



Solano Transportation Authority

One Harbor Center, Suite 130  
Suisun City, California 94585

Area Code 707  
424-6075 • Fax 424-6074

**Arterials, Highways, and Freeways Element  
Committee Meeting Agenda  
Wednesday, June 25, 2008  
8:30-10:00 a.m.**

Members:

- Benicia
- Dixon
- Fairfield
- Rio Vista
- Solano County
- Suisun City
- Vacaville
- Vallejo

**Meeting Location: Solano Transportation Authority  
One Harbor Center, Suite 130  
Suisun City 94585**

**ITEM**

**BOARD/STAFF PERSON**

- |  |                             |
|--|-----------------------------|
| <b>I. CALL TO ORDER – SELF INTRODUCTIONS</b><br>(1:00-1:05 p.m.)   | <b>Len Augustine, Chair</b> |
| <b>II. COMMITTEE VICE-CHAIRPERSON APPOINTMENT</b><br>(1:05-1:10 p.m.)  | <b>Len Augustine, Chair</b> |
| <b>III. APPROVAL OF JUNE 25, 2008 ARTERIALS, HIGHWAYS AND FREEWAYS AGENDA</b><br>(1:10-1:15 p.m.)                            | <b>Len Augustine, Chair</b> |
| <br><b>IV. INFORMATIONAL ITEMS</b>   |                             |
| <b>1. Solano County Comprehensive Transportation (CTP) Plan History and Organization.</b><br>(1:15-1:25 p.m.)<br><b>Pg 2</b> | <b>Robert Macaulay, STA</b> |
| <b>2. Summary of the 2005 Arterials, Highways, and Freeways Element</b><br>(1:25-1:30 p.m.)<br><b>Pg 7</b>                   | <b>Robert Guerrero, STA</b> |
| <b>3. Highway Studies and Projects Status</b><br>(1:30-1:40 p.m.)<br><b>Pg. 10</b>   | <b>Janet Adams, STA</b>     |

**ARTERIALS, HIGHWAYS, AND FREEWAYS COMMITTEE MEMBERS**

Len Augustine Chair  
City of Vacaville

Elizabeth Patterson  
City of Benicia

Jack Batchelor,  
City of Dixon

Harry Price  
City of Fairfield

Ed Woodruff  
City of Rio Vista

Pete Sanchez  
City of Suisun City

Mike Reagan  
County of Solano

Paul Wiese  
Technical Advisory  
Committee

**4. Solano County Travel Demand Model**

(1:40-1:50 p.m.)

**Pg. 16**

**Robert Macaulay, STA**

**5. Committee Schedule and Subsidiary Plans**

(1:50-2:00 p.m.)

**Pg. 18**

**Robert Guerrero, STA**

**V. ACTION ITEMS**

**A. Arterials, Highways, and Freeways Element Goals and Objectives**

**Robert Guerrero, STA**

Recommendation:

*Forward recommendation to the STA Board to adopt the Arterials, Highways, and Freeway Element Purpose Statement and Goals for the Solano Comprehensive Transportation Plan as shown in Attachment A.*

(2:00-2:25 p.m.)

**Pg. 21**

**VI. NEXT MEETING DATE**

**Len Augustine, Chair**

(2:25 p.m.)

Establish date and agenda for next Committee meeting.

**VII. ADJOURNMENT- 2:30 p.m.**

**Len Augustine, Chair**

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**ARTERIALS, HIGHWAYS, AND FREEWAYS COMMITTEE MEMBERS**

Len Augustine Chair  
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Elizabeth Patterson  
City of Benicia

Jack Batchelor,  
City of Dixon

Harry Price  
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City of Rio Vista

