation improvements (including improvements to comply with County design standards) are constructed and operational prior to or concurrent with the need, to the extent feasible.
- Policy CI-3.14 Encourage inter- and intra-regional traffic to use State and federal interstates and highways. The primary role of County roads is to serve local and agricultural traffic.
- Policy CI-3.15 Provide for greater street connectivity and efficient movement of all transportation modes by: 🌐
- A. Encouraging roundabouts as an alternative intersection control.
  - B. Requiring bicycle and pedestrian connections from cul-de-sacs to adjacent streets, trails, or bicycle paths.
  - C. Requiring a grid-based system.
  - D. Incorporating traffic calming measures where appropriate.
- Policy CI-3.16 Ensure that funding for the long-term maintenance of affected roads is provided by planned development.
- Policy CI-3.17 County roadways shall be limited to a maximum of four lanes. 🌐
- Policy CI-3.18 Ensure adequate access for emergency vehicles.
- Policy CI-3.19 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, the following actions:
- A. 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.
- B. 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).
  - C. Increase the cost of driving and parking private vehicles by, for example, imposing parking fees.
  - D. Build or fund a transportation center where various public transportation modes intersect.
  - E. Provide shuttle service to public transit.
  - F. Provide public transit incentives such as free or low-cost monthly transit passes.
  - G. Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.
  - H. Incorporate bicycle-friendly intersections into street design.
  - I. 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.
  - J. Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
  - K. Work with the school district to create and expand school bus services.
  - L. Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.
  - M. Provide education and information about public transportation.
  - N. 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.



- Policy CI-3.20 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). (DEIR MM CI-1a)
- Policy CI-3.21 Other Specific Plan areas allowed under the 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. (DEIR MM CI-1b)
- Policy CI-3.22 Require each Specific Plan area to establish mode split goals for walking, bicycling, and transit trips in development of the required transit plan (per Action CI-A6). Biennial household surveys should be conducted to ensure identified mode split goals are being achieved as the Specific Plan areas build out.
- Policy CI-3.23 Ensure that walk times to necessary destinations are minimized and that the walking experience is comfortable.

<b>GOAL CI-4</b>	<b>Environmental Impacts. Minimize environmental impacts caused by transportation.</b>
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- Policy CI-4.1 Avoid or mitigate environmental impacts from the construction and/or operation of the transportation system, to the greatest feasible extent. 🌍
- Policy CI-4.2 Support regional air quality and greenhouse gas objectives through effective management of the county's transportation system. 🌍
- Policy CI-4.3 Reduce dependence upon fossil fuels through: 🌍
- Reduction of vehicle trips and vehicle miles traveled by requiring compact, infill and mixed use development.
  - Use of alternatives to the drive-alone automobile, including walking, bicycling and public transit.
  - Use of vehicles powered by renewable/alternative fuel sources.
  - Local street designs that encourage pedestrian and bicycle use and discourage high speed traffic.

- Street designs that support/enhance access between neighborhoods and to neighborhood-based commercial developments.
- Promotion of ride sharing and car sharing programs.
- Encourage development of the infrastructure necessary to support clean alternative fuel vehicles and electric vehicles.
- Emerging technologies related to goods movement activities at truck stops, loading terminals, airports and rail facilities.

Policy CI-4.4 Support and encourage low emission or non-polluting forms of transportation. 🌍

Policy CI-4.5 Roads and road-related structures (bridges, culverts, retaining walls, abutments, etc.) located in or near watercourses shall be placed, designed, built, and landscaped so as to minimize the impact to riparian corridors. Structures shall reduce erosion during and after construction, accommodate flood flows, and minimize grading on slopes greater than 20 percent.

Policy CI-4.6 Parking standards and appropriate minimum and maximum requirements shall continue to be regulated through the County zoning code; however, the amount of parking provided to serve a particular project, in and of itself, shall not be considered an appropriate threshold for adverse environmental impact under CEQA.

