Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 3 Office of System and Freight Planning makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

California Department of Transportation
Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability

Approvals:

Marlon Flournoy
District 3 Deputy Director
Planning and Local Assistance
7/22/14 Date

John Rodrigues
Acting District 3 Director
7/24/14 Date
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ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans’ statutory responsibility as owner/operator of the State Highway System (SHS) (Gov. Code §65086) by evaluating conditions and proposing enhancements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans’ goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four parts: the District System Management and Development Plan (DSMDP), the Transportation Concept Report (TCR), Corridor System Management Plan (CSMP), and the DSMDP Project List. The district-wide DSMDP is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The TCR is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The CSMP is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments included within the CSMP. The DSMDP Project List is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for stakeholders, the public, and partner, regional, and local agencies.

STAKEHOLDER PARTICIPATION

Stakeholder participation was sought throughout the development of the State Route (SR) 113 TCR. Outreach involved internal and external stakeholders, regional and local agencies. During the initial information resource gathering for the TCR, stakeholders were contacted for initial input related to their particular specializations, and to verify data sources used and data accuracy. As the document was finalized, stakeholders were asked to review the document for comments, edits, and for consistency with the intent of existing plans, policies, and procedures. Written comments were received and incorporated into the final document. The process of including and working closely with stakeholders adds value to the TCR, allows for outside input and ideas to be reflected in the document, and helps strengthen public support and trust.

STATE AND LOCAL RESPONSIBILITY

Improvements to the SHS are the responsibility of both Caltrans and local agencies. Developments that add cumulative impacts to this route and the regional State Highway System may necessitate that local jurisdictions provide nexus based, proportional fair-share funding for future highway improvements. Developments or local circulation changes that will have significant traffic impacts to the highway should provide improvements to mitigate those impacts.
EXECUTIVE SUMMARY

State Route (SR) 113 within District 3 is a north-south route that extends 38.3 miles from Interstate 80 (I-80), near the City of Davis, to the SR 99/SR 113 junction, 10 miles south of Yuba City. The majority of the route is classified as a two-lane conventional highway, except for the portion of the route between Davis and Woodland, which is a four-lane freeway. Outside of the urbanized areas of Davis and Woodland, and the rural communities of Knights Landing and Robbins, the route primarily crosses agricultural land uses. SR 113 serves as an important crosslink within Yolo and Sutter County because of trucking and commuter traffic that use the route as a connection to major SHS routes.

Concept Summary

The SR 113 TCR evaluates current traffic conditions along the route by using 2014 as a base year and projected growth along the route within a 20-year planning horizon (2034). This document is broken down into 4 segments. Table 1 provides a summary of the existing facility, build facility (20-year concept), and ultimate facility (post-20 year concept) for SR 113. The build facility scenario is the existing facility plus planned and programmed SHS projects with future traffic volumes. The ultimate facility is the facility needed to meet the concept Level of Service (LOS) standards for the route.

Table 1: SR 113 Concept Summary

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Segment Description</th>
<th>Existing Facility</th>
<th>Build Facility</th>
<th>Ultimate Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-80 at the Solano/Yolo County line to I-5 in the City of Woodland.</td>
<td>4F</td>
<td>4F, Maintenance, and freeway-to-freeway connection improvements</td>
<td>4F, Bike/Pedestrian Improvements, Maintenance, and Interchange Improvements</td>
</tr>
<tr>
<td>Break in Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SR 113/I-5 northbound off-ramp at East Street in the City of Woodland to Knights Landing</td>
<td>2C</td>
<td>2C and Maintenance</td>
<td>2C, Bike/Pedestrian Improvements, and Maintenance</td>
</tr>
<tr>
<td>3</td>
<td>Knights Landing to Yolo/Sutter County Line</td>
<td>2C</td>
<td>2C and Maintenance</td>
<td>2C, Bike/Pedestrian Improvements, and Maintenance</td>
</tr>
<tr>
<td>4</td>
<td>Yolo/Sutter County Line to SR 99</td>
<td>2C</td>
<td>2C, Maintenance, and New Interchange Connection</td>
<td>2C, Bike/Pedestrian Improvements, and Maintenance</td>
</tr>
</tbody>
</table>

Note: F = Freeway, C = conventional

Concept Rationale

Caltrans District 3 Concept Rationale is based on the concept Level of Service (LOS) standards for acceptability in rural, urban clusters, and urbanized areas. Traditionally, concept LOS has been used in Caltrans TCRs to reflect the minimum level or quality of operations acceptable for each route segment within the 20-year planning period. District 3 LOS standards are as follow: LOS D in rural areas (population less than 2,500), LOS E in urban cluster (population 2,500 to 49,999), and LOS E urbanized areas (population over 50,000). There is no significant growth expected in the next 20 years. However, improvements as identified below are essential to providing and maintaining a sustainable, safe, integrated, and efficient transportation system that will enhance California’s economy and livability.
Proposed Projects and Strategies

There are three projects identified that will affect capacity along SR 113: I-5/SR 113 Connector Phase 2 (planned), I-5/SR 113 Interchange (planned) and the SR 99/113 Interchange (currently in construction).

The I-5/SR 113 projects are part of a new interchange and freeway-to-freeway connection for north and southbound traffic. These projects will help improve the interconnection between I-5 and SR 113, which has become more significantly deficient over recent years. Both of these projects are currently in the “planned” phase with an estimated completion date of 2026 for the I-5/SR 113 Connector Phase 2 and an estimated completion date of 2035 for the I-5/SR 113 Interchange. Only the I-5/SR 113 Connector Phase 2 project is scheduled to be completed within the 20-year horizon period.

The SR 99/113 Interchange project is the only project currently in construction. The interchange is intended to improve the efficiency and safety conditions as vehicles merge onto SR 99 or SR 113. The project is planned to be completed in the summer of 2014.

Other proposed projects along the routes include ADA improvements, pavement rehab, and minor changes at intersections (i.e. turn lanes). These projects do not affect SR 113 capacity, but they do provide necessary maintenance upgrades for vehicles and facility upgrades for alternative modes of transportation.

The goal of Caltrans is to work with local agencies in order to meet the Concept Rationale for the route segments through feasible project enhancement/development, and/or Intelligent Transportation Systems (ITS) and operational improvements, which is consistent with the Caltrans’ goal of improving mobility through System Management strategies. Proposed projects and strategies are listed in Tables 13 and 14 on pages 18 and 19.

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

For the purpose of analysis, SR 113 is divided into four segments. These segments are identified in Table 2 and illustrated in Figure 1. In-between Segment 1 and Segment 2 there is a small break in route because of I-5.

