



Solano Transportation Authority

One Harbor Center, Suite 130
Suisun City, California 94585

Area Code 707
424-6075 • Fax 424-6074

**TECHNICAL ADVISORY COMMITTEE (TAC)
AGENDA**

**1:30 p.m., Wednesday, December 17, 2008
Solano Transportation Authority
One Harbor Center, Suite 130
Suisun City, CA 94585**

Members:

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

<u>ITEM</u>	<u>STAFF PERSON</u>
I. CALL TO ORDER	Daryl Halls, Chair
II. APPROVAL OF AGENDA	
III. OPPORTUNITY FOR PUBLIC COMMENT (1:30 -1:35 p.m.)	
IV. REPORTS FROM CALTRANS, METROPOLITAN TRANSPORTATION COMMISSION (MTC), AND STA STAFF Note: Please limit comments to 5 minutes. (1:35 -1:45 p.m.)	
V. CONSENT CALENDAR <i>Recommendation: Approve the following consent items in one motion.</i> (1:45 – 1:50 p.m.)	
A. Minutes of the TAC Meeting of November 19, 2008 <i>Recommendation:</i> <i>Approve TAC Meeting Minutes of November 19, 2008.</i> Pg. 1	Johanna Masielat
VI. ACTION NON-FINANCIAL ITEMS	
A. Regional Transportation Impact Fee (RTIF) Feasibility Study <i>Recommendation:</i> <i>Recommend the STA Board approve the STA’s Regional Transportation Impact Fee Feasibility Study and Executive Summary.</i> (1:50 – 2:00 p.m.) Pg. 5	Janet Adams

TAC MEMBERS

Dan Schiada	Royce Cunningham	Gene Cortright	Vacant	Vacant	Rod Moresco	Gary Leach	Paul Wiese
City of Benicia	City of Dixon	City of Fairfield	City of Rio Vista	City of Suisun City	City of Vacaville	City of Vallejo	County of Solano

- B. Regional Measure 2 (RM 2) Implementation Plan** Janet Adams
Recommendation:
Forward a recommendation to the STA Board to direct staff to develop an implementation plan for RM 2 Funded Intermodal Transit Facilities in partnership with the implementing agencies.
 (2:00 – 2:10 p.m.)
Pg. 14
- C. STA’s Draft 2009 Legislative Priorities and Platform and Legislative Update** Jayne Bauer
Recommendation:
Approve STA’s Draft 2009 Legislative Priorities and Platform , and forward a recommendation to the STA Board to adopt the draft as the Final 2009 STA Legislative Priorities and Platform.
 (2:10 – 2:15 p.m.)
Pg. 15

VII. INFORMATIONAL ITEMS

- A. Transit Consolidation Study Update** Elizabeth Richards
Informational
 (2:15 – 2:20 p.m.)
Pg. 23
- B. Draft State of the System Report: Arterials, Highways and Freeways** Robert Guerrero
Informational
 (2:20 – 2:25 p.m.)
Pg. 67
- C. Solano Modeling TAC Appointments** Robert Guerrero
Informational
 (2:25 – 2:30 p.m.)
Pg. 83
- D. Climate Change Status** Robert Macaulay
Informational
 (2:30 – 2:35 p.m.)
Pg. 86
- E. Unmet Transit Needs Public Hearing for Fiscal Year (FY) 2009-10** Liz Niedziela
Informational
 (2:35 - 2:40 p.m.)
Pg. 113

NO DISCUSSION ITEMS

- F. Project Delivery Update** Sam Shelton
Informational
Pg. 116
- G. State Route (SR) 12 Jameson Canyon Road Bicycle and Pedestrian Connection Plan** Sara Woo
Informational
Pg. 119
- H. Funding Opportunities Summary** Sara Woo
Informational
Pg. 123
- I. STA Board Meeting Highlights of December 10, 2008** Johanna Masielat
Informational
Pg. 125
- J. STA Board and Advisory Committee Meeting Schedule for 2008** Johanna Masielat
Informational
Pg. 130

VIII. ADJOURNMENT

The next regular meeting of the Technical Advisory Committee is scheduled at **1:30 p.m. on Wednesday, January 28, 2008.**



TECHNICAL ADVISORY COMMITTEE
Minutes for the meeting of
November 17, 2008

I. CALL TO ORDER

The regular meeting of the Technical Advisory Committee (TAC) was called to order at approximately 1:35 p.m. in the Solano Transportation Authority's Conference Room.

Present:

TAC Members Present: Dan Schiada City of Benicia
Royce Cunningham City of Dixon
Wayne Lewis City of Fairfield
Dan Kasperson City of Suisun City
Rod Moresco City of Vacaville
Arrived at 1:45 p.m. Gary Leach City of Vallejo
Paul Wiese County of Solano

STA Staff Present: Daryl Halls STA
Janet Adams STA
Robert Macaulay STA
Elizabeth Richards STA
Liz Niedziela STA
Robert Guerrero STA
Sam Shelton STA
Kenny Wan STA
Sara Woo STA
Johanna Masielat STA

Others Present: *(In Alphabetical Order by Last Name)*
Ed Huestis City of Vacaville

II. APPROVAL OF THE AGENDA

On a motion by Royce Cunningham, and a second by Dan Schiada, the STA TAC unanimously approved the agenda.

III. OPPORTUNITY FOR PUBLIC COMMENT

None presented.

IV. REPORTS FROM CALTRANS, MTC AND STA STAFF

- Caltrans:** None presented.
- MTC:** None presented.
- STA:** Robert Guerrero announced the comments to the Routes of Regional Significance are due November 24, 2008.

- Other:** Presentation of Transit Capital Regional Measure 2 (RM 2) Funded Projects:
 - 1. City of Benicia:
 - a. Benicia Intermodal Park and Ride Facilities
 - b. Park Industrial Park and Ride (Phase 2)
 - 2. City of Fairfield:
 - a. Transportation Center (Phase 4)
 - 3. City of Vacaville:
 - a. Vacaville Intermodal Station (Phase 1)
 - 4. City of Vallejo:
 - a. Vallejo Station Intermodal Center (Initial Phase);
 - b. Curtola Transit Center

V. CONSENT CALENDAR

On a motion by Wayne Lewis, and a second by Dan Schiada, the STA TAC approved Consent Calendars Item A and B.

- A. Minutes of the TAC Meeting of September 24, 2008**
Recommendation:
Approve TAC Meeting Minutes of September 24, 2008.

- B. Fiscal Year (FY) 2008-09 Transportation Development Act (TDA) Article 3 Bike Project**
Recommendation:
Forward a recommendation to the STA Board to approve the attached FY 2008-09 TDA Article 3 Resolution.

VI. ACTION NON-FINANCIAL ITEMS

- A. Comprehensive Transportation Plan (CTP) Update – State of the Transit System Report and Transit Element Introduction Chapter**
Robert Macaulay reviewed the two (2) reports to be included in the Transit Element of the CTP; The State of the System (Transit and Rideshare) Report and The Introduction Chapter to the Transit Element. He stated at the October 29, 2008 meeting of the CTP Transit Committee, the Committee recommended that the STA Board adopt both reports with minor changes.

It was noted that at an earlier meeting, the SolanoExpress Intercity Transit Consortium amended the recommendation to include ridership statistics to the draft “State of the System – Transit and Rideshare” report to better define the term.

The STA TAC concurred.

Recommendation:

Forward a recommendation to the STA Board to approve the following:

1. The Draft “State of the System – Transit and Rideshare” Report included as Attachment A; and
2. The Introduction Chapter to the Transit Element of the Solano CTP included as Attachment B.

On a motion by Royce Cunningham, and a second by Wayne Lewis, the STA TAC unanimously approved the recommendation as amended.

B. Regional Transportation Impact Fee (RTIF) Nexus Study Scope of Work

Janet Adams reviewed the process of conducting the Regional Impact Fee (RTIF) Feasibility Study. She outlined the schedule of meetings aimed at completing the feasibility study consideration by the STA Board at the December 10, 2008 meeting. She cited that the RTIF Working Group members received a Draft RTIF Nexus Study Scope of Work and will send comments to STA staff by November 24, 2008.

After discussion, the TAC recommended changes in the language on the Draft Conceptual Scope of Work and Deliverables to the Solano Regional Transportation Impact Fee Nexus Study.

Recommendation:

Forward a recommendation to the STA Board to approve the RTIF Nexus Study Scope of Work as specified in Attachment ~~A~~ **B**.

On a motion by Wayne Lewis, and a second by Royce Cunningham, the STA TAC unanimously approved the recommendation as amended.

VII. INFORMATIONAL ITEMS

A. Status of Regional Measure 2 (RM 2) Funded Projects

Janet Adams provided a status report on the RM 2 funded projects in Solano County and a summary of MTC’s November 12, 2008 Programming and Allocations Committee report that included an informational item regarding the RM 2 implementation status. She cited that the STA recommends that as part of the development of the Implementation Plan, consideration of overall countywide benefit of the project, deliverability of the proposed project, consideration and initiation of complimentary land use plan, and the reality of funding for any outstanding funding needs.

B. Regional Transportation Plan (RTP) T2035 Update

Robert Macaulay summarized MTC’s discussion of the next steps in the implementation of the RTP. He cited that the CMA Directors have prepared a set of draft principles to guide the near-term implementation of the RTP.

C. State Route (SR) 12 Status Update

Robert Macaulay provided a status update to several near-term safety implementation recommendations for SR 12.

D. Lifeline State Transit Assistance Funds (STAF) and Proposition 1B Call for Projects

Liz Niedziela distributed and provided a status report on the list of recommended STAF and Prop 1B Lifeline Projects for 2009-10. She cited that MTC's deadline for submitting projects for the Prop 1B and STAF funding is November 2008. She stated the recommendation from the Lifeline Committee will be submitted to MTC pending the STA Board approval on December 10, 2008.

E. Unmet Transit Needs Public Hearing for Fiscal Year (FY) 2009-10

Liz Niedziela announced the upcoming Unmet Transit Needs Public Hearing scheduled for 6:00 p.m., Monday, December 15, 2008 at the Solano County Administration Center (SCAC) in Fairfield. She also discussed an issue that was raised by MTC concerning the budget challenges facing Vallejo Transit and whether the services are inter- or intra-county and eligible for apportionment beyond the Vallejo based on TDA statute.

NO DISCUSSION

F. Project Delivery Update

G. Funding Opportunities Summary

H. STA Board Meeting Highlights of September 10, 2008

I. STA Board and Advisory Committee Meeting Schedule for 2008

IX. ADJOURNMENT

The meeting was adjourned at 3:30 p.m. The next meeting of the STA TAC is scheduled at **1:30 p.m. on Wednesday, December 17, 2008.**



DATE: December 2, 2008
 TO: STA TAC
 FROM: Janet Adams, Deputy Executive Director/Director of Projects
 RE: Regional Transportation Impact Fee (RTIF) Feasibility Study and Nexus Study Update

Background:

One of the tasks identified by the Solano Transportation Authority (STA) Board as a priority project in the STA’s Overall Work Plan (OWP) for Fiscal Year (FY) 2008-09 and 2009-10 is the initiation of a Regional Impact Fee Feasibility Study. Regional Transportation Impact Fees (RTIF) are used in a variety of counties throughout the State of California. A transportation impact fee is established by a local or regional government (and usually collected during issuance of the building permit) in connection with approval of a development project for purpose of defraying all or a portion of the cost of particular public facilities. The legal requirements for enactment of a traffic impact fee program are set forth in the California “Mitigation Fee Act”, which was adopted in 1987 under AB 1600, and thus these fees are commonly referred to as “AB 1600” fees. An impact fee is not a tax or a special assessment. By definition, a fee must be reasonably related to the cost of the facility or service provided by the local agency.

On July 9th, the STA Board authorized the Executive Director to begin the Regional Transportation Impact Fee (RTIF) Feasibility Study. On October 8th, the STA Board recommended that STA Staff move forward with the formation of multi-agency working groups for the purpose of developing the scope of work for a countywide RTIF nexus study, including project selection and fee options.

Discussion:

RTIF Feasibility Study

The RTIF Feasibility Study and Executive Summary will assist in educating elected officials, local agency staff, and the public about the nature of regional transportation impact fees and their potential benefits. Below is a schedule of meetings aimed at completing the feasibility study by January 14, 2009 for STA Board consideration:

Date	Committee/Group	Meeting Agenda
2008		
July 23	City Managers Meeting	• RTIF Study Introduction
July 30	Public Works Directors and Planning Directors	• RTIF Study Introduction
Aug 27	RTIF Working Group meeting	• Review background and RTIF options
Aug 27 – Sept 17	Individual Agency Meetings	• Review potential TIF Projects & Options
Sept 17	RTIF Working Group meeting	• Recommend Draft RTIF Study for additional committee review
Sept 24	STA TAC Meeting	• Recommend Draft RTIF Study to STA Board for Adoption
Oct 8	STA Board Meeting	• Presented Preliminary RTIF Study Findings. • Received STA Board direction for Countywide RTIF

Date	Committee/Group	Meeting Agenda
Nov 13	RTIF Working Group meeting	<ul style="list-style-type: none"> Reviewed Countywide RTIF direction Received Draft Nexus study RFP & Feasibility Study “Frequently Asked Questions” (FAQ).
Nov 19	STA TAC Meeting	<ul style="list-style-type: none"> Recommend STA conduct Nexus Study
Dec 4	RTIF Working Group meeting	<ul style="list-style-type: none"> Review Final Feasibility Study, FAQ, and Nexus Study Scope of Work
Dec 10	RTIF Policy Committee meeting	<ul style="list-style-type: none"> Review Governance Structures & Fee Collection options.
Dec 10	STA Board	<ul style="list-style-type: none"> Authorize STA to carryout RTIF Nexus Study with consultants
Dec 17	STA TAC	<ul style="list-style-type: none"> Recommend adoption of Feasibility Study
2009		
Jan 14	STA Board	<ul style="list-style-type: none"> Adopt Feasibility Study

On December 4th, the RTIF Working Group reviewed a draft executive summary of the STA’s RTIF Feasibility Study. On December 10th, the RTIF Policy Committee reviewed the revised Draft RTIF Feasibility Study Executive Summary and requested no additional changes.

The attached RTIF Feasibility Study (Attachment A) walks through all of the following data previously presented to the STA Board in October and December and displayed in the RTIF Feasibility Study’s Executive Summary:

- Increasing Demand for Mobility
- Currently Planned Projects
- Currently Funded Projects
- Introduction to Impact Fees (with a review of Existing Fees)
- Pros & Cons of RTIFs
- Examples of RTIF models
- Potential Governance Structures
- Nexus Study and Governance Discussion Timeline

STA Board members also requested presentations from other agencies with Countywide RTIF programs as they consider governance model options, such as those operated by the Transportation Agency for Monterey County (TAMC), the Western Riverside Council of Governments (WRCOG), and the San Joaquin Council of Governments (SJCOG).

Nexus Study Scope of Work

On November 19th, the STA Technical Advisory Committee (TAC) reviewed and recommended minor changes to the Draft RTIF Nexus Study Scope of work, and recommended that the STA Board approve the RTIF Nexus Study Scope of Work.

On December 4th, RTIF Working Group members reviewed and recommended a Final RTIF Nexus Study Scope of Work for STA Board adoption. On December 10th, the STA Board adopted the Nexus Study Scope of Work and authorized the Executive Director to issue a Request for Proposals (RFP) for consultant services, with the following amendments, recommended by the RTIF Policy Committee earlier that day (see Attachment B):

- Add language to Task 11 “Draft Nexus Study Report”, parts 11 and 12, to review and recommend methods of discounting impacts from affordable housing and transit oriented developments.
- Add language in Task 9 “Committee & Stakeholder Meetings” to specifically include the development community, taxpayers groups, and other interested businesses.

Revised RTIF Schedule

Attachment C is a revised schedule for the STA's Nexus Study work and additional meetings to discuss the form of governance of a potential RTIF. On December 4th, the RTIF Working Group revised the schedule to allow for more time to complete the nexus study. The revised schedule estimates completing the Nexus Study by September 2009, forming the RTIF Governance Authority by August 2009, and begin implementation of an RTIF by the end of 2009.

Fiscal Impact:

There is no fiscal impact from recommending the adoption of the STA's Regional Transportation Impact Fee Feasibility Study. The STA Board has already authorized the Executive Director to use a revised Scope of Work for a RTIF Nexus Study Request for Proposals, which will have a fiscal impact.

Recommendation:

Recommend that the STA Board approve the STA's Regional Transportation Impact Fee Feasibility Study and Executive Summary.

Attachments:

- A. STA's Regional Transportation Impact Fee (RTIF) Feasibility Study with Executive Summary (provided under separate cover).
- B. Regional Transportation Impact Fee (RTIF) Nexus Study Scope of Work, as presented at the December 10, 2009 STA Board meeting. (STA Board amended version to be provided at the TAC meeting).
- C. Regional Transportation Impact Fee (RTIF) Development Schedule, Revised 12-10-08

Solano Regional Transportation Impact Fee Nexus Study
DRAFT Conceptual Scope of Work and Deliverables
10-16-08

Tasks:

- 1. Confirm Final Scope of Work and Schedule and Commence Study**
- 2. Define the Project Criteria and Regional Development Impact Fee System Network**
- 3. Regional Travel Demand Model Analysis and Growth Projections**
- 4. Formulate Draft Project List**
- 5. Travel Demand Model “Select Link” Analysis**
- 6. Optional Regional Fee Calculation**
- 7. Fee Revenue Estimation**
- 8. Nexus and Burden Analysis**
- 9. Committee & Stakeholder Meetings**
- 10. Team Meetings**
- 11. Draft Nexus Study Report**
- 12. Final Report**

Task 1: Confirm Final Scope of Work and Schedule and Commence Study

- Conduct a targeted analysis of the factors critical to determine the full scope of work.
- Develop the full scope of work and Final Schedule needed to be performed that would provide a study that meets the STA's objectives and State requirements for an AB-1600 study.
- Confirm a countywide benefit zone for the fee program analysis and fee calculation(s).
- Conduct AB-1600 study upon STAs approval of the scope of work.

Deliverable: The results of this Task will be a *Final Scope of Work*.

Task 2: Define the Project Criteria and Regional Development Impact Fee System Network

- Confirm the criteria to be used in selection of projects.
- Confirm the proposed countywide regional road and highway network and transit facilities to be further analyzed based on STA and member agency plans and studies including but not limited to the Solano Comprehensive Transportation Plan, Routes of Regional Significance, Draft Jepson Parkway Project EIR/S, I-80-I-680/I-780 Major Investment and Corridor Study, SR 12 Major Investment Study, General Plans and/or Capital Improvement programs.

Deliverable: The results of this Task will be a *System Map* depicting the preliminary set of projects to be considered in this study.

Task 3: Regional Travel Demand Model Analysis and Growth Projections

- Review methodology, performance standards, and future “no-build” assumptions.
- Run Solano Napa Travel Demand Model to identify growth projections, levels of service, performance deficiencies and identify regional project locations.

Deliverable: The results of this Task will be a *System Performance Evaluation* including list of roadway segments and maps depicting existing and future levels of service for projects identified in the System Map.

Task 4: Formulate Draft Project List

- Identify proposed improvements based on deficiency analysis results and defined project selection criteria from Task 2.
- Develop Project Cost Estimates.

Deliverable: The results of this Task will be a *Draft Project List with estimated costs*.

Task 5: Travel Demand Model “Select Link” Analysis

- Conduct select link analysis of specific project locations to identify new trips subject to calculation of fees.
- Optional select link iteration based on stakeholder/local agency and Technical Working Group input.

Deliverable: The results of this Task will be a “*Select Link*” Analysis.

Task 6: Regional Fee Calculation Scenarios

- Calculate draft fee options based on select link analysis, optional benefit zone structures, and optional fees structures to be evaluated for various land uses.
- Adjust fees based on stakeholder/local agency and Technical Working Group input.

Deliverable: The results of this Task will be a report identifying a *Regional Fee Calculation*.

Task 7: Fee Revenue Estimation

- Growth forecasts will be used in combination with projected areas of congestion (from Task 3) and the project list (from Task 4) to develop an estimation of overall fee revenues.
- Vested development rights will be evaluated as to the feasibility of levying a regional impact fee on these developments. Previous

contributions and current commitments of these developments towards improving the regional transportation system will be taken into account in determining the feasibility of levying an added fee or establishing credits.

- The extent of vested development in each jurisdiction will be determined based upon discussions with each of the local jurisdiction's planning director. The local jurisdiction's attorney will be consulted regarding the legal feasibility of levying any new fees on vested development. Those developments for which a new fee is determined to be infeasible will be subtracted from the total growth forecast for the purpose of computing fee revenues.

Deliverable: The results of this Task will be a report identifying the *Fee Revenue Estimation*.

Task 8: Nexus and Burden Analysis

The purpose of this task is to allocate the expected unfunded costs of the transportation improvement projects in the draft project list by land use type and jurisdiction type. A portion of each project's cost must be allocated to the correction of existing deficiencies (if appropriate) and to growth in through trips.

There are four sub-steps required to formulate an equitable allocation of the costs:

- Separate the cost of remedying existing deficiencies from the cost of accommodating growth;
- Give credit to new development for dedications, exactions, special assessments, use fees, existing local transportation impact fees or other in-lieu payments toward its share of new capacity;
- Identify the share of costs and benefits attributable to traffic that neither originates nor has a destination in Solano County, and,
- Distribute the net costs for the projects among different types of development (i.e., residential, retail, office, and industrial) and across geographical areas.

Once the project list is refined (in Task 4) the allocated project costs will be used to construct a fee schedule by jurisdiction and land use type. Recommendations will be provided on different strategies for allocating the fees among residential, retail, and other commercial development, and across geographic boundaries.

A preliminary, proposed fee schedule will then be assessed in terms of its relative economic burden placed upon each local jurisdiction's residential and commercial development markets. This assessment will be based upon

discussions with planning directors and other local experts on the strength of each jurisdiction's residential and commercial development markets.

Deliverable: The end product of this task will be a Technical Memorandum entitled "Nexus and Burden Analysis" which will document the analysis methods, summarized quantification of the nexus and burden, proposed fee schedule, and an assessment of the relative economic burden imposed by the preliminary fee schedule on local residential and commercial markets.

Task 9: Committee & Stakeholder Meetings

- Participate in workshops through tasks 1-6 with STA Board, Policy Advisory Committee, Technical Advisory Committee, STA member agencies, and stakeholder groups to present fee program work products, answer questions, and collect feedback. At least twelve (12) meetings are anticipated.

Deliverable: This Task will require attendance at *Committee & Stakeholder Meetings*.

Task 10: Team Meetings

- Participation in person or by phone in team meetings to review project status and work products. Fifteen (15) meetings are anticipated.

Deliverable: This Task will require participation in *Team Meetings*.