Pete Sanchez  
City of Suisun City

Mike Reagan  
County of Solano

Paul Wiese  
Technical Advisory  
Committee



## STA ACRONYMS LIST OF TRANSPORTATION TERMS

<b>A</b>		<b>P</b>	
ABAG	Association of Bay Area Governments	PAC	Pedestrian Advisory Committee
ADA	American Disabilities Act	PCC	Paratransit Coordinating Council
AVA	Abandoned Vehicle Abatement	PCRPP	Planning and Congestion Relief Program
APDE	Advanced Project Development Element (STIP)	PDS	Project Development Support
AQMD	Air Quality Management District	PDT	Project Delivery Team
		PMP	Pavement Management Program
<b>B</b>		PMS	Pavement Management System
BAAQMD	Bay Area Air Quality Management District	PNR	Park and Ride
BABC	Bay Area Bicycle Coalition	POP	Program of Projects
BAC	Bicycle Advisory Committee	PPM	Planning, Programming and Monitoring
BATA	Bay Area Toll Authority	PSR	Project Study Report
BCDC	Bay Conservation and Development Commission	PTA	Public Transportation Account
BT&H	Business, Transportation & Housing Agency	PTAC	Partnership Technical Advisory Committee (MTC)
<b>C</b>		<b>R</b>	
CAF	Clean Air Funds	RABA	Revenue Alignment Budget Authority
CALTRANS	California Department of Transportation	REPEG	Regional Environmental Public Education Group
CARB	California Air Resources Board	RFP	Request for Proposal
CCCC (4'Cs)	City County Coordinating Council	RFQ	Request for Qualification
CCCTA (3CTA)	Central Contra Costa Transit Authority	RM 2	Regional Measure 2
CEQA	California Environmental Quality Act	RRP	Regional Rideshare Program
CHP	California Highway Patrol	RTEP	Regional Transit Expansion Policy
CIP	Capital Improvement Program	RTIP	Regional Transportation Improvement Program
CMA	Congestion Management Agency	RTMC	Regional Transit Marketing Committee
CMAQ	Congestion Mitigation and Air Quality	RTP	Regional Transportation Plan
CMP	Congestion Management Program	RTPA	Regional Transportation Planning Agency
CNG	Compressed Natural Gas		
CTA	County Transportation Authority		
CTC	California Transportation Commission		
CTEP	County Transportation Expenditure Plan		
CTP	Comprehensive Transportation Plan		
		<b>S</b>	
<b>D</b>		SACOG	Sacramento Area Council of Governments
DBE	Disadvantaged Business Enterprise	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users
DOT	Federal Department of Transportation	SCTA	Sonoma County Transportation Authority
		SHOPP	State Highway Operations and Protection Program
<b>E</b>		SJCOG	San Joaquin Council of Governments
EIR	Environmental Impact Report	SNCI	Solano Napa Commuter Information
EIS	Environmental Impact Statement	SOV	Single Occupant Vehicle
EPA	Environmental Protection Agency	SMAQMD	Sacramento Metropolitan Air Quality Management District
		SP&R	State Planning and Research
<b>F</b>		SR2S	Safe Routes to School
FHWA	Federal Highway Administration	SR2T	Safe Routes to Transit
FST	Fairfield-Suisun Transit	SRITP	Short Range Intercity Transit Plan
FTA	Federal Transit Administration	SRTIP	Short Range Transit Plan
		STA	Solano Transportation Authority
<b>G</b>		STA	Spare the Air
GARVEE	Grant Anticipation Revenue Vehicle	STAF	State Transit Assistance Fund
GIS	Geographic Information System	STIA	Solano Transportation Improvement Authority
		STIP	State Transportation Improvement Program
<b>H</b>		STP	Surface Transportation Program
HIP	Housing Incentive Program		
HOV	High Occupancy Vehicle	<b>T</b>	
		TAC	Technical Advisory Committee
<b>I</b>		TAM	Transportation Authority of Marin
ISTEA	Intermodal Surface Transportation Efficiency Act	TANF	Temporary Assistance for Needy Families
ITIP	Interregional Transportation Improvement Program	TAZ	Transportation Analysis Zone
ITS	Intelligent Transportation System	TCI	Transportation Capital Improvement
		TCM	Transportation Control Measure
<b>J</b>		TCRP	Transportation Congestion Relief Program
JARC	Jobs Access Reverse Commute	TDA	Transportation Development Act
JPA	Joint Powers Agreement	TDM	Transportation Demand Management
		TEA	Transportation Enhancement Activity
<b>L</b>		TEA-21	Transportation Efficiency Act for the 21 <sup>st</sup> Century
LS&R	Local Streets & Roads	TFCA	Transportation Funds for Clean Air
LTA	Local Transportation Funds	TIF	Transportation Investment Fund
LEV	Low Emission Vehicle	TIP	Transportation Improvement Program
LIFT	Low Income Flexible Transportation	TLC	Transportation for Livable Communities
LOS	Level of Service	TMA	Transportation Management Association
LTF	Local Transportation Funds	TMP	Transportation Management Plan
		TMTAC	Transportation Management Technical Advisory Committee
<b>M</b>		TOS	Traffic Operation System
MIS	Major Investment Study	TRAC	Trails Advisory Committee
MOU	Memorandum of Understanding	TSM	Transportation Systems Management
MPO	Metropolitan Planning Organization		
MTC	Metropolitan Transportation Commission		
MTS	Metropolitan Transportation System		
		<b>U, V, W, Y, &amp; Z</b>	
<b>N</b>		UZA	Urbanized Area
NEPA	National Environmental Policy Act	VTA	Valley Transportation Authority (Santa Clara)
NCTPA	Napa County Transportation Planning Agency	W2W	Welfare to Work
NHS	National Highway System	WCCCTAC	West Contra Costa County Transportation Advisory Committee
NVTA	Napa Valley Transportation Authority	YSAQMD	Yolo/Solano Air Quality Management District
		ZEV	Zero Emission Vehicle
<b>O</b>			
OTS	Office of Traffic Safety		



DATE: June 16, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Robert Macaulay, Director of Planning  
RE: CTP History and Organization

**Background:**

The Solano Transportation Authority (STA) was created in 1990 by a Joint Powers Agreement between the cities of Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville and Vallejo and the County of Solano. The STA Board is made up of one representative from each city – often the Mayor – and one member of the County Board of Supervisors. STA serves as the long-range transportation planning organization for the county, and partners with regional transportation planning agencies such as the Metropolitan Transportation Commission (MTC) and the California Department of Transportation (Caltrans).

STA's functions involve not only planning for future transportation needs, but also obtaining and disbursing local, state, and federal money for those needs. Most of this money is channeled through STA to the cities, county, and transit operators. Recently, STA began its first construction project – the I-80 High Occupancy Vehicle lanes from Red Top Road to Airbase Parkway.

Since its creation, STA has used a variety of plans to create a long-term vision of the county's transportation system. One of the primary documents was the Congestion Management Program, which examines certain key roads and intersections every two years. Other plans have included corridor and infrastructure studies and transit plans.

**Discussion:**

In 2000, the STA began to develop its first comprehensive plan, integrating all forms of transportation in a single document. In May 2002, the STA adopted the first Solano Comprehensive Transportation Plan. The purpose of this original CTP was to “establish a vision, provide direction and set priorities” for the county-wide transportation needs through 2025. The 2002 CTP had 4 elements:

- Arterials, Highways and Freeways
- Alternative Modes
- Transit
- Funding

The CTP identified 30 individual projects or programs. These included express bus service, improvements to the Vallejo ferry terminal, improvements to State Route (SR) 37 through Vallejo and to the I-80/I-680/SR 12 interchange in Fairfield, new park and ride lots, and the beginning of the Transportation for Livable Communities (TLC) program.

The 2002 CTP identified approximately \$4 billion in projects and programs over the 20-year time period covered by the plan. Over that same time period, total revenues for these projects and programs were estimated to be approximately \$1 billion, leaving a \$3 billion shortfall.

The CTP was updated in 2005, with a new plan horizon year of 2030. The same general organization was kept, with separate elements for Transit, Arterials, Highways and Freeways, and Alternative Modes.

