



DATE: March 27, 2007
TO: STA Board
FROM: Robert Macaulay, Director of Planning
RE: State Route (SR) 12 Safety Plan Update

Background:

The STA's mission statement is "to improve the quality of life in Solano County by delivering transportation projects to ensure mobility, travel safety, and economic vitality." There has been a long-running Agency concern about safety on State Route (SR) 12, especially the segment between I-80 and the Rio Vista bridge. Recent auto accidents, both on the Solano County side of the bridge and the Sacramento/San Joaquin County side of the bridge have further heightened those concerns.

In October of 2001, STA released the final "Highway 12 Major Investment Study" (the 2001 SR 12 MIS). This report provided information on the roadway and traffic, examined a number of possible improvements to the roadway, and recommended priorities for those improvements.

At the March 2007 STA Board meeting, Chair Intintoli asked STA staff to put a report on the status of SR 12 safety planning and action at the beginning of each Board meeting.

Discussion:

At the meeting, staff will provide an overview of:

1. The roadway itself – facts about the roadway and the land it runs through
2. Traffic on SR 12 – the volume of traffic, and what is known about the make-up and destination of the traffic
3. Accidents – a review of available information on the number, type, severity and location of accidents
4. Improvements – those improvements announced by Caltrans Director Will Kempton in a letter dated March 21, 2007.
5. The SR 12 Steering Committee and the Enforcement, Education, Legislation and Engineering approach
6. SR 12 MIS Update – the schedule and components of an update to the 2001 SR 12 MIS

In addition, STA staff will highlight elements of the 2006 California Strategic Highway Safety Plan. The CSHSP includes information on typical collision factors, and notes that human factors are at least partly involved in 93% of the accidents on state freeways and highways. The CSHSP also includes 16 safety challenges for state freeways and highways, including strategies to address those challenges and related implementation issues.

Recommendation:

Informational.

Attachments:

- A. State Route 12 – Roadway and Setting
- B. Traffic on SR 12
- C. Accidents
- D. March 21 Letter from Will Kempton
- E. SR 12 Steering Committee Enforcement, Education, Legislation and Engineering Approach
- F. SR 12 MIS Update
- G. California Strategic Highway Safety Plan

Attachment A - State Route 12 – Roadway and Setting

State Route 12 from I-80 to the Sacramento River Bridge in Rio Vista is 25.5 miles long, and can be divided into four segments:

Segment	Length	Lanes	Shoulder	Division	Crossings	Speed
Urban corridor from I-80 through Fairfield and Suisun	6.35 miles	2 lanes in each direction	shoulder adequate for emergency stopping	divided by concrete barrier, vegetated median or drainage channel	3 grade-separated crossings of local roads 11 at-grade intersections with local roads; 6 controlled by signal lights	Speed limit – 50 MPH
Level rural route from Suisun City limits to Shiloh Road	6.1 miles	1 lane in each direction no passing lanes; some areas striped to allow passing	shoulder adequate for stopping	no lane divider	5 at-grade intersections with local roads; none controlled by traffic lights	Speed limit – 55 MPH
Hilly rural route from Shiloh Road to Summerset Rd	10.4 miles	occasional passing lanes few areas striped to allow passing	shoulders generally not adequate for stopping	no lane divider	17 at-grade intersections with local roads or driveways; intersection with SR 113 controlled by flashing yellow light	Speed limit –55 MPH
Small-town main street Summerset Rd to Sac. River Bridge	2.7 miles	2-lane road with common left-turn lane	Shoulders adequate for stopping; no parking allowed	No lane divider Common left-turn lane	numerous local roads and driveways; striped pedestrian crossings	speed limit – 45 to 35 MPH

Attachment B - Traffic on SR 12 – the volume of traffic, and what is known about the make-up and destination of the traffic

Sources of traffic counts: 2001 SR 12 MIS; 2005 actual counts conducted by the Metropolitan Transportation Commission (MTC); SR12 Comprehensive Transportation Corridor Study - Rio Vista Bridge to Hwy 99, dated Feb 28 2006 (SR 12 East)

Segment	Weeekday	Weekend	Truck %	Origin/Destination
Urban corridor from I-80 through Fairfield and Suisun	16,000 (MTC) 20,300 (SR 12 MIS)	18,000 (SR 12 MIS)	6% (SR 12 MIS)	Origin – 87% in county, 13% outside of county Destination – 88% in county, 12% outside of county (SR 12 MIS)
Level rural route from Suisun City limits to Shiloh Road	14,000 (SR 12 MIS)	13,000 (SR 12 MIS)	14% (SR 12 MIS)	N/a
Hilly rural route from Shiloh Road to Summerset Rd	15,600 (MTC) 14,000 (SR 12 MIS)	13,000 (SR 12 MIS)	14% (SR 12 MIS)	At SR 113 Origin – 67 % in county, 33% outside of county Destination - 67 % in county, 33% outside of county (SR 12 MIS)
Small-town main street Summerset Rd to Sac. River Bridge	16,000 (MTC) 28,200 (SR 12 MIS)	25,000 (SR 12 MIS)	15% (SR 12 East)	Origin and destination 59% Rio Vista traffic 41% pass-through (SR 12 MIS)

Attachment C - Accidents – a review of available information on the number, type, severity and location of accidents