Task 11: Draft Nexus Study Report

- Based on input from the public workshops and further consultation with STA and participating agencies, prepare draft and final reports including the following topics:
 1. A brief statement of the need for and purpose of a regional transportation impact fee.
 2. A description of the decision making and public input process used to arrive at the recommended fee program.
 3. A brief summary of the state rules and regulations for impact fees and how they have been complied with for the Solano RTIF fee program.
 4. The list of projects, their costs, their implementation schedule, and the rationale and need for including them in the regional transportation impact fee program.
 5. An estimate of the current balance in fee revenues available for these projects.
 6. Estimates of the non-fee revenues that may be available for these projects,

7. Tabulation of the unfunded shortfall that must be covered by impact fees.
8. The estimated growth (after allowing for vested development rights) that would be subject to the fee in each jurisdiction.
9. The nexus analysis allocating the unfunded regional project costs to new development by land use category and justifying the “proportionality” of the fee.
10. An assessment of the ability of the local residential and commercial markets to absorb a fee increase (economic burden analysis).
11. Summary of proposed procedures for collecting, administering and expending fee revenues.
12. Recommended policies for granting exemptions and credits
13. Recommended Strategic Expenditure Plan & Fee Schedule
14. Recommendations regarding financing and cash flow.

Deliverable: The results of this Task will be a *Draft Nexus Study Report*.

Task 12: Final Report

- Submit a final report and make a formal presentation of AB-1600 study findings and recommendations to the Technical Working Group (TAC) and STA Board.
- Final Report will include a recommended Joint Exercise of Powers Agreement, Operating Agreement and any other appropriate instruments to formally implement the recommended RTIF program by the STA and member agencies.

Deliverable: The results of this Task will be a *Final Nexus Study Report*.

Solano Transportation Authority

Revised Draft Regional Transportation Impact Fee Schedule, 12-05-08

Task:		Nexus Study	Fee Governance Authority
2008	Dec	<ul style="list-style-type: none"> • STA Board Adopts Scope 	<ul style="list-style-type: none"> • Stakeholder meetings to recommend governance structure
2009	Jan	<ul style="list-style-type: none"> • STA Releases RFP for Nexus Study 	<ul style="list-style-type: none"> • STA advisory committees recommend governance structure to STA Board
	Feb	<ul style="list-style-type: none"> • STA reviews RFP responses & interviews consultants 	<ul style="list-style-type: none"> • STA Board approves governance structure for circulation to local agencies (city council meetings, planning commissions, County Board of Supervisors)
	Mar	<ul style="list-style-type: none"> • STA Hires Nexus Study consultants 	
	Apr	<ul style="list-style-type: none"> • Begin Stakeholder meetings (local agency staff, developers, elected officials, etc.) • Model impacts & Define Projects 	
	May		
	Jun		<ul style="list-style-type: none"> • Local agencies adopt Fee Governance Authority ordinance.
	Jul		
	Aug		<ul style="list-style-type: none"> • New Fee Governance Authority established
	Sept	<ul style="list-style-type: none"> • Draft Nexus Study Completed 	<ul style="list-style-type: none"> • Fee Governance Authority adopts Nexus Study & Operating Agreement
	Oct	<ul style="list-style-type: none"> • Nexus Study Reviewed by STA Advisory Committees 	<ul style="list-style-type: none"> • Nexus Study & Operating Agreement circulated for approval by local agencies.
	Nov	<ul style="list-style-type: none"> • Nexus Study adopted by Fee Governance Authority 	
	Dec	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Nexus Study & Operating Agreement executed



DATE: December 12, 2008
TO: STA TAC
FROM: Janet Adams, Deputy Executive Director/Director of Projects
RE: Regional Measure 2 (RM 2) Implementation Plan

This report will be provided under separate cover.



DATE: December 12, 2008
TO: STA TAC
FROM: Jayne Bauer, Marketing and Legislative Program Manager
RE: STA's Draft 2009 Legislative Priorities and Platform and Legislative Update

Background:

STA staff monitors state and federal legislation pertaining to transportation and related issues. Legislative updates from STA's legislative consultants are included (Attachments A and B). On December 10, 2008, the STA Board approved (with amendments) distributing the Draft 2009 Legislative Priorities and Platform for a 21-day review and comment period. Upon adoption, the document will provide policy guidance on transportation legislation and activities during 2009.

Discussion:

2009 STA Legislative Priorities and Platform

To help ensure the STA's transportation policies and priorities are consensus-based, the Legislative Priorities and Platform is developed in draft form by staff with input from the STA's state and federal legislative consultants. The draft is distributed to STA member agencies, members of the Technical Advisory Committee (TAC) and Consortium, and our federal and state legislative delegations for review and comment before adoption by the STA Board.

Adoption of the Final Draft 2009 STA Legislative Priorities and Platform will be considered at the January 14, 2009 STA Board meeting. Key additions to the draft 2009 platform include an update of federal funding priorities and a renamed section, "Climate Change/Air Quality" to focus on climate change issues.

Federal Economic Stimulus

Staff attended a conference held by Caltrans Director Will Kempton on Friday, December 5th to discuss the Federal Economic Stimulus package proposed by the current Congress (110th). It is anticipated that S 3689 and HR 7110 (introduced by the Senate and House of Representatives respectively), which were aimed at jumpstarting the economy through investment in "ready to go" transportation projects, will be reintroduced by the next Congress (111th). The two bills contain \$10/\$12.8 billion for highway projects, and \$2.5/\$3.6 billion for transit, respectively.

The definition of "ready to go" is still under debate (projects ready to go to contract between 60 and 180 days). Director Kempton has initiated a process to quickly bring together stakeholders in the transportation community to assist in developing parameters for the administration of funding. The process will establish categories through which proposed projects will be submitted using a template similar to the Proposition 1B process. Director Kempton stressed that as many projects as possible will be fast-tracked, with consideration to relax NEPA/ CEQA requirements to expedite project delivery. President-elect Obama told Governor Schwarzenegger that he wants to sign a stimulus package on his first day in office, January 20th.

Recommendation:

Approve STA's Draft 2009 Legislative Priorities and Platform, and forward a recommendation to the STA Board to adopt the draft as the Final 2009 STA Legislative Priorities and Platform.

Attachments:

- A. Shaw/Yoder State Legislative Update
- B. Akin Gump Federal Legislative Update
- C. STA's Draft 2009 Legislative Priorities and Platform (staff is currently revising to incorporate Board comments – will be distributed under separate cover)



November 25, 2008

To: Board Members, Solano Transportation Authority

Fm: Joshua W. Shaw, Partner
Gus Khouri, Legislative Advocate
Shaw / Yoder, Inc.

RE: STATE LEGISLATIVE UPDATE- OCTOBER/NOVEMBER

2008-09 Budget Update-Special Session

On November 6th, the Governor called for the Legislature to convene in Special Session in order to tackle the State's \$11.2 billion deficit that had matriculated since the 2008-09 State Budget was signed on September 23rd. The 2009-10 budget deficit was projected to be near \$13 billion. As a result, the Governor released a document referred to by many as the "November Revise", which provides additional revenue enhancements and cuts to address the shortfall. The deficit has deepened since the release of that document late last week.

The Legislative Analyst's Office (LAO) subsequently published a report on November 11th which states that the budget shortfall is estimated to be \$27.8 billion over the next 20 months. Furthermore, the LAO went on to mention that the state's revenue collapse is so dramatic and the underlying economic factors are so weak that the forecast is for huge budget shortfalls through 2013-14, absent corrective action. From 2010-11 through 2013-14, a projected annual shortfall in the range of \$22 billion is expected.

It is uncertain whether the Legislature will propose any solutions in part or whole prior to the new class being sworn in on December 1st. Session is scheduled in both houses for Sunday, November 23rd but that appears to be tentative as many members are reportedly out of the country on educational trips abroad.

November Revise Decimates Transit Funding

The Governor's "November Revise" proposes to slash the State Transit Assistance (STA) program by \$230 million - reducing it from the \$306 million as signed into law on September 23rd to \$76 million – a 75 percent reduction from the September allotment. The \$306 million originally appropriated consisted of approximately \$215 million in Proposition 42 revenues.

While Proposition 42 is not proposed to be suspended, the administration does propose new legislation to divert those revenues, along with \$15 million in additional “base” funding, to the Mass Transportation Fund to pay for bond debt service (\$169 million) and the home-to-school program (\$61 million). This is on top of the \$1.67 billion that was diverted from the Public Transportation Account in the 2008-09 Budget Act as signed on September 23rd. The administration cites the drop in spillover revenues as necessitating the additional diversion of this critical revenue source, which is used for operations and capital expenditures by transit operators.

STA recipients were told that the first quarter allocations would be the only payments that they would receive for the rest of the year. In addition, the administration calls for the elimination of funding to the STA program for the 2009-10 fiscal year and beyond.

The Governor’s budget proposal does accelerate \$800 million in capital project funding made available through the Public Transportation Modernization, Improvement and Service Enhancement Account within Proposition 1B, which is on top of the \$350 million currently provided in the 2008-09 Budget Act. Eliminating the STA program which provides critical operating funds, however, will make it difficult to maintain existing service, let alone accommodate increasing ridership demands as a result of the new system capacity.

In a last ditch effort, both the Senate and Assembly met and attempted to address the fiscal crisis on Tuesday, November 25th yet neither body was successful in passing a proposal. While both houses did not propose to eliminate the STA program, the Senate did propose to reduce the 2008-09 STA level by an undisclosed amount. The current class is not expected to meet again prior to the adjournment of Session on November 30th. Therefore, it will be the responsibility of the 2009-10 class of legislators, who will be sworn in on December 1st, to address the state’s budget deficit. The Governor is expected to call for yet another Special Session on December 1st.

Your legislative advocacy team worked with STA staff and prepared two letters-one addressed and delivered to the current class and the other pending delivery to the incoming class- signed by STA Board Chair Jim Spering which opposes the elimination of the STA program and the reduction of the 2008-09 funding level for the program as well.

MEMORANDUM

November 25, 2008

To: Solano Transportation Authority
From: Akin Gump Strauss Hauer & Feld LLP
Re: October/November Report

Congress was in session from September 8 through October 3 during which time it passed a continuing resolution that funds most federal departments, including the Department of Transportation, through March 6, 2009 as well as legislation that authorizes a \$700 billion bailout of the country's financial services sector. Congress recessed until after the elections and returned last week for organizational meetings. Congress may return in December to consider legislation that would provide financial assistance to the U.S. automobile manufacturers, but the automobile manufacturers still must develop a proposal and convince Congress to move forward.

I. SAFETEA-LU Reauthorization and Appropriations

We have worked with STA staff to develop federal priorities for the SAFETEA-LU reauthorization bill and fiscal year 2010 appropriations. STA staff met with Paul Schmid of Rep. Tauscher's staff and briefed him on STA's priority projects. Susan Lent followed up with Paul and received positive feedback regarding STA priorities and strategy for pursuing funding. STA staff is also reaching out to other members of the STA congressional delegation and Susan Lent will follow up to determine their reaction to funding requests. STA staff is now drafting their legislative platform and Susan Lent will participate in the STA Board meeting on December 10 where the Board considers the platform.

We also have identified February 4 and 5, 2009 as the dates that STA Board members and staff will meet with members of Congress in Washington regarding SAFETEA-LU reauthorization and appropriations.

II. November Elections

The Democrats increased their majority by more than 20 seats in the House of Representatives (256-174) and 6 seats in the Senate (56-40, 2 Independents, 2 undetermined) as a result of the November elections. The increased Democratic majorities in Congress coupled with Barack Obama's election, means that states and local governments likely will receive increased federal funding for infrastructure.

We do not anticipate major changes in the leadership of the House and Senate authorizing committees with jurisdiction over highways and public transportation in the 111th Congress, which will convene in January. Chairman Jim Oberstar (D-MN) and Ranking Republican John

November 25, 2008

Page 2

Mica (R-FL) will continue to lead the House Transportation and Infrastructure Committee. Chairman Pete DeFazio (D-OR) and Ranking Republican John Duncan (R-TN) will lead the Highway and Transit Subcommittee. Sen. Christopher Dodd (D-CT) will maintain the chairmanship of the Senate Banking Committee with Sen. Richard Shelby (R-AL) as ranking member.

Sen. Barbara Boxer (D-CA) will have a large voice in the 111th Congress from her purview as chair of the Senate Committee on Environment and Public Works, which has jurisdiction over much of the highway bill reauthorization and the climate change legislation. Other key members on that panel will include Sen. Jim Inhofe (R-OK), the Committee's Ranking Republican, Sen. Max Baucus (D-MT), the Chairman of the Transportation and Infrastructure Subcommittee, and Sen. Johnny Isakson (R-GA), the Subcommittee's Ranking Republican. Senate Subcommittee membership has not been finalized and Sen. Voinovich (R-OH) could replace Sen. Isakson as the ranking member.

Sen. Robert Byrd (D-WV) announced on November 7 that he would step down as the Chairman of the Senate Appropriations Committee. He will be replaced by Sen. Daniel Inouye (D-HI), who will give up the chair of the Commerce Committee to take over the Appropriation Committee's gavel. Sen. Thad Cochran (R-MS) is expected to continue to serve as the Ranking Republican. Sen. Patty Murray (D-WA) will likely remain as chairman of the Transportation, Housing and Urban Development Subcommittee. It seems likely that Sen. Christopher Bond (R-MO) will return as ranking member, but there are at least three open ranking member positions on the Appropriations Committee due to retirements and Sen. Ted Steven's (R-AK) defeat (Defense, Energy & Water, and Interior). This could lead to some reorganization on the Republican side.

There are not expected to be any changes in the Democratic leadership of the House Appropriations Committee. Chairman David Obey (D-WI) will retain the chairmanship of the full Committee and Rep. John Olver (D-MA) is expected to continue as the chairman of the Transportation, Housing and Urban Development Subcommittee. Rep. John Lewis (R-CA) will be the Ranking Minority Member of the full Committee, however, the defeat of Rep. Knollenberg (R-MI) leaves open the question of who will serve as Ranking Member on the Transportation Subcommittee.

Committee assignments will be finalized during the week of January 6.

November 25, 2008

Page 3

III. Economic Stimulus

President-elect Barack Obama supports quick passage of an economic stimulus bill that provides funding for infrastructure, including highway, transit, and airports. Prior to the election, the House and Senate attempted to move economic stimulus legislation. The House passed *The Job Creation and Unemployment Act* (H.R. 7110) a \$60 billion bill that would have funded infrastructure projects that could be under contract within 120 days. It included \$12.8 billion for highway projects, \$3.6 billion for transit capital assistance grants, \$1 billion for transit energy assistance grants, \$5 billion for water infrastructure, \$600 million for airports, and \$500 million for passenger rail. The Senate introduced its own \$56 billion bill, but fell eight votes short of the 60 votes needed to bring the bill to a final vote before Congress adjourned for the elections.

The House and Senate Democratic leadership expressed an interest in moving an economic stimulus bill during the week of November 17, when Congress was in session, but with a looming veto threat from the White House and plans for a filibuster in the Senate, House and Senate Democrats decided to wait until January rather than consider the legislation this year.

Although the House and Senate have not finalized their economic stimulus bills, they likely will include funding for highway, public transportation and aviation infrastructure. House Speaker Nancy Pelosi (D-CA) had stated her intent to move a bill that provided about \$150 billion in spending. On November 18, the Senate Appropriations Committee released its latest proposal, which included \$10 billion for highways, \$500 million for airports, \$400 million for intercity passenger rail and \$60 million for ferries. Public transit agencies would receive \$2.5 billion in formula grants with the Transportation Secretary instructed to take measures to ensure that transit agencies receive at least \$100,000. The bill requires that grant recipients obligate the funds within 180 days of the bill's enactment. Transit agencies may use the funds for operating costs if the transit agency is able to demonstrate that the spending is necessary to maintain existing services or expand service due to increased ridership. No local match is required.

On November 22, President-elect Obama announced that he is drafting a bill that would create about 2.5 million jobs over 2 years. He has not released any details of the legislation, but economists estimate that the package must be more than \$200 billion to generate that type of growth. The President-elect stated that the bill will be a "down payment" on the reform that he will bring to Washington by rebuilding roads and bridges, modernizing schools, building wind farms and adopting other energy efficient technologies. Congress is expected to act early in January to have the bill on the new President's desk shortly after his inauguration on January 20.

IV. Fiscal Year 2009 Appropriations

Congress passed a \$600 billion continuing resolution to fund most federal programs through March 6, 2009 largely at fiscal year 2008 funding levels, including the Department of Transportation. Like the stimulus package, the House and Senate Democratic Leadership is currently working on an omnibus spending bill and hopes to have the bill passed and awaiting

November 25, 2008

Page 4

the President's signature when he is sworn-in. The bill is expected to boost federal spending by at least \$24.5 billion above the level recommended by the Bush Administration (\$991.6 billion).

V. Rail Safety/Amtrak Funding

On October 1, the Senate passed *The Rail Safety Improvement Act of 2008* (H.R. 2095), by a vote of 74-24, sending the bill to the President's desk. The House approved the bill by voice vote on September 24. The support for the bill in the House and Senate convinced the President to sign the bill over objections that it lacked "meaningful" reform of Amtrak management, and contained Davis-Bacon Act provisions, which require federal contractors to pay their employees prevailing wages.

The rail safety provisions of the bill mandate installation of positive train control (PTC) technology on rail main lines by 2015, authorize \$250 million in federal grants for the installation, and expand the federal loan guarantee program for PTC. The bill authorized \$13.06 billion over five years for Amtrak, including \$2.95 billion for operations and \$5.31 billion for capital expenses, \$1.9 billion for intercity passenger rail and \$1.5 billion for high-speed rail routes. The bill also allows private companies to compete to provide high-speed service in eleven corridors, starting with the Northeast Corridor. The Federal Railroad Administration intends to issue a request for proposals on this provision before December 15, 2008.



DATE: December 11, 2008
TO: STA TAC
FROM: Elizabeth Richards, Director of Transit and Rideshare Services
RE: Transit Consolidation Study Update

Background:

In Solano County, each City and the County fund and/or operate transit services. This includes local and intercity transit services as well as general public and American with Disabilities Act (ADA) paratransit services. A subsidized taxi program and other special transportation services are also funded with local transit funds and operated through local jurisdictions.

Over the past several years, the issue of consolidating some or all of the services has been discussed and proposed for evaluation. This topic was discussed by STA Board members at the February 2005 Board retreat and the participants expressed interest and support for transit service becoming more convenient through a seamless system, that there should be a reasonable level of service throughout the county, and that local transit issues and needs would have to be considered and addressed. In March 2005, the STA Board directed STA staff to initiate a countywide Transit Consolidation Study. In April 2005, the STA Board approved goals, objectives and evaluation criteria to be incorporated in the scope of work for this study. After funding was secured, DKS Associates was selected to lead the Transit Consolidation Study.

Work began in early 2007. The first major endeavor was to conduct an extensive outreach involving interviews with transit operator staff, other city staff, public officials, and others. Interviews began with STA Board members and Board alternates in March 2007 and with local staff and funding partners in April and continued into May and June. To gain a broad perspective of issues and concerns, nearly sixty (60) interviews were conducted. Outreach to transit users was added. The consulting team held a focus group meeting with the STA's Paratransit Coordinating Council (PCC) members in May 2007. In addition, two focus group sessions with transit users were held in June 2007 in Vacaville and Vallejo.

In May 2007, the consultants presented to the STA Board a summary of their findings from the interviews. The summary represented a set of commonalities, key issues and potential challenges. Board feedback included extending the schedule for the study, completing the interviews, collecting user input, and analyzing the issues associated with preliminary consolidation alternatives prior to the return to the Board.

A preliminary analysis of alternatives was presented to the Technical Advisory Committee (TAC) and Consortium in June 2007. It included five (5) potential transit consolidation alternatives. During discussion at the TAC meeting, a sixth (6th) alternative

was requested. This alternative suggested consideration of consolidating all intercity fixed-route service and local and intercity American for Disabilities (ADA) paratransit service.

At the July 2007 STA Board meeting, staff presented the six (6) transit consolidation alternatives to the STA Board along with the Executive Committee's recommendation and a recommendation to release the Findings Report and the Options Report once the TAC and Consortium had additional time to review. After discussion, the STA Board modified and approved the membership of the Transit Consolidation Steering Committee to include all eight (8) jurisdictions comprised of Board members, City Managers and the County Administrator.

The Transit Consolidation Steering Committee first met October 2007 and provided guidance to Phase II. Phase II is a detailed assessment of the existing transit operators including an analysis of not only their operations but also their financial accounting methodology and forecasting. In addition, several potential consolidation options were to be further analyzed. One of the first consolidation options to be evaluated was a Benicia/Vallejo consolidation.

Discussion:

Separate from the Transit Consolidation Study, DKS Associates and the consultant team completed an in-depth assessment of the Benicia Breeze transit system this past summer. Although the Benicia study was primarily conducted for other purposes, this effort assisted with the Transit Consolidation Study. This was followed by a somewhat similar in-depth analysis of Vallejo Transit. This Vallejo Transit Financial and Service Assessment Study was to provide an independent report on the projected financial shortfall of Vallejo Transit service and how this is likely to affect service delivery. This assessment report is in the stage of finalization.

The second Transit Consolidation Steering Committee meeting was held Thursday, December 11th, 2008 at the Suisun City Council Chambers and was well attended. At this meeting, several elements of Phase II of the Transit Consolidation study were presented (see attached agenda, Attachment A). In addition, STA staff and the consultant team is planning to schedule individual meetings in January with each of the operators to review preliminary financial and operational data. An update will be provided at the TAC and Consortium.

Fiscal Impact:

Not applicable

Recommendation:

Informational.

Attachment:

- A. Transit Consolidation Steering Committee December 11, 2008 Agenda
- B. Powerpoints from the December 11th Meeting of the Transit Consolidation Steering Committee

One Harbor Center, Suite 130
Suisun City, California 94585

Area Code 707
424-6075 • Fax 424-6074

TRANSIT CONSOLIDATION STEERING COMMITTEE

Members:

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

11:00 a.m. – 1:00 p.m.
Thursday, December 11, 2008
(Lunch will be provided.)

Suisun City Hall
701 Civic Center Blvd.
Suisun City, CA 94585

MEETING AGENDA

- I. INTRODUCTIONS/APPROVAL OF AGENDA** Chair Spring
(11:00 – 11:05 a.m.)
- II. OPPORTUNITY FOR PUBLIC COMMENTS**
(11:05 – 11:10 a.m.)

Pursuant to the Brown Act, public agencies must provide the public with an opportunity to speak on any matter within the subject matter jurisdiction of the agency and which is not on the agency’s agenda for that meeting. Comments are limited to no more than 3 minutes per speaker. Gov’t Code §54954.3(a). By law, no action may be taken on any item raised during the public comment period although informational answers to questions may be given and matters may be referred to staff for placement on a future agenda of the agency.

This agenda is available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42 U.S.C. §12132) and the Ralph M. Brown Act (Cal. Govt. Code §54954.2). Persons requesting a disability-related modification or accommodation should contact Johanna Masiplat, Clerk of the Board, at (707) 424-6008 during regular business hours, at least 24 hours prior to the time of the meeting.

- III. CONSENT CALENDAR**
 - A. Transit Consolidation Steering Committee Meeting Minutes of October 24, 2007** Johanna Masiplat
Recommendation
Receive the Transit Consolidation Steering Committee Meeting Minutes of October 24, 2007.
Pg.