Amongst the new features of the CTP were:

- Routes of Regional Significance – roadways within the plan area that were significant to more than one jurisdiction; and, that may be eligible for matching funds from STA when they are improved.
- Corridor Studies: Studies of future traffic patterns and needed infrastructure for SR 12 and I-80/I-680/I-780 were incorporated into the CTP.
- Countywide Bicycle and Pedestrian Plans were adopted as part of the CTP.

The 2005 CTP identified more than \$5.7 billion worth of projects and programs in 26 separate entries. The CTP identified a funding shortfall of more than \$2.3 billion. The discussion of regional transit systems, especially express busses, was substantially more detailed in the 2005 CTP, as was the Transportation for Livable Communities program.

The 2005 CTP included substantially improved maps and graphics. This included county-wide and community-specific maps using STA's Geographic Information System.

In February 2008, the STA Board authorized the update of the CTP. The overall organization will be familiar, but several changes will be made. Each Element will identify performance standards and measures, and will incorporate recommendations on funding, safety and disaster preparedness, and environmental issues. The elements of the CTP will be:

- Conditions and Projections
- Arterials, Highways and Freeways
- Alternative Modes
- Transit

The first step in preparing the new Solano CTP was the adoption in February 2008 of the CTP Purpose Statement and Goals. Purpose Statement and Goals are included as Attachment A, and are also contained in the Committee Member binders. The adopted CTP Purpose Statement is:

The Solano Comprehensive Transportation Plan will help fulfill the STA's mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.

As the CTP is updated, all of the policies and elements of the CTP will be examined in regards to how they promote this overall purpose.

**Recommendation:**

Informational.

Attachments: A. STA Comprehensive Transportation Plan Purpose Statement and Goals

### STA MISSION STATEMENT

The mission of the Solano Transportation Authority is "To improve the quality of life in Solano County by delivering transportation projects to ensure mobility, travel safety, and economic vitality."

### COMPREHENSIVE TRANSPORTATION PLAN

**Purpose Statement:** The Solano Comprehensive Transportation Plan will help fulfill the STA's mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.

All of the goals and policies of the Solano CTP will be evaluated on their conformance with the Purpose Statement.

**Goals:** Goals are the milestones by which achievement of the Purpose Statement are measured. In order to implement the Purpose of the Solano CTP, the following goals are established:

- 1) The Solano CTP will serve as a foundational document for all other STA plans, studies and programs.
- 2) Each Element of the Solano CTP will directly support the achievement of the overall Purpose Statement.
- 3) The Solano CTP will be compatible with regional plans such as the Metropolitan Transportation Commission's Regional Transportation Plan, as well as plans from the Bay Area Air Quality Management District, the Yolo-Solano Air Quality Management District, and the Association of Bay Area Government's regional growth projections.
  - a) The CTP will acknowledge plans from outside the region, such as the Sacramento Area Council of Governments Blueprint program, and seek to identify areas of common interest.
- 4) The Solano CTP will identify a transportation system that supports the existing and planned land uses of Solano County's seven cities and the County of Solano.
  - b) The Solano CTP recognizes that land use decisions are the responsibility of the local agencies.
  - c) Recognize the interaction between land use and transportation plans, with neither taking precedence over the other.
  - d) The CTP will help identify regional and state land use initiatives linked to transportation, and support local land use plans and projects that seek to take advantage of those programs.
- 5) The Solano CTP will seek to maintain regional mobility while improving local mobility.

- e) Mobility will be maintained or improved by reducing congestion, whether through more efficient use or expansion of existing systems.
  - f) Local roadway and transit systems that do not rely upon the regional freeways will play a key role in improving local mobility.
- 6) Assess projects and programs based on their ability to balance the goals of economy, environment and equity
- g) Economy – continue to promote the development of a healthy, diverse economy in Solano County.
  - h) Environment – promote the maintenance and improvement of a healthy natural environment, with special emphasis on air quality and climate change issues.
  - i) Equity – ensure that the transportation system is fully accessible to all members of society, and is not developed or operated at the expense of any segment.
- 7) Encourage projects and programs that maintain and use existing systems more efficiently before expanding infrastructure.
- 8) The Solano CTP will include priority lists and funding strategies for projects and programs.
- a) Projects and programs will be prioritized as either Tier 1 (can be built or implemented in the next 5 years), Tier 2 (can be built or implemented in the 5- to 10-year time frame) or Tier 3 (could be built beyond the 10-year time frame, and needs additional study before being moved into the Tier 2 or Tier 1 category).
  - b) Funding strategies will identify potential funding opportunities and constraints.
    - i) Projects will identify potential funding to qualify for regional, state and federal funds.
    - ii) Roadway projects must be in the CTP to qualify for the STAs “50/50” funding policy.
    - iii) Consideration will be given to fully funding a smaller number of projects and programs that have a high likelihood of completion, rather than partially funding a large number of projects or programs that may not be constructed.
    - iv) Project costs will consider full life cycle costs – construction, operation, maintenance and replacement.
- 9) The Solano CTP will identify and support a transportation system that supports Solano County’s economic vitality and economic priorities and a range of housing options.



DATE: June 16, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Robert Guerrero, Senior Planner  
RE: Summary of the 2005 Arterials, Highways, and Freeways Element

**Background:**

The Arterials, Highways, and Freeways Element is one of three core elements of the Solano Comprehensive Transportation Plan. The primary purpose of this element is to recognize existing and future needs for the major arterials, highways, and freeways in Solano County. The 2005 Arterials, Highways, and Freeways Element Goal is to:

*“Develop a balanced transportation system that reduces congestion and improves access and travel choices through the enhancement of roads.”*

The 2005 Element included seven objectives that supported this goal and identified specific local and regional improvement needs, costs, and available funding information through comprehensive outreach efforts and studies. As with the other two elements of the CTP, the Arterials, Highways and Freeways Element was a resource of information for use by decision makers and staff to gauge potential funding shortfalls, and the balance between roadway demand and committed and future funding for specific projects.