Table 2: SR 113 Route Segmentation

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Location Description</th>
<th>County, Route, Beginning Postmile (PM)*</th>
<th>County, Route, End PM*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-80 at the Solano/Yolo County line to I-5 in the City of Woodland.</td>
<td>YOLO_R0.0</td>
<td>YOLO_R11.14</td>
</tr>
<tr>
<td>2</td>
<td>SR 113/I-5 northbound off-ramp at East Street in the City of Woodland to Knights Landing</td>
<td>YOLO_11.296</td>
<td>YOLO_M21.20</td>
</tr>
<tr>
<td>3</td>
<td>Knights Landing to Yolo/Sutter County Line</td>
<td>YOLO_M21.20</td>
<td>YOLO_22.08</td>
</tr>
<tr>
<td>4</td>
<td>Yolo/Sutter County Line to SR 99</td>
<td>SUT_0.00</td>
<td>SUT_16.38</td>
</tr>
</tbody>
</table>

*Beginning and end post miles for each segment are derived from the Caltrans Transportation System Network (TSN) Highway Sequence Listing using route breaks and district, county, and urban/rural boundaries.

ROUTE DESCRIPTION

SR 113 is not a major SHS route, but it does serve as an important crosslink in the SHS for the commuter and commercial traffic within the region. It is a north-south route that begins at the southern edge of Yolo County, near the City of Davis and the University of California, Davis (UC Davis) campus, and ends at the SR 99 Junction in Sutter County. The route is primarily a two-lane conventional highway that crosses agricultural fields, except for an 11.14 mile stretch that is a four-lane freeway.
The freeway section of SR 113 (Segment 1) is used frequently by commuters because it is the primary connection between I-5 and I-80, as well as the urbanized communities of Davis and Woodland. Because of this, traffic volumes are highest along this portion of the route, especially during peak hours and in times of delay along either I-5 or I-80. More frequently, in times of delay along the I-80 causeway SR 113 has been used an alternative route across the Yolo Bypass overflow channel.

North of Woodland (Segments 2-4), the route is a two-lane conventional highway that crosses agricultural fields and the rural communities of Knights Landing and Robbins as it traverses towards the SR 99 Junction. These agricultural areas have historically been and continue to be a main contributor to each county’s economic base and produce some of the highest truck volumes in the region. In addition to trucking, commuters sometimes travel through the rural portion of the route as an alternative to SR 99 for connection to the San Francisco Bay Area and the more rural communities located north of the Sacramento area. A complete breakdown of each segment’s designation and characteristics is identified in Table 2 below.

**Table 3: SR 113 Route Designations and Characteristics**

<table>
<thead>
<tr>
<th>Segment #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway &amp; Expressway²</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>National Highway System³</td>
<td>MAP-21 Principal Arterial</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Strategic Highway Network</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Scenic Highway⁴</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Interregional Road System⁵</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>High Emphasis⁶</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Focus Route⁷</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Federal Functional Classification⁸</td>
<td>Other Freeway or Expressway</td>
<td>Major Collector</td>
<td>Minor Arterial</td>
<td>Minor Arterial</td>
</tr>
<tr>
<td>Goods Movement Route</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Truck Designation⁹</td>
<td>Terminal Access (STAA)</td>
<td>Terminal Access (STAA)</td>
<td>Terminal Access (STAA)</td>
<td>Terminal Access (STAA)</td>
</tr>
<tr>
<td>Rural/Urban/Urbanized¹⁰</td>
<td>Urbanized</td>
<td>Rural</td>
<td>Rural</td>
<td>Rural</td>
</tr>
<tr>
<td>Metropolitan Planning Organization¹¹</td>
<td>SACOG</td>
<td>SACOG</td>
<td>SACOG</td>
<td>SACOG</td>
</tr>
<tr>
<td>Regional Transportation Planning Agency¹²</td>
<td>SACOG</td>
<td>SACOG</td>
<td>SACOG</td>
<td>SACOG</td>
</tr>
<tr>
<td>Congestion Management Agency</td>
<td>Yolo County Transportation District</td>
<td>Yolo County Transportation District</td>
<td>Yolo County Transportation District</td>
<td>N/A</td>
</tr>
<tr>
<td>County Transportation Commission¹²</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Local Agency</td>
<td>Yolo County, City of Davis and Woodland</td>
<td>Yolo County, City of Woodland, Town of Knights Landing</td>
<td>Yolo County, Town of Knights Landing</td>
<td>Sutter County</td>
</tr>
<tr>
<td>Tribes¹³</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Air District¹⁴</td>
<td>Yolo Solano Air Quality Management District</td>
<td>Yolo Solano Air Quality Management District</td>
<td>Yolo Solano Air Quality Management District</td>
<td>Feather River Air Quality Management District</td>
</tr>
<tr>
<td>Terrain</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
<td>Flat</td>
</tr>
</tbody>
</table>
Figure 1: SR 113 Route Segmentation Map
COMMUNITY CHARACTERISTICS AND LAND USE

The density and type of land uses along the route vary based on communities and location. The majority of the route crosses agriculture lands that are designated Prime Farmland, Farmland of Statewide Significance, and Unique Farmland. Prime Farmland represents the best land for agricultural production, while Unique Farmland is the least of the three.\textsuperscript{15} Within Yolo County there are pockets of Farmland of Statewide Significance areas, but the majority of the route crosses Prime Farmlands that produce a mixture of tomatoes, seed crops, and wheat crops. However, in Sutter County there is a mixture of Prime Farmland, Farmland of Statewide Significance, and Unique Farmland that produce products such as tomatoes, beans, sugar beets and grain. Neither county has plans to change the agricultural land uses within the horizon period because of the priority both counties place on preserving the viability of their agricultural resources.

Within the rural and urban communities land uses vary, some of which include residential, commercial, industrial, and public. The proximity of these land uses to the route also varies between each community. Land uses in the urbanized areas of Davis and Woodland are located further away from SR 113 than in the rural communities where public and private driveways connect to the route. This is more common in Knights Landing than Robbins. Through Robbins the residential and majority of the commercial land uses are isolated east of the route. Whereas through Knights Landing the route is classified as a “Main Street” as commercial, public, and residential driveways connect to the route.

Outside of the City of Davis, City of Woodland, Knights Landing and Robbins a major trip generating facility is the UC Davis campus. The campus is located directly south of the City of Davis and has two main campus sections divided by SR 113 – east of the route is their Main Campus location which contains a mixture of student housing and campus facilities. To the west of the route is their new residential and commercial mixed-use development, West Village, which was built in order to accommodate a growing student population. Both of these sections of campus attract and generate a high number of student and faculty members year round.

The larger populated areas – Davis and Woodland – have seen small growth in population and development in recent years, which has increased the possibility of queuing and congestion along the route during peak hours. Congestion points are increased during peak hours at on-ramp locations which sometimes cause queuing on local streets, such as Main Street in Woodland, as well as delay along the freeway portion of the route where vehicles are forced to merge.