COMMITTEE MEMBERS

City of Benicia	City of Dixon	City of Fairfield	City of Rio Vista	City of Suisun City	City of Vacaville	City of Vallejo	County of Solano
Elizabeth Patterson Jim Erickson	Jack Batchelor, Jr. Nancy Huston	Harry Price Sean Quinn	Jan Vick Hector de la Rosa	Pete Sanchez Suzanne Bragdon	Len Augustine David Van Kirk	Osby Davis Joseph Tanner	Jim Spering Michael Johnson

IV. INFORMATION ITEMS

- A. Purpose and Background of Transit Consolidation Feasibility Study** John Harris,
(11:10 – 11:20 a.m.) Project Manager
Pg.
- B. Transit Roles of Transit Operators, STA, and MTC** Elizabeth Richards, STA
(11:20 – 11:30 a.m.)
Pg.
- C. Transit Funding Summary** Liz Niedziela, STA
(11:30 – 11:40 p.m.) Derek Wong, Consultant
Pg.
- D. Comprehensive Solano Transit Operations Analysis** Joe Story, Consultant
(11:40 – 12:10 p.m.)
Pg.
- E. Status of Option 1 (Vallejo/Benicia) Consolidation** John Harris
(12:10 – 12:15 p.m.)
Pg.
- F. Option 5 – Functional Consolidation Overview** John Harris
(12:15 – 12:20 p.m.)
Pg.

V. ACTION ITEMS

- A. New Phase 2 Issue: Adverse Fiscal Environment Effect on Transit Operations** Joe Story
Recommendation:
Affirm, remove or modify consolidation options based on new information about impending financial shortfalls for transit operations.
(12:20 – 12:35 p.m.)
Pg.

- VI. CLOSING COMMENTS FROM COMMITTEE MEMBERS** Committee Members
(12:35 – 12:45 p.m.)

VII. ADJOURNMENT

The next Transit Consolidation Steering Committee Meeting is scheduled at **11:00 a.m. – 1:00 p.m., Thursday, March 12, 2009** at Suisun City Hall.

The complete Transit Consolidation Steering Committee packet is available on STA's website: www.solanolinks.com

Agenda Item IV.A

Purpose and Background of Transit Consolidation Feasibility Study

By: John Harris

Agenda Item IV.B

Transit Roles of Transit Operators, STA, and MTC

By: Elizabeth Richards

Agenda Item IV.C

Transit Funding Summary

By: Liz Niedziela/Derek Wong

Agenda Item IV.D

Comprehensive Solano Transit Operations Analysis

By: Joe Story

Agenda Item IV.E

Status of Option 1 (Vallejo/Benicia) Consolidation

By: John Harris

Agenda Item IV.F

Option 5 – Functional Consolidation Overview

By: John Harris

Agenda Item V.A

New Phase 2 Issue: Adverse Fiscal Environment Effect on Transit Operators

By: Joe Story



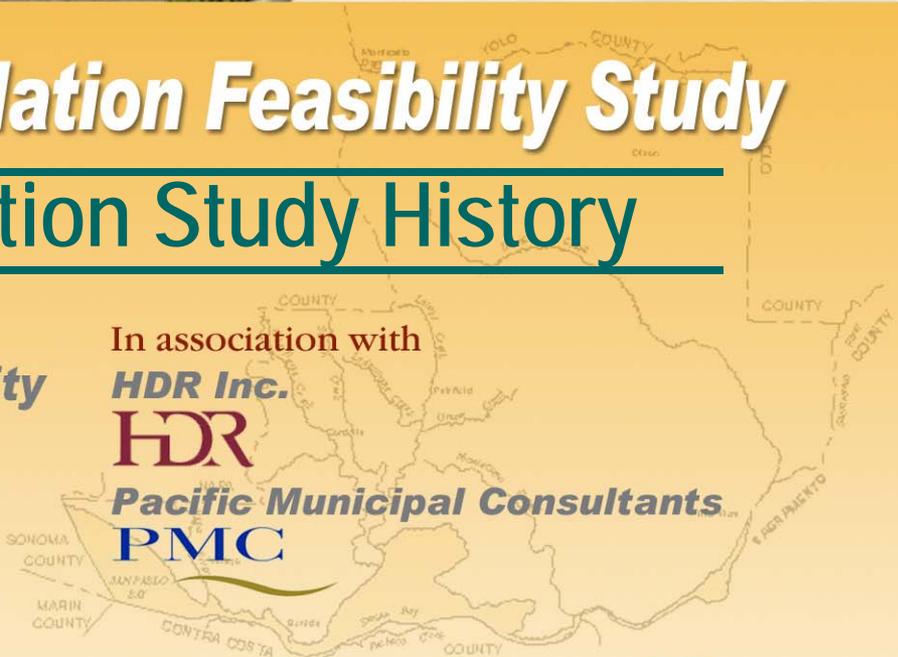
Solano *Transit Consolidation Feasibility Study*

Transit Consolidation Study History

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



Study History

- **2005.....Board Retreat**
- **2005.....Establish goals, objectives & evaluation criteria**
- **2006.....Secured initial funding for study**
- **2007.....Hired consultant team**
- **2007.....Completed Phase I**
 - Outreach & over 60 interviews
 - Completed Findings Report with Executive Summary
 - Completed Options Report

Study History (cont'd)

- **2007.....First Steering Committee (October 24, 2007)**
 - **1. Reviewed and approved Phase I products**
 - **2. Pared consolidation options to the following:**
 - ❖ **1. South County (Vallejo/Benicia) consolidation**
 - ❖ **4a. All intercity fixed-route bus routes and intercity paratransit service**
 - ❖ **4b. All intercity fixed-route bus routes and all local and intercity paratransit services**
 - ❖ **5. Functional countywide consolidation**
 - ❖ **6. Full countywide consolidation**

History (cont'd)

4

- **2007.....First Steering Committee (October 24, 2007)**
 - **3. Reviewed and approved proposed Phase II Scope**
 - ❖ **Core tasks include:**
 - **1. Evaluation of current services above and beyond the description information in the Phase I Findings Report**
 - **2. Evaluation of the feasibility of the remaining consolidation options after completion of Task #1 above**
 - **3. Guidance and implementation assistance if Steering Committee recommendation option(s) are approved**

History (cont'd)

- **2007.....First Steering Committee (October 24, 2007)**
 - **4. Steering Committee requested the following at the next Steering Committee meeting:**
 - ❖ **A. Status of Task I – Phase II**
 - ❖ **B. Status of Option 1
(South County Vallejo/Benicia Consolidation)**
 - ❖ **C. Further definition of Option 5
(Functional Countywide Consolidation)**



Solano *Transit Consolidation Feasibility Study*

Transit Roles of Transit Operators, STA, MTC

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



Transit Operators

- **Focus on Service Delivery**
- **Contracted drivers, maintenance, dispatch**
- **Customer service and fare handling/media**
- **Service budgeting, grants, procurement, audits**
- **Service area short and long-range service planning, capital planning**
- **Reports to State and Federal**
- **Plan, construct and maintain transit capital facilities**
- **Ensure compliance with CHP, CARB, ADA and other State and Federal regulations**

STA Focus on Countywide Planning, Funding, Operational Management/Marketing, and Coordination

- Role has evolved as STA matured since the early 1990s
- Long and short-range planning: Transit Element of the Comprehensive Transportation Plan; Community-Based Transportation Plans; Solano Paratransit Review
- Intercity Transit Funding Agreement
- Lifeline Funding Program Management
- Rt. 78 Management Agreement with Vallejo
- Countywide Ridership Survey
- SolanoExpress, RM2 and Employer Marketing
- SolanoExpress Intercity Transit Consortium; Paratransit Coordinating Committee

MTC Focus on Bay Area Transit Funding and Coordination

- **Allocates and authorizes distribution of multiple transit fund sources for transit operating and capital**
- **Develops regional transit funding policies and priorities (Lifeline; Regional Paratransit)**
- **Coordinates regional transit issues and discussions among over 2 dozen Bay Area transit operators**
- **Conducts long-range regional, transit planning**
- **Manages regional transit projects such as 511 Transit Trip Planner and Translink**

All Roles Lead to Funding and Delivering Quality, Efficient Transit Service to the Public

- **Work together:**
 - To meet local, county, and regional priorities
 - To recognize opportunities
 - To maximize available resources



Solano *Transit Consolidation Feasibility Study*

Transit Funding Overview

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



All Transit Revenue Sources are not Equal

- **Wide variety of revenue sources for transit operations and capital**
- **Complex environment**
- **Solano transit operators in Solano range in size and type of area they serve which determines their eligibility for some revenues sources**
- **Three major sources for transit operators are**
 - **Transportation Development Act Funds (TDA)**
 - **Passenger fare revenues**
 - **Federal Transit Administration Funds (FTA)**

Major Funding Sources

- **Different rules for different funding sources**
- **TDA and Passenger Fares:**
 - **Can be used for Capital and Operating**
- **FTA (federal funds) can be used for Capital and Operating depending on the agency and the allocation**

Operating Revenues

- **The sources that Solano County transit operators rely for operating are:**
 - TDA
 - Passenger Fares
 - FTA (Federal)
 - RM2 (Bridge Tolls)
 - STAF
- **All transit operational revenues combined in the six (6) transit agencies in Solano County uses on an estimated average of:**
 - 48% TDA
 - 24% Passenger Fare
 - 18% FTA
 - 9% Other Sources

Federal Revenue Programs Vary

- **Federal 5307 – Small Urbanized Areas (UZA) can use these funds for both transit capital and transit operating assistance (non-competitive)**
 - Vacaville
 - Fairfield
- **Federal 5307 – Capital**
 - Vallejo/Benicia
- **Federal 5311 (rural) - Capital and Operating (competitive)**
 - Dixon
 - Rio Vista
 - Some specific routes serving rural areas

Sample of Other Funding Sources

- **AB664 – Local Match Capital**
 - Vallejo
- **RM2 – Capital and Operating (Partially formula; partially competitive)**
 - Vallejo.....Vacaville
 - Fairfield.....Benicia
- **BAAQMD and YSAQMD (Competitive)**
 - Project Limited
- **Prop 1B Capital Only (Some formula; some competitive)**
- **STIP Capital Only (Competitive)**
- **STAF Capital and Operating (Some formula; some competitive)**
 - All Agencies

How are Funds Generated?

- **Transit revenue funds are generated from a range of sources**
- **Distribution method may be based on formula, competition or a combination**
- **TDA**
 - **Population share of ¼ cent sales tax**
 - **Distributed by formula to City**
- **STAF**
 - **Statewide sales tax on fuel, distributed through various means (some formula, some competitive)**
- **AB664 and RM2**
 - **Bridge Toll**
- **BAAQMD and YSAQMD**
 - **Vehicle registration fees**
- **Prop 1B**
 - **State bonds**



Solano *Transit Consolidation Feasibility Study*

PHASE 2 TASK 1 FINDINGS SUMMARY

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



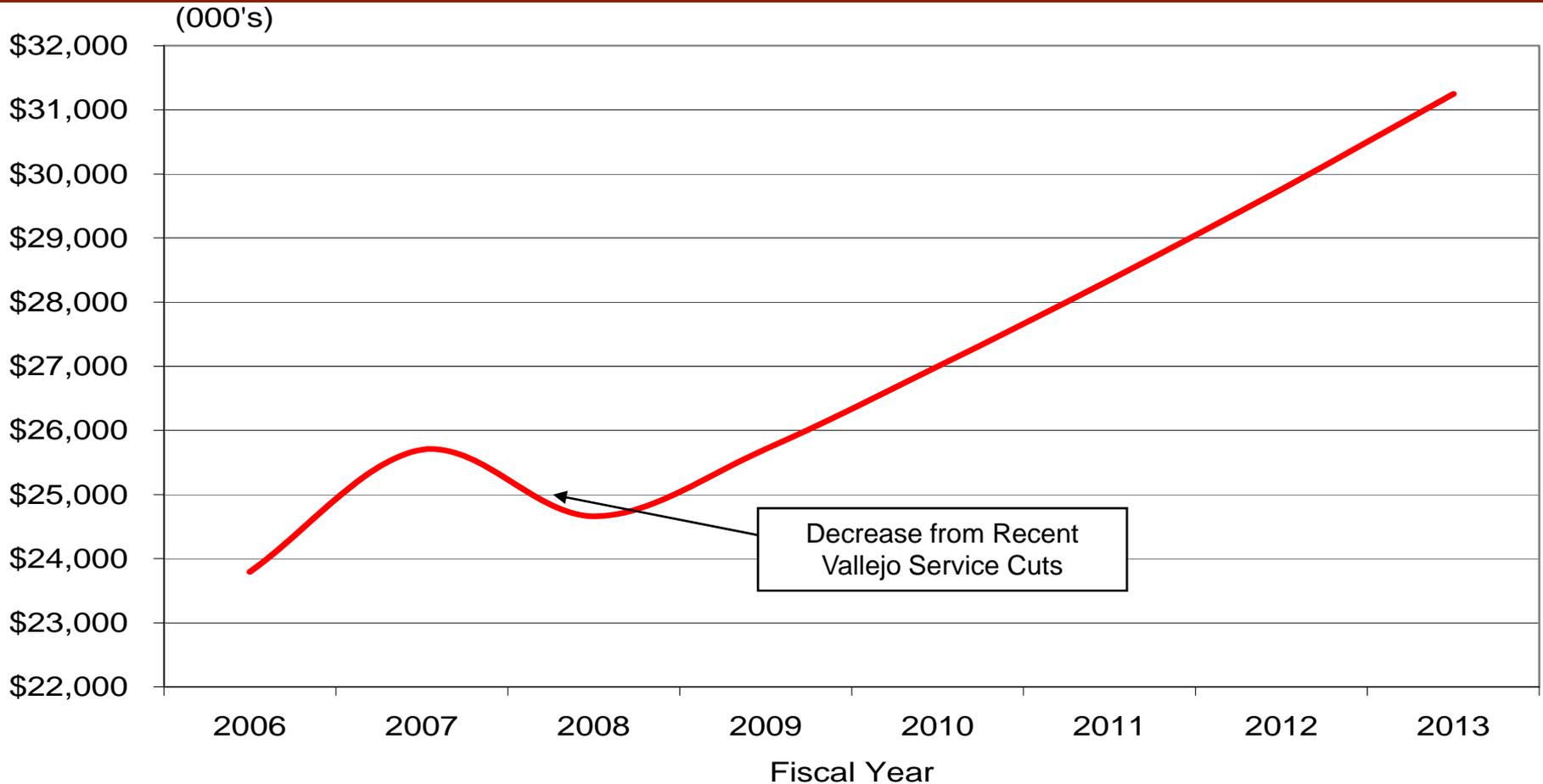
Item IV.D: Operating Funding Crisis – Effect on Transit Consolidation Options

- **Phase 2 Tasks 1 and 2 Continuing**
 - Task includes projections of needs
- **Looming Transit Operating Funding Crisis has Emerged**
 - Governs future facilities and staff needs
 - Provides situation where options on transit governance would react differently
 - Potentially affects interest in one or more of consolidation options

Operating Cost History and Projections

- **Recent Factors**
 - **Some operators have already made major cuts**
 - **Fuel costs are between 10-20% of total operating cost, and vary annually**
- **Financial Assumptions (Projected Trends)**
 - **All unit costs grow by 5% each year**
 - **Existing service levels (No changes)**

Aggregate Operating Cost Trends for all Solano County Operators



Current State of Major Revenue Sources

- **Transportation Development Act (TDA)**
 - **Fixed source from sales tax – Funds about half of all operations**
 - ❖ **Strong economy – more \$\$**
 - ❖ **Weak economy – less \$\$**
 - **Had been gradually increasing for many years**
 - **Current lower sales tax revenue means automatic decreases**
 - **Projected decreases for 2008/2009 and 2009/2010**
 - **May take 5 years to recover to 2007/2008 levels**
- **State Transit Assistance Fund (STAF)**
 - **Subject to legislative variability**
 - **Cut of 50% to 75% being discussed**
 - **Threats of on-going major reductions in future years with projected state budget crisis**

Current State of Major Revenue Sources (continued)

- **Regional Measure 2**

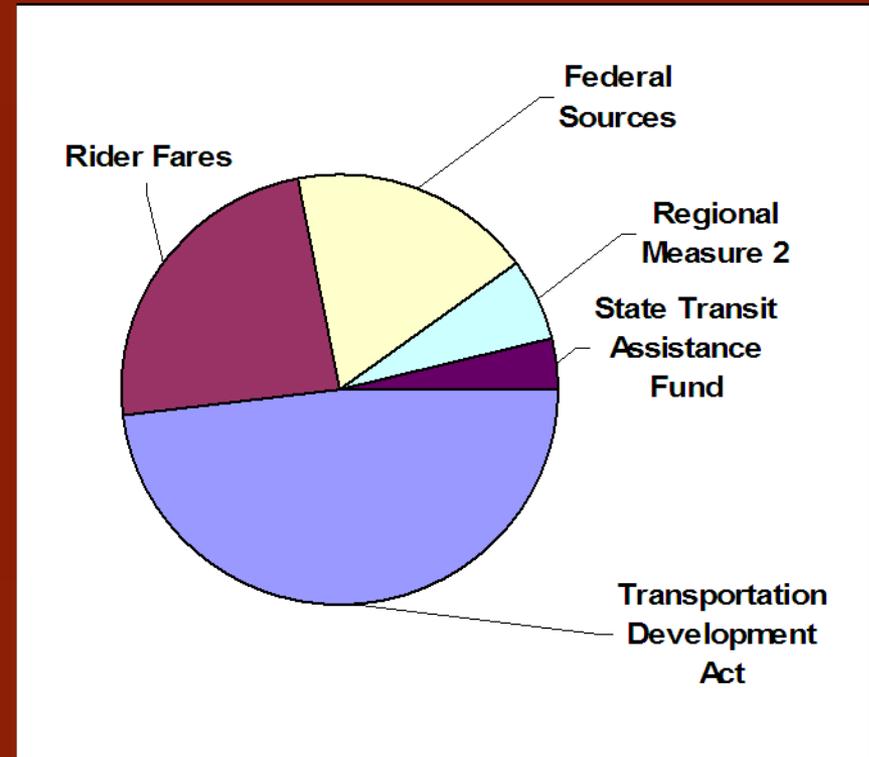
- Began in 2005
- Pool for express service only (over the bridge)
- Toll revenue expected to grow marginally
- Revenue growth likely to be below inflation

- **Passenger Fares –**

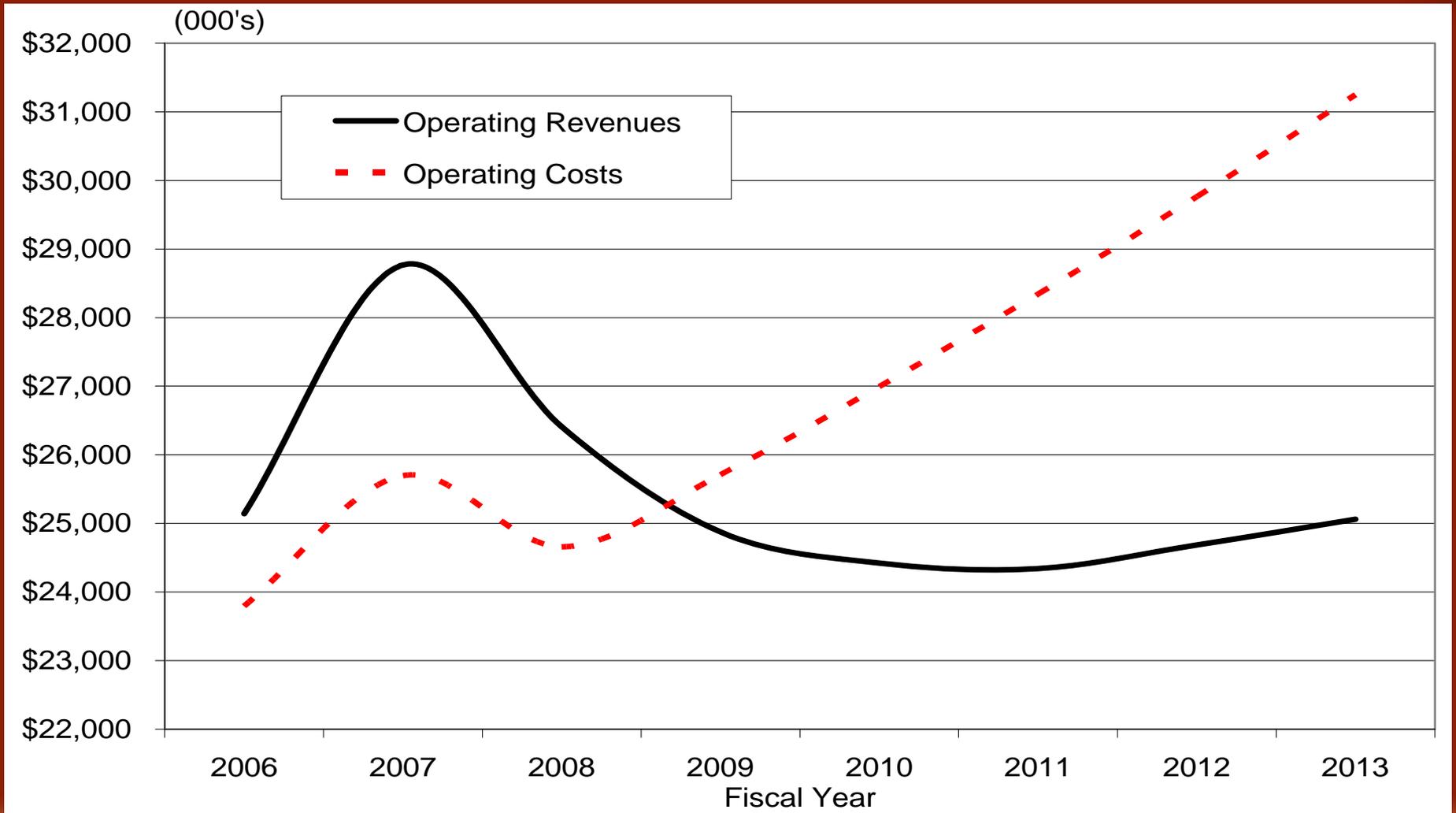
- Most operators raised fares significantly in past few years
- Risk of “over-pricing” to riders
- Higher fares will result in lost ridership

Operating Revenue Assumptions

- **Fare Revenues are Flat Each Year**
- **Transportation Development Act**
 - Decline of 10% in FY 2009-10
 - Flat in FY 2010-11
 - Then growth of 3% starting in FY 2011-12
- **Other Local Revenues are Flat**
- **Federal Revenues are Flat**
- **State Transit Assistance Fund**
 - Decline of 10% per year