Sources of accident data - CHP SWITRS report for 1/1/2000 through 8/30/2006

Segment	Total Accidents	Fatal Accidents / fatalities injuries	“hot-spot” locations	Accidents by type
Urban corridor from I-80 through Fairfield and Suisun	732 (644 on SR 12, 88 on immediately adjacent roads)	4 / 4 608 injuries	71 - Chadbourne Rd 180 - Beck Ave 142 – Pennsylvania Ave 85 - Marina Blvd 65 - Sunset Ave 63 - Lawlor Ranch/ Emperor 20 - Walters Rd	4 – Auto/Ped 97 - Broadside 10 – Head on 84 - Object 419 - Rear End 62 – Sideswipe 56 - all others
Level rural route from Suisun City limits to Shiloh Road	93 (90 on SR 12, 3 on immediately adjacent roads)	8 / 17 37 injuries	28 - Denverton Rd/ Overhead 19 – Scally Rd	0 – Auto/Ped 5 - Broadside 7 - Head on (6 fatal) 27 - Object 10 - Rear End 17 - Sideswipe 27 - All others
Hilly rural route from Shiloh Road to Summerset Rd	232 (229 on SR 12, 3 on immediately-adjacent roads)	6 / 15 171 injuries	22 – Avezedo Rd 24 – Currie Rd 51 – Olsen Rd 76 - SR 113	0 – Auto/Ped 18 - Broadside 23 - Head on (4 fatal) 62 - Object 57 - Rear End 30 - Sideswipe 42 - All others
Small-town main street Summerset Rd to Sac. River Bridge	207 (197 on SR 12, 10 on immediately-adjacent roads)	0 / 0 90	29 – Church Rd 56 – Dourin Dr 24 – Summerset Dr 31 – Virginia St	0 – Auto/Ped 30 - Broadside 5 - Head on 25 - Object 106 - Rear End 21-Sideswipe 20 - All others

Sources of accident data: SR 12 MIS covering 5-year period prior to publication in 2001

Segment	Total Accidents	Fatal Accidents Injury Accidents	“hot-spot” locations	Accidents by type
Urban corridor from I-80 through Fairfield and Suisun	536	2 147	19 - Chadbourne Rd 115 - Beck Ave 71 – Pennsylvania Ave 65 - Marina Blvd 45 - Sunset Ave 28 - Lawlor Ranch/ Emperor	6 – Auto/Ped 77 - Broadside 11 – Head on 25 - Object 282 - Rear End 33 – Sideswipe 102 - all others
Level rural route from Suisun City limits to Shiloh Road	53	1 19	13 – Shiloh Rd	0 – Auto/Ped 2 - Broadside 3 - Head on 17 - Object 10 - Rear End 6 - Sideswipe 15 - All others
Hilly rural route from Shiloh Road to Summerset Rd	141	6 36	22 - SR 113 18 – Western Railroad Museum	0 – Auto/Ped 10 - Broadside 15 - Head on (5 fatal) 37 - Object 33 - Rear End 10 - Sideswipe 36 - All others
Small-town main street Summerset Rd to Sac. River Bridge	96	0 20	16 – Church Rd 11 – Virginia St 25 – Hillside Ter.	2 – Auto/Ped 22 - Broadside 2 - Head on 21 - Object 30 - Rear End 10-Sideswipe 9 - All others

Attachment D – Letter from Will Kempton

Attachment E - The SR 12 Steering Committee and the Enforcement, Education, Legislation and Engineering approach

Enforcement

The Solano California Highway Patrol expects to hear in April if it will receive an Office of Traffic Safety (OYS) grant for special enforcement on SR 12 from I-80 to I-5. In the mean time, CHP continues to use allocated overtime hours for enforcement on SR 12. As of mid-March, CHP overtime activity had accounted for more than 300 additional citations on SR 12 in Solano County.

Education

CHP and Caltrans have placed several lighted changeable message signs along SR 12 to alert drivers to on-going safety concerns and enforcement activity. STA staff is reviewing the "Every 15 Minutes" educational presentation developed by CHP.

Legislation

Assemblywomen Lois Wolk has introduced Assembly Bill (AB) 112 to make the SR 12 Corridor from I-80 to I-5 a double fine zone for 5 years. The 5-year time frame will provide the double fine zone through the time frame for the major capital improvements that are scheduled to begin in 2008 between Rio Vista and Suisun City. The bill as currently amended includes an Urgency Provision, making it effective as soon as signed by the Governor. The bill was endorsed by the Assembly Transportation Committee on March 26, with a 12-0 favorable vote. The bill next goes to the Assembly Appropriations Committee.

Assemblywomen Lois Wolk has also introduced Assembly Concurrent Resolution (ACR) 7 to make a segment on SR 12 between Olsen Road and SR 113 the Officer Lamoree Memorial Highway. This Resolution was approved by consent by the Assembly Transportation Committee on March 26.

Engineering

Immediate physical improvements to SR 12 have been announced by Caltrans (see attached map), including striping all of the center divide as No Passing, installation of concrete barriers east of Suisun City and installation of plastic traffic channelers in areas where concrete barriers are not appropriate.

The next SR 12 Steering Committee meeting will be held May 3, 2007 at 9:00 a.m. in Rio Vista.

Attachment F - SR 12 MIS Update – the schedule and components of a safety evaluation and update to the 2001 SR 12 MIS

Traffic counts, which will be a vital part of the MIS update, are most effective when collected in the September through May time frame. Planning staff hopes to contract with a traffic engineering firm for counts on SR 12 on key connecting roads in April, and to have the traffic counts available to whatever consultant is selected to prepare the safety evaluation and update to the 2001 SR 12 MIS.

Staff will take the proposed Request for Proposals (RFP) to the April 25, 2007 meeting of the STA Technical Advisory Committee (TAC). The RFP and the TAC recommendation will be presented to the STA Board for action at its meeting of May 9.

Staff plans to have a consultant recommended and a contract ready to sign by the STA Board meeting of July 11, 2007.

The schedule is expected to call for preliminary identification of key safety improvements in the Fall of 2007, in order to submit them to Caltrans for fiscal programming as part of the 2008 State Highway Operations and Protection Program (SHOPP).

Attachment G – California Strategic Highway Safety Plan