The STA Board adopted the 2005 Arterials, Highways, and Freeways Element on June 8<sup>th</sup>, 2005 as part of the overall Solano Comprehensive Transportation Plan.

**Discussion:**

The 2005 Arterials, Highways and Freeways Element is divided into several sections that can be summarized as follows:

1. Goal and objectives

This section defined the goal and seven objectives of the element. Each objective had specific policy actions to achieve the objective.

2. Routes of Regional Significance

This section identified Solano County’s Routes of Regional Significance which includes roadways that were deemed critical for maintaining existing mobility between and through cities. Solano County’s Routes of Regional Significance includes the entire interstate and state highway system in Solano County, plus those existing local arterials that provide major points of access to the State highway system or provide regional connections between communities and key transportation facilities. The County’s Routes of Regional Significance was used for the initial traffic analysis for the Solano Comprehensive Transportation Plan (CTP) to update the Solano Napa Travel Demand Model Countywide Traffic Model. New or other significant routes could be added to the system, but have not since the Routes of Regional Significance was first developed.

3. Needs by Jurisdiction

As part of the overall 2005 CTP development process, a survey was distributed to all STA member agencies (seven cities and the County of Solano) to determine the transportation needs by jurisdiction. Each agency had an opportunity to provide their input regarding their respective transportation priorities for their projects. The survey results related to roadways were included in this section of the Arterials, Highways and Freeways Element.

4. Federal Function Classification System

This section depicts Solano County's roadway categorized by the Federal Functional Classification System (FFCS). Roadway projects must be included in the FFCS to be eligible for federal funding. The FFCS is defined by the Federal Highway Administration and Caltrans and includes all streets and roads classified as urban collectors and above or rural major collector and above.

5. Corridor Planning

The Corridor Planning section summarized the planning status for each of the major roadways in Solano County. The 2005 Arterials, Highways, and Freeways Element discussed the recommendations that resulted from the I-80/I-680/I-780 Corridor Plan, SR 12 Major Investment Study, and the Jepson Parkway Concept Plan. The 2005 Element also discussed the need for future studies on SR 29, SR 113 and SR 12 through Jameson Canyon.

6. Travel Patterns

This section briefly discussed current travel patterns, traffic forecast and performance measures. A couple of key points described in this section are:

- a. Approximately 71% of existing daily vehicle trips in Solano County have origins and destinations within the county, while the remaining 29% have at least one origin or destination outside the county.
- b. The overall daily vehicle travel demand is forecast to increase by approximately 43% between 2000 and 2030.

7. High Occupancy Vehicle (HOV) Lanes

Solano County had the highest carpooling and vanpooling rate of any county in the Bay Area in 2005. This section summarized an HOV counts conducted in the spring of 2001. This analysis indicated that at least nine sections of I-80 exceeded Caltrans HOV threshold necessary for establish a carpool lane. The section also indicated that although the counts did not show that any segments of I-680 currently exceeded the HOV threshold, traffic forecasts predicted that it would potentially exceed it by 2020.

8. Local Road Maintenance

The Local Road Maintenance section focused on a growing shortfall of funding to maintain local streets and roads. The 2005 Arterials, Highways and Freeways Element noted that STA member agencies maintain a total of 3,265 lane-miles of local road way and that there was a maintenance backlog of approximately \$112 million. This backlog was estimated to grow to \$600 million in 25 years if the shortfall in maintenance funding continued. This section identified the current funding programs available and noted that these programs are not sufficient to meet ongoing road maintenance needs.

9. Traffic Management Program

This section introduced ideas and described current efforts to use modern technology address congestion efficiently. Technology such as closed circuit cameras, vehicle detectors, changeable message signs, and the internet could provide real time information to motorist and allow them to explore other traffic routes in order to avoid congestion. This information is also useful for emergency and incident management responders.

10. Travel Safety Program

This brief section summarizes the safety improvements at intersections and freeway segments identified in a 1998 Travel Safety Plan. The Plan identified the 40 local intersections with the highest accident rates and included accident data on 13 freeway segments in the County. Between 1998 and 2005, safety improvements have been funded and/or completed for 29 of the 40 intersections and for 9 of the 13 freeways segments.

11. Funding

The Funding Section outlined current funding available for roadway projects. This section also identified a shortfall of \$3.161 Billion over the next 25 years based on the information available for Solano County's transportation needs. Several funding information options to address the transportation funding shortfall were provided, including:

- Local Sales Tax
- Countywide Traffic Impact Fee
- Regional Gas Tax
- Bridge Tolls

12. Implementation

The last section of the Arterials, Highways and Freeways Element discussed recommendations for the STA to update planning data, tools, and processes to advance projects from planning to design and construction. Four specific implementation strategies discussed in this section are:

- Systems Performance Measures
- Enhanced Travel Forecasting Tools
- Project Development Program
- Timing of Implementation

**Recommendation:**

Informational



DATE: June 17, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Janet Adams, Director of Projects  
RE: Highway Studies and Projects Status:  
Studies:  
1.) 2004 I-80/I-680/I-780 MIS/Corridor Study  
2.) 2005 Cordelia Truck Scales Relocation Study  
3.) 2008 MTC I-80 FPI  
4.) 2009 I-80/I-680/I-780 Highway Corridor Operations Implementation Study  
5.) SR 12 MIS  
6.) Rio Vista Bridge Study  
  
Projects:  
7.) I-80 HOV Lanes Vallejo  
8.) I-80/I-680/SR 12 Interchange  
9.) I-80 EB Cordelia Truck Scales Relocation  
10.) North Connector  
11.) I-80 HOV Lanes: Red Top Road to Air Base Parkway  
12.) Jepson Parkway  
13.) State Route 12 (Jameson Canyon)

**Background:**

Highway studies projects in Solano County are funded from a variety of Federal, State and local fund sources. With the passage of the Proposition 1B Bond in November 2006, the county was able to secure additional funding from the Corridor Mobility Improvement Account (CMIA) for the State Route (SR) 12 Jameson Canyon and the I-80 High Occupancy Vehicle (HOV) Lanes projects. In addition, the STA has received funding for the I-80 Eastbound Cordelia Truck Scales Relocation Project for funding from the Proposition 1B Trade Corridor Improvement Fund (TCIF).