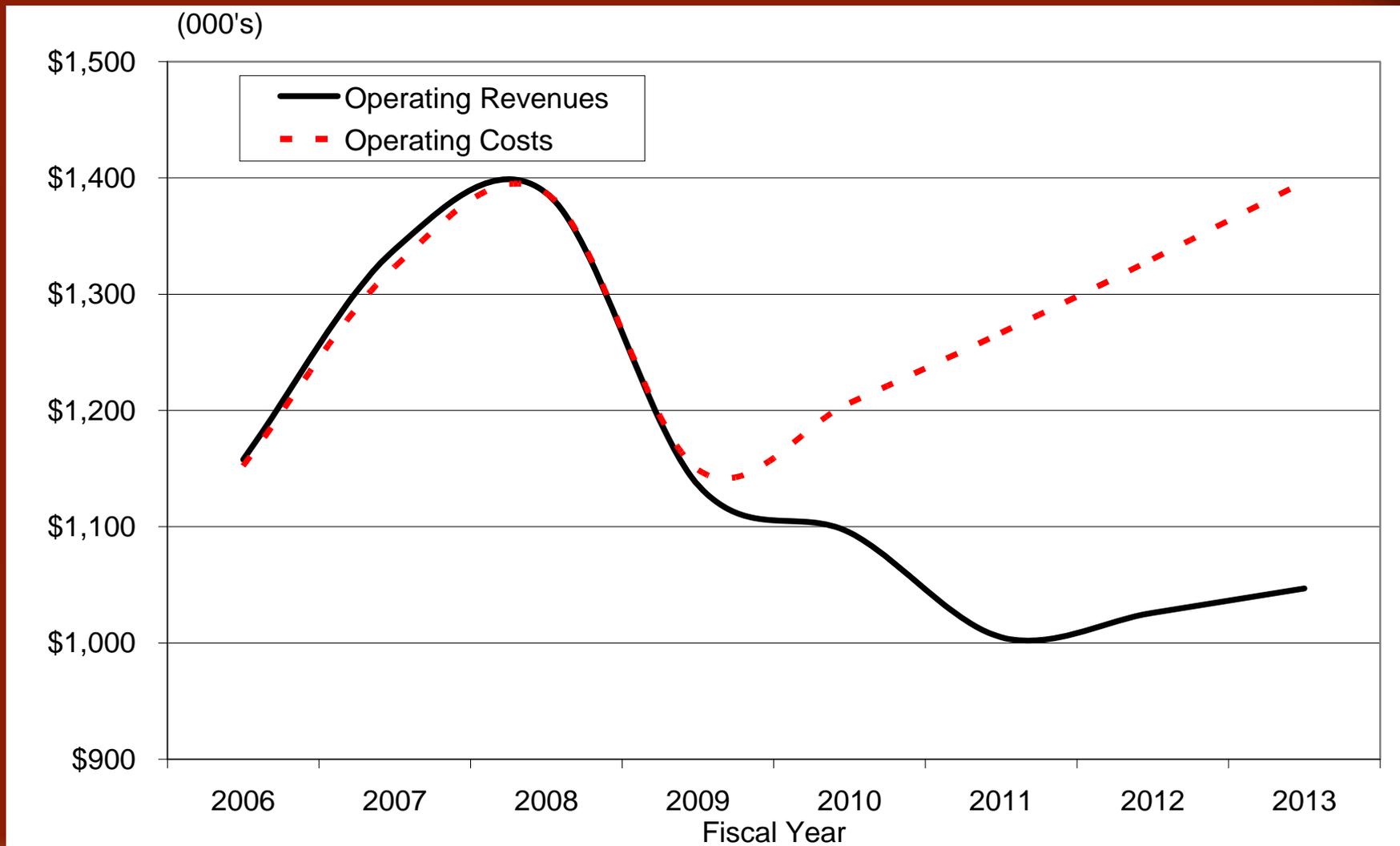
Major Shortfall Projected



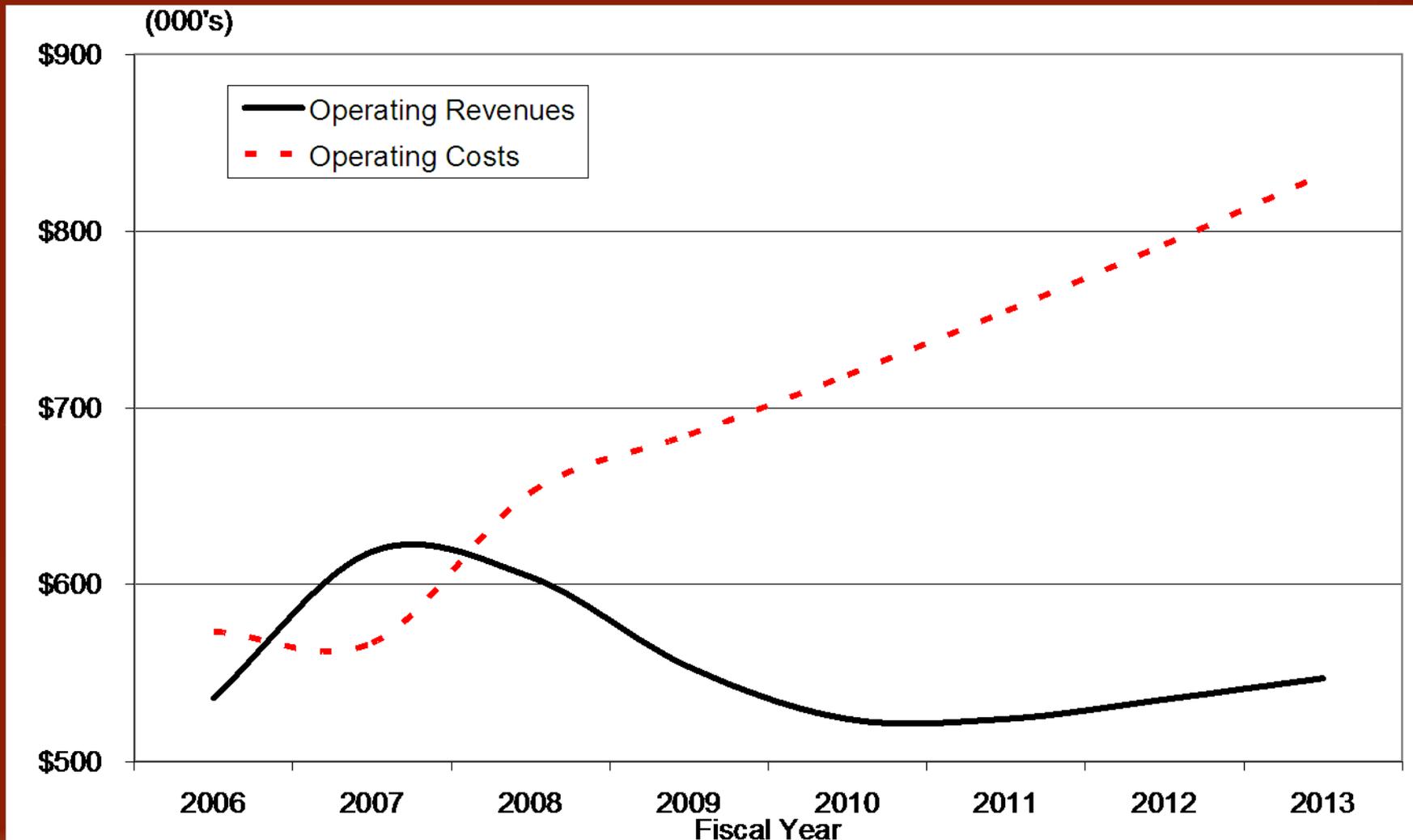
Projected Effects on Current Operators

- **Data Disaggregated for Each Operator**
- **Note: Scales are Different (Because of Different Operator Sizes)**

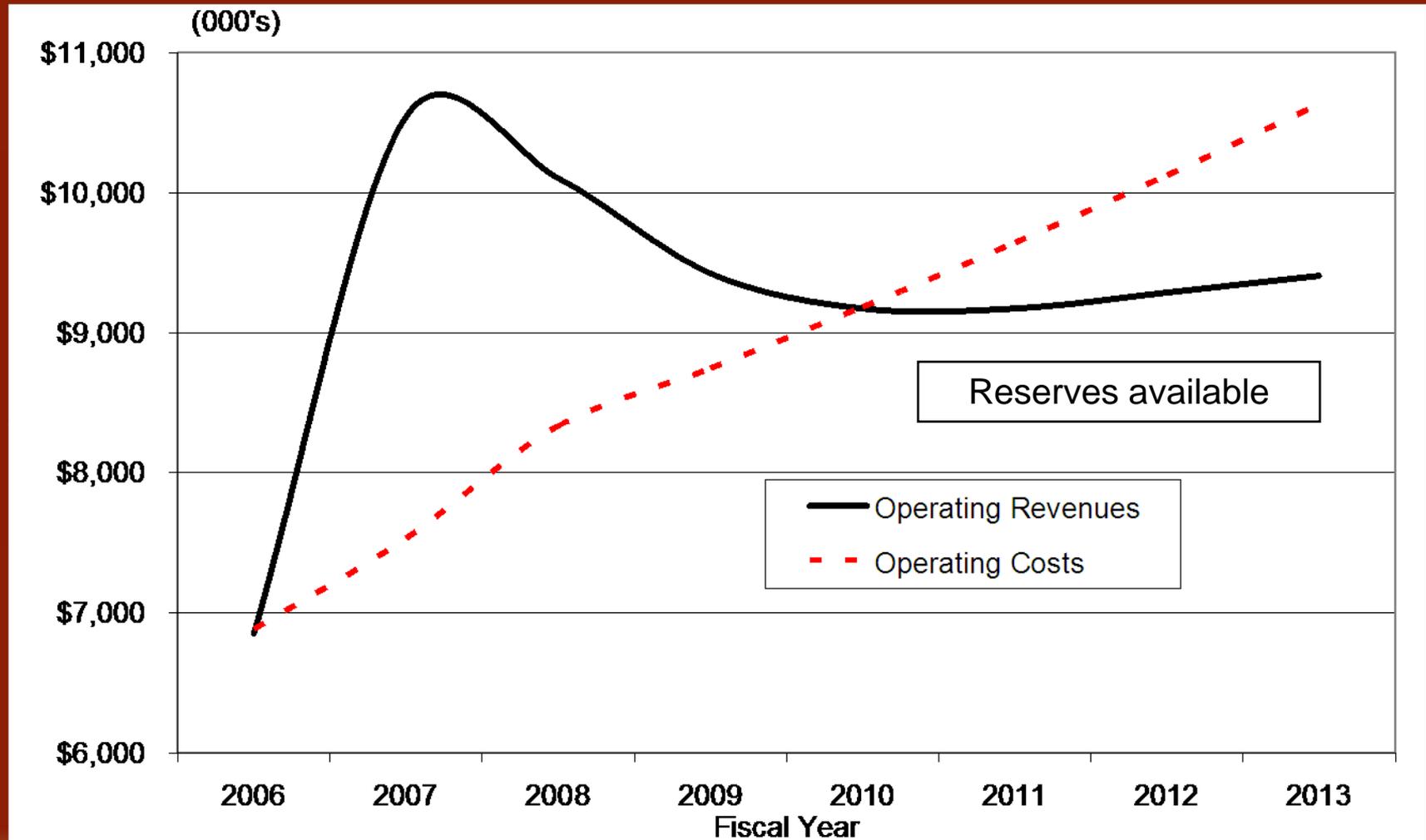
Benicia Breeze Projections



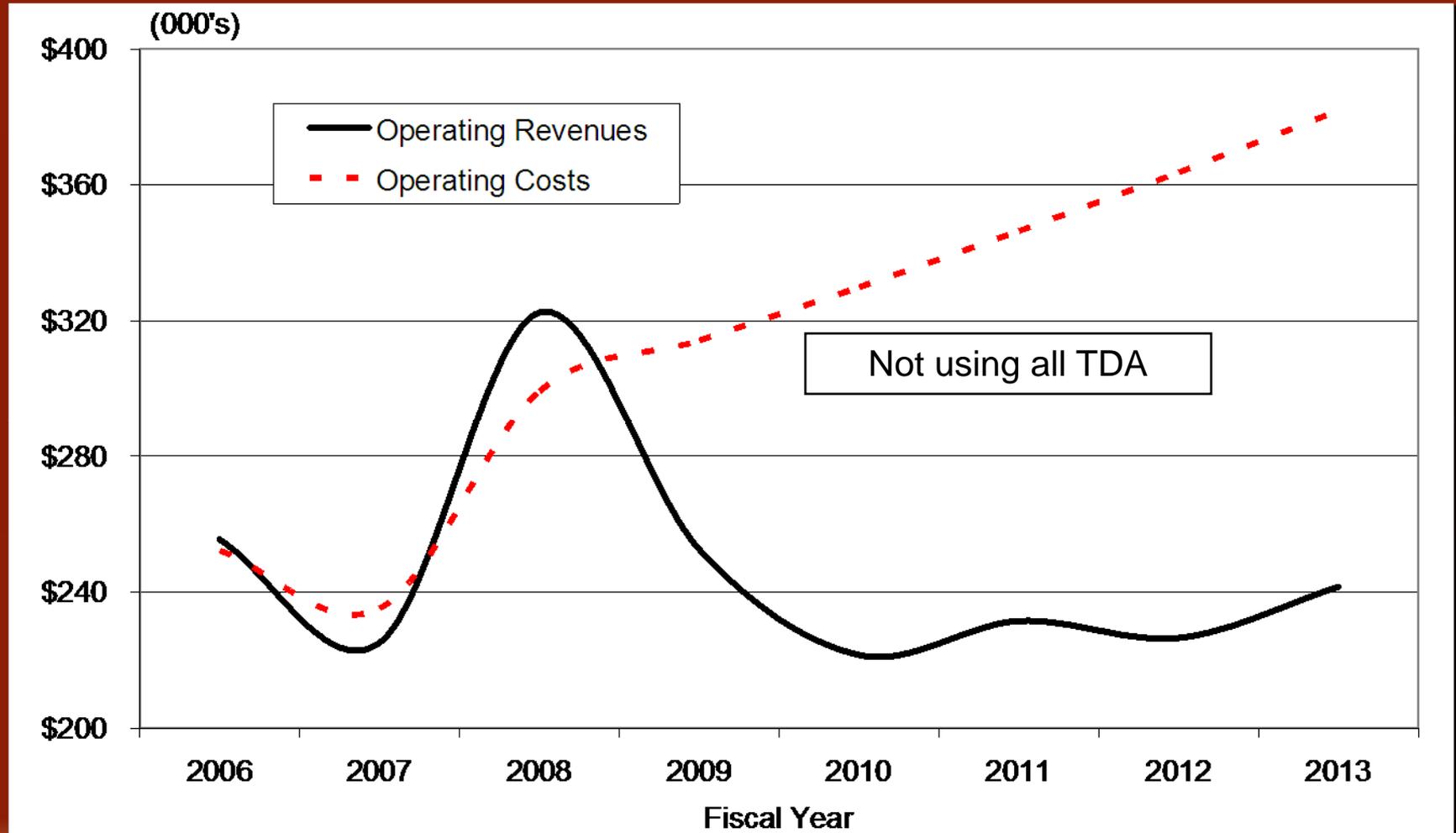
Dixon Read-Ride Projections



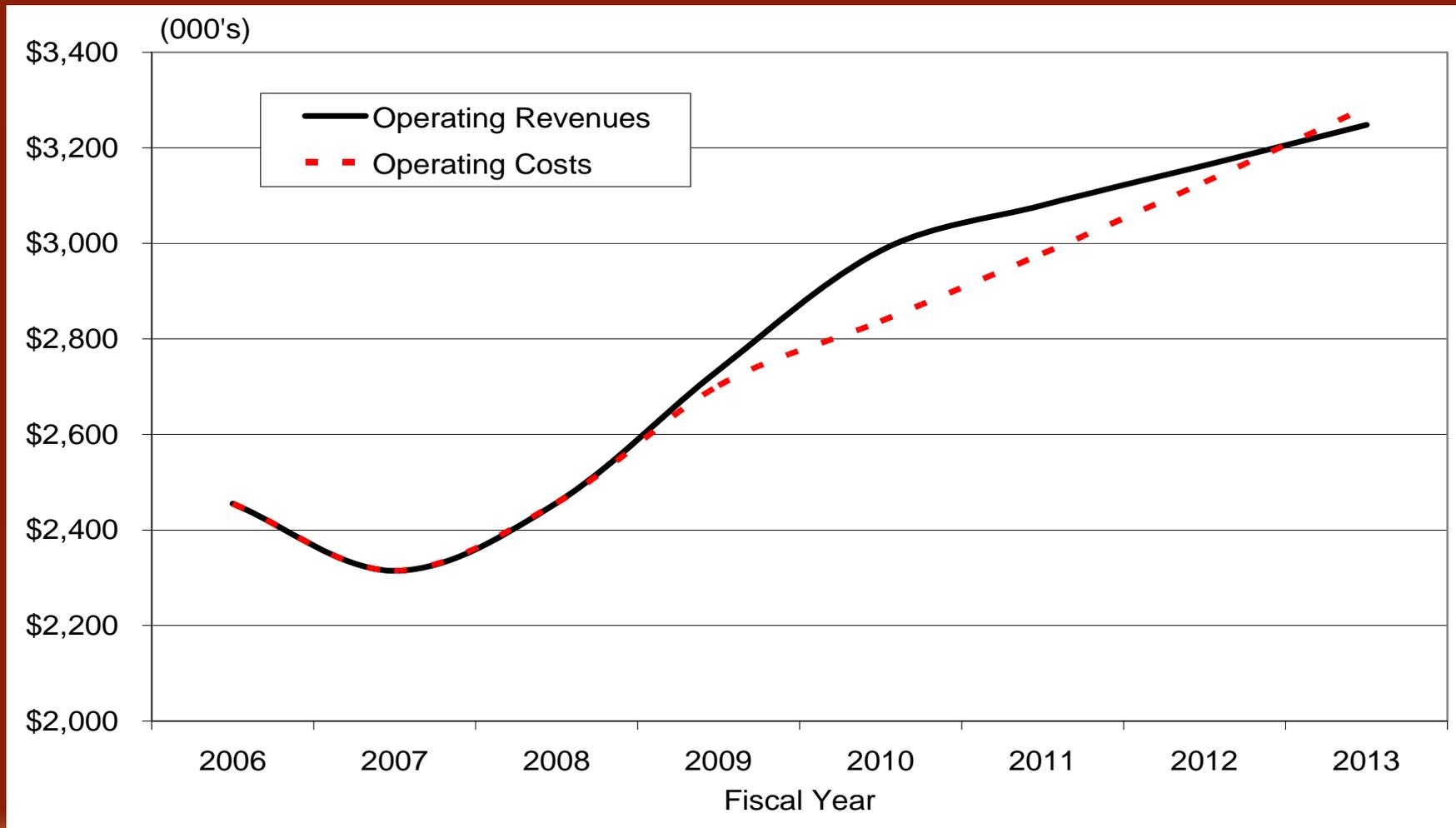
Fairfield and Suisun Transit Projections



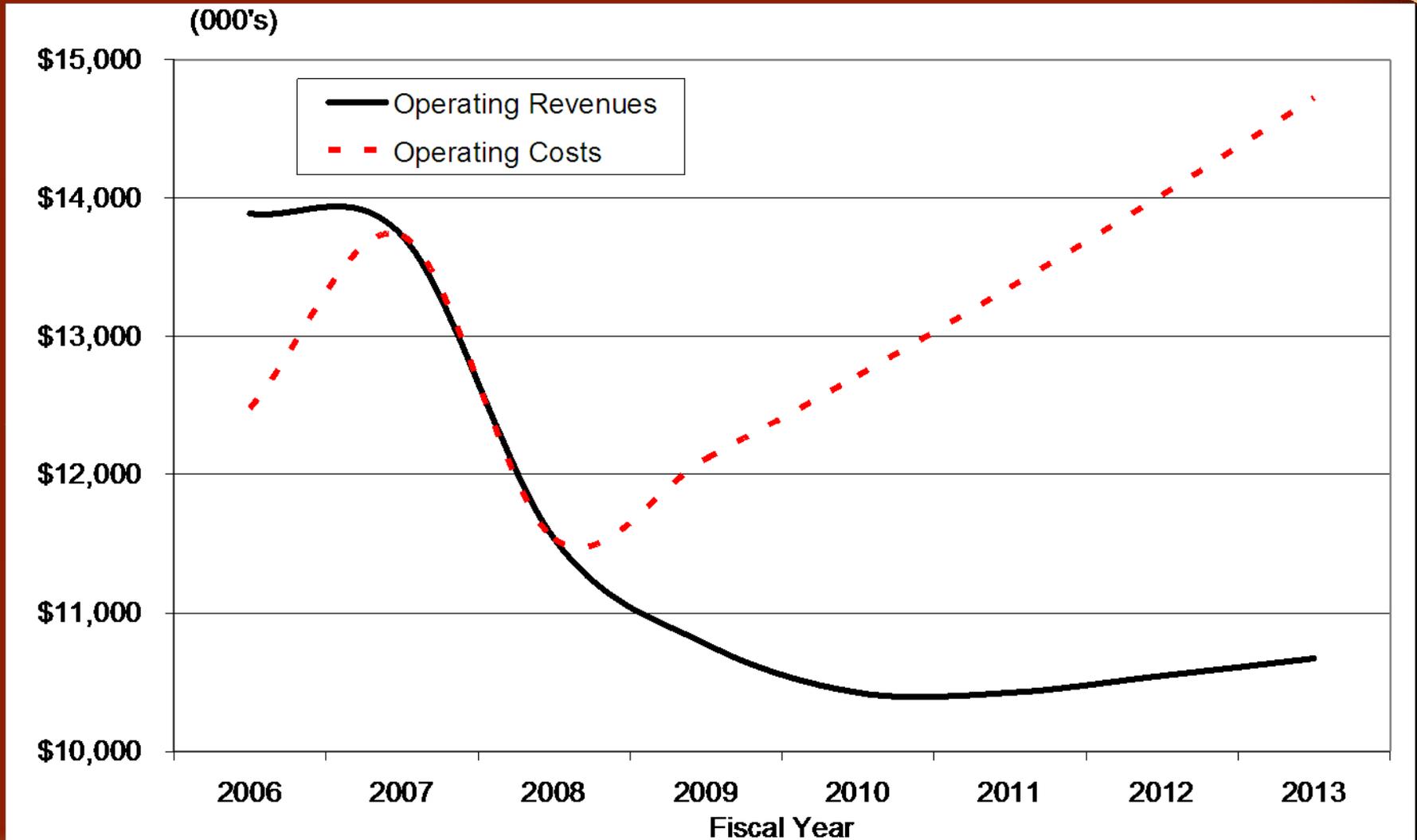
Rio Vista Breeze Projections



Vacaville City Coach Projections



Vallejo Transit Projections





Solano *Transit Consolidation Feasibility Study*

Status of Option 1 – Vallejo/Benicia Consolidation

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



Why

- **Originally selected because Vallejo and Benicia have similar commute patterns to urban core and significant travel between the two cities**
- **First Steering Committee: both Vallejo and Benicia supported continuing to explore this option**
- **Recently both City staffs coordinated implementation of new express Rt. 78 through a working group**

Recent Status

- **November 25, South County Transit Coordinating Committee met for the first time**
- **Policy-makers attending: Mayor Elizabeth Patterson, Councilmember Alan Schwartzman and Vice-Mayor Tom Bartee**
- **Reconfirmed interest in following this option through Phase II**

Option 1

South County Consolidation

- **Potential Advantages:**
 - Optimized route structure
 - Paratransit coordination improvements
 - Better regional leverage
 - Direct oversight by board
 - Dedicated TDA/STA funding
- **Potential Disadvantages:**
 - Unavailability of other revenue sources outside of transit
 - Resolution of consolidation issues – fares/facilities/equipment/contracts
 - Less local control



Solano *Transit Consolidation Feasibility Study*

Option 5 – Functional Consolidation

Prepared for 
Solano Transportation Authority

Prepared by
DKS Associates
TRANSPORTATION SOLUTIONS

In association with
HDR Inc.
HDR
Pacific Municipal Consultants
PMC



Further Definition of Option 5

- **Share staff to support transit operator staff duties and range of special skills**
- **Provide enhanced support when needed**
- **Maintains local transit identity and decision-making**

Consolidate Functions Rather than All Operations

Examples:

- * **Coordinate and manage multi-jurisdictional grants**
- **Create centralized special transit support services such as ADA eligibility process**
- **Provide technical support and data collection as requested**
- **Staff support during transitions and emergencies**

Option 5: Functional Consolidation

- **Potential Advantages:**
 - **Skilled staff available to all operators**
 - **Improved coordination for multi-operator projects**
 - **Paratransit coordination improvements**

- **Potential Disadvantages:**
 - **No reduction in operators**
 - **Perceived loss of individual City oversight**
 - **Additional coordination time**



DATE: December 8, 2008
TO: STA TAC
FROM: Robert Macaulay, Director of Planning
RE: Draft State of the System Report: Arterials, Highways and Freeways

Background:

The STA Board has initiated an update of the Solano Comprehensive Transportation Plan (CTP). The CTP is the STA's primary long-range planning document. The CTP consists of three main elements: Alternative Modes; Arterials, Highways and Freeways; and, Transit.