**GOAL CI-5 System Integration. Promote and ensure the provision of safe, convenient and attractive sidewalks, bikeways and trails where appropriate for local, regional and recreational travel.**

Policy CI-5.1 Work with local and regional agencies to implement a regional bikeway and/or alternative energy vehicle system that connect the cities, larger unincorporated communities and scenic areas. Implement a dedicated multi-purpose bikeway between Woodland and Davis as a part of this effort. 🌍

Policy CI-5.2 Create a complete bikeway and sidewalk system within each community, including the completion of existing systems. Create walkways and bikeways that connect existing paths where feasible, and that connect to grocery stores, parks, and other community features. 🌍





- Policy CI-5.3 Ensure that existing and new pedestrian facilities are, at a minimum, compliant with the Americans With Disabilities Act (ADA).
- Policy CI-5.4 Establish a looped off-street trail system in each community. 🌐
- Policy CI-5.5 Integrate bicycle, pedestrian and transit facilities into new developments. 🌐
- Policy CI-5.6 Establish a network of off-street multi-purpose trails countywide and encourage their use for commute, recreational and other trips. 🌐
- Policy CI-5.7 Ensure that bikeways are striped and signed in accordance with the standards defined in the Caltrans Highway Design Manual. In agricultural areas, bicycle routes shall be designated, striped, and signed after considering the impact of the designation on the movement of agricultural equipment.
- Policy CI-5.8 Include sidewalks and bikeways on newly constructed or modified bridges and overpasses, where feasible. 🌐
- Policy CI-5.9 Strive to incorporate bikeways and sidewalks with modifications or upgrades to existing roadways consistent with the Bicycle Transportation Plan. 🌐
- Policy CI-5.10 Institute requirements for the establishment and maintenance of extensive tree canopy over community roadways to create shade. 🌐
- Policy CI-5.11 Protect abandoned rail corridors for re-use as trails and other forms of alternative transportation. 🌐
- Policy CI-5.12 Support development of facilities that link bicyclists and pedestrians with other modes of transportation. 🌐
- Policy CI-5.13 Establish pedestrian areas in conjunction with the development, redevelopment and design of mixed-use neighborhoods, schools, parks and community downtowns. Incorporate the following minimum design elements into pedestrian areas: 🌐
- Intersection bulb-outs to reduce walking distances across streets.
  - Pedestrian facilities at all signalized intersection approaches, including mid-street refuges, where appropriate.
  - Vertical curbs, detached sidewalks and tree-lined streets.

- Adequate lighting for bicycle and pedestrian access.
- Wide sidewalks in downtown areas that allow for multiple uses, including outdoor dining.
- Grid-based street pattern.
- Community entry points (gateways).
- Bicycle and pedestrian connections from cul-de-sacs to adjacent streets.

Policy CI-5.14 Strive to ensure that bikeway and sidewalk networks within communities are at least as efficient (e.g. miles traveled, connectivity, etc.) as the network for motorists. 🌐

Policy CI-5.15 Develop and design a system of bikeways and sidewalks that promote safe bicycle riding and walking for transportation and recreation, with particular emphasis on establishing a network of safe routes from residential areas to schools. 🌐

Policy CI-5.16 Construct and maintain bikeways and sidewalks in a manner that minimizes conflicts between bicyclists, pedestrians and motorists. 🌐

Policy CI-5.17 Consider agricultural equipment when determining the width and signing of on-road bicycle facilities.

Policy CI-5.18 Ensure that bike paths, multi-use trails and alternative fuel vehicle routes are designed to minimize impacts to adjoining agricultural lands.

Policy CI-5.19 Before abandoning a County right-of-way, ensure easement rights are preserved or obtained to provide for access to public lands, natural features, or to provide connections to other existing or planned trail systems. The easement may be held by the county or other public agency.

**GOAL CI-6 Accessible Transit. Encourage an integrated transit system that connects population centers to destinations and other transit facilities within and external to Yolo County.**

Policy CI-6.1 Ensure that residents of unincorporated communities have convenient transit service to employment centers, county service centers, other government centers including the courts and other regional



destinations, as funding allows. Work with YCTD to provide fixed route and/or commuter bus service as appropriate. 🌐

- Policy CI-6.2 Require new development to situate transit stops and hubs at locations that are convenient and accessible to transit users based on coordination with YCTD. 🌐
- Policy CI-6.3 Require the design of transit stops and hubs to include upgraded amenities such as sheltered stops, benches and lighting based on coordination with YCTD. 🌐
- Policy CI-6.4 Support convenient and efficient public transportation to workplaces, government services, shopping and other destinations. 🌐
- Policy CI-6.5 Integrate transit stops into new residential and employment center developments. 🌐
- Policy CI-6.6 Support YCTD in establishing, expanding and improving a balanced public transportation system, integrated with Sacramento Regional Transit. 🌐
- Policy CI-6.7 Support multi-modal stations at appropriate locations to integrate transit with other transportation modes. 🌐
- Policy CI-6.8 Work with regional leadership to ensure the continued development of a regional transit system, including coordination with SACOG, YCTD, and the cities of Yolo County, in updating regional transit plans. 🌐
- Policy CI-6.9 Encourage the development of facilities for convenient transfers between transportation systems (e.g. rail-to-bus, bus-to-bus). 🌐
- Policy CI-6.10 Coordinate and encourage Caltrans and YCTD to identify and implement park-and-ride sites with convenient access to public transit. 🌐
- Policy CI-6.11 Require new development to include design elements that promote transit use, such as: 🌐
- Locating sheltered bus stops near neighborhood focal points.
  - Locating transit routes on streets serving medium-high density development whenever feasible.
  - Linking neighborhoods to bus stops through continuous bikeways and sidewalks.