**Discussion:**

The following provides updates to the major studies in Solano County that plan for future projects and priorities of work:

1. 2004 I-80/I-680/I-780 MIS/Corridor Study  
The I-80/I-680/I-780 Major Investment and Corridor Study considered improvements on the interstate system in Solano County. The Study identified, in priority order, short term and long term projects to improve mobility. Based on this Study, the I-80/I-680/State Route (SR) 12 Interchange Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was developed.

2. 2005 Cordelia Truck Scales Relocation Study  
As part of the development of the I-80/I-680/SR 12 Interchange alternatives, the STA, in partnership with the California Highway Patrol (CHP) and Caltrans, needed to determine the future location of the Cordelia Truck Scales. Built in 1958 the Truck Scales are outdated and cannot handle the current demand of trucks, let along the future projected demand. Knowing they needed to be updated, the Truck Scales Study looked at options of relocation of the scales, both within the Interchange Complex and outside the Interchange Complex. The Study determined that the Scales needed to stay within the Interchange Complex due to the ideal location for enforcements along I-80, I-680 and SR 12. As such, the Scales were recommended to be relocated ½ mile east of their current location. This recommendation has been incorporated into the I-80/I-680/SR 12 Interchange EIR/EIS, the I-80 Eastbound Cordelia Truck Scales Relocation Project and the North Connector.
3. 2008 MTC I-80 FPI  
The Freeway Performance Initiative (FPI) is a new Metropolitan Transportation Commission (MTC) effort designed to improve the operations, safety, and management of the Bay Area's freeway system. The purpose of the FPI is to develop a comprehensive strategic plan to guide the next generation of freeway investment along the nine county Bay Area's major corridors. The I-80 FPI is build off from the I-80/I-680/I-780 Major Investment and Corridor Study adopted by the STA Board in 2004. This Major Investment Study used the old 2025 Solano Napa Traffic Demand Model. The FPI is based on the newer 2030 Solano Napa Traffic Demand Model. The primary objective of the report is to identify congestion mitigation strategies for the I-80 corridor for the short-term (2015) and long-term (2030) forecasts presented and documented in the Future Conditions Technical memorandum. This analysis identifies mitigation strategies that address congestion along I-80 and include capacity improvements (additional lanes, HOV facilities), operational improvements (auxiliary lanes and interchange modifications) and transportation management strategies (ramp metering, changeable message signs, etc.). The FPI is expected to be completed for I-80 in 2008. These recommended projects will be prioritized similar to the 2004 I-80/I-680/I-780 MIS/Corridor Study.
4. 2009 I-80/I-680/I-780 Highway Corridor Operations Implementation Study  
STA and MTC, in partnership with the cities of Benicia, Dixon, Fairfield, Vacaville and Vallejo, the County of Solano, and Caltrans Districts 3 & 4 will develop operational improvements and policy recommendations relating to a long range Intelligent Transportation System (ITS), ramp metering, High Occupancy Vehicle (HOV) network/lane extensions, and hardscape landscape improvements that visually link corridor segments to areas of Solano County. This study is considered Phase II of the completed I-80/I-680/I-780 Major Investment and Corridor Study. The focus of the scope of services will rest on the "Operational Improvement Analysis", "Landscape and Hardscape Recommendations" and "Public Outreach" tasks. This Study is expected to be completed in 2009.
5. SR 12 MIS  
STA in partnership with Caltrans, the Metropolitan Transportation Commission (MTC), Sacramento Council of Governments (SACOG), and the San Joaquin Council of Governments (SJCOG) will update the SR 12 Major Investment Study from I-80 to I-5. This update will include an important component of safety projects. The Study is expected to begin in 2008 and be completed in 2009.

6. Rio Vista Bridge Study  
The Rio Vista Bridge is identified in the 2001 SR 12 Major Investment Study as a major choke point for regional and local traffic on the SR 12 Corridor in Solano County. Currently, the bridge operations and the traffic related to the SR 12 Corridor have a negative impact on the City of Rio Vista's local traffic and pedestrian/bicycle circulation. In conjunction with the SR12 Major Investment Study Update, this Study will assess opportunities and constraints for improving congestion and safety along the current alignment of the Rio Vista Bridge (Helen Madre) and the SR 12 Corridor through the City of Rio Vista. The Study will consider re-alignment of SR 12 around the City. The work developed in this site specific analysis will be incorporated into the SR 12 MIS Update. This Study will be completed in 2009.
7. I-80 HOV Lanes Vallejo Project  
The proposed project includes a westbound and eastbound High Occupancy Vehicle (HOV) Lane between SR 37 and the Carquinez Bridge, improvements to the Redwood Parkway/I-80 Interchange and an adjacent park-and-ride lot. Currently STA is completing a Project Study Report (PSR) for these improvements in partnership with the City of Vallejo and Solano County. Due to the existing conditions along the corridor which include non-standard interchange spacing and limited right-of-way availability, the project is considering a cross section that would have limited left shoulders and some consolidation of access. A draft PSR is currently being circulated for comments. The PSR is expected to be completed in 2008. The next step for this project would be to program funding to begin the environmental phase of the project.
8. I-80/I-680/SR 12 Interchange Project  
The I-80/I-680/SR 12 Interchange Project is currently in completing a EIR/EIS. The EIR/EIS is studying two build alternatives. The overall project is estimated at \$1.5 billion, and as such, it will be built in phases as funding becomes available. Currently it is scheduled to have the Draft EIR/EIS released for public comment in 2009. The Project currently has approximately \$100 million in bridge tolls funds to be applied toward the next phase of improvements.
9. I-80 Eastbound Cordelia Truck Scales Relocation Project  
The I-80 Eastbound (EB) Cordelia Truck Scales Relocation Project will reconstruct the EB scales is fully with Proposition 1B TCIF/State Highway Operations & Protection Program (SHOPP) and Bridge Toll funds. STA is currently underway with the environment document. A draft environmental document is expected to be released for public comment in late 2008 with a Final document in mid 2009. STA will also be the lead for the design of this project with oversight by Caltrans. Currently the schedule to begin construction is 2012, with the project team actively looking to improve on the start date of construction.
10. North Connector Project  
The proposed North Connector Project is a new intra-city/county roadway to provide a parallel arterial to ensure the local roadway system can serve local traffic and I-80 can better serve regional traffic through the I-80/I-680/SR 12 interchange area. The Project consists of four lanes from Chadbourne Road at SR 12 East heading north to Abernathy Road and continuing west (parallel to I-80) over a new bridge at Suisun Creek, thereby connecting to the recently approved local development project (Fairfield Corporate Commons Project). In addition, the North Connector would construct a two-lane roadway, west from the existing

