



DATE: June 10, 2011
TO: STA Board Workshop
FROM: Robert Macaulay, Director of Planning
RE: STA Priorities for SR 12 Corridor – (Funding, 2 Lanes versus 4 Lanes, Rio Vista Bridge, and Economic Analysis)

Background:

State Route (SR) 12 is an important east-west corridors in Solano County, the other being I-80. SR 12 runs from Rio Vista, where it crosses the Sacramento River, to I-80 in Fairfield. SR 12 picks up again in Cordelia and runs through the Jameson Canyon and into Napa County. SR 12 is a primary means of access for much of Solano County's agricultural industry, for the wind turbines in the Portrero Hills area, provides the main access into and out of Rio Vista, and is the delivery route for almost all cargo being flown out of Travis Air Force Base. Finally, SR 12 is one of the main routes for recreational traffic into the Sacramento San Joaquin River Delta area. Hence, SR 12 is a fast east-west trade corridor vital to the economic vitality of Solano County.

The Jameson Canyon portion of SR 12 is 2 lanes in the middle segment, with an additional west-bound truck climbing lane on the stern (Solano) segment and 2 east-bound lanes in most of the Napa segment. This portion will be improved to a separated 4-lane facility with full shoulders in the next few years.

Average daily traffic on SR 12 ranges from more than 13,000 vehicles in Rio Vista to 9,000 in the rural county, and reaches almost 15,000 in the Fairfield-Suisun City urban area. Trucks make up a large portion of that traffic, including 9% of the traffic in Fairfield-Suisun City and 14% in the rural segments.

SR 12 is currently a 4-lane highway in the Fairfield and Suisun City area, and a 2-lane highway between Suisun City and Rio Vista. For many years, it has had poor pavement quality and many areas with substandard interior and exterior shoulders. The California Highway Patrol has been unable to conduct enforcement in many locations because there was no area in which to pull drivers over.

In response to congestion and safety issues identified on SR 12, the STA Board adopted a 4-pronged approach in 2006. Those four prongs are:

- Enforcement – an immediate increase in enforcement of traffic laws on SR 12 in order to reduce speeds and improve driver behaviors.
- Legislation – seeking legislation to create a double fine zone on SR 12 and to name a portion of the roadway after Rio Vista police officer David Frank Lamoree, who died on SR 12 while driving home from work in Rio Vista.

- Education – improve driver awareness of safety and congestion issues on SR 12 in order to reduce hazardous behavior.
- Engineering – seek to identify, plan, fund and construct improvements to the roadway itself to improve safety and increase capacity.

SR 12 also suffers from substantial traffic back-ups when the draw bridge over the Sacramento River is opened. Depending upon the size of the ship passing under the bridge, the opening can last as long as 25 minutes, and vehicle queues can reach 200 vehicles in the peak direction. To address this issue, STA undertook a study of the operation and possible relocation options for the Rio Vista Bridge. That study was completed in mid 2010.

The importance of SR 12's role in the regional economy was highlighted during Bridge Study discussions and the initiation of the SR 12 corridor study. However, it was clear that the economic impact of SR 12 have not been fully documented. As a result, the STA is coordinating with Solano Economic Development Corporation to conduct an Economic Analysis, which will be completed on the same timeline as the SR 12 corridor study.

Finally, SR 12 has had a larger number of accidents, including fatal accidents, than similar roadways on the state highway system. A series of crashes in early 2007, with three fatalities in 3 days, acted to focus state attention on pending improvements to the roadway. The California Department of Transportation (Caltrans) moved quickly to install temporary median barriers, and to expedite the delivery of curve and shoulder improvements in the Solano County portion of SR 12. CHP and local law enforcement increased traffic enforcement efforts, in part with State Office of Traffic Safety grant funds, and a double fine zone was established through AB 112. As a result, the accident rate has substantially improved.

In 2010, STA, the San Joaquin Council of Governments (SJCOG), the Metropolitan Transportation Commission (MTC) and the 3 Caltrans districts that cover SR 12 from I-80 to I-5 agreed that SR 12 needs a game plan with local and regional buy-in. As a result, they jointly decided to fund and conduct a study on the roadway's needs through 2035. The SR 12 Corridor Study will be completed in 2012.

Discussion:

Caltrans has completed the first of two roadway improvement projects on SR 12, from just east of Suisun City to Currie Road. The second project, from about Currie Road to Liberty Island Road, is scheduled for construction in 2013. Caltrans is studying the SR 12/SR 113 intersection to determine if it meets standards for installation of a traffic light. Even if the intersection does meet these standards, there are no funds allocated for design and installation of the needed improvements. At this time, therefore, there is only one project to improve roadway safety on SR 12 that is planned and funded.

Traffic on SR 12 is projected to increase, due to growth in a number of communities in both Solano and San Joaquin counties. Traffic analysis for the SR 12 Corridor Study shows that traffic volumes will almost triple in some areas. Although the roadway analysis is not complete, it is likely that the improvements to accommodate this additional traffic will need to include new travel lanes. The 2010 Rio Vista Bridge Study also identified the need to replace the existing 2-lane bridge with a 4-lane alternative (bridge or tunnel).