As shown in Tables 4 and 5 below, population, housing, and employment are all expected to rise in both counties. The California Department of Finance projected a population increase of 32 percent (%) in Yolo County and a 59% in Sutter County between the years of 2010 - 2035.\textsuperscript{16} The Sacramento Area Council of Governments (SACOG) 2035 Metropolitan Transportation Plan (MTP) projected an increase in the housing units (42.53%) and employment (37.75%) for Yolo County, as well as increases in Sutter County housing (36.43%) and employment (39.76) from 2008 – 2035.\textsuperscript{17}

<table>
<thead>
<tr>
<th>Segment #</th>
<th>County</th>
<th>Population (Year 2010)</th>
<th>Projected Population (Year 2035)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Yolo County</td>
<td>200,849</td>
<td>266,653</td>
<td>32%</td>
</tr>
<tr>
<td>4</td>
<td>Sutter County</td>
<td>94,737</td>
<td>151,452</td>
<td>59%</td>
</tr>
</tbody>
</table>

Source: 2010 US Census, Yuba-Sutter Census Economic and Demographic Information, and California Department of Finance
Table 5: Housing and Employment of SR 113 Counties

<table>
<thead>
<tr>
<th>Segment #</th>
<th>County</th>
<th>Type</th>
<th>Population (Year 2008)</th>
<th>Projected Population (Year 2035)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Yolo County</td>
<td>Housing Units</td>
<td>73,024</td>
<td>104,080</td>
<td>42.53%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment</td>
<td>102,378</td>
<td>141,022</td>
<td>37.75%</td>
</tr>
<tr>
<td>4</td>
<td>Sutter County</td>
<td>Housing Units</td>
<td>33,707</td>
<td>45,986</td>
<td>36.43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment</td>
<td>31,751</td>
<td>44,376</td>
<td>39.76%</td>
</tr>
</tbody>
</table>

Sources: The County of Yolo 2030 Countywide General Plan and SACOG 2035 MTP

**SYSTEM CHARACTERISTICS**

Figures 2 through 5 show the location of Segments 1 through 4. Table 6 below identifies the System Characteristics for all segments within SR 113. The following summarizes the characteristics of each segment:

**Segment 1** extends 11.14 miles and begins at the I-80 interchange near UC Davis and ends at the I-5 connection in the City of Woodland. The segment is classified as a four-lane freeway, but portions of the route extend to a maximum of six lanes and a minimum of three lanes. This section is the main connection between I-5 and I-80, and the cities of Davis and Woodland. During times of delay on either Interstate SR 113 has been used more frequently as an alternative route connection. In addition, interregional and intraregional transit services use this segment of SR 113 in their daily routes.

**Segment 2** begins at PM 11.296, near the I-5 north on-ramp along East Street in Woodland, and ends near Knights Landing (PM 21.2). Between Segment 1 and Segment 2 there is a small break because of I-5. This segment is a two-lane conventional highway that primarily crosses unincorporated areas of Yolo County.
Segment 3 is 0.87 miles long and is the shortest segment of the four. This segment through Knights Landing is also the only portion of the route that acts as a “Main Street”. Both sides of the route have public and private driveways connections with pedestrian and bicycle facilities that extend across the Sacramento River Bridge into Sutter County. The Sacramento River Bridge is a 24 foot wide drawbridge built in 1933. The bridge has not seen any major upgrades in recent years, but the bridge may need to be replaced or upgraded to meet current bridge standards and accommodate future traffic growth.

Segment 4 begins at the Sutter County line (PM 00.00) and ends at the SR 99 connection (PM 16.38), 10 miles south of Yuba City. In this segment, SR 113 passes through flat, agricultural land and crosses the Sutter Bypass overflow channel. With the exception of the rural town of Robbins and the Sutter Bypass Wildlife Area, agricultural use is expected to continue through the 20-year planning period.
BICYCLE FACILITY

Bicyclists are permitted on the majority of SR 113, except for two sections of Segment 1 which are listed in Table 7. Both restrictions are along the freeway portion of the route, which restricts bicyclists from using SR 113 as a route between the cities of Davis and Woodland. Instead, bicyclists are encouraged to use parallel facilities such as County Route (CR) 99 via CR 29 and CR 99D, and CR 102 since both incorporate Class II* bicycle lanes and have lower vehicular speeds and volumes.

SR 113 only incorporates Class II bicycle lanes along one segment of the route, Segment 3 in Knights Landing. However, there is a small break in the Class II striping between 4th and 7th St., but the lane widths remain the same as previous sections with Class II striping. Because SR 113 is a “Main Street” in this segment, it is prone to higher bicyclists’ activities due to the proximity of commercial, public and residential land uses. However, bicyclist activities are mainly contained within Knights Landing. Not many bicyclists travel between Knights Landing and Davis/Woodland, but those that do usually use CR 102 instead of SR 113 since CR 102 is a Class II facility and is a more direct north-south route. As shown in

Figure 7: Narrow Shoulders in Segment 2

Table 6: SR 113 System Characteristics and Concept Facility

<table>
<thead>
<tr>
<th>Segment #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Facility (BY)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Type*</td>
<td>F</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>General Purpose Lanes</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lane Miles</td>
<td>44.56</td>
<td>19.808</td>
<td>1.74</td>
<td>32.76</td>
</tr>
<tr>
<td>Centerline Miles</td>
<td>11.14</td>
<td>9.904</td>
<td>0.87</td>
<td>16.38</td>
</tr>
<tr>
<td>ITS Elements**</td>
<td>7-TMS</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Build Facility (HY)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Type*</td>
<td>F</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>General Purpose Lanes</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lane Miles</td>
<td>44.56</td>
<td>19.808</td>
<td>1.74</td>
<td>32.76</td>
</tr>
<tr>
<td>Centerline Miles</td>
<td>11.14</td>
<td>9.904</td>
<td>0.87</td>
<td>16.38</td>
</tr>
<tr>
<td>ITS Elements**</td>
<td>7-TMS</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* BY=Base Year 2014, HY=Horizon Year 2034, F = Freeway, C = Conventional
** ITS Elements (April 2013 Inventory): RMS=Ramp Metering Stations, TMS=Traffic Monitoring Station, CCTV=Closed Circuit Television

Figure 7: Narrow Shoulders in Segment 2
Figure 7, cyclists who do use SR 113 will have to share the roadway at certain points due to varying shoulder widths because of terrain and vegetation. Outside of the Class II facility, the route does not incorporate any Class I* or Class III* facilities, according to the County of Yolo 2013 Bicycle Transportation Plan (CYBTP) and SACOG’s 2013 Regional Bicycle, Pedestrian and Trails Master Plan.18

Currently, there are no planned or programmed bicycle related projects along SR 113. Though, the local agencies within Yolo County continue to look at ways to improve bicycle facilities between Davis and Woodland though plans such as the CYBTP.