Business Center Drive to SR 12 (Jameson Canyon) at Red Top Road. Detailed preliminary engineering continues on the East Segment with construction on this segment expected to begin in summer 2009. The West Segment is expected to begin construction by 2016 once funding has been identified.

11. I-80 HOV Lanes Project: Red Top Road to Air Base Parkway

This project includes an additional lane in each direction on I-80 for High Occupancy Vehicle (HOV) use between the I-80/Red Top Road Interchange East to approximately 0.5 miles east of the I-80/Air Base Parkway Interchange. The lanes, 8.7 miles in length, will be constructed primarily in the median of the existing highway. The Green Valley Creek Bridge widening project, an advanced construction project to the I-80 HOV Lanes Project has been completed with project close-out on-going. This project widened the outside shoulder of westbound I-80 at this structure by 12 feet. A ground breaking ceremony for this project will occur on June 19, 2008 with the new lanes expected to open in 2009.

12. Jepson Parkway Project

The 12-mile Jepson Parkway project will improve intra-county mobility for Solano County residents. The project upgrades a series of narrow local roads to provide a north-south travel route for residents as an alternative to I-80. The plan proposes a continuous four-lane roadway from the State Route 12 / Walters Road intersection in Suisun City to the I-80 / Leisure Town Road interchange in Vacaville. The project also includes safety improvements, such as the provision for medians, traffic signals, and shoulders. The project is divided into 10 segments for design and construction purposes. Four construction projects on the Jepson Parkway have been completed: the extension of Leisure Town Road from Alamo to Vanden; the relocation of the Vanden/Peabody intersection; and improvements to Leisure Town Road bridges and the Walters Road Widening (Suisun City). The I-80/Leisure Town Road Interchange (Vacaville) has also been completed. The remaining segments of the Jepson Parkway Project are obtaining environmental clearance as one project. Since 2002, STA has been working to prepare alignment plans for the four (4) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) alternatives and to complete a range of environmental studies. The overall estimated construction cost of the remaining segments is estimated at \$125 million. These costs will be updated in conjunction with the environmental document. The Draft EIR/EIS has been submitted for public comment with the comment period to close on August 6, 2008. The STA in an effort to reach out to the community has sent out a newsletter to remind the property and business owners in the area of the project and to attend the Public Hearing which is schedule for June 24, 2008.

13. State Route 12 (Jameson Canyon) Project

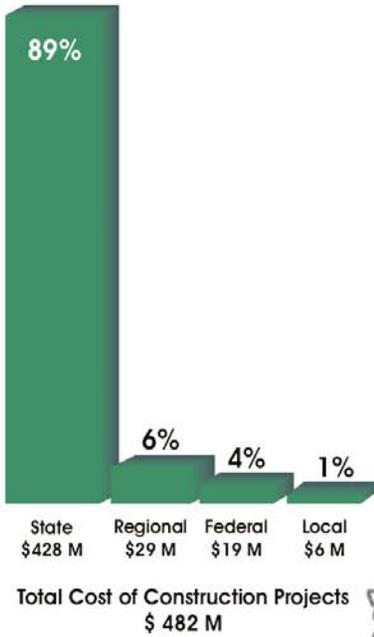
The existing State Route (SR) 12 has one lane in each direction with no median barrier. It has sections that do not meet current highway standards and consistently maintains a poor level of service in many sections. This Project will widen approximately 6 miles of SR 12 from two to four lanes and upgrade the highway to current standards from I-80 in Solano County to SR 29 in Napa County. The purpose of this Project is to add capacity to relieve traffic congestion and upgrade the facility to improving safety and operations along the route. The STA, Napa County Transportation and Planning Authority (NCTPA) and Caltrans Executive Steering Committee (ESC) comprised of the Executive Directors from the STA and NCTPA and the Caltrans District 4 Director agreed at the February 2008 meeting to allow STA to be the design lead for the Phase 1 project. The project is scheduled to begin construction in late 2010.

**Recommendation:**  
Informational.

Attachment:

A. Solano County - Next 3-Years of Construction

Construction Project Funding Sources



**Legend**

- ③ Construction Order
- Project Limits

**2008-2011 Construction Projects**

- Spring 2008 ① I-80 Pavement Rehabilitation (Tennessee St to American Canyon Rd)
- Spring 2008 ② SR 12 Jameson Canyon Truck Climbing Lane
- Spring 2008 ③ I-80 HOV Carpool Lane (Red Top Road to Air Base Parkway)
- Summer 2008 ④ I-80 Pavement Rehabilitation (American Canyon Rd to I-80/80 Separation)
- Summer 2008 ⑤ I-80 Pavement Rehabilitation (East of Air Base Parkway to Leisure Town Rd)
- Summer 2008 ⑥ SR 12 East Pavement and Safety Project
- Summer 2009 ⑦ I-80 Pavement Rehabilitation (SR 12 East to East of Air Base Parkway)
- Winter 2009 ⑧ North Connector (East and Central Segments)
- Summer 2010 ⑨ SR 12 East Pavement and Safety Project
- Winter 2010 ⑩ SR 12 Jameson Canyon Widening
- Spring 2011 ⑪ Vaden Road (Peabody to Leisure Town)
- Summer 2011 ⑫ Travis Air Force Base South Gate Improvements