- Providing direct bicycle and pedestrian access to transit stops, park-and-ride lots, alternative fuel stations, bicycle racks, train access (e.g. Dunnigan, Yolo and Zamora), public docks for water taxis (Clarksburg, Elkhorn and Knights Landing) and airport shuttles (Elkhorn).

Policy CI-6.12 Encourage YCTD to implement future express bus, light rail, rapid transit, commuter rail, or other transit services if development densities occur to support such service. 🌐

**GOAL CI-7      Truck and Rail Operations. Facilitate the movement of goods by truck and rail.**

- Policy CI-7.1 Preserve existing heavy railroads for movement of goods.
- Policy CI-7.2 Encourage movement of goods by truck on freeways and other appropriate designated routes.
- Policy CI-7.3 Facilitate agricultural “farm-to-market” transport. Improve and maintain the roadways listed in Table CI-1 to provide a network of agricultural truck transportation corridors and to facilitate farm-to-market connectivity. By attracting truck trips to targeted corridors, other roadways throughout the County are more available for movement of agricultural vehicles (including over-sized and slower-moving equipment critical to harvest) and farm workers thus supporting more efficient and safe agricultural operations countywide.
- Policy CI-7.4 Support the ongoing operation and expansion of passenger rail service, including the Capitol Corridor line.

**GOAL CI-8      Port of West Sacramento. Support the role of the Port of West Sacramento as a regional transportation center.**

- Policy CI-8.1 Coordinate with the Port of West Sacramento to facilitate dredging of the Deep Water Ship Channel, including reuse of dredged material for levee maintenance and wildlife habitat enhancement.
- Policy CI-8.2 Support the continued operation of the Port of West Sacramento for movement of goods related to agricultural and other industries.



Policy CI-8.3 Work with the Port of West Sacramento and other regional agencies to consider the feasibility of commuter ferries to/from the Bay Area.

<b>GOAL CI-9</b>	<b><u>Air Transport.</u> Support and protect airports to provide goods transportation, tourism and related economic activities.</b>
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Policy CI-9.1 Encourage the maintenance and use of both public- and privately-owned airports.

Policy CI-9.2 Encourage the use of airports for commuter travel, movement of goods, agricultural uses (e.g. crop dusting) and economic development.

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 as proximate concentrations of waterfowl).

Policy CI-9.4 Support appropriate visitor services at the County Airport.

Policy CI-9.5 Work with UC-Davis to coordinate and accommodate operations of the University Airport with the County Airport, where mutually beneficial.

<b>GOAL CI-10</b>	<b><u>Transportation Within the Delta.</u> Within the Delta Primary Zone, ensure the compatibility of circulation decisions and improvements with applicable policies of the Land Use and Resource Management Plan of the Delta Protection Commission.</b>
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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. 🌐