One of the most important tasks for the CTP update is to identify the gap between the current county-wide transportation system and the goals for the system at the end of the time period covered by the CTP (2035). Each of the three CTP steering committees has adopted a Purpose Statement and Goals. Each of the Committees will also be asked to review and adopt a State of the System report for the CTP Element they review.

The STA has not previously prepared comprehensive State of the System reports for any of its CTP elements. Each report will address three areas: what is the "system" being reported on; what are the physical facilities that make up the system; and what are the programs and/or operational characteristics of the system.

Discussion:

STA staff is developing a State of the System Report for the Arterials, Highways and Freeways Element and is seeking comments on the overall approach and content from the committee.

The draft State of the System - Arterials, Highways and Freeways Report is divided into two sections: Physical and Operations. The first report is the State of the System Arterials, Highways and Freeways Report: Physical (Attachment A). This report defines the roadway and freeway network the STA prioritizes for funding, highway facility conditions (measured by Caltrans Distressed Lane Miles report), local roadway conditions (Pavement Condition Index (PCI) as reported to MTC), and current construction activities.

The second report, State of the Arterials, Highways and Freeways System Report: Operations will be presented at the January 2009 STA TAC meeting. Upon approval by the Arterials, Highways, and Freeways Committee and the STA Board, STA staff will include both reports in the Arterials, Highways, and Freeways Element of the CTP.

The Arterials, Highways, and Freeways Committee reviewed the current draft State of the System: Physical report at their December 11th meeting and agreed with the overall approach. Mayor Patterson suggested that the State of the System Report also include a discussion on how the current system would function given global warming trend affects such as a rise in sea level.

STA staff will address this issue in the document. Lastly, the Committee deferred to the STA TAC to refine the details of the information presented such as the PCI index, local streets and roads funding, and total lane miles.

STA staff is currently seeking input from the TAC on the content and format of the draft State of the System: Physical report (See Attachment A). An outline summarizing the content is provided at the beginning of the draft report. STA staff is also seeking information from the TAC to incorporate in State of the System Report. A list of information needed will be provided and discussed in detail at the TAC meeting.

Recommendation:

Informational.

Attachment:

- A. Draft State of the Arterials, Highways and Freeways System Report: Physical Conditions

Draft
State of the System:
Arterials, Highways,
and Freeways

Physical Conditions Report
December 2008



Arterials, Highways and Freeways

State of the System: Physical Conditions Report Outline

Physical Conditions:

1. Introduction
 - Purpose of the report
 - Physical Conditions versus Operational Conditions
 - Summary of Findings
2. Defining the Arterials, Highways and Freeway System
 - STA Roadway Funding Priorities: Solano Routes of Regional Significance (RORS)
 - a. Define “Significance” with approved criteria
 - i. Links to land use (i.e. employment centers and transit facilities)
 - ii. Congestion Management Program
 - iii. Emergency Response Improvements
 - b. Interstate and State Highways included in RORS
 - i. Define Interstate and State Highways in Solano County
 - ii. Start and end point with discussion on connections
 - iii. Describe Characteristics
 - Responsible agency (Caltrans vs Local Agencies)
 - Length of facility
 - Number of lanes of each facility
 - Median facility (list what each corridor includes)
 - ITS
 - Cross section describing the corridor shoulders, median and lane configurations
 - c. Local Roads/Arterials included in RORS
 - i. List and illustrate local roads included in RORS
 - ii. Describe Characteristics
 - Responsible agency (Local Agencies)
 - Length of facility
 - Number of lanes of each facility
 - Other characteristics
 - d. Community and Intercity Connector Routes
 - i. Purpose
 - ii. Current projects underway
 - Jepson Parkway
 - North Connector
 - iii. Potential projects
 - Columbus Parkway
3. Roadway Conditions
 - Local Roads
 - a. Pavement Management Index
 - i. MTC Pavement Condition Index (PCI) Tracking Process

- ii. PCI definition and examples of PCI categories
 - iii. PCI scores for the County and Member Agencies
 - b. Funding for local pavement management
 - i. STP Local Streets and Roads Funds
 - ii. Gas Tax
 - iii. Others
 - c. Construction projects on local roads included in RORS
 - i. Recently completed
 - ii. Planned
 - Solano County Highways and Freeways
 - a. Caltrans “Distressed Lane Miles” analysis for Solano County Highways and Freeways
 - b. Funding sources for Highways and Freeways Maintenance
 - i. SHOPP Projects list
 - ii. Others
 - c. Construction projects
 - i. Recently completed
 - ii. Planned
- 4. Conclusions
 - Findings
 - Next steps

1. INTRODUCTION

The purpose of this report is to provide a current status of the of the state of Solano County’s Roadway System. The report is divided in two distinct focus areas: the physical aspect and the operational aspect.

The State of the System: Physical Conditions includes:

- Countywide Roadway System Definition
- Current Roadway conditions
- Caltrans “Distressed Lane Miles” (Caltrans report for maintaining highways and freeways)
- Current Construction Activities

In a separate follow up report, the State of the System: Operational Conditions will focus on:

- Safety and accident rates analysis
- Mobility (average travel time, vehicle miles travelled, and Level of Service (LOS))
- Users and destinations (define who is the client-census info; journey to work, goods movement, transit routes)
- System efficiency

<To Be Added>Summary of Findings-

2. DEFINING THE SYSTEM

STA Roadway Funding Priorities: Solano Routes of Regional Significance

The STA prioritizes countywide transportation planning and programming transportation funds for all State highways within Solano County and principal arterials that connect communities to the State highway system as well as other communities within Solano County. This priority roadway system is defined in the Solano County Routes of Regional Significance. The STA’s Routes of Regional Significance are the routes deemed critical for maintaining existing mobility between the County and through the cities. The proposed Routes of Regional Significance freeway and roadway segments are illustrated in Figure 1.

Routes of Regional Significance (RORS) Criteria

To be considered a Route of Regional Significance, the roadway segment has demonstrated its importance by fulfilling at least one of the following criteria:

1. Solano County Congestion Management Program (CMP) Network¹
2. Access to Existing and Planned Transit Centers Serving Intercity Trips
3. Access to a Major Employment Center with HighTraffic Volumes
4. Intercity and Freeway/Highway Connection
5. Improves Countywide Emergency Response

<To Be Added> Criteria Definitions and examples

Solano Interstate and State Highway Routes included in RORS

The Solano Transportation Authority (STA), as the Congestion Management Agency (CMA) for Solano County, works with the County of Solano and the seven cities, the California Department

¹ The Solano County CMP includes a defined roadway system used for monitoring mobility in the county.

Solano County Draft Routes of Regional Significance (2008)

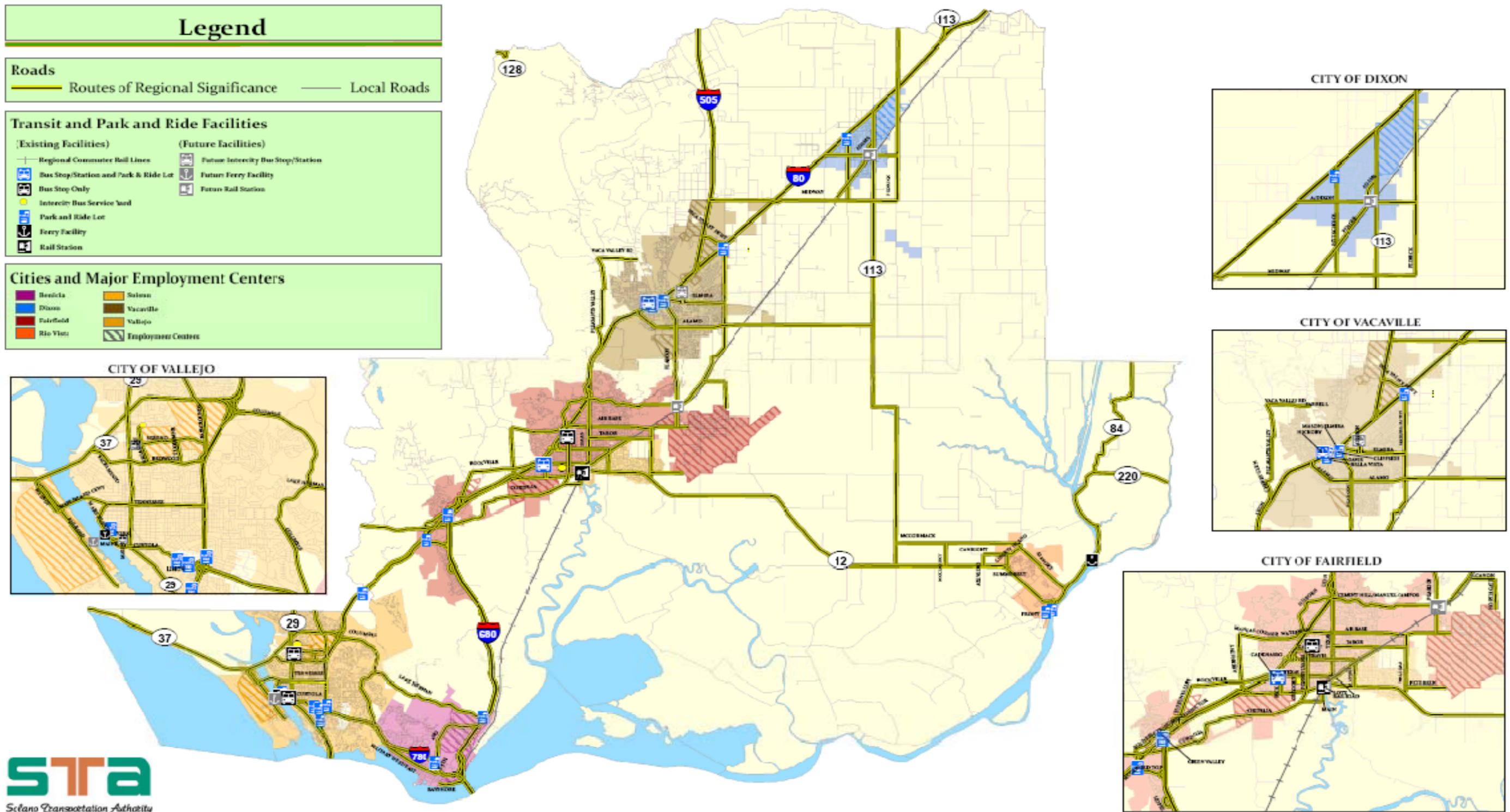


Figure 1. Solano County Draft Routes of Regional Significance

of Transportation (Caltrans), the Metropolitan Transportation Commission (MTC), Federal Highway Administration (FHWA) and other agencies to coordinate planning, funding and construction of improvements to Solano County’s major roadway systems.

Solano County has four Interstate corridors, seven state-highway routes, and numerous arterials providing intra- and inter-county connections. Interstate corridors are a network of freeways of national defense importance. These freeway routes were created by Congress and constructed with Federal-aid Interstate System Funds. In Solano County, these include Interstate 80, 505, 680, and 780. Routes on the Interstate system are signed with Interstate route shields which differ with State highway route sign shields.



State highway routes, as the name implies, are state highways within the state that serve intrastate and interstate travel. According to the Caltrans Highway Design Manual, “The Legislature has stated its intent that the routes of the State Highway System serve the State’s heavily traveled rural and urban corridors, that they connect the communities and regions of the State, and that they serve the State’s economy by connecting centers of commerce, industry, agriculture, mineral wealth, and recreation.” State Route (SR) 12, SR 29, SR 37, SR 84, SR 113, SR 220 and a brief segment of SR 128 run through Solano County.



The table below further describes the highway and freeway corridor characteristics in Solano County.

Corridor	Centerline Miles	Responsible Agency	Median Type	ITS characteristics	Lanes
I-80	42	Caltrans	<To be added>	<To be added>	6-8 lanes
I-505	9	Caltrans	<To be added>	<To be added>	4 lanes
I-680	13	Caltrans	<To be added>	<To be added>	4 lanes (not including lanes on Benicia Martinez Bridge)
I-780	6	Caltrans	<To be added>	<To be added>	4 lanes
SR 12	28	Caltrans	<To be added>	<To be added>	2-4 lanes
SR 29	6	Caltrans	<To be added>	<To be added>	4 lanes
SR 37	10	Caltrans	<To be added>	<To be added>	2-4 lanes
SR 84	10	Caltrans	<To be added>	<To be added>	2 lanes
SR 113	21	Caltrans	<To be added>	<To be added>	2-4 lanes

SR 128	2	Caltrans	<To be added>	<To be added>	2 lanes
SR 220	3	Caltrans	<To be added>	<To be added>	2 lanes

Table 1. Solano County Highway and Freeway Summary

Interstate 80 (I-80) is Solano County’s most prominent freeway. All Interstate routes in Solano County connect I-80. The I-80 Corridor carries a significant amount of locally generated traffic as well as through traffic from the Bay Area and the Sacramento Valley. State highways that connect to I-80 are SR 12, SR 29, SR 37 and SR 113. Solano County’s three largest cities, Vallejo, Fairfield, and Vacaville, are directly connected to I-80. The City of Dixon is also connected to I-80 in the North. The cities of Rio Vista and Suisun connect to I-80 from SR 12 or SR 113 from Rio Vista. The City of Benicia is directly connected to I-780 and I-680. Both Interstate routes connect to I-80 in the west at Vallejo via I-780 and Fairfield via I-680.

Solano County Local Streets and Roads included in RORS

The Metropolitan Transportation Commission (MTC) reported in the 2008 State of the System Report that Solano County and the seven cities maintain a total of 3,268 lane miles of local streets and roads. The County of Solano maintains the most miles with a total of 942 miles of unincorporated streets and roads. The City of Vallejo has the second most miles of local roadways to maintain with 642 miles. Table 2 provides a list of the total lane miles maintained by each STA member agency.

Agency	Total Lane Miles
Benicia	183
Dixon	129
Fairfield	655
Rio Vista	45
Solano County	1174
Suisun City	145
Vacaville	527
Vallejo	642
Total	3500

Table 2. Total Lane Miles by Agency

RORS Local Road/Arterial Characteristics

Roadway	Length	Number of lanes	Other Characteristics
<To Be Added>	<To Be Added>	<To Be Added>	<To Be Added>
<To Be Added>	<To Be Added>	<To Be Added>	<To Be Added>
<To Be Added>	<To Be Added>	<To Be Added>	<To Be Added>
<To Be Added>	<To Be Added>	<To Be Added>	<To Be Added>

Community and Intercity Connector Routes

The STA partnered with cities and the County to plan and upgrade connector routes. These routes provide options for local traffic to travel instead of utilizing the Interstate or highway system. These connector routes encourage a cohesive link between land use and transportation and include aspects such as transit facilities, and bicycle and pedestrian options with land use policies to support these improvements. The benefits to the reliever routes are that they decrease traffic on the mainline freeway/highway corridors and provide focused transit and traffic safety improvements to major arterials connecting communities and cities in Solano County. Solano County's current connector routes being developed are the Jepson Parkway and the North Connector Project.

1. The Jepson Parkway

The Jepson Parkway Project is a coordinated strategy for developing a multimodal two to four lane corridor between Suisun City, the cities of Fairfield and Vacaville, and the Solano County unincorporated areas north west of Travis Air Force Base. The Jepson Parkway Project is designed to upgrade and link a series of narrow local roads to provide a north-south travel route

for residence to utilize instead of I-80. The Jepson Parkway links existing road segments of Leisure Town, Vanden, Cement Hill and Walters Road to provide a connection between Highway 12 and I-80. The project includes direct connections to the future Fairfield Vacaville Capitol Corridor Train Station, local and intercity bus service, and regional bicycle routes.

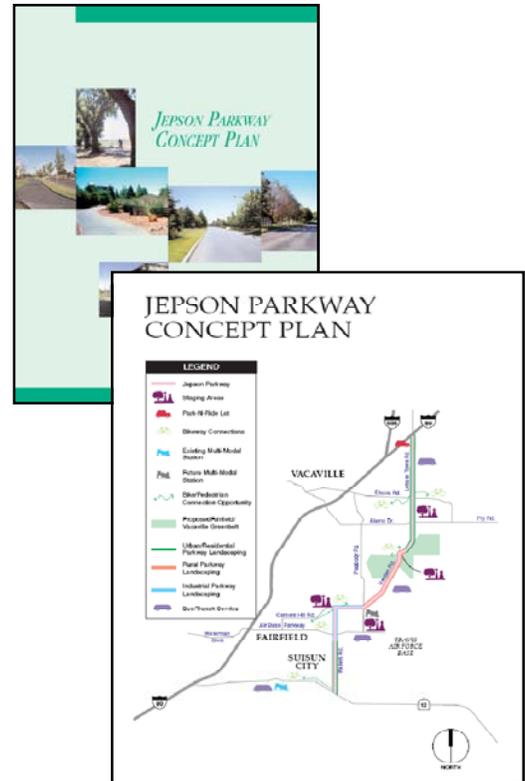


Figure 2. 2001 Jepson Parkway Concept plan

2. North Connector Project

The North Connector project involves constructing two segments of a two to four-lane arterial connection in the City of Fairfield and Solano County, north of I-80 between Abernathy Road on the east and State Route 12/Red Top Road on the west. The first phase of the project involves construction of the east end from Abernathy Road to west of Suisun Creek. The purpose of the project is to address existing and future traffic congestion on local streets and I-80 in Solano County and the City of Fairfield, and to provide a better local circulation network for transit users, bicyclists, and pedestrians.

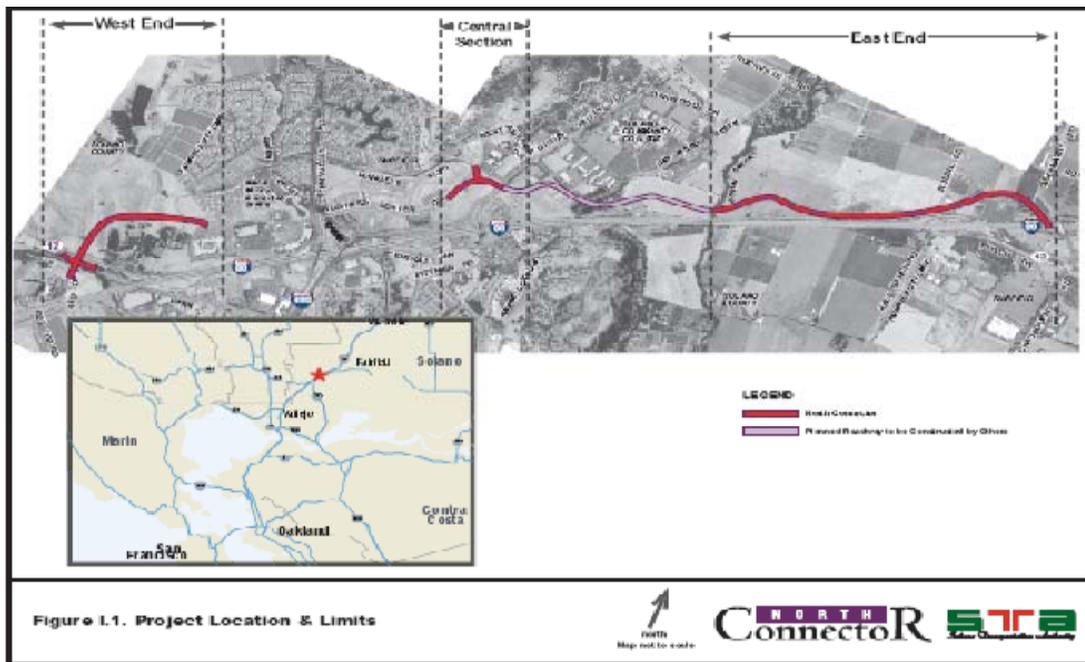


Figure 3. North Connector Project location.

Another potential connector route under consideration is Columbus Parkway between the cities of Vallejo and Benicia.

3. ROADWAY CONDITIONS

There are several methodologies to evaluate current road conditions. As the Solano Comprehensive Transportation Plan (CTP) continues to be developed, performance measures will be discussed and developed to assess the future roadway network based on the implementation of the goals and objectives of the CTP. To provide a snapshot of the current roadway conditions the STA evaluated current information related to:

- Solano County Pavement Management Index
- Caltrans “Distressed Lane Miles” (Caltrans report for maintaining highways and freeways)

Solano County Pavement Management Index

MTC’s Pavement Management System tracks the conditions of the streets and roads for the Bay Area by surveying the Pavement Condition Index (PCI) throughout the Bay Area. The PCI is based on a point system that ranges from 0 to 100 that measures the type and severity of the pavement distress. A PCI scores are rated as follows:

<u>Pavement Condition</u>	<u>PCI Score</u>
Poor	25-49
At-Risk	50-59
Fair	60-69
Good	70-79
Very Good	80-89

Pavement with a PCI score below 25 is in severe distress; in contrast, pavement with a PCI score above 89 is in optimal condition. PCI data are generally provided by cities and County agencies on an annual basis. In some cases, MTC needed to estimate the PCI based on previous year PCI reports. According to MTC’s 2007 PCI report, no Bay Area agency reported a PCI score below 25 or above 89.

<To Be Added> Illustrations of Pavement Condition Examples (Poor, At-Risk, Fair, Good, Very Good)

Solano County and the seven cities collectively have an average score of 65 with a Fair rating.