**Solano County Construction**

**The next 3 years of construction**

February 11, 2008

ATTACHMENT A



DATE: June 17, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Robert Macaulay, Director of Planning  
RE: Solano County Travel Demand Model

**Background:**

The Solano County Travel Demand Model is a complex tool used to predict future travel behavior on Solano County's transportation facilities. The model also predicts how adequate or congested these facilities will be in the future. As the Congestion Management Agency (CMA) for Solano County, the Solano Transportation Authority (STA) is required to have transportation model for the Solano Congestion Management Program (CMP). The Solano CMP is a monitoring tool that is designed to review traffic conditions by the level of service for specific roadway segments that were established early on as Solano County's CMP Network. In accordance to the requirements of the CMP, the Solano County Travel Demand Model is used to show any changes in traffic patterns as a result of changes in land use patterns or traffic conditions.

In addition to the requirements of the CMP, the STA uses the Solano County Travel Demand Model regularly current transportation projects, studies and plans. The traffic forecast from the model is used to prioritize investments that will address traffic congestion predicted on Solano County's roadways. The model is also used by STA member agencies for local transportation projects if or when their local model is not adequate at forecasting traffic impacts that result from their planned activity.

**Discussion:**

The Solano County Travel Demand Model consists of three main elements; land use, roadway network, and assumptions (such as percentage of trips taken by transit). These three elements operate together to produce predictions of future roadway uses; the number and direction of trips on all of the roadways in the model. As part of the model's development process, the STA created a Model Technical Advisory Committee (Model TAC) with modelers from STA's member agencies and regional transportation planning agencies. The Model TAC met regularly to provide input and assess the accuracy of the Solano County Travel Demand Model's three main elements.

The current model has been undergoing significant upgrading for approximately two years, and was recently adopted by the STA Board on June 11, 2008 for general use. The Solano County Travel Demand Model is a regional model that incorporates modeling information from Napa County, San Joaquin County, and superregional models from the San Francisco Bay Area and Sacramento Region. The Solano County Model is more accurate at providing traffic forecast for Solano County's highway, freeways, and major arterials. Local traffic models are just opposite since they provide more accurate traffic forecast for local streets and roads rather than highways

and freeways. Local traffic models are maintained by each city for their planning purposes in conjunction with the STA's County Travel Demand Model.

The model will also allow agencies and consultants with the proper software and authorization to run "what if" scenarios. This will allow users to change assumptions, such as the road network, transit mode share or land uses and examine the results on the traffic patterns. These model runs will produce new screen line reports and maps that can help guide planning documents.

STA staff will provide the Arterials, Highways, and Freeways Committee a detailed presentation with mapped modeling illustrations of current traffic conditions and 2030 forecast year. The comparison between current and forecasted traffic conditions are dramatic and illustrate the challenges Solano County will face as transportation and land use projects are planned, prioritized and implemented.

**Recommendation:**

Informational.



DATE: June 17, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Robert Guerrero, Senior Planner  
RE: Committee Schedule and Subsidiary Plans

**Background:**

Since the Arterials, Highways, and Freeways Element was adopted in 2005, a number of related plans have been completed, updated, or currently being developed. The STA Board approved the following subsidiary plans on May 17, 2008 to be incorporated as part of the 2009 Solano Comprehensive Transportation Plan update:

Update with the Arterials, Highways, and Freeways Element completion:

1. Routes of Regional Significance
2. Solano Travel Safety Plan

Update after the Arterials, Highways, and Freeways Element completion:

1. SR 12 Major Investment Studies

Incorporate after the Arterials, Highways, and Freeways Element without update:

1. I-80/I-680/I-780 Corridor Study (Phase II- Operational Improvement Plan)
2. MTC's Freeway Performance Initiative
3. SR 113 Major Investment and Corridor Study
4. Rio Vista Bridge Feasibility Study
5. North Connector TLC Corridor Concept Plan
6. Cordelia Truck Scales Relocation Study

**Discussion:**

The subsidiary documents can be categorized by the following focus areas:

- 1) Policies and Performance Measures
- 2) Routes of Regional Significance
- 3) Goods Movement
- 4) ITS Improvements
- 5) Priority Projects
- 6) Federal, State, and Local Funding

These categorized will be the focus areas to structure the Arterials, Highways, and Freeways Element update. The Arterials, Highways, and Freeways committee will be encouraged to consider additional focus areas. STA staff anticipates at least five meetings to complete the Element's update given the development of the subsidiary documents and potential focus areas. The goal is to complete the element for STA Board adoption by May 2009. Attachment A is a tentative schedule with discussion topics for each meeting.

**Recommendation:**  
Informational

Attachment: A. Arterials, Highways, and Freeways 2008-09 Tentative Meeting Schedule.