***D. Implementation Program***

- Action CI-A1 Identify county staff liaison(s) to actively participate in and report annually on local and regional transportation planning, available funding sources for road maintenance, safety improvements, capacity expansions and coordination with Caltrans on changes to State facilities. Engage in County and regional advocacy efforts regarding federal and State transportation funding. (Policy CI-1.4, Policy CI-1.6, Policy CI-1.7, Policy CI-6.8)  
Responsibility: Planning and Public Works Department; County Administrator's Office  
Timeframe: Ongoing participation; annual reporting
- Action CI-A2 Develop and adopt transportation impact study (TIS) guidelines that consider all modes of travel and define, at a minimum, the need for transportation impact studies, analysis methodology and CEQA significance criteria. Development of the TIS guidelines shall include coordination with Caltrans. (Policy CI-3.1, Policy CI-3.2, Policy CI-3.5, Policy CI-3.6) 🌐  
Responsibility: Planning and Public Works Department  
Timeframe: 2009/2010
- Action CI-A3 Update the Bicycle Transportation Plan to include: 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. (Policy CI-5.1, Policy CI-5.2, Policy CI-5.6, Policy CI-5.11, Policy CI-5.15) 🌐  
Responsibility: Planning and Public Works Department  
Timeframe: 2014, 2019, 2024, 2029
- Action CI-A4 Pursue funding for construction and maintenance of bikeways and sidewalks, including off-road bikeways where feasible. (Policy CI-2.1, Policy CI-2.3, Policy CI-5.1, Policy CI-5.2, Policy CI-5.4) 🌐  
Responsibility: Planning and Public Works Department  
Timeframe: Ongoing
- Action CI-A5 Develop an Americans With Disabilities Act (ADA) transition and compliance program for pedestrian facilities. (Policy CI-5.3)  
Responsibility: Planning and Public Works Department  
Timeframe: 2010/2011



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 specific plan.

Within each Specific Plan, establish mode split goals for walking, bicycling, and transit trips in development of the required transit plan. Biennial household surveys should be conducted to ensure identified mode split goals are being achieved as the Specific Plan areas build out. (DEIR MM CI-1c) (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) 🌐

Responsibility: Planning and Public Works Department

Timeframe: Ongoing

Action CI-A7      Develop and maintain a priority program to construct bikeways, especially off-road bikeways, in conjunction with roadway projects, consistent with the county's Bicycle Transportation Plan. Implementation of the program should consider available funding for construction and maintenance. (Policy CI-2.1, Policy CI-2.3, Policy CI-5.1, Policy CI-5.4, Policy CI-5.6, Policy CI-5.9) 🌐

Responsibility: Planning and Public Works Department

Timeframe: 2010/2011

Action CI-A8      Provide appropriate signage and markings warning vehicular traffic of merging or crossing bicyclists and pedestrians. (Policy CI-5.15, Policy CI-5.16)



Responsibility: Planning and Public Works Department

Timeframe: Ongoing

Action CI-A9      Continue to implement and enforce design standards for industrial and highway commercial roadways to accommodate heavier loads associated with truck operations and larger turning radii to facilitate truck movements. (Policy CI-7.2)

Responsibility: Planning and Public Works Department

Timeframe: 2010/2011; Ongoing

- Action CI-A10      Require approved truck routes for discretionary commercial and/or industrial development. (Policy CI-7.2, Policy CI-7.3)  
Responsibility: Planning and Public Works Department  
Timeframe: Ongoing
- 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)  
Responsibility: Planning and Public Works Department; General Services Department  
Timeframe: Ongoing
- Action CI-A12      Submit planned County transportation improvements to SACOG for consideration in subsequent updates of the MTP and MTIP. (Policy CI-1.4)  
Responsibility: Planning and Public Works Department  
Timeframe: Bi-annually
- 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)  
Responsibility: Planning and Public Works Department; County Administrator's Office  
Timeframe: Ongoing
- Action CI-A14      Prepare and adopt roadway cross-sections that accommodate all users (e.g. vehicles, trucks, bicycles, pedestrians, alternative fuel vehicles, agricultural equipment, etc.) The standards shall be flexible to allow for different mixes of users depending on the surrounding land use(s). For instance, roadway cross-sections in a farming area would differ from those in either residential neighborhoods or downtown mixed use areas. (Policy CI-3.7, Policy CI-3.8, Policy CI-5.2)   
Responsibility: Planning and Public Works  
Timeframe: 2009/2010
- Action CI-A15      Develop Specific Plan circulation guidelines including requirements for content and minimum standards, including but not limited to roadway cross-sections, intersection improvements, public transportation and bicycle and pedestrian circulation. Incorporate the concept of "complete" streets. Establish Specific Plan requirements for focused sub-area travel demand forecasting models. (Policy CI-3.7, Policy CI-3.8) 