Agency	Total Lane Miles	PCI Survey Year				Rating
		2003	2004	2005	2006	
Benicia	183	70	71	70	70	Good
Dixon	129	70	77	79	81	Very Good
Fairfield	655	80	79	78	77	Good
Rio Vista	45	60	57	55	51	At-Risk
Solano County	942	60	59	59	58	At-Risk
Suisun City	145	61	58	56	53	At-Risk
Vacaville	527	73	74	76	78	Good
Vallejo	642	54	54	54	54	At-Risk
	Average PCI	66.0	66.1	65.8	65.2	Fair

Table 3. 3-Year PCI Agency Ratings for Solano County.

<To Be Added>Insert Graphic Table for PCI

In addition to measuring the pavement quality for streets and roads, the PCI is a factor in determining federal funding levels for local agencies streets and roads maintenance. Other factors include population and lane miles.

Local Roads/Arterials included in RORS

Over the last two years, Solano County received a little over \$3.462 million in Federal Surface Transportation Project (STP) funding for the County unincorporated area and cities’ local street and roads maintenance. On October 12, 2005, the STA Board approved streets and roads funds in the amounts listed on Table 4 for FY 2007-08 and FY 2008-09.

<To Be Added>Other local funds spent on streets and roads maintenance

Agency	3 rd Cycle Local (FY 2007-08 and FY 2008-09) Streets and Roads Allocation	Other local funds
Solano County	\$ 1,055,954*	<To Be Added>
Benicia	\$ 202,371	<To Be Added>
Dixon	\$ 131,089	<To Be Added>
Fairfield	\$ 544,822	<To Be Added>
Rio Vista	\$ 77,332	<To Be Added>
Suisun City	\$ 206,088	<To Be Added>
Vacaville	\$ 531,837	<To Be Added>
Vallejo	\$712,678	<To Be Added>
Total	\$ 3,462,171	

Table 4. Streets and Roads Allocations for Solano County

* Includes Federal Aid Secondary set-aside requirement for County streets and roads funding

<To Be Added>Construction Projects on RORS Local Roads/Arterials

Solano County Highway and Freeways

<To Be Added>Caltrans “Distressed Lane Miles” analysis for Solano County

Funding for Highways and Freeways Maintenance

<To Be Added>Caltrans SHOPP Process

<To Be Added>SHOPP list

<To Be Added>Other revenue

Construction Projects

Over the last six years, Solano County has had major transportation improvements constructed on its highways and freeway network:

1. Al Zampa Bridge Project (Carquinez Bridge). The new bridge span was constructed with three westbound lanes, a High Occupancy Vehicle (HOV) lane and a pedestrian/bicycle lane. The project was completed on time and within budget. It was funded entirely with local Regional Measure 1 funds passed by Bay Area voters in 1988. Completed in 2003.
2. I-80/680 Interchange Auxiliary Lane Project. The I-80/I-680 Auxiliary Lane project added a fifth through-lane in each direction on I-80 between I-680 and State Route 12 (east), as

well as expanded the existing one-lane connector ramp to two lanes between I-80 and I-680 in both directions. Completed in 2004.

3. SR 37/29 Interchange Project. Caltrans improved State Route 37 to a four-lane freeway in each direction from the Napa River Bridge to Diablo Street in Vallejo. A cloverleaf interchange was also constructed at the Highway 37/29 Interchange. Completed in 2005.
4. George Miller Bridge Project (Benicia Martinez Bridge). The bridge improvement project was constructed to include five northbound lanes, four southbound lanes, a bicycle pedestrian lane, and capacity to add future light rail service. Project was funded by voter approved Regional Measure 1 and 2. New bridge span completed in 2007. Retrofitted bridge under construction.
5. SR 12 Safety Improvements. Caltrans completed several safety projects on SR 12 in 2007 and 2008. These included an installation of a median concrete barrier east of Walters Road in Suisun City to Shiloh Rd, rumble strips and centerline channelizers, safety interchangeable signs, shoulder widening and speed radars.

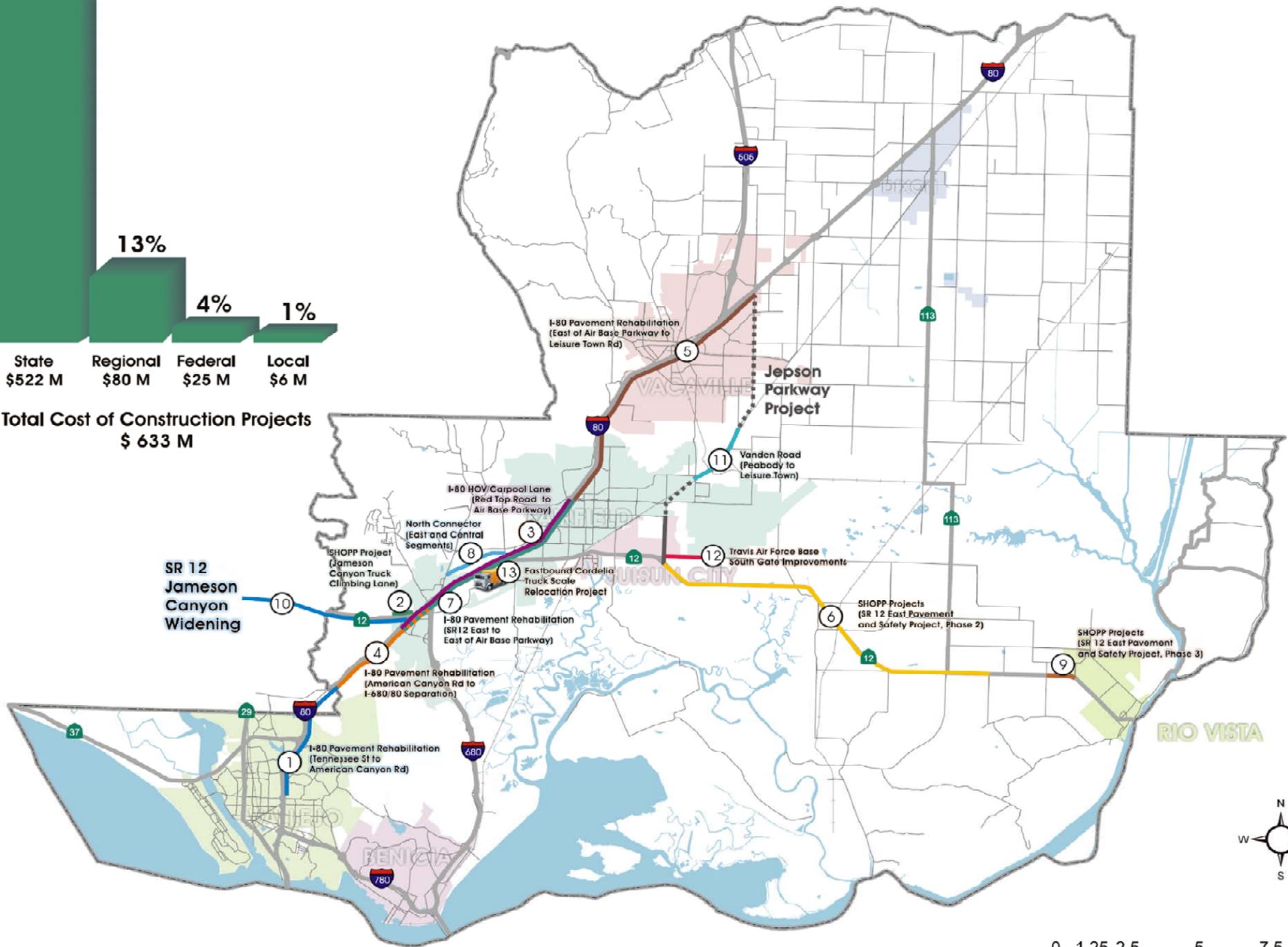
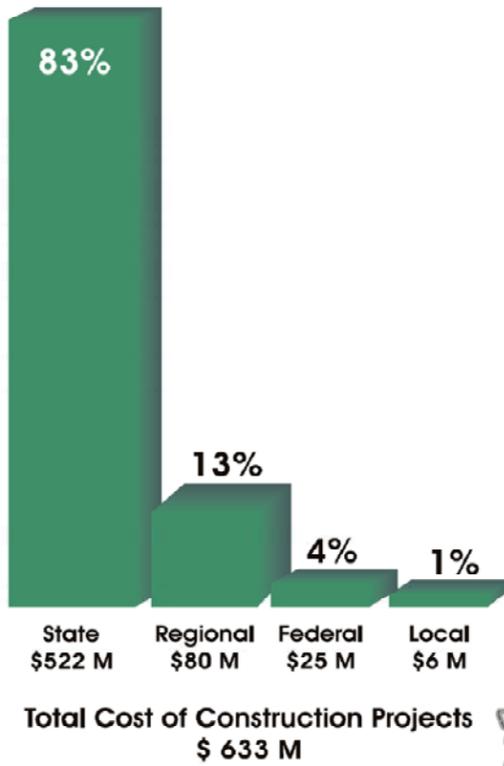
<To Be Added> Photos of completed projects

The STA in coordination with the County of Solano, seven cities, member agencies, Caltrans and MTC anticipates 13 additional major construction improvements over the next four years. Figure 2 provides a summary of these projects including anticipated completion dates as of April 2007. A total of \$633 million in construction funds have been secured for safety projects on SR 12, I-80 pavement rehabilitation projects and HOV/Carpool lanes, California Highway Patrol's Truck Scale relocation, road improvements along the Jepson Parkway, and access improvements to Travis Air Force Base.

<To Be Added> Chart for RTP Tier 1 Projects

<To Be Added> CONCLUSION

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-680/80 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 Vanden Road (Peabody to Leisure Town)
- Summer 2011 ⑫ Travis Air Force Base South Gate Improvements
- Fall 2012 ⑬ Eastbound Cordelia Truck Scale Relocation Project



Solano County Construction

The next 4 years of construction

May 5, 2008

Figure 2. Solano County Construction.



DATE: December 8, 2008
TO: STA TAC
FROM: Robert Guerrero, Senior Planner
RE: Solano Modeling TAC Appointments

Background:

On September 12, 2001, the Solano Transportation Authority (STA) Board authorized the development of the first Solano Napa Multi-Modal Regional Transportation Model. Solano County modelers and modeling associates from the surrounding counties and regions were invited to participate in the development of the new Solano Model. This core group of modelers informally became the Model Technical Advisory Committee (TAC) for the new model. The STA and the modeling consultant (DKS Associates) relied upon the Model TAC to assist in providing data and peer review for quality control. Initial tasks for the Model TAC included deciding what modeling software to use and providing land use data for the Model's base conditions.

The original Model TAC included participants from the Napa County Transportation Planning Agency and the cities of Benicia, Dixon, Fairfield, Vacaville, and Vallejo. Other active participants included staff from San Joaquin Council of Governments, Sacramento Area Council of Governments, the Metropolitan Transportation Commission, and Caltrans. The City of Rio Vista, the City of Suisun City and Solano County did not have participants on the Modeling TAC. The STA's model member from City of Fairfield provided land use information on behalf of the agencies without active participants.

The first phase of the Solano Napa Travel Demand Model was adopted by the STA Board on February 9, 2005 and was calibrated with travel demand assumptions from the Association of Bay Area Governments Projections 2003 and transportation funded projects from MTC's 2002 Regional Transportation Plan. The 2005 Solano Napa Model forecasted traffic conditions in Solano County with reasonable certainty through 2030. An update (Phase 2) of the Solano Napa Model began immediately after the 2005 Model was completed to reflect MTC's 2005 RTP and ABAG's Projections 2005 data. The updated model continued to forecast traffic conditions through 2030. The STA Board adopted the Phase 2 Model on June 11, 2008.

Discussion:

The Model TAC continued to be the main resource for local land use information and peer review for the 2008 model update; however, participation and information sharing have begun to decline. STA staff is currently formalizing the Model TAC roles and responsibilities and is seeking a formal participation from its member agencies. The goal is to have the Model TAC members more accountable for land use recommendations provided to the STA as part of the development of the Solano Napa Travel Demand Model. Attachment A lists the current Model TAC participants.

The current Model TAC participants met on Wednesday, December 10th to discuss roles and responsibilities of the Committee. STA staff initially proposed that the STA TAC formally recommend appointments for the Model TAC. However, the Model TAC participants agreed unanimously that planning departments need to be more involved as well as recognizing land use information must be submitted by the agency planning departments. There was consensus among the Model TAC participants to have a Model TAC with a subcommittee that focuses on land use data. The suggestion was to have the Model TAC primarily be modelers or similar public works staff appointed by the Public Works Directors. The Model TAC land use subcommittee was suggested to include planning staff appointed by Planning Directors.

STA staff is developing a committee structure proposal with a work program for the STA TAC to consider at their January 2009 meeting. STA staff will also meet with the Solano County Planning Directors to discuss the Model TAC in January 2009.

It is anticipated that the Model TAC is expected to meet every quarter to:

1. Review the current administration of the model
2. Review upcoming projects that need model analysis
3. Discuss land use changes and anticipated land use development information sharing

The initial task of the Model TAC will be to assist in a technical update of the current Model in anticipation of the upcoming Regional Transportation Impact Fee (RTIF) Nexus Study. The Model TAC and the Model TAC subcommittee appointments will be responsible for their agency's modeling data used for future Solano Napa Travel Demand Model purposes.

Recommendation:

Informational.

Attachment:

- A. Current Solano Napa Model Technical Advisory Committee Participants

Current Solano Napa Model Technical Advisory Committee Participants

Agency	Contact	Model Data Resource Administration
Napa City	Diana Vargas, NCTPA	Napa County Transportation and Planning Agency Files
Napa County	Diana Vargas, NCTPA	Napa County Transportation and Planning Agency Files
Benicia	Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services)	Solano/Napa Model
Dixon	Jason Riley, City of Dixon Public Works	Dixon Model
Fairfield	Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services)	Fairfield/Suisun Model
Rio Vista	Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services)	Solano/Napa Model
Suisun City	Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services)	Fairfield/Suisun Model
Vacaville	Ozzie Hilton, City of Vacaville Public Works	Vacaville Model
Vallejo	1) Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services) 2) Mike Aronson, Dowling Associates (model contractor for the City of Vallejo)	Vallejo Model
Unincorporated Solano County	Ken Harms, City of Fairfield Public Works (contracted by STA for day to day modeling services)	Solano/Napa Model



DATE: December 8, 2008
TO: STA TAC
FROM: Robert Macaulay, Director of Planning
RE: Climate Change Status

Background:

The California Legislature passed and the Governor signed Assembly Bill (AB) 32, the California Global Warming Solutions Act in 2006. In 2008, the Legislature passed and the Governor signed Senate Bill (SB) 375 to require communities to develop sustainable communities plans to tie regional housing needs allocations, regional transportation plans and greenhouse gas (GHG) reduction efforts to each other. Most jurisdictions are still working to formulate specific programs to achieve the mandated reductions in GHG.

On November 17, 2008, the Legislative Analyst Office (LAO) issued a report on the California Air Resources Board (CARB) draft scoping plan for GHG reduction. The LAO is a non-partisan research arm of the Legislature, and its research and conclusion papers are considered balanced and authoritative.

The City County Coordinating Committee (4Cs) has requested that Solano County and the STA to work together with the 7 Cities to develop an initial plan for GHG reduction. Solano County is seeking to hire an individual to help create a scope for work for a GHG initial inventory and subsequent emission reduction plan. Once a detailed scope of work is completed, the County and STA will seek funding from the Bay Area and Yolo-Solano air districts to help fund this study.

Discussion:

The LAO report, included as Attachment A, makes several key findings, including:

- Most of the assumed GHG emission reductions come from a single source – assumed improved fuel efficiency for cars and light trucks.
- The plan analysis shows an economic savings, but the analysis leading to this conclusion lack details.
- The plan does not lay out an implementation strategy.

From the perspective of STA staff, the transportation measures with the largest impact should be implemented at a state-wide level. The local measure with the greatest potential impact to GHG emissions is a reduction in Vehicle Miles Traveled (VMT), yet this measure only accounts for 8% of the identified transportation-sector reduction, and only 2.8% of the total targeted reduction.

The ability to achieve local reductions in GHG emissions will likely involve a broad range of approaches, from VMT reduction to green building practices and land use pattern changes. Before a plan that can be implemented by all of the local jurisdictions is implemented, a local GHG emission inventory is needed. Solano County committed to

developing and implementing GHG reduction measures during the recent update of its general plan, and STA anticipates similar commitments to flow from the update of the Comprehensive Transportation Plan. Solano County staff is taking the lead in identifying and hiring an individual with local experience to develop the GHG inventory and emission reduction plan, while STA staff is developing a detailed draft scope of work for the consultant.

Fiscal Impact:

None.

Recommendation:

Informational.

Attachment:

- A. LAO Report, dated November 17, 2008

November 17, 2008

Hon. Roger Niello
Assembly Member, Fifth District
Room 6027, State Capitol
Sacramento, California 95814

Dear Assembly Member Niello:

The following is in response to your letter dated August 6, 2008, in which you requested that we report on the draft scoping plan of the Air Resources Board (ARB) for implementation of the Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006 [AB 32, Núñez]). Your letter was a follow-up to earlier communication from you and Assembly Member Villines requesting our analysis of the plan. Specifically, you asked our office to:

- Provide a summary of the draft scoping plan to reduce greenhouse gas (GHG) emissions and a discussion of the major measures contained within the plan.
- Identify measures proposed in the draft scoping plan that lack an economic impact analysis that support them.
- Provide, to the extent possible, a critique of the adequacy of the plan's analysis of economic impacts in support of a proposed measure, and the reasonableness of the conclusions drawn from that analysis.
- Provide a discussion of some of the key policy choices warranting legislative evaluation raised by measures proposed in the draft scoping plan, such as so-called "cap-and-trade" mechanisms or a carbon tax or fee.

The remainder of this letter addresses each of your requests in turn. Immediately below, we provide a summary of the bottom-line findings of our analysis.

Summary of LAO's Findings. As a result of our review and analysis of ARB's scoping plan and accompanying documents, we find the following:

- ***The scoping plan's overall emissions reductions and purported net economic benefit are highly reliant on one measure—the Pavley regulations.*** Implementation of the so-called Pavley regulations on light-duty vehicle emission of GHGs (developed in accordance with Chapter 200, Statutes of 2002 [AB 1493, Pavley]) accounts for about 18 percent of the plan's emissions re-

ductions. It also accounts for roughly 70 percent (\$11 billion) of the plan's net direct economic savings to businesses and consumers, according to ARB's documentation.

- ***The plan's evaluation of the costs and savings of some recommended measures is inconsistent and incomplete.*** The plan does not reflect the costs and savings of all of the emissions reduction measures that it recommends. This is because, in some cases, ARB has intentionally excluded the costs and savings associated with certain measures, such as the "million solar roofs" program. In other cases, including the proposed cap-and-trade program, ARB has yet to develop the costs and savings associated with its measures. For one measure—the low-carbon fuel standard—ARB acknowledges that the assumptions behind its estimates of costs and savings are weak at present, even though this measure represents a significant portion of the plan's direct costs and savings.
- ***Macroeconomic modeling results show a slight net economic benefit to the plan, but ARB failed to demonstrate the analytical rigor of its findings.*** Despite its findings—slight, eventual overall benefit to the economy—the macroeconomic analysis conducted by ARB provides little insight. The findings are highly dependent upon key assumptions, and ARB has not performed an analysis to determine how sensitive the macroeconomic findings are to changes in the key assumptions.
- ***Economic analysis played a limited role in development of scoping plan.*** It appears that ARB selected measures for inclusion in the scoping plan and then conducted its economic analysis of the plan as a whole after the fact. Selection of particular measures and the mix of measures appear not to have been directly influenced by cost-effectiveness considerations or macroeconomic analysis. In fact, ARB deemed all measures included in the plan "cost-effective" simply because they reduce GHG emissions, whatever the cost.
- ***The plan fails to lay out an "investment pathway."*** Despite its prediction of eventual net economic benefit, the scoping plan fails to lay out an investment pathway to reach its goals for GHG emissions levels in 2020. Such a pathway would describe, year-by-year, the investments required by implementation of the plan and the timing of the economic return on those investments. This information is very important to businesses and households that would be responsible for these investments, especially in the current climate of pronounced economic uncertainty and scarce credit. In addition, because the modeling approach used provides information about how broad economic sectors would be affected, but not individual businesses and households, it cannot identify the types of disruptions certain parties could face under the proposal. For example, it is possible some businesses could lose money or go

out of business. An investment pathway analysis could potentially help to identify such problems.

BACKGROUND

ARB's Scoping Plan Documents

Assembly Bill 32 requires that California limit its emissions of GHGs so that, by 2020, California's emissions of GHGs are equal to what they were in 1990. To that end, AB 32 requires ARB to quantify the state's 1990 GHG emissions and to adopt, no later than January 1, 2009, a "scoping plan" that describes the board's plan for achieving the maximum technologically feasible and cost-effective reductions of GHG emissions reductions by 2020.

Beginning in June of this year, ARB, in keeping with AB 32, began releasing scoping plan documents to the public. Below is a summary of the documents released by ARB and the dates of their release.

- ***Draft Scoping Plan Released on June 26, 2008.*** The draft scoping plan provided an estimate of California's GHG emissions in 1990, outlined the GHG emissions reduction measures under consideration by ARB, and discussed the preliminary estimates of the costs and savings associated with implementation of the plan. The ARB highlighted the findings of its economic analysis of the scoping plan, which predicted the plan's positive effect on the California economy. However, the draft scoping plan did not include several supplements and appendices, including the details of its economic analysis of the scoping plan, that were listed in the plan's table of contents.
- ***Initial Economic Analysis Released on September 17, 2008.*** On this date, ARB released several supplements to the draft scoping plan, including its economic analysis.
- ***Proposed Scoping Plan Released on October 16, 2008.*** This version of the plan modified and replaced the earlier draft scoping plan, including its appendices and supplements, such as the economic analysis. The proposed scoping plan newly included an appendix that evaluated the public health benefits associated with the plan.

The board of ARB will consider and take public testimony on the proposed scoping plan at its next meeting, scheduled for November 20 and 21. The ARB is then expected to vote on adoption of the plan at its meeting scheduled for December 11 and 12.

LAO's Process for Reviewing the Scoping Plan

As requested, we have worked to understand and to analyze ARB's scoping plan—both in its draft and proposed forms. To complete these tasks, LAO staff in our Resources and Economics sections:

- Reviewed, as each version was released, the plan, appendices, supplements, and other related documents.
- Met in person in July and early September with ARB supervisors and program staff, including its economists and other staff responsible for developing (1) the scoping plan measures; (2) estimates of emissions reductions, costs, and savings; and (3) the economic model that ARB applied to the scoping plan.
- Examined, along with ARB staff, the real-time operation and components of the computer-based economic model used by ARB.
- Sent to ARB in early October a series of written follow-up questions based on our earlier meetings with ARB and our ongoing review of the scoping plan materials. We met with ARB supervisors and staff in early October to clarify the questions to help expedite ARB's response.

At the time we prepared this analysis, ARB had not provided written responses to our questions even though it had been provided ample time to do so. Should we ultimately receive ARB's written responses, we will provide you with any necessary updates to the content of this letter.