### Table 7: SR 113 Bicycle Facilities Existing Conditions

<table>
<thead>
<tr>
<th>Segment #</th>
<th>State Bicycle Facility</th>
<th>Parallel Bicycle Facility</th>
<th>Facility Type*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YOLO_ R0.00- R11.14</td>
<td>PM R0.00 – R4.1: Yes</td>
<td>Non-Designated</td>
</tr>
<tr>
<td></td>
<td>I-80 at the Solano/Yolo County line to I-5 in the City of Woodland.</td>
<td>PM R4.1 – 7.4: No</td>
<td>Non-Designated</td>
</tr>
<tr>
<td>2</td>
<td>YOLO_ 11.29- M21.20</td>
<td>No</td>
<td>Non-Designated</td>
</tr>
<tr>
<td></td>
<td>SR 113/I-5 northbound off-ramp at East Street in the City of Woodland to Knights Landing</td>
<td>No</td>
<td>Non-Designated</td>
</tr>
<tr>
<td>3</td>
<td>YOLO_ M21.20-22.08</td>
<td>No</td>
<td>Class II</td>
</tr>
<tr>
<td></td>
<td>Knights Landing to Yolo/Sutter County Line</td>
<td>No</td>
<td>Class II</td>
</tr>
<tr>
<td>4</td>
<td>SUT_ 0.00- 16.38</td>
<td>No</td>
<td>Non-Designated</td>
</tr>
<tr>
<td></td>
<td>Yolo/Sutter County Line to SR 99</td>
<td>No</td>
<td>Non-Designated</td>
</tr>
</tbody>
</table>

* According to the CYBTP, a Class I bikeway is a trail separated from roads or streets. Bicycles can go either way on a bike path. The minimum paved width of travel for a two-way bike path is 8 feet, 10 feet preferred. A Class II bikeway is the paved edge of a wide street or road, delineated by white stripes. Bike lanes come in pairs, one on each side of the road. The minimum width of a Class II bike lane is 4 feet, except where adjacent to on-street parking. A Class III bikeway is a road or street without bike lanes or bike path, but designated by signs to provide continuity to the bikeway system and share the bike route with motorist. Non-designated means that while the facility is not prohibited to bicyclists; there is no designated bicycle facility on the corridor For more information, see Figure 3 in the 2013 CYBTP or see Appendix A, Glossary of Terms, for further definitions of bicycle facilities under “Bikeways”.
PEDESTRIAN FACILITY

Pedestrian facilities share the same access and restriction points as described in the Bicycle section, which are listed in Table 8.

Pedestrian facilities are limited along the route because of segment classification (i.e. freeways) or the areas rural environment. A brief section of Segment 2 in the City of Woodland and Segment 3 in Knights Landing are the only pedestrian facilities along SR 113. The beginning of Segment 2 in Woodland at the N. East Street interchange connection has commercial land uses isolated east of the route with sidewalk connections.

Segment 3 has the most extensive pedestrian facilities because of the proximity of residential, commercial, and public land uses to the route. The route incorporates pedestrian facilities such as sidewalks and crosswalks that move pedestrians along and across the route. Sidewalks begin south of Dixon St and end at the Sacramento River Bridge as shown in Figure 8.

Currently there are no planned or programmed projects to improve pedestrian facilities along SR 113. Caltrans will continue to monitor and evaluate the facilities along the route.

Table 8: SR 113 Pedestrian Facilities Existing Conditions

<table>
<thead>
<tr>
<th>Segment #</th>
<th>County, Post mile</th>
<th>Location Description</th>
<th>Pedestrian Access Prohibited</th>
<th>Sidewalk Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YOLO_ R0.00- R11.14</td>
<td>I-80 at the Solano/Yolo County line to I-5 in the City of Woodland.</td>
<td>PM R0.00 – R4.1: Yes PM R4.1 – 7.4: Yes PM R7.4 – R10.718: Yes PM R10.717 – R11.14: Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>YOLO_ 11.29- M21.20</td>
<td>SR 113/I-5 northbound off-ramp at East Street in the City of Woodland to Knights Landing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>YOLO_ M21.20- 22.08</td>
<td>Knights Landing to Yolo/Sutter County Line</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>SUT_ 0.00-16.38</td>
<td>Yolo/Sutter County Line to SR 99</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

TRANSIT FACILITY

Yolo County, through its Yolobus transit service provides interregional and intraregional service to the cities of Davis, West Sacramento, Woodland, community of Knights Landing and other communities’ located in-between. SR 113 between Davis and Woodland is used by the regular, express, and commuter routes. Routes up to Knights Landing do not use SR 113; instead they use CR 102 because it is more direct. Sutter County does not provide transit service to areas along SR 113. Table 9 provides a summary of Transit operators and facilities available within the SR 113 TCR corridor.

Table 9: SR 113 Transit Facilities Existing Conditions

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Mode &amp; Collateral Facility</th>
<th>Operator Name</th>
<th>Route End Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interregional Bus</td>
<td>Yolobus</td>
<td>Davis to Woodland</td>
</tr>
</tbody>
</table>
**Freight**

State Route 113 is classified as a Terminal Access (TA) route according to the California Truck Route Classification map. TA routes are state or local routes that allow access to trucks that meet the federal Surface Transportation Assistance Act of 1982 (STAA) requirements as identified in Table 10.

<table>
<thead>
<tr>
<th>STAA Truck with Single Trailer</th>
<th>STAA Truck with Double Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-trailer = 48 feet maximum</td>
<td>Semi-trailer = 28 feet 6 inches maximum</td>
</tr>
<tr>
<td>KPRA = no limit</td>
<td>Trailer = 28 feet 6 inches maximum</td>
</tr>
<tr>
<td>Combination length = no limit</td>
<td>KPRA = no limit</td>
</tr>
<tr>
<td>OR</td>
<td>Combination length = no limit</td>
</tr>
<tr>
<td>Semi-trailer = over 48 feet, but 53 feet maximum</td>
<td>Combination length = no limit</td>
</tr>
<tr>
<td>KPRA = 40 feet max (if 2+ axles in rear)</td>
<td></td>
</tr>
<tr>
<td>KPRA = 38 feet max (if 1 axle in rear)</td>
<td></td>
</tr>
</tbody>
</table>

Source: [http://www.dot.ca.gov/hq/traffops/trucks/routes/truck-routes.htm](http://www.dot.ca.gov/hq/traffops/trucks/routes/truck-routes.htm)

According to the Sacramento Area Council of Government (SACOG) Metropolitan Transportation Plan (MTP), the agricultural areas around SR 113 produce some of the highest number of trucks per acre (> 0.5 trucks/acre) in the SACOG region (El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties). Because of this, the potential for congestion on the route increases, especially on the two-lane highway rural arterial sections of the route.

Congestion is not an issue along the freeway portion of the route because trucks merge onto the freeway at interchanges. However, along the two-lane highway sections of the route, trucks merge directly onto the route from facilities. Due to acceleration and speed restrictions as well as geometric limitations for turning, trucks can be a direct cause of congestion. However, because the route is relatively flat and has long straight-away sections, vehicles do have opportunities to pass slow-moving trucks.