There are currently no fund sources dedicated to improvements on SR 12 or to replacement of the Rio Vista Bridge. The replacement options identified in the Rio Vista Bridge study all had costs in the range of \$1 billion or more, and improvements to the roadway to widen it to 4 lanes in Solano County could easily cost almost as much. Without a dedicated funding source, it is unlikely that any of these expensive improvements will compete well for the limited state and federal funds that are available.

Workshop Discussion:

1. What is the economic significance of SR 12 to Solano County and the region?
2. Aside from the Currie Road to Liberty Island Road improvements, there are no other projects on SR 12 that have funding. Are we satisfied with the current number of lanes, shoulder width and median barriers on SR 12?
3. Any options for improving SR 12 are likely to be expensive. Are future improvements important, and if so, how do we fund them?

Attachment :

- A. SR 12 STATUS Report (June 27, 2011)

SR



STRATUS

"DRIVE TO STAY ALIVE"

STA Board Workshop June 27, 2011

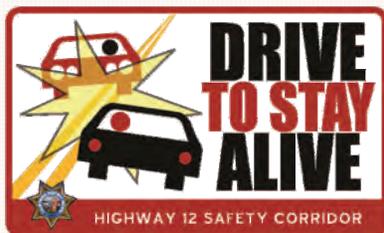
SR 12 Issues & Strategies

THE ISSUES FACED ON SR 12:

- Safety – the number of accidents and fatalities is above the state average for similar roadways.
- Congestion – 2-lane road with a high percentage of trucks and summertime recreational vehicles.
- No Alternative - The closest parallel routes are I-80 and SR 4; using them adds significant time and distance to a trip that would otherwise use SR 12.

The adopted **SR 12 STRATEGY** to address current and anticipated problems:

- Legislation to make the route safer, including a Double Fine Zone
- Enforcement to improve driver behavior
- Education to encourage better driver behavior
- Engineering to make the roadway safer



Actions & Plans

WHAT HAS BEEN DONE ALREADY:

- Concrete median barrier from Scandia Road to Lambie Road
- Channelizers from Lambie Road to Rio Vista
- Improved shoulders, curves and hills and add turn lanes from Scandia Road to Currie Road
- Extra enforcement by CHP and local law enforcement agencies
- Completed the Rio Vista Bridge Realignment Study and started the SR 12 Corridor Study (I-80 to I-5)

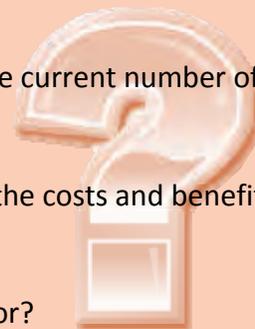


Projects and plans that are **IN THE PIPELINE:**

- Additional shoulder improvements and turn lanes from Azevedo Road to Liberty Island Road
- Complete the SR 12 Corridor Study (I-80 to I-5) in December 2011
- Corridor Economic Impact Study, due in late 2011

A FEW QUESTIONS:

- There are no other projects on SR 12 that have funding. Are we satisfied with the current number of lanes, shoulder width and median barriers on SR 12?
- Any options for improving SR 12 are likely to be expensive. How do we balance the costs and benefits of the options available?
- Should we focus local, state and federal resources on SR 12 or on the I-80 corridor?



Solano SR 12 Facts

26.2 Miles from I-80 to the Solano/Sacramento County Line

- 6.4 miles of 4-lane road from I-80 to Walters Road
- 19.1 miles of 2-lane road (plus 2 passing lanes) from Walters Road to Rio Vista
- 0.7 miles of 2 lanes plus a center turn lane in Rio Vista
- 8 intersections controlled by traffic lights

Average daily traffic on SR 12 (counted in May, 2010):

- In Rio Vista, 13,600 vehicles
- In rural Solano County, 9,300 vehicles
- In Suisun City/Fairfield, 41,700 vehicles

Truck traffic on SR 12:

- In Rio Vista, 7%
- In rural Solano County, 14%
- In Suisun City/Fairfield, 9%



Accidents:

State Route 12		Actual Accident Rates ¹ For Project Area			Average Accident Rates ¹		
Location	Post Mile	Fatal	Fatal + Injuries	Total	Fatal	Fatal + Injuries	Total
Solano County – 4 Lane (I-80 to Walters)	1.801 – 8.000	0.004	0.50	1.35	0.014	0.46	1.19
Solano County – 2 Lane (Walters to Rio Vista)	8.000 – 24.820	0.028	0.28	0.60	0.024	0.34	0.76
Solano County – 2 Lane (Rio Vista)	24.820 – 26.240	0.000	0.43	0.80	0.022	0.76	2.04
Sacramento County – 2 Lane	0.000 – 6.200	0.014	0.37	0.80	0.025	0.33	0.77
San Joaquin County – 2 Lane	0.000 – 11.499	0.045	0.35	0.76	0.025	0.33	0.78

¹ - Reported accident rates are "accidents per million vehicle miles."
Shaded boxes indicate accident rates higher than the state average.