Finally, we note that ARB has arranged for peer review of its economic analysis of the scoping plan. This peer review is being conducted by an independent panel selected by economists from the University of California (UC), Berkeley. The ARB originally had informed us that the peer review findings would be available for our review by mid-to-late October, but no such findings have been made available to us to date. We also will update your office on the peer review findings when they become available.

HIGHLIGHTS OF THE PROPOSED SCOPING PLAN

You have requested that we provide you with a summary of the draft scoping plan to implement AB 32 and a discussion of its most significant components. We provide this information below.

ARB Concludes That Scoping Plan Leads to Direct Economic Savings

The proposed scoping plan recommends 31 GHG emissions reduction measures to be applied to 8 broad sectors of the economy that together would reduce GHG emissions to 1990 levels by 2020, as required by AB 32. The ARB estimates that, collectively, the measures would reduce California's GHG emissions by roughly 29 percent below what they would otherwise be in 2020 under the "business as usual" scenario. In addition, ARB concludes that implementation of the scoping plan measures would eventually result in nearly \$16 billion in net "annualized" savings (a concept we explain below) to California businesses and households as a whole.

This estimate of net annualized cost savings drives the results of ARB's macroeconomic modeling of the effects of the scoping plan on jobs, gross state product, and income, as discussed later in this analysis.

The Concept of Annualized Costs and Savings

The ARB's documents display both the costs and savings from implementation of the plan's recommended measures on an annualized basis. Therefore, it is important to define the annualized concept.

The ARB calculates the annualized costs of a GHG reduction measure by determining the total of associated capital outlay costs, such as the purchase price of equipment and the cost to finance that purchase. The ARB then spreads those costs, along with the costs of operation and maintenance of the capital good, over its projected useful lifetime, with costs occurring in future years discounted at 5 percent annually. The result is that the costs of a measure are distributed evenly in real dollar terms, year by year, over its life. The annualized costs, then, reflect the discounted costs for a single year for which a measure remains in effect.

Similarly, to determine what it terms annualized savings, ARB estimates the dollar value of annual savings expected to result over the life of the measure, such as the yearly savings resulting from increased fuel efficiency, again discounting savings occurring in future years by 5 percent annually. This distributes the discounted savings from a measure evenly, year by year, over its life.

To determine *net* annualized costs/savings of a measure, ARB compares the annualized savings to the annualized costs. Net annualized costs/savings, then, are the theoretical costs/savings that would result in any given year that a measure remains in effect.

For example, consider a hypothetical measure that, similar to the Pavley regulations, reduced GHG emissions from passenger vehicles. As a result of the measure, consumers would purchase vehicles that each cost more than the vehicles they otherwise would have purchased but that each save consumers money as the result of increased fuel efficiency.

The ARB would calculate the annualized cost of compliance with the measure as follows. For each year the measure was in effect, ARB would multiply the number of cars purchased as a result of the measure by the additional costs paid by consumers as a result of the measure. Next ARB would sum the annual cost of compliance to determine the overall cost of compliance, first having discounted future expenses at a discount rate of 5 percent per year. Then, ARB would divide the overall cost of compliance by the number of years during which the vehicles will remain in operation. The resulting dollar amount is the annualized cost of compliance, or, in other words, the cost of compliance with a measure in an average year.

To calculate annualized savings of the measure, ARB would estimate the dollar amount that consumers will save as a result of the measure during each year of the vehicles' useful lives, discounting future savings at a rate of 5 percent per year. The ARB

would then sum those discounted savings to arrive at the overall savings associated with the measure. Finally, ARB would divide the overall savings by the number of years during which the vehicles will be in operation. The resulting dollar amount is the annualized savings associated with the measure, or, in other words, the amount saved in an average year as a result of the measure.

To determine the net annualized costs/savings of the measure, ARB simply subtracts annualized savings from annualized costs.

Components of the Plan

Figure 1 summarizes, by sector, the GHG emissions reductions expressed in MMTCO₂E (millions of metric tons of carbon dioxide equivalents) and annualized costs/savings that ARB estimates would relate to a single year from implementation of the scoping plan. Figure 2 shows the measures that the scoping plan proposes for each sector shown in Figure 1, along with the scoping plan’s estimates of annualized costs/savings that would be achieved from the measures in a given year.

Figure 1			
Scoping Plan’s Greenhouse Gas (GHG) Emissions Reductions, by Sector^a			
<i>(GHG emissions in MMTCO₂E in 2020)</i>			
<i>(Dollars in Millions)</i>			
Sector	Business-as-Usual GHG Emissions	Scoping Plan GHG Emissions Reductions	Net Annualized Cost/Savings^b
Transportation	225.4	62.4	-\$14,047
Electricity	139.2	45.3	-1,191
Industry	100.5	1.4	-60
High global warming potential gases	46.9	20.3	129
Commercial and residential	46.7	4.4	-470
Recycling and waste management	7.7	1.0	52
Forests	—	5.0	50
Subtotals	596.2	139.8	-\$15,537
Regional cap and trade	—	35.0	—
Totals	596.2	174.8	-\$15,537

^a Does not include 7.8 millions of metric tons of carbon dioxide equivalents (MMTCO₂E) of reductions in water and agricultural sectors, because water reductions are accounted for in business-as-usual scenario and agricultural reductions are voluntary.

^b Negative dollar amounts represent net savings.

Figure 2					
Scoping Plan's Greenhouse Gas (GHG) Emissions Reductions Measures					
<i>(GHG emissions in MMTCO₂E in 2020)</i>					
<i>(Dollars in Millions)</i>					
Sector	Measure	GHG Emissions Reductions	Annualized Costs	Annualized Savings	Net Annualized Costs/Savings^a
Transportation		62.3	\$16,208	\$30,255	-\$14,047
	Pavley light-duty vehicle emissions regulations	31.7	1,966	13,024	-11,058
	Low-carbon fuel standard	15.0	11,000	11,000	—
	Vehicle miles traveled reductions	5.0	500	2,054	-1,554
	Light-duty vehicle efficiency measures	4.5	1,033	1,863	-830
	Goods movement efficiency measures	3.5	TBD	TBD	TBD
	Support implementation of high-speed rail	1.0	—	—	—
	Heavy-/medium-duty vehicle aerodynamic efficiency	0.9	1,616	2,137	-521
	Heavy-/medium-duty vehicle hybridization	0.5	93	177	-84
	Ship electrification at ports	0.2	—	—	—
Electricity		45.3	\$7,436	\$8,627	-\$1,191
	Increase renewable electricity generation to 33 percent	21.3	3,672	1,889	1,783
	Energy efficiency and conservation—electricity	15.2	3,402	5,065	-1,663
	Increase combined heat and power use	6.7	362	1,673	-1,311
	Million solar roofs	2.1	—	—	—
High Global Warming Potential Gases		20.3	\$159	\$30	\$129
	Reductions from stationary sources	10.9	32	30	2
	Mitigation fee	5.0	100	—	100
	Reductions from mobile sources	3.4	21	TBD	TBD
	Sulfur hexafluoride limits in non-utility and non-semiconductor applications	0.3	<0.1	<0.1	<0.1
	Limit use in consumer products	0.3	<0.1	—	<0.1
	Reduce refrigerant loss from nonprofessional servicing of motor vehicle air conditioning	0.3	3	—	3
	Reduction in semiconductor industry	0.2	3	—	3
Forestry		5.0	\$50	—	\$50
	Sustainable forest target	5.0	50	—	50
Commercial and Residential		4.4	\$963	\$1,433	-\$470
	Energy efficiency and conservation—natural gas	4.3	963	1,433	-470
	Solar water heating	0.1	—	—	—
Industry		1.4	\$11	\$71	-\$60
	Energy efficiency and cobenefits audits for large industrial sources	TBD	TBD	TBD	TBD
	Leak reduction from oil and gas transmission	0.9	\$1	\$18	-\$18
	Refinery flare recovery process improvements	0.3	7	46	-39
	Oil and gas extraction emissions reductions	0.2	<0.1	4	-4
	Removal of methane exemption from existing refinery regulations	<0.1	3	3	1

Continued

Sector	Measure	GHG			Net Annualized Costs/Savings ^a
		Emissions Reductions	Annualized Costs	Annualized Savings	
Recycling and Waste Management		1.0	\$52	—	\$52
	Landfill methane control	1.0	52	—	52
Subtotals		139.8	—	—	—
	Cap and trade system	35.0	—	—	—
Totals		174.8	\$24,879	\$40,416	-\$15,537

MMTCO₂E = millions of metric tons of carbon dioxide equivalents, TBD = to be determined.
^a Negative dollar amounts represent net savings.

As Figures 1 and 2 show, over two-thirds of the 175 millions of MMTCO₂E in GHG emissions reductions projected from the scoping plan come from 5 of 31 measures recommended by the proposed scoping plan:

- Cap-and-trade program—35 MMTCO₂E. (We discuss this proposed market-based policy approach in more detail in the last part of our analysis.)
- The Pavley light-duty vehicle emissions regulations—32 MMTCO₂E.
- Increase in electricity from renewable energy to 33 percent by 2020—21 MMTCO₂E.
- Energy efficiency and conservation in the electricity sector—15 MMTCO₂E.
- Low-carbon fuel standard—15 MMTCO₂E.

The preceding figures also show that ARB projects, as a result of implementation of the proposed scoping plan, the following direct economic effects for businesses and households:

- \$25 billion in annualized costs.
- \$40 billion in annualized savings.
- About \$16 billion in net annualized savings.

Plan Requires Sectors to Reduce Emissions Roughly in Proportion to Their Emissions

The ARB’s scoping plan calls for GHG emissions reductions from sectors that are roughly proportional to the emissions from those sectors. For example, the transportation sector is estimated to be responsible for roughly 38 percent of GHG emissions absent the implementation of measures to reduce GHG emissions. (As noted earlier, the scenario in which California’s emissions of GHGs are not reduced in 2020 is referred to in the ARB plan as business as usual, or BAU.) The scoping plan accordingly calls on the transportation sector to contribute nearly 36 percent of the plan’s overall emissions reductions. Similarly, the plan seeks 26 percent of its reductions from the electricity sector, which contributes about 23 percent of BAU emissions.

One seeming exception to this proportionality is the industrial sector. The scoping plan calls on the industrial sector to reduce its emissions by less than 1 percent through direct emissions reduction measures, even though that sector contributes about 17 percent of BAU emissions. However, ARB assumes that a large proportion of the emissions reductions resulting from the proposed cap-and-trade program will come from the industrial sector. Were all cap-and-trade emissions reductions to come from the industrial sector, that sector’s contribution to the plan’s overall GHG emissions reductions would total just over 20 percent.

Costs and Savings Concentrated in Transportation Sector

As noted above, the ARB plan would reduce GHG emissions in the transportation sector roughly in keeping with its share of GHG emissions (about 36 percent). However, as shown in Figure 3, the transportation sector would represent a much larger share of the plan’s costs and savings.

Figure 3
Costs and Savings Concentrated in Transportation Sector
(Dollars in Millions)

Sector	Percentage BAU GHG Emissions	Annualized Costs	Percent Annualized Costs	Annualized Savings	Percent Annualized Savings	Net Annualized Costs/Savings ^a
Transportation	37.8 %	\$16,208	65.1%	\$30,255	74.9%	-\$14,047
Electricity	23.3	7,436	29.9	8,627	21.3	-1,191
Industry	16.9	11	<1.0	71	<1.0	-60
HGWP gases	7.9	159	<1.0	30	<1.0	108
Commercial and residential	7.8	963	3.9	1,433	3.5	-470
Agriculture	5.0	156	<1.0	—	—	156
Recycling and waste management	1.3	52	<1.0	—	—	52
Forestry	—	50	<1.0	—	—	50

^a Negative dollar amounts represent net savings.
 BAU = business as usual, GHG = greenhouse gas, HGWP = high global warming potential.

**Plan Assumes Net Savings Heavily Concentrated in One Measure—
 The Pavley Regulations**

Figure 4 shows those recommended measures that account for the most significant proportions of annualized costs, annualized savings, or net annualized costs/savings.

Figure 4
Greenhouse Gas Reduction Costs and Savings Concentrated in a Few Measures
(Dollars in Millions)

Measure	Reductions (MMTCO ₂ E)	Annualized Costs	Percent	Annualized Savings	Percent	Net Annualized Costs/Savings ^a
Pavley light-duty vehicle emissions regulations	31.7	\$1,966	8.0%	\$13,024	32.2%	-\$11,058
Increase renewable electricity generation to 33 percent	21.3	3,672	14.9	1,889	4.7	1,783
Energy efficiency and conservation—electricity	15.2	3,402	13.8	5,065	12.5	-1,663
Low-carbon fuel standard	15.0	11,000	44.5	11,000	27.2	—
Heavy-/medium-duty vehicle aerodynamic efficiency	0.9	1,616	6.5	2,137	5.3	-521

MMTCO₂E = millions of metric tons of carbon dioxide equivalents.
^a Negative dollar amounts represent net annualized savings.

As the figure shows, the net annualized savings identified by the scoping plan are concentrated in one measure. Of the roughly \$16 billion in net annualized savings identified by the plan, approximately \$11 billion comes from implementation of the Pavley light-duty vehicle GHG emissions regulations.

LAO CRITIQUE OF ECONOMIC ANALYSIS

You have requested that we provide you with a critique of the adequacy and reasonableness of the analysis of economic impacts conducted by ARB in its review of its draft scoping plan. Our review found that the ARB’s economic analysis raises a number of questions relating to (1) how implementation of AB 32 was compared to doing BAU, (2) the incompleteness of the ARB analysis, (3) how specific GHG reduction measures are deemed to be cost-effective, (4) weak assumptions relating to the low-carbon fuel standard, (5) a lack of analytical rigor in the macroeconomic modeling, (6) the failure of the plan to lay out an investment pathway, and (7) the failure by ARB to use economic analysis to shape the choice of and reliance on GHG reduction measures. We discuss these concerns in more detail below.

Scoping Plan’s Treatment of BAU Scenario of Major Significance

The ARB projects that California will emit 596 MMTCO₂E of GHG emissions in 2020. This projection is based on the assumption that no actions are taken explicitly to reduce California emissions of GHGs between now and 2020, such as implementation of the Pavley regulations, regardless of the requirements of AB 32 or any other statute or policy. As noted earlier, this scenario is described by ARB as BAU. How the economic analysis categorizes the economic impacts of the BAU case has major significance.

Scoping Plan Presents Alternative to BAU. The scoping plan presents an alternative scenario to BAU. Under this alternative scenario, implementation of measures recom-

mended in the proposed scoping plan brings about an estimated 29 percent (175 MMTCO₂E) decrease in California’s emissions of GHGs by 2020, compared to the BAU case. Although some of the measures recommended in the scoping plan, such as implementation of the Pavley regulations, are required by statute or administrative action other than AB 32 (“non-AB 32 measures”), ARB nonetheless does not consider the GHG *emissions reductions* resulting from these non-AB 32 measures as BAU. Rather, it always attributes the GHG emissions reductions from these non-AB 32 measures to the AB 32 scoping plan. In other words, by assuming that no actions are taken to reduce GHG emissions by 2020, ARB overstates the problem that it then credits the scoping plan with addressing. Together, non-AB 32 measures account for at least 34 MMTCO₂E (about 20 percent) of the 175 MMTCO₂E of the scoping plan’s GHG emissions reductions.

ARB Varies in Attribution of Costs and Savings of Measures to BAU. The scoping plan varies in the way it reflects the *costs/savings* associated with the non-AB 32 measures it recommends. In some cases, ARB attributes the costs and savings of non-AB 32 measures to BAU. In such instances, the costs and savings are not reflected in the costs and savings associated with the scoping plan. In other instances, however, ARB does attribute the costs and savings associated with non-AB 32 measures to the scoping plan, and those costs and savings are reflected in ARB’s calculation of the costs and savings of the scoping plan.

The ARB’s explanation for its seemingly inconsistent treatment of the costs and savings of recommended non-AB 32 measures is shown in Figure 5.

Figure 5 Scoping Plan Rationale for Differing Treatment of Costs and Savings of Non-AB 32 Measures	
If...	...Then
The measure is not required by preexisting statute, regulation, or policy...	...The ARB attributes costs/savings to the scoping plan.
The measure is required by preexisting statute, regulation, or policy in order to reduce GHG emissions...	... The ARB attributes costs/savings to the scoping plan.
The measure is required by preexisting statute, regulation, or policy but is not explicitly for purposes of reducing GHG emissions...	... The ARB does not attribute costs/savings to the scoping plan.

For example, consider two non-AB 32 measures recommended by the scoping plan—the Pavley light-duty vehicle emissions regulations and the installation of 3,000 megawatts of rooftop solar by 2017. Each measure is required by a statute other than AB 32—the Pavley bill in the case of the vehicle regulations and Chapter 132, Statutes of 2006 (SB 1, Murray), in the case of rooftop solar (a so-called “million solar roofs initiative”). Because the explicit purpose of the Pavley regulations is to reduce GHG emissions, ARB attributed to the scoping plan the costs and savings associated with this

measure. Conversely, because the explicit goal of the million solar roofs initiative is increased renewable energy generation, not GHG emissions reductions per se, the plan does not consider the costs/savings associated with the measure as part of the state’s efforts to reduce GHG emissions and, therefore, does not attribute costs/savings associated with the measure to the scoping plan. Figure 6 below summarizes the measures that were excluded from ARB’s calculations of costs and savings.

Figure 6	
Scoping Plan Includes Emissions Reductions, But Intentionally Excludes Costs or Savings Associated With Four Measures	
<i>(Greenhouse gas reductions in MMTCO₂E)</i>	
Measure	Emissions Reductions
Million solar roofs	2.1
Support implementation of high-speed rail	1.0
Ship electrification at ports	0.2
Solar water heating	0.1
Total	3.4

MMTCO₂E = millions of metric tons of carbon dioxide equivalents.

Relevance to Economic Analysis. The ARB’s differing treatment of costs and savings associated with non-AB 32 measures substantially affects the ARB’s bottom-line economic projections for the plan. This is primarily, though not solely, because one non-AB 32 measure for which ARB attributed savings to the scoping plan—the Pavley regulations—accounts for such a large proportion of the plan’s projected net annualized savings—\$11 billion out of the plan’s purported roughly \$16 billion in net annualized savings. Were costs and savings of the Pavley regulations to be treated like those of the other non-AB 32 measures, for which ARB attributed no cost or savings, the net annualized savings that ARB attributes to the plan itself would be diminished considerably.

Notably, it is unclear what effect including the costs and savings of the non-AB 32 measures listed in Figure 6 would have had on the bottom-line costs and savings of the plan. These measures reflect roughly 2 percent of the emissions reductions from the measures recommended in the plan. However, the scoping plan does not provide any information on the costs and savings associated with these measures. Thus, in summary, the scoping plan includes an inconsistent and incomplete evaluation of costs and savings associated with its recommended measures.

Some Costs, Savings, or Emissions Reductions Undetermined for Certain Measures

For most measures included in the scoping plan, ARB has estimated anticipated emissions reductions, costs, and savings. However, this is not always the case. As

shown in Figure 7, ARB has yet to identify either the emissions reductions or resulting annualized costs/savings associated with the following measures.

Figure 7			
Some Reductions, Costs, or Savings Yet to Be Determined			
<i>(Dollars in Millions)</i>			
Measure	GHG Emissions Reductions (MMTCO2E)	Annualized Costs	Annualized Savings
HGWP gas reductions from mobile sources	3.4	\$21	TBD
Energy efficiency and cobenefits audits for large industrial sources	TBD	TBD	TBD
Goods movement efficiency measures	3.5	TBD	TBD

HGWP = high global warming potential, GHG = greenhouse gases, MMTCO2E = millions of metric tons of carbon dioxide equivalents.

As can be seen in Figure 7 (see amounts marked “TBD”), these measures account for slightly more than 4 percent (about 7 MMTCO2E) of the scoping plan’s GHG emissions reductions. As is the case with the ARB’s exclusion of costs and savings for certain non-AB 32 measures discussed above, this lack of data for certain measures is another example of the incompleteness of ARB’s economic analysis of the scoping plan.

We appreciate that development of the scoping plan continues and that the plan is not a final document. While it is not unreasonable that the plan includes some measures which ARB has yet to fully analyze, we would expect that full analysis would accompany regulatory development of the measures. In the interim, we are unable to estimate the extent to which inclusion of the missing data would affect the bottom-line net annualized costs/savings associated with the scoping plan because ARB did not provide us preliminary estimates of such data.

Weak Basis for Low-Carbon Fuel Standard Assumptions

The \$25 billion in annualized costs that ARB attributes to the scoping plan are concentrated in one measure—the low-carbon fuel standard. That measure alone accounts for \$11 billion (44 percent) of the scoping plan’s annualized costs, although it provides just less than 9 percent of the plan’s emissions reductions. However, the ARB further claims that these \$11 billion in annualized costs would be offset by equivalent savings on petroleum products (mainly gasoline) that would no longer be purchased for transportation purposes. Therefore, according to ARB, the net annualized cost of this measure is zero.

The ARB acknowledges that these estimates of costs and savings associated with this measure are weak at present. The scoping plan is based on the uncertain assumption that fuel producers can produce ethanol and biodiesel at costs similar to the current and projected high price of gasoline and diesel. However, ARB did not provide us a basis to justify this major assumption. We see the lack of development of the costs and savings estimates for the low-carbon fuel standard as a significant weakness in ARB's economic analysis of its scoping plan. As a consequence, the bottom-line calculation of net annualized costs/savings could change substantially, depending on the development of more refined estimates for the fuel standard.

ARB's Macroeconomic Modeling Lacks Analytical Rigor

Our analysis indicates that the macroeconomic analysis conducted by ARB provides little insight. The findings are highly dependent upon key assumptions, some of which are based on incomplete data as discussed above. However, in spite of the weakness of the data, the ARB has not determined how sensitive the macroeconomic findings are to changes in these key assumptions. Therefore, the modeling lacks analytical rigor. We discuss ARB's modeling of its economic analysis, and our concerns about it, in more detail below.

General Equilibrium Model. To determine the economic effects of the proposed scoping plan on the larger California economy, ARB relied upon a well-known type of model called a computable general equilibrium (CGE) macroeconomic model. Such models divide the overall economy into a large number of different individual sectors that interact with one another, and can trace through the effects of a change in one sector on the other sectors and, ultimately, the economy as a whole. A CGE model assumes as its starting point that each of its sectors is in equilibrium—that is, the supply and demand for the goods and services it produces are in balance. It then allows one to change the supply and demand in an individual economic sector by reallocating money from that sector to another, and then permits prices and wage rates in all sectors to adjust until equilibrium is restored in each one and their supply and demand are again in balance.

The factors that cause prices to change are as a result of inputs to the model. The inputs could represent changes in tax policy or the effects of regulation but, in any case, are expressed in the model as increased or decreased dollar amounts allocated to one or more economic sectors. In effect, the model is designed to reflect the interrelationship of sectors of the economy, in which direct economic changes to one sector manifest themselves indirectly as subsequent economic changes in other sectors of the economy.