Currently there are no planned or programmed projects along the roadway that would affect freight movement. Wear and tear along the roadway from trucks should continue to be monitored since SR 113 is a main north-south rural arterial for the agricultural areas of Sutter and Yolo counties. Existing freight facilities are identified in Table 11 and the existing freight network is delineated in Figure 10.

**District 3 Goods Movement Plan**

In 2013, Caltrans District 3 was fully underway in creating a district-wide Goods Movement Plan. The Plan will synthesize the findings of other goods movement related plans in the District and State, conduct a district-wide assessment of the District 3 Goods Movement network, propose a prioritization framework to identify and prioritize projects, and propose a list of prioritized projects for potential funding that will sustain or improve goods movement throughput. The plan will require significant outreach, collaboration, and consensus with stakeholders, including public agencies such as the SACOG, and the private sector entities such as the California Trucking Association. Findings from the study will be included in the Statewide Freight Mobility Plan, and will be transferrable to other Caltrans Districts statewide for implementation. The District 3 Goods Movement Plan is scheduled to be finished in 2015. More information can be found at: [https://sites.google.com/site/d03goodsmovement/](https://sites.google.com/site/d03goodsmovement/).
**Table 11: SR 113 Freight Facilities Existing Conditions**

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Facility Type/Freight Generator</th>
<th>Location</th>
<th>Mode</th>
<th>Name</th>
<th>Major Commodity/Industry</th>
<th>Comments/Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freeway Yolo County Truck</td>
<td></td>
<td>Truck</td>
<td>SR 113 (Terminal Access)</td>
<td>Agriculture/Industrial</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>Highway Yolo County Truck</td>
<td></td>
<td>Truck</td>
<td>SR 113 (Terminal Access)</td>
<td>Agriculture</td>
<td>Narrow paved shoulders and no passing lanes</td>
</tr>
<tr>
<td>3</td>
<td>Highway Yolo County Truck</td>
<td></td>
<td>Truck</td>
<td>SR 113 (Terminal Access)</td>
<td>Agriculture</td>
<td>Varying paved shoulder widths. Crosses through Knights Landing which has adjacent commercial, residential and public land uses</td>
</tr>
<tr>
<td>4</td>
<td>Highway Sutter County Truck</td>
<td></td>
<td>Truck</td>
<td>SR 113 (Terminal Access)</td>
<td>Agriculture</td>
<td>Narrow paved shoulders and no passing lanes</td>
</tr>
</tbody>
</table>

**AIRPORT FACILITY**

There is one public airport and four private air fields within 5 miles of SR 113.

The **University Airport** in Davis has a Community functional class. The airport is owned by the University of CA Davis, and is the only campus in the University of California system with an airport. The airport serves the University, and City of Davis’ corporate, business, and agriculture needs, tourism, and air taxi service. Airport services include search and rescue, disaster/emergency services, aero medical evacuation, flight training, aircraft rental and sales, aircraft fuel sales, and major aircraft repair. There are 45 based aircraft, and 24,475 operations for the 12 month period ending May 30, 2013. The airport is home to the Cal Aggie Flying Farmers, the University’s flying club.

One air field, **Medlock Field**, is located between Davis and Woodland. Two of the air fields, **Sunrise Duster’s Airport** and **Bob’s Flying Service Inc. Airport**, are located in the vicinity of Knights Landing. The fourth field, **Wagner Aviation Airport**, is located rear Robbins. These air fields primarily service agriculture needs.
Figure 10: SR 113 Freight Network Map
CORRIDOR PERFORMANCE

The performance measures used for the highway facility in this TCR include Level of Service (LOS), Vehicle Miles Traveled (VMT), Peak Hour Volume over Capacity (V/C), and Peak Hour VMT. The data inputs used to determine the performance measures include Average Annual Daily Traffic (AADT), Truck AADT, Percent of Trucks, 5+ Axle Truck AADT, and 5 Axle Truck Percentage of AADT. The definitions, applicability, and sources of the baseline performance measures data used in this TCR corridor are identified in Appendix A. This data is given for both the Base Year of 2014 and Horizon Year of 2034 for both a “No Build” and “Build” scenarios where applicable. Basic system operation, truck traffic, and peak hour traffic performance data is discussed below and summarized in Table 12.

The future LOS for the four segments of SR 113 are projected to decrease over the 20-year horizon period because of projected increases in vehicle miles traveled. LOS is a qualitative measure describing operational conditions within a traffic stream and perception of condition by users. Operational conditions are defined in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. LOS is defined into six levels with letter designations from A to F. LOS A represents the best operating conditions wherein there is ample maneuverability, no speed restrictions and no delay, while LOS F represents the worst operating conditions with traffic congestions, significant delays and restricted maneuverability.

Caltrans has set a minimum LOS of LOS D in rural areas (population less than 2,500), LOS E in urban cluster (population 2,500 to 49,999), and LOS E urbanized areas (population over 50,000). However, these standards may vary depending on the unique corridor conditions. A local agency may set a higher LOS threshold standard consistent with community wishes and local concerns. Since Caltrans Concept LOS defines the minimum acceptable level of service established by Caltrans as the owner and operator of the facility, the threshold standard LOS established by the local agency should not be lower than the Caltrans Concept LOS.19

**Segment 1** has the highest base year average daily traffic (ADT) out of all the segments because it is a four-lane freeway and facilitates traffic between major SHS routes and the cities of Davis and Woodland. The base year (2014) ADT for this segment is 39,775 with a LOS of B. Of the 39,775 trips, 1,868 are truck traffic with 939 of those trips generated by 5+ axle trucks. The base year peak hour volume/capacity (V/C) is 0.39 and is projected to reach 0.56 in the Build scenario. Overall, the segment’s capacity is expected to increase over the 20-year horizon period to a maximum of 67,525 in the Build scenario. This scenario will also decrease the LOS to C, but still meets the minimum Caltrans LOS standards.

**Segment 2** has a base year ADT of 6,793, the smallest out of all the segments. Out of the 6,793 trips, 270 come from truck traffic with 132 of those trips from 5+ axle trucks. In total the base year LOS for this segment is currently at C and is projected to decrease in the Build scenario to LOS D. During peak hours the current V/C is 0.26 and is projected to reach 0.34 in the Build scenario.

**Segment 3** has a base year ADT of 9,152 with a base year LOS of D. Out of the 9,152 trips, 581 of those trips are from trucks with 132 trips coming from 5+ axle trucks. During peak hours the base year V/C is 0.32. In total, the LOS is expected to decrease to E due to the increase in ADT (12,672) which will increase the peak V/C to 0.47. This is the only segment that is projected to not meet the minimum LOS standard for a rural area (population less than 2,500).