Responsibility: Planning and Public Works  
Timeframe: 2009/2010

- Action CI-A16     Require new development to enter into an agreement with the County that establishes circulation improvements to be constructed and/or fair share costs to be the responsibility of the project applicant. (Policy CI-3.10, Policy CI-3.12, Policy CI-3.14)  
Responsibility: Planning and Public Works Department  
Timeframe: Ongoing
- Action CI-A17     Work with property owners to acquire appropriate buffers around the County Airport. (Policy CI-9.3)  
Responsibility: County Administrator's Office  
Timeframe: 2009/2010
- Action CI-A18     Continue to identify farm-to-market routes and needed improvements and maintenance for those routes and seek funding to complete those improvements, as a priority. (Policy CI-7.3)  
Responsibility: Planning and Public Works Department  
Timeframe: Ongoing
- Action CI-A19     Evaluate County roadway segments that are underutilized and/or seasonal, for potential reduced or eliminated maintenance, closure and/or vacation. (Policy CI-1.2, Policy CI-1.6)  
Responsibility: Planning and Public Works Department  
Timeframe: Ongoing
- Action CI-A20     Require that an avigation easement be recorded on any property requiring a discretionary permit near the County Airport and pursue the purchase of avigation easements from willing sellers. (Policy CI-9.3)  
Responsibility: General Services Department, Planning and Public Works Department  
Timeframe: Ongoing
- Action CI-A21     Amend the Facilities and Service Authorization (FSA) fee to include alternative transportation modes, including transit capital improvements, park and ride lots and/or pedestrian and bicycle facilities. (Policy CI-4.2, Policy CI-4.3, Policy CI-4.4, Policy CI-5.2, Policy CI-5.4, Policy CI-5.6) 🌐

Responsibility: County Administrator's Office, Planning and Public Works Department  
Timeframe: 2010/2011

- Action CI-A22 Create special districts in Specific Plan areas and other areas where appropriate to fund operation and maintenance of alternative transportation modes, with an emphasis on public transit. (Policy CI-4.2, Policy CI-4.3, Policy CI-4.4, Policy CI-5.2, Policy CI-5.4, Policy CI-5.6)   
Responsibility: Planning and Public Works Department  
Timeframe: 2011/2012
- Action CI-A23 Create special districts in Specific Plan areas and other areas where appropriate to fund the operation and maintenance of county roads. (Policy CI-3.11, Policy CI-3.12, Policy CI-3.13)  
Responsibility: Planning and Public Works Department  
Timeframe: 2011/2012
- Action CI-A24 Work with SACOG to ensure that the importance of rural road maintenance and safety improvements are recognized in the Rural-Urban Connections Strategy and to secure the necessary investment in transportation funding for local farm-to-market needs and other improvements. (Policy CI-1.4)  
Responsibility: Planning and Public Works Department, County Administrator's Office  
Timeframe: 2009/2010
- Action CI-A25 Consider the development of new toll roads and/or conversion of existing county roads to pay-for-use. (Policy CI-4.2)   
Responsibility: Planning and Public Works Department  
Timeframe: 2012/2013
- Action CI-A26 Analyze the potential for the Sacramento River Train to operate as a commuter line between Woodland and West Sacramento. (Policy CI-6.4, Policy CI-6.12)   
Responsibility: Planning and Public Works Department  
Timeframe: 2013/2014
- Action CI-A27 In conjunction with implementation of Action CI-A14 and CI-A15, conduct a study of the existing street network to identify streets that can be more complete based upon adopted cross-sections, other



applicable design standards, and the policies of the General Plan. (Policy CI-3.6, Policy CI-5.2) 🌐

Responsibility: Planning and Public Works Department

Timeframe: 2010/2011

- Action CI-A28 Identify priority travel and/or commute routes in the County and regularly measure travel times for transit, bicyclists, and automobiles. The study should be focused on setting and improving priority for the various modes as appropriate, based on General Plan policies. (Policy CI-1.3, Policy CI-2.1, Policy CI-2.4, Policy CI-3.2, Policy CI-3.4) 🌐
- Responsibility: Planning and Public Works Department
- Timeframe: Every five years starting in 2010

- Action CI-A29 Establish a regional funding mechanism to fund the planned roadway capacity expansion projects identified in the Circulation Element. (DEIR MM CI-3a) (Policy CI-3.12, Policy CI-3.13, Policy CI-3.17)
- Responsibility: Planning and Public Works Department
- Timeframe: 2010/2011

- Action CI-A30 Amend the existing County Facilities Services Assessment (FSA) Fee to include planned roadway projects identified in the Circulation Element. (DEIR MM CI-3b) (Policy CI-3.12, Policy CI-3.13, Policy CI-3.17)
- Responsibility: Planning and Public Works Department
- Timeframe: 2010/2011

- Action CI-A31 Investigate the possibility of restricting private buses to State Route 16, east of Interstate 505. (Policy CI-3.15)
- Responsibility: Planning and Public Works Department
- Timeframe: 2014/1015