**Arterials, Highways, and Freeways Subcommittee  
2008-09 Tentative Meeting Schedule**

<b>Meeting # 1 (June 26, 2008)</b>
1) Meeting Focus Area: Element Purpose Statement and Goals <ul style="list-style-type: none"> <li>• Arterials, Highways, and Freeways Subcommittee Background</li> <li>• Purpose Statement and Goals</li> </ul>
<b>Meeting # 2 (September 2008)</b>
1) Meeting Focus Area: Draft Policies and Performance Measures <ul style="list-style-type: none"> <li>• Discuss potential performance measures</li> <li>• Potential policies for monitoring</li> <li>• Solano Congestion Management Program</li> <li>• STA Travel Demand Model</li> </ul> 2) Meeting Focus Area: Routes of Regional Significance <ul style="list-style-type: none"> <li>• Criteria for Routes of Regional Significance</li> <li>• Solano 50/50 fund policy</li> </ul>
<b>Meeting # 3 (December 2008)</b>
1) Goods Movement <ul style="list-style-type: none"> <li>• Corridor Studies</li> <li>• Freight and Truck Traffic</li> <li>• Origins and Destinations</li> </ul> 2) Meeting Focus Areas: Intelligent Transportation Systems (ITS) Improvements <ul style="list-style-type: none"> <li>• HOV</li> <li>• Freeway Performance Initiative</li> <li>• I-80/680/780 Operational Improvement Plan</li> </ul>
<b>Meeting # 4 (March 2009)</b>
1) Meeting Focus Area: Priority Projects <ul style="list-style-type: none"> <li>• STA 10-Year Plan</li> </ul> 2) Meeting Focus Area: Federal, State, and Local Funding <ul style="list-style-type: none"> <li>• Streets and Roads maintenance Shortfall</li> <li>• Prop 1b</li> <li>• ITIP/STIP</li> <li>• TDA</li> <li>• SHOPP</li> </ul> 3) Meeting Focus Area: Other Funding Options <ul style="list-style-type: none"> <li>• Development impact fees- (update any changes since the last)</li> <li>• County Transportation Sales Tax</li> <li>• Countywide Development Impact Fees</li> <li>• Toll Roads</li> <li>• Double Fine Zones/Traffic Citations</li> <li>• Earmarks</li> </ul>
<b>Meeting # 5 (May 2009)</b>
1) Meeting Focus Area: Draft Plan Review and Adoption



DATE: June 17, 2008  
TO: Arterials, Highways, and Freeways Subcommittee  
FROM: Robert Guerrero, Senior Planner  
RE: Arterials, Highways, and Freeways Element Purpose Statement and Objectives

**Background:**

The STA Board directed STA staff to update the 2005 Comprehensive Transportation Plan (CTP) with the following overall CTP Purpose Statement:

*“The Solano Comprehensive Transportation Plan will help fulfill the STA’s mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.”*

As one of the three core elements of the CTP, the Arterials, Highways, and Freeways Element will include separate purpose statement and goals that will be consistent with the overall CTP Purpose Statement. The Element’s Purpose Statement and Goals will guide the development of document.

**Discussion:**

Attached are the draft Purpose Statement and goals developed by STA staff for the Arterials, Highways, and Freeways Committee to review (see Attachment A). STA staff provided the same Purpose Statement from the 2005 Arterials, Highways, and Freeways Element as a starting point for the committee to consider and provide input. The draft goals are similar to the 2005 Element; however, the goals were updated to reflect new priorities such as monitoring and implementation. The draft goals were developed in an effort to reflect the new CTP overall Purpose Statement.

**Recommendation:**

Forward recommendation to the STA Board to adopt the Arterials, Highways, and Freeway Element Purpose Statement and Goals for the Solano Comprehensive Transportation Plan as shown in Attachment A.

Attachment: A. Arterials, Highways, and Freeways Element Purpose Statement and Goals

# Arterials, Highways, and Freeways Element Purpose Statement and Goals

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## **OVERALL COMPREHENSIVE TRANSPORTATION PLAN PURPOSE STATEMENT:**

The Solano Comprehensive Transportation Plan will help fulfill the STA's mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.

**Draft Arterials, Highways, and Freeways Element Purpose Statement:** Identify existing and future safety, capacity, and enhancement needs for the major arterials, highways, and freeways in Solano County that serve inter-city and interregional travel.

**Goals.** Goals are the milestones by which achievement of the Purpose Statement are measured. In order to implement the Arterials, Highways, and Freeways Element of the overall purpose of the Solano CTP, the following goals are established:

- 1) Invest available funds in maintaining a minimum Pavement Conditions Index (PCI) of **63** on the STA's Routes of Regional Significance.
  - a. Advocate Caltrans to maintain a similar standard on state highways and interstate system.
- 2) Identify, prioritize, and implement safety improvements on Solano County's highway and freeways to reduce vehicle collisions and severe accidents below the statewide average for similar types of facilities.
- 3) Develop performance measures for funding and prioritizing arterials, highways, and freeway projects in Solano County.
- 4) Support funding improvements roadways identified in the STA's Routes of Regional Significance to accommodate transit routes and bicycle and pedestrian facilities included in the Solano Countywide Bicycle and Pedestrian Plans that is consistent with MTC's Routine Accommodations for Non-Motorized Vehicles.
  - a. Encourage local agencies to adopt similar standards for local road systems not included in the STA's Routes of Regional Significance
- 5) Develop and maintain an arterials, highways and freeways system that facilitate and encourage carpool, vanpools and multi-modal transportation through the use of an adequate High Occupancy Vehicle (HOV) lane network, connections to regionally significant transit facilities, and park and ride lots.
- 6) Update Solano County's Routes of Regional Significance to implement the STA's 50/50 policy\*.

\*50/50 Funding Policy commits STA to fund 50% of local interchange improvements and significant roadways that provide a local alternative to using state highway for travel between two cities.

- 7) Prioritize roadway projects for available and future funding with the following criteria:
  - a. Project Deliverability
  - b. Safety improvements
  - c. Increased system efficiency
  - d. Capacity improvements
  - e. Goods movement enhancements
  - f. Air emission reductions
  - g. Routes of Regional Significance
  
- 8) Prepare and maintain an up-to-date a travel demand model for Solano and Napa counties. The model should have the following characteristics:
  - a. Consistent with MTC requirements, including use of ABAG projections.
  - b. Use a future year adequate to meet Caltrans requirements.
  - c. Substantially revised after each decennial census, and updated with new ABAG projections.
  
- 9) Anticipate and fully mitigate arterial, highway, and freeway project's environmental impacts
  - a. Special emphasis should be given to a air emission reduction
  - b. Where appropriate, be consistent with the Solano County Habitat Conservation Plan's avoidance and mitigation measures.
  
- 10) Identify and prioritize Right of Way (ROW) needed to preserve to meet long-term traffic demands.
  
- 11) Identify and obtain potential funding sources to implement the Arterials, Highways and Freeways Element of the Solano Comprehensive Transportation Plan.