**Segment 4** is the lone section in Sutter County. It has a base year ADT of 8,216 with a LOS C. Out of the 8,216 trips, 581 of those trips are truck traffic with 132 of the truck trips coming from 5+ axle trucks. During peak hours it has a V/C of 0.28. Over the 20-year horizon period this segment is expected to see a peak of 11,376 ADT with a peak hour V/C of 0.42 and a LOS D.
### Table 12: SR 113 Corridor Performance Measures

#### BASIC SYSTEM OPERATIONS

<table>
<thead>
<tr>
<th>Segment</th>
<th>County, PM</th>
<th>Average Annual Daily Traffic (AADT)</th>
<th>Level of Service (LOS)</th>
<th>Vehicle Miles Traveled (VMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Base Year (BY)</td>
<td>No Build Horizon Year (HY)</td>
<td>Build (HY)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>YOL: 0.000-11.14</td>
<td>39,775</td>
<td>67,313</td>
<td>67,525</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break in Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>YOL: 11.296-21.20</td>
<td>6,793</td>
<td>9,254</td>
<td>9,718</td>
</tr>
<tr>
<td>3</td>
<td>YOL: 21.20-22.07</td>
<td>9,152</td>
<td>12,637</td>
<td>12,672</td>
</tr>
<tr>
<td>4</td>
<td>SUT: 0.00-16.38</td>
<td>8,216</td>
<td>11,311</td>
<td>11,376</td>
</tr>
</tbody>
</table>

#### TRUCK TRAFFIC DATA

<table>
<thead>
<tr>
<th>Segment</th>
<th>County, PM</th>
<th>Average Annual Daily Truck Traffic (AADTT) (BY)</th>
<th>Total Trucks (% of AADT (BY))</th>
<th>5+ Axle AADTT (BY)</th>
<th>5+ Axle Total Truck (% of AADT) (BY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YOL: 0.000-11.14</td>
<td>1,868</td>
<td>7.70%</td>
<td>939</td>
<td>3.87%</td>
</tr>
<tr>
<td>Break in Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>YOL: 11.296-21.20</td>
<td>270</td>
<td>7.00%</td>
<td>132</td>
<td>1.59%</td>
</tr>
<tr>
<td>3</td>
<td>YOL: 21.20-22.07</td>
<td>581</td>
<td>7.00%</td>
<td>132</td>
<td>1.59%</td>
</tr>
<tr>
<td>4</td>
<td>SUT: 0.00-16.38</td>
<td>581</td>
<td>7.00%</td>
<td>132</td>
<td>1.59%</td>
</tr>
</tbody>
</table>

#### PEAK HOUR TRAFFIC DATA

<table>
<thead>
<tr>
<th>Segment</th>
<th>County, PM</th>
<th>Volume</th>
<th>Directional Split</th>
<th>Volume/Capacity (V/C)</th>
<th>VMT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BY</td>
<td>No Build (HY)</td>
<td>Build (HY)</td>
<td>BY</td>
</tr>
<tr>
<td>1</td>
<td>YOL: 0.000-11.14</td>
<td>3,924</td>
<td>6,563</td>
<td>6,661</td>
<td>60%</td>
</tr>
<tr>
<td>Break in Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>YOL: 11.296-21.20</td>
<td>700</td>
<td>912</td>
<td>1,002</td>
<td>54%</td>
</tr>
<tr>
<td>3</td>
<td>YOL: 21.20-22.07</td>
<td>863</td>
<td>1,185</td>
<td>1,195</td>
<td>54%</td>
</tr>
<tr>
<td>4</td>
<td>SUT: 0.00-16.38</td>
<td>749</td>
<td>1,027</td>
<td>1,037</td>
<td>55%</td>
</tr>
</tbody>
</table>

*The Corridor Performance Measures table is based on Base Year (BY) 2014 traffic data and estimates a Horizon Year (HY) of 2034.*
KEY CORRIDOR ISSUES

A key issue for all segments along the route is meeting the concept LOS standards. Based on the performance measures identified in Table 12, only three out of the four segments are projected to at least meet the ultimate concept LOS standards. Segment 3, through Knights Landing, is projected in the 20-year horizon period to have a LOS E, which is below the ultimate concept LOS D standard for rural areas. A priority on projects and strategies that would improve the segments LOS to at least the stated minimum LOS for a rural area should be evaluated.

The LOS for Segment 1 is not projected to drop below the minimum standard of LOS E, but congestion during peak hours is a concern due to the fact that it is the primary route between major SHS routes and the cities of Davis and Woodland. Currently, SR 113 is still equipped to handle the projected population, but certain merge points along the route (i.e. lane reduction or on/off ramps) have a tendency to cause congestion. Monitoring the impacts new developments have on SR 113 should continue and improvements to alleviate issues should be considered as they arise.

In addition, in the past there have been flooding occurrences along the route in Segments 2-4. Portions of these segments are in the 100-year flood plain. Specifically for Segment 4, the entire segment is expected to be classified as a Special Flood Hazard Area (SFHA) A Zone (100-year flood plain) by 2016 or 2017 due to the non-certified levees. Projects and strategies which may include converting SR 113 into an “all weather” route is one alternative to evaluate if flooding along the route becomes an issue.

Overall, maintaining the routes pavement conditions is an on-going priority due to the current and future growth projections of commuter and truck on all segments of the route.

CORRIDOR CONCEPT

CONCEPT RATIONALE

The concept LOS for segment 1 is LOS E, which is standard for areas classified as urban cluster (population 2,500 to 49,999) and urbanized areas (population over 50,000). The rural sections, Segments 2-4, have a concept LOS D, which is the standard for rural areas (population less than 2,500). Based off the performance measures three of the four segments are anticipated to meet their ultimate concept LOS. However, Segment 3, is projected to fall below the concept LOS for rural areas, as it is projected to have a LOS E. Projects such as operational improvements, intelligent transportation systems, transportation demand management, active multimodal corridor management strategies, and reduction of travel demand on the SHS by increased use of transit and development of parallel facilities will be considered to help attain the Ultimate Concept. The concept of Complete Streets should also be considered and implemented in future design and construction of improvements in the urban cluster and small communities to the SR 113 Corridor, whenever feasible.

PROJECTS AND STRATEGIES

Projects and strategies to achieve the facility concept have two categories of funding status: fiscally constrained and fiscally unconstrained.

Fiscally constrained projects and strategies are projects that can be implemented using committed, available, or reasonably available revenue sources.

Fiscally unconstrained projects and strategies are conceptual transportation improvements without an identified funding source and may be funded if reasonable additional resources become available.
In addition to the funding status categories, there are three types of transportation improvements or actions: programmed, planned, and conceptual. Projects and strategies to achieve SR 113 facility concept are grouped into (1) planned and programmed projects, and (2) conceptual projects.

### Planned and Programmed Projects and Strategies

**Planned Project:** A planned improvement or action is a project in a fiscally constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

**Programmed Project:** A programmed improvement or action is a project in a near-term programming document that identifies funding amounts by year, such as the State Transportation Improvement Program of the State Highway Operations and Protection Program.

Lists of Planned and Programmed projects and strategies are contained in Table 13 below.

**Table 13: SR 113 Planned and Programmed Projects and Strategies**

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Description</th>
<th>Planned or Programmed</th>
<th>Location, County, PM</th>
<th>Lead Agency</th>
<th>Source*</th>
<th>Purpose</th>
<th>Total Cost Estimate* ($1,000)</th>
<th>Proposed Completion Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phase 2 - Construct northbound I-5 to southbound SR 113 freeway to freeway connection.</td>
<td>Planned</td>
<td>SR 113/I-5, YOL, R6.4-R6.8</td>
<td>Caltrans</td>
<td>2035 SACOG MTP</td>
<td>Operational Improvements</td>
<td>68,012</td>
<td>2026</td>
</tr>
<tr>
<td>1</td>
<td>Construct New Interchange: NB SR 113 to SB I-5 freeway to freeway connection. Phase 3.</td>
<td>Planned</td>
<td>SR 113/I-5, YOL, R10.7-R10.7</td>
<td>Caltrans</td>
<td>2035 SACOG MTP</td>
<td>Operational Improvements</td>
<td>66,000</td>
<td>2034</td>
</tr>
<tr>
<td>1</td>
<td>Upgrade curb ramps from north to south of Davis to comply with American With Disabilities Act.</td>
<td>Programmed</td>
<td>SR 113, Davis, YOL, 0.3-2.2</td>
<td>Caltrans</td>
<td>2035 SACOG MTP/ SACOG MTIP</td>
<td>ADA Compliance</td>
<td>1,460</td>
<td>2020</td>
</tr>
<tr>
<td>1</td>
<td>From Davis to Woodland, Rehabilitate pavement (PCC profile grind).</td>
<td>Programmed</td>
<td>Davis-Woodland, YOL, 0.00-11.1</td>
<td>Caltrans</td>
<td>2035 SACOG MTP/ SACOG MTIP</td>
<td>Pavement Rehabilitation</td>
<td>8,462</td>
<td>2020</td>
</tr>
<tr>
<td>4</td>
<td>Near Tudor, from 1.8 miles north of Wilson Road to 2.1 miles south of O’Banion Road - Construct an interchange at SR 99/SR 113 (SR 99 PM R19.5/R20.5; SR 113 PM 16.3/16.7)</td>
<td>Construction</td>
<td>SR 113/SR 99, SUT, 16.3-16.3</td>
<td>Caltrans</td>
<td>2035 SACOG MTP</td>
<td>Operational Improvements</td>
<td>19,350</td>
<td>2014</td>
</tr>
</tbody>
</table>

* Total Cost Estimate and Proposed Completion Year are from listed source. Additional project details and programming information can be found in the listed source. Note, RTPs included separate fiscally unconstrained section. Please see appendix B-Resources for more information regarding the listed source.

### Conceptual Projects and Strategies

**Conceptual Project:** A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a fiscally constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.
Caltrans District 3 is currently developing the **Caltrans District 3 Intelligent Transportation Systems/Operational Improvement (ITS/Ops) Plan.** This plan will provide critical guidance to optimize the State Highway System within the District by identifying and managing ITS and other operational strategies that yield a very high return on investment. Further information on the planning and deployment of ITS and operational improvements within District 3 can be reviewed in the **District 3 ITS/Ops Plan** (forthcoming) and the **District 3 Concept of Operations Plan** (expected to be complete in 2015). For more information visit: [http://www.dot.ca.gov/dist3/departments/planning/](http://www.dot.ca.gov/dist3/departments/planning/).

Conceptual projects and strategies that will help SR 113 meet the Ultimate LOS Concept are listed in Table 14.

**Table 14: SR 113 Projects and Strategies to Achieve Concept**

<table>
<thead>
<tr>
<th>Segment #</th>
<th>Description</th>
<th>Location, County, PM</th>
<th>Lead Agency</th>
<th>Source*</th>
<th>Purpose</th>
<th>Total Cost Estimate* ($1,000)</th>
<th>Proposed Completion Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Add turn lanes for access-egress to SR 113 including the overcrossing structure</td>
<td>Covell Blvd./SR 113, YOL, 0.00-1.14</td>
<td>City of Davis</td>
<td>2035 SACOG MTP</td>
<td>Operational Improvements</td>
<td>15,000</td>
<td>2040</td>
</tr>
<tr>
<td>1</td>
<td>Class I bike/low speed electric vehicle path between Davis and Woodland, along alignment identified in September 2009 feasibility study</td>
<td>Near J St/Covell Blvd in Davis to 24A/6th St in Woodland, YOL, Parallel to SR 113</td>
<td>City of Woodland Dept of Public Works, City of Davis Dept of Public Works, Yolo County Dept of Public Works</td>
<td>Yolo County 2013 Bicycle Transportation Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>9,640</td>
<td>2040</td>
</tr>
<tr>
<td>1</td>
<td>Woodland—Bicycle/pedestrian improvements on Main Street that is currently functioning as the I-5/SR 113 interchange</td>
<td>Main Street in Woodland, YOL, 11.14</td>
<td>Caltrans</td>
<td>Draft D3 ITS Ops Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>N/A</td>
<td>2040</td>
</tr>
<tr>
<td>1</td>
<td>Davis—Woodland Bikeway: connect low volume frontage roads on the west side of SR 113</td>
<td>West of SR 113 between Davis and Woodland, YOL, 0.00-11.14</td>
<td>Caltrans</td>
<td>Yolo County 2013 Bicycle Transportation Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>5,500</td>
<td>2040</td>
</tr>
<tr>
<td>1</td>
<td>Class II Bike lanes on SR 113</td>
<td>CR 27 to CR 25A, between Davis and Woodland, YOL, R6.11-7.46</td>
<td>Yolo County</td>
<td>SACOG 2013 Regional Bicycle, Pedestrian and Trails Master Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>N/A</td>
<td>2040</td>
</tr>
<tr>
<td>3</td>
<td>Bike facilities, streetscape elements, crosswalks, and signage where feasible</td>
<td>Knights Landing, YOL, 21.2-22.07</td>
<td>Caltrans</td>
<td>Draft D3 ITS Ops Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>N/A</td>
<td>2040</td>
</tr>
<tr>
<td>4</td>
<td>Class III Bike route on SR 113</td>
<td>Robbins to SR 99, SUT, 4.893-16.38</td>
<td>Sutter County</td>
<td>Sutter County 2012 Pedestrian &amp; Bikeway Master Plan</td>
<td>Bike/Pedestrian Improvements</td>
<td>N/A</td>
<td>2040</td>
</tr>
</tbody>
</table>

* Total Cost Estimate and Proposed Completion Year are from listed source. Additional project details and programming information can be found in the listed source. Note, RTPs included separate fiscally unconstrained section. Please see appendix B-Resources for more information regarding the listed source.
APPENDICES

APPENDIX A: GLOSSARY OF TERMS AND ACRONYMS

Acronyms

AADT- Annual Average Daily Traffic
ADT- Average Daily Traffic
BY – Base Year
CALTRANS - California Department of Transportation
CLA – California Legal Advisory
CLN – California Legal Network
CMA - Congestion Management Agencies
CR – County Route
CSS - Context Sensitive Solutions
CSMP – Corridor System Management Plan
CT – Caltrans
CTC – County Transportation Commission
DSMP – District System Management Plan
DSMDP – District System Management and Development Plan
FHWA - Federal Highway Administration
GHG - Green House Gas
HCM - Highway Capacity Manual
HCP - Habitat Conservation Plan
HY – Horizon Year
I - Interstate
ITS - Intelligent Transportation System
ITSP - Interregional Transportation System Plan
KPRA – Kingpin-to-rear-axle
LOS - Level of Service
MPO - Metropolitan Planning Organizations
MTIP - Metropolitan Transportation Improvement Program
MTP - Metropolitan Transportation Plan
NOA - Naturally Occurring Asbestos
NCCP - Natural Community Conservation Plan
PID - Project Initiation Document
PM - Post Mile
PSR - Project Study Report
ROW – Right of Way
RTP - Regional Transportation Plan
RTIP - Regional Transportation Improvement Program
RTPA - Regional Transportation Planning Agencies
SACOG – Sacramento Area Council of Governments
SCS - Sustainable Community Strategies
SFHA – Special Flood Hazard Area
SHBFP – State Highway Bicycle Facility Plan
SHOPP - State Highway Operation Protection Program
SHS – State Highway System
SR - State Route
STAA - Surface Transportation Assistance Act
**Definitions**

**AADT** – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic Counting is generally performed by electronic counting instruments moved from location throughout the State in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

**Base year** – The year that the most current data is available to the Districts.

**Bikeway Class I (Bike Path)** – Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

**Bikeway Class II (Bike Lane)** – Provides a striped lane for one-way bike travel on a street or highway.

**Bikeway Class III (Bike Route)** – Provides for shared use with pedestrian or motor vehicle traffic.

**California Legal Truck** – A truck tractor-semitrailer (or double) that can travel on virtually any route in California, as described below:

- **California Legal Truck Tractor – Semitrailer**
  - Semitrailer length: no limit
  - KPRA: 40 feet maximum for two or more axles, 38 feet maximum for single-axle trailers
  - Overall length: 65 feet maximum

- **California Legal Truck Tractor - Semitrailer - Trailer (Doubles)**
  - Option A
    - Trailer length: 28 feet 6 inches maximum (each trailer)
    - Overall length: 75 feet maximum
  - Option B
    - Trailer length: 28 feet 6 inches maximum (each trailer)
    - Overall length: 75 feet maximum

**Capacity** – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.
**Capital Facility Concept** – The 20-25 year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

**Concept LOS** – The minimum acceptable LOS over the next 20-25 years.

**Conceptual Project** – A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a financially constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

**Corridor** – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included as informational purposes and not analyzed in the TCR.

**Facility Concept** – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, State Highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, transportation demand management and incident management.

**Facility Type** – The facility type describes the state highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

**Freight Generator** – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

**Headway** – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

**Horizon Year** – The year that the future (20-25 years) data is based on.

**ITS** – Intelligent Transportation System improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

**LOS** – Level of Service is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS can generally be categorized as follows:

- **LOS A** describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.

- **LOS B** is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.

LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.

LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.

LOS F a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

**Multi-modal** – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

**System Operations and Management Concept** – Describes the system operations and management elements that may be needed within 20-25 years. This can include Non-capacity increasing operational improvements (Aux. lanes, channelization’s, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g. HOV land to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

**Peak Hour** – The hour of the day in which the maximum volume occurs across a point on the highway.

**Peak Hour Volume** – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between 6 percent and 10 percent of the ADT. The lower values are generally found on roadways with low volumes.

**Planned Project** – A planned improvement or action is a project in a financially constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

**Post Mile** – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a county to the next county line. The milepost values start over again at each county line. Milepost values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "milepost equations" are introduced at the
end of each relocated portion so that mileposts on the reminder of the route within the county will remain unchanged.

**Programmed Project** – A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

**Route Designation** – A route’s designation is adopted through legislation and identifies what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but not limited to National Highway System (NHS), Interregional Route System (IRRS), and Scenic Highway System.

**Rural** – Fewer than 2,500 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau.

**Segment** – A portion of a facility between two points.

**(Interstate) STAA Truck** – A truck tractor-semitrailer (or double that conforms to the requirements to the STAA, as described below:)

- Interstate “STAA” Truck Tractor – Semitrailer
  - Semitrailer length: 48 feet maximum
  - KPRA length: no limit
  - Overall length: no limit
  - Semitrailer length: over 48 feet up to 53 feet maximum
  - KPRA length: 40 feet maximum for two or more axles,
    - 38 feet maximum for single-axle trailers
  - Overall length: no limit

- Interstate “STAA” Truck Tractor-Semitrailer-Trailer (Doubles)
  - Trailer length: 28 feet 6 inches maximum (each trailer)
  - Overall length: no limit

**TDM** – Transportation Demand Management programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

**TMS** – Transportation Management System is the business processes and associated tools, field elements and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

**Ultimate Concept** - In general, this is also called the Post 20-Year concept that could provide the maximum reasonable and foreseeable roadway needed beyond a 20-year horizon. The ultimate concept can be used to identify potential widening, realignments, future facilities, and rights-of-way required to complete the development of each corridor.

**Urban Area** – An area with a population of 50,000 or more people as defined by the US Census Bureau.
Urban Cluster – 2,500 to 49,999 in population designates an urban cluster. Limits are based upon population density as determined by the U.S. Census Bureau.

VMT – Is the total number of miles traveled by motor vehicles on a road or highway segments.

**APPENDIX B: RESOURCES**


California Department of Transportation, District 3, *District System Management Plan Project List, July 2013*. Website: M:\Plan\Shared\File Structure Project\System Planning\DSMDP\2012-13 Update\DSMP Project List


California Department of Transportation: District 3, *Transportation Corridor Concept Report State Route 113*, 2010


Sacramento Area Council of Governments *2035 Metropolitan Transportation Plan*


Yolo County *2030 Countywide General Plan*

Yuba-Sutter Census Economic and Demographic Information, 2013

County of Yolo *2013 Bicycle Transportation Plan*, [http://www.yolocounty.org/home/showdocument?id=2538](http://www.yolocounty.org/home/showdocument?id=2538)

Endnotes:


2 [http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=250-257](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=shc&group=00001-01000&file=250-257)