The ARB applied a particular CGE model to the scoping plan—a modification of the Dynamic Revenue Assessment Model (DRAM). The DRAM was originally developed by Peter Berck, Professor in the Department of Agriculture and Resources Economics and Policy at UC Berkeley, for use by the Department of Finance to model the effects of proposed tax law changes. The ARB, working with Professor Berck, modified the

DRAM model to allow consideration of the effects of environmental regulations, dubbing the modified model Environmental DRAM (or E-DRAM).

Results of Economic Modeling Show Slight, Positive Effect. Based on the inputs provided by ARB (these are discussed further below), E-DRAM modeled the macroeconomic effects of the proposed scoping plan. Most notable among E-DRAM's "outputs":

- There would be an overall, though slight, positive effect on the state economy as of the year 2020, with increased total state output of 0.9 percent (\$33 billion) and gross state product of 0.3 percent (\$7 billion).
- The strongest, overall positive economic effects would occur in the agriculture, forestry, and fishing sector—a 3.9 percent (\$4 billion) increase in economic output, and a 3.5 percent (15,000 job) increase in employment.
- Overall economic loss would be contained to the utilities sector—a 16.7 percent (\$12 billion) decrease in economic output, and a 14.7 percent (10,000 job) decrease in employment.

Results of Economic Modeling Depend Heavily Upon Several Key Assumptions.

Like all models, E-DRAM necessarily relies upon assumptions, such as the definition of major economic sectors and the interrelations between those sectors. We asked ARB to identify the most significant assumptions used in its economic modeling of the scoping plan—in other words, to list those assumptions that, were any one of them to change, would substantially alter the E-DRAM findings. At the time this analysis was prepared, ARB had not responded to our request. However, our analysis of the information available to us indicates that the most significant assumptions made by ARB are the direct economic costs and savings that it assumes result from each GHG reduction measure. These inputs drive the model's finding of net economic benefit from the scoping plan measures. We do not find it particularly insightful or surprising that E-DRAM predicts a positive economic effect for the scoping plan based on an input of \$16 billion in assumed annual net savings. Therefore, the appropriate focus of any review of ARB's economic analysis is not the E-DRAM model itself or its findings, but on ARB's inputs to the model.

Despite Reliance on Key Assumptions, Plan Provides No Sensitivity Analysis. Sensitivity analysis determines how dependent the findings of an economic model are to changes in individual variables used in the model. The ARB indicates that, though it has not conducted a sensitivity analysis of the scoping plan, it hopes to do so in the future.

We see the lack of sensitivity analysis as particularly problematic, given that the findings of ARB's economic analysis rely so heavily on a small number of key assumptions. For example, the analysis assumes significant net economic effects from some measures which seem well-developed, such as the Pavley regulations, and other measures which are not well-developed, such as the low-carbon fuel standard. Similarly, the ARB necessarily made key assumptions about the public and private actions that would lead to the BAU scenario. It is impossible for our office, or decision makers, to fully

evaluate the scoping plan and its economic effect without an awareness of the degree of uncertainty connected with these assumptions and the risk associated with that uncertainty.

Plan Fails to Lay Out an Investment Pathway

ARB Analysis Fails to Explicitly Identify Timing of Needed Investments and Resulting Savings. The ARB estimates net annualized costs/savings for the scoping plan, as described above. However, the ARB has failed to plot an investment pathway required to implement the scoping plan. Such a pathway would depict the *timing* of the \$25 billion in annual investments that the scoping plan seeks to require of businesses and households, as well as the timing of the \$40 billion in annual savings predicted by the scoping plan. Such information is critical to businesses and households, and the decision makers who represent them, in trying to determine whether and how to finance capital improvements. The current environment of significant economic uncertainty and credit scarcity only make such information more critical. We see ARB's failure to lay out such an investment pathway as a major shortcoming of its economic analysis of the plan. This is especially so given that certain individual parties could be harmed by the plan, depending on those parties' individual circumstances, even if broad economic sectors will benefit.

Economic Analysis Not Used to Inform Plan Development

As acknowledged by ARB, its selection of measures for inclusion in the scoping plan preceded its economic analysis. Based on our review of the scoping plan materials, as well as our conversations with ARB staff, it appears that ARB developed the scoping plan by first selecting a collection of measures that conceivably could achieve the GHG emissions reductions called for by AB 32. Once it had compiled and developed that collection of measures, ARB estimated the associated direct costs and savings of those measures and input those dollar amounts into the E-DRAM economic model.

The modeling provided new macroeconomic findings related to the scoping plan. However, according to ARB, it did not use these findings in its selection of measures to include in the scoping plan or in its development of the individual measures. In this sense, ARB's economic modeling was after the fact. We would think that the modeling results would have provided useful data for ARB to have used in its development of the scoping plan.

It is unclear whether any findings about cost-effectiveness influenced either the mix of measures included in the scoping plan or the relative importance of each of those measures to achieve emissions reductions. For some individual measures, such as the Pavley regulations, ARB appears to have conducted reasonably thorough economic analyses, including cost-effectiveness considerations. However, the board indicates that it did not eliminate measures from the scoping plan that fell below a cost-effectiveness threshold. Nor, according to ARB, did it apply any findings about cost-effectiveness to

alter its designation of the number of tons of emissions reductions that it determined should be applied to each specific measure in the scoping plan.

MARKET-BASED MECHANISMS RAISE POLICY CHOICES

You have requested that we provide a discussion of some of the key policy choices in the draft scoping plan that warrant evaluation by the Legislature. As referenced earlier, the proposed scoping plan relies on a cap-and-trade program to provide about 20 percent of the plan's GHG emissions reductions. A cap-and-trade program is one of two major types of market-based compliance mechanisms. Another involves taxation related to carbon emissions. In the section that follows, we discuss:

- The economic theory behind market-based mechanisms.
- The tradeoffs involved in choosing one type of market-based mechanism over the other.
- The ARB's specific proposal for a cap-and-trade program.
- The important policy choices raised by the ARB's proposal that warrant legislative consideration.

The Theory of Market-Based Compliance Mechanisms

Traditionally, California has relied upon direct regulatory measures to regulate air emissions. Such regulations, sometimes referred to as "command-and-control" measures, specify certain performance standards applicable to emissions sources and, often-times, require specific actions on the part of those sources. Direct regulatory measures can be distinguished from market-based compliance mechanisms, which provide economic incentives to achieve emissions reductions, usually without specifying how emissions sources are to achieve those reductions.

The rationale in economic theory behind use of market-based mechanisms is that, when compared to command-and-control measures, they can achieve the same quantity of emissions reductions, but at a potentially lower cost. This is because the focus of market-based mechanisms is the amount of emissions placed into the atmosphere from all sources combined, not the amount of emissions attributable to any individual emissions source. Sources facing high costs to reduce emissions can choose not to do so. At the same time, sources that can reduce emissions cheaply can do so by an amount that compensates for the emissions reductions foregone by other emissions sources.

Broadly speaking, there are two types of market-based compliance mechanisms that could be used to achieve the GHG emissions reductions called for by AB 32—emissions taxes and trading programs. We discuss each of these mechanisms in turn and highlight the tradeoffs involved in choosing one mechanism over the other.

Emissions Taxes

The first type of market-based compliance mechanisms is emissions taxes. Tax mechanisms, such as imposing a set tax on each ton of carbon dioxide emitted, place a cost on GHG emissions where none previously existed. Under an emissions tax program, the regulator does not limit the amount of emissions that any individual source may emit. Rather, the regulator would set the tax at a dollar amount per ton of emissions so that, overall, the resulting amount of emissions will not exceed regulatory targets. This is because at least some emissions sources are assumed to reduce their emissions in order to avoid the tax.

An individual firm will experience greater cost, as a result of the tax, the more emissions it produces. The choice for any given emissions source, then, is whether the cost of reducing a ton of emissions exceeds the cost of the emissions tax. Presumably, those firms that can reduce a ton of emissions for less than the cost of the emissions tax will do so. Conversely, those firms that can only reduce a ton of emissions at a cost that exceeds the emissions tax will continue to produce emissions and pay the resulting emissions tax. In theory, if the amount of the tax is set appropriately, the decisions of emissions sources facing the emissions tax will result in a collective reduction in overall emissions. This collective emissions reduction is achieved, even as individual emissions sources maintain the flexibility to reduce, or not to reduce, emissions, based on each of their economic situations. And those emissions reductions are achieved, in theory, at the least cost possible.

Trading Programs

The second common type of market-based mechanism is trading programs, often referred to as cap-and-trade programs. As with emissions taxes, a cap-and-trade program does not directly require an individual emissions source to reduce its emissions. However, under a cap-and-trade program, the regulator issues allowances for each ton of emissions permissible within the regulated area. A regulated source must possess an allowance for each ton of the regulated emission it produces or face penalties established by the regulator. Because the amount of allowances issued is less than the amount of emissions that would otherwise be produced, the effect of the allowance system is assumed to be lower overall emissions.

A cap-and-trade program differs from a tax program in that the cost to emit regulated emissions is not decided by a regulator who sets a tax. Rather, the cost is determined, in effect, by the emissions sources themselves through trading of scarce emissions allowances. (An emissions allowance is essentially a permit to emit a particular quantity of emissions.) In this way, a trading market determines the price of an emissions allowance.

As is the case under an emissions tax program, regulated firms in the trading program must decide whether the cost to emit a ton of emissions is economically rational. Firms that can reduce their emissions at a cost below the trading price of emissions al-

allowances will do so, thereby allowing them to sell their excess allowances to those sources for which the cost of emissions reductions exceeds the trading price of allowances. In this way, a cap-and-trade program achieves, in theory, emissions reductions at the least cost possible.

Relative Economic Effects of Emissions Tax and Cap-and-Trade Programs

While an emissions tax and a cap-and-trade program differ in their administration, their theoretical economic effects (all other factors being equal) are identical. This is because both mechanisms ordinarily use the price per ton of emissions to limit emissions at the desired level. The difference between the two mechanisms is how the price per ton of emissions is established.

Under an emissions tax program, the regulator sets the per-ton price of emissions by setting the amount of the emissions tax. In contrast, under a cap-and-trade program, the regulator determines the number of emissions allowances to issue to regulated sources and leaves it to the trading of allowances to determine the price of a ton of emissions. The end result is theoretically the same—a cost per ton of emissions that causes emissions sources to reduce their emissions to the level desired by regulators.

Emissions Taxes Provide More Certainty Regarding the Costs of Compliance. The main difference between an emissions tax and a cap-and-trade program is the level of certainty provided by each to the parties subject to such regulation. An emissions tax provides relative certainty about the price per ton of emissions reductions and, therefore, the cost of compliance. This is because the per-ton price is, by definition, the dollar amount of the per-ton emissions tax. Emissions sources subject to the tax are free to emit whatever quantity of emissions they choose, so long as they are willing to pay the emissions tax. Should regulators set the emissions tax too low, emissions may exceed regulatory targets. Should regulators set the emissions tax too high, then regulated sources may reduce emissions beyond what is economically optimal. Therefore, under an emissions tax program, the cost of compliance to a regulated source is known, although the overall effect of this regulatory approach on the quantity of GHGs emitted is less certain.

Cap-and-Trade Programs Provide More Certainty Regarding the Level of Compliance. In contrast to an emissions tax, a cap-and-trade program provides relative certainty about the reduction in GHG emissions that will be achieved. This is because, by definition, the amount of overall emissions will equal the amount of emissions allowances issued by the regulator. However, because the price of an allowance is determined by the market, not regulators, the cost of compliance with a cap-and-trade program is more uncertain.

Scoping Plan Relies on Both Command-and-Control and Market-Based Measures

Consistent with AB 32, the scoping plan includes both direct regulatory measures and market-based compliance mechanisms to achieve GHG emissions reductions. The

plan relies heavily on the types of direct regulatory requirements that have typified California’s regulation of environmental quality, such as efficiency and emissions standards. In fact, as can be seen from Figures 1 and 2, such direct regulatory measures account for over three-quarters of the GHG emissions reductions recommended by the plan.

The remainder of the plan’s GHG emissions reductions would result from market-based compliance mechanisms. Specifically, the scoping plan recommends a cap-and-trade program to achieve roughly 33 MMTCO₂E—or about 20 percent—of the scoping plan’s 175 MMTCO₂E of GHG emissions reductions. The scoping plan also includes very limited use of fees applied to specific emissions sources to achieve relatively minor reductions of GHG emissions. (See, for example, the mitigation fee on high global warming potential gases.) The plan does not propose the use of a broad-based carbon tax to reduce GHG emissions.

Cap-and-Trade Proposed for Economic Sectors With the Largest Emissions. The particular cap-and-trade program recommended by the scoping plan would apply to four economic sectors which, collectively account for more than 80 percent of the state’s BAU GHG emissions. Those four sectors are transportation, electricity, commercial and residential, and industry. The GHG emissions from these sectors would be “capped” so that, collectively, they could emit no more than 365 MMTCO₂E of GHGs in 2020. Figure 8 shows the four economic sectors that would be covered by the proposed cap-and-trade program.

Figure 8			
Economic Sectors Covered by the Proposed Cap-and-Trade Program			
<i>(Greenhouse gas [GHG] emissions in MMTCO₂E)</i>			
Sector	Business-as-Usual GHG Emissions	Scoping Plan Direct Reduction Measures	GHG Emissions After Direct Reduction Measures
Transportation	225.4	62.4	163.0
Electricity	139.2	45.3	93.9
Industry	100.5	1.4	99.1
Commercial and residential	46.7	4.4	42.3
Subtotals	511.8	113.5	398.3
GHG emissions limit for capped sectors			365.0
Emissions to be achieved through cap-and-trade program			33.3 ^a

MMTCO₂E = millions of metric tons of carbon dioxide equivalents.

^a Air Resources Board rounded this amount to 35 MMTCO₂E in Figures 1 and 2.

As Figure 8 illustrates, each of the four economic sectors must reduce its GHG emissions through the direct regulatory measures recommended by the program. However, after accounting for GHG emissions reductions resulting from the plan’s direct regulatory measures, the four sectors must together achieve additional reductions of approximately another 33 MMTCO₂E through the cap-and-trade program.

Cap-and-Trade Program Still Under Development, But Many Important Policy Choices Already Made

The ARB is still developing its cap-and-trade proposal and indicates that details of the program will be finalized later as part of the regulatory process. Still, the scoping plan provides some details of the program that ARB envisions. Though preliminary, those details allow insight into ARB's leanings on some important policy choices related to the program's design.

Program to Be Linked to the Western Climate Initiative. The scoping plan indicates ARB's intent to link California's cap-and-trade program to that of the Western Climate Initiative (WCI)—a collaboration of the governors of several western states and premiers of several Canadian provinces to collectively reduce GHG emissions. The ARB indicates that participation in a region-wide trading program will increase the diversity of emissions sources covered by the program and that such diversity will allow more opportunities to realize GHG emissions reductions at the lowest possible cost. However, we note that there are some tradeoffs with such a regional approach. For example, a program that operates beyond the state's borders raises challenging enforcement issues from the state's perspective.

Like ARB's cap-and-trade proposal, the WCI's program is still under development. Nonetheless, WCI has begun to adopt minimum standards for member jurisdictions that would choose to participate in the proposed regional cap-and-trade program. The ARB indicates that many of the policy choices described below were made in order to accommodate the emerging framework of the WCI's regional approach.

Program to Be Phased In. The scoping plan describes a two-phase implementation approach, in which capped sectors are brought in to the cap-and-trade program over time. The first phase would begin in 2012 and the second in 2015. Figure 9 illustrates the two phases and the sectors that would be incorporated under each.

Allocation of Allowances. One of the most contentious policy choices regarding the design of a cap-and-trade system concerns the initial allocation of emissions allowances, including the pricing of such allowances. Generally speaking, regulators could allocate the allowances in one of four ways:

- Give them away for free.
- Sell them for set prices.
- Auction them.
- Do some combination of the three.

The method of initial allocation is so controversial because the emissions allowances, once traded in a market, will have economic value. Thus, in distributing allowances, regulators are distributing a valuable commodity. In addition, because some of the allo-

cation methods generate revenue, decisions concerning the use of that revenue are highly relevant.

<p>Figure 9 Cap-and-Trade Program Would Have Two Phases</p>
<p>Sectors Covered</p>
<p>Phase I—Beginning 2012</p> <ul style="list-style-type: none"> • Electricity generation, including imports. • Large industrial sources with emissions above 25,000 metric tons of CO2 equivalents, including high global warming potential gases used in the industrial process. <p>Phase II—Beginning 2015</p> <ul style="list-style-type: none"> • All sectors covered in Phase I. • Industrial fuel combustion at facilities with emissions at or below 25,000 metric tons (“upstream”^a). • All commercial and residential fuel combustion (upstream^a). • Transportation fuels (upstream^a). <p>^a “Upstream” refers to points earlier in the product cycle, such as extraction and refinement of raw materials, rather than later, “downstream” points in that cycle, such as retail sales of products.</p>

The ARB has indicated that, in keeping with WCI guidelines, it will likely auction a portion (at least 10 percent) of the allowances. Another portion of the remaining allowances may be distributed based on performance standards (an approach often termed “benchmarking”) or regulated sources’ historical emissions of GHG (so-called “grandfathering”). In addition, ARB may withhold some allowances and later award them to firms and sectors that are struggling to adjust to a carbon-constrained economy.

Use of “Offsets.” Offsets refer to projects that reduce emissions of GHGs that are undertaken by emissions sources not subject to the cap-and-trade program’s GHG emissions cap. These projects are in lieu of emissions reductions by an emissions source subject to the cap. For example, a regulated power plant may pay an industrial emissions source not subject to GHG regulation to reduce its emission of GHGs. The power plant would do this because it would cost the industrial source less to reduce its emissions of GHGs than it would cost the power plant to reduce its emissions by the same amount. Under an offset program, the regulator would credit the power plant for the GHG emissions reductions realized by the industrial source. The result is a reduction in overall GHGs, but at a cost that is lower than if the regulated power plant were to realize those reductions itself.

Use of offsets is controversial, however. This is because it can be difficult to verify that offsets represent a “real” reduction in GHG emissions by nonregulated sources. Similarly, it can also be difficult to verify that the emissions reductions by the nonregulated source are truly “additional”—in other words, that they would not have occurred anyway absent the payment made by the regulated emission source.

These difficulties become more pronounced as the eligible geographic location of potential offset projects is broadened. For example, it would likely be more challenging for California regulators to verify whether an offset project undertaken in northern Canada reflects real, additional GHG emissions reductions than it is for them to verify an offset project undertaken in Northern California.

The ARB indicates in the scoping plan its intention to allow use of offsets as part of its cap-and-trade program. The ARB notes the potential of offsets to reduce emissions reduction costs by incorporating low-cost emissions reductions from nonregulated emissions sources into the cap-and-trade program. The ARB also notes, for similar reasons, the desirability of recognizing offsets from as wide a geographic area as possible.

In keeping with WCI guidelines, ARB states that no more than 49 percent of the cap-and-trade program emissions reductions will be allowed from offsets, with the remainder coming from regulated emissions sources. In addition, ARB indicates that, in keeping with the public health and economic development goals of AB 32, much of California's reduction of GHGs will need to come from California emissions sources. The ARB indicates that it will continue to work with WCI to develop its cap-and-trade proposal, which eventually will be considered for regulatory adoption by the ARB.

Economic Impact of Cap-and-Trade Program Unclear

The effect of the cap-and-trade program on the scoping plan's economic bottom line is unclear. The scoping plan documents, including the figures that illustrate the emissions reductions, costs, and savings associated with the scoping plan measures, include no cost or savings data for the program. This is yet another weakness in the economic analysis accompanying the proposed scoping plan.

Market Mechanisms Raise Policy Choices; Legislative Oversight Needed

As can be seen from the above discussion, the use and design of market mechanisms are very complex and involve many key policy choices. While successful examples of the use of market mechanisms to control air emissions exist, such as the federal acid rain program, there is little experience with the use of these mechanisms to control GHG emissions. As ARB continues to develop its proposed cap-and-trade program, it will be important for the Legislature to oversee and provide policy direction on these issues.

CONCLUSION

In summary, we think that it will be important for the Legislature to exercise oversight as ARB continues to develop the scoping plan's measures up to and through regulatory development. This will be necessary to ensure that AB 32 is implemented cost-effectively and efficiently and that the weaknesses in the economic analysis that we have identified are addressed.

Hon. Roger Niello

24

November 17, 2008

If you have any questions regarding this letter, please contact Jay Dickenson of my staff at 319-8354 or Mark Newton at 319-8323.

Sincerely,

Mac Taylor

Legislative Analyst

cc: Hon. Michael Villines



DATE: December 8, 2008
TO: STA TAC
FROM: Liz Niedziela, Transit Program Manager/Analyst
RE: Unmet Transit Needs Public Hearing for Fiscal Year (FY) 2009-10

Background:

Transportation Development Act (TDA) Article 4/8 funds are distributed to cities and counties based upon a population formula and are primarily intended for transit purposes. However, TDA funds may be used for streets and roads purposes in counties with a population of less than 500,000, if it is annually determined by the regional transportation planning agency (RTPA) that all reasonable unmet transit needs have been met.

Solano County is the one county in the Bay Area that has local jurisdictions using TDA funds for streets and roads. Three out of eight jurisdictions currently use TDA funds for streets and roads (Rio Vista, Suisun City, and the County of Solano). This will be the last year Suisun City is scheduled to be claiming TDA funds for streets and roads. The other two jurisdictions have no plans to phase out the use of TDA funds for streets and roads purposes.

Annually, the Metropolitan Transportation Commission (MTC), the state designated Regional Transportation Planning Agency (RTPA) for the Bay Area, holds a public hearing in the late fall to begin the process to determine if there are any transit needs not being reasonably met in Solano County. Based on comments raised at the hearing and written comments received, MTC staff identifies pertinent comments for Solano County's local jurisdictions that will be addressed. The STA coordinates with the transit operators who must prepare responses specific to their operation.

Once STA staff has collected all the responses from Solano County's transit operators, a coordinated response is approved by the STA Board and forwarded to MTC. Evaluating Solano County's responses, MTC staff determines whether or not there are any potential comments that need further analysis. If there are comments that need further analysis, MTC presents them to MTC's Programming and Allocations Committee (PAC) to seek their concurrence on those issues that the STA or the specified transit operator would need to further analyze as part of the Unmet Transit Needs Plan. Until MTC can make a finding that there are no reasonable unmet transit needs, all TDA claims for local streets and roads for the forthcoming fiscal year are held by MTC.

Discussion:

The annual Unmet Transit Needs public hearing has been traditionally held in November or early December. This year Unmet Needs Hearing is scheduled to be held on Monday, December 15, 2008 from 6:00 pm – 8:00 pm at the Solano County Administration Center (SCAC) in the Board of Supervisors Chambers.

STA staff is coordinating with MTC and local transit operators to notify the public regarding the Unmet Transit Needs Hearing and opportunity for comment. MTC produced a flyer announcing the public hearing that will be provided to transit operators to post on their buses and other locations. (see attachment A). Transit operators are encouraged to attend and hear the concerns expressed first hand in this process.

Recommendation:

Informational.

Attachment:

- A. Solano County Transit Needs Flyer



Attention Transit Riders

We Want To Hear From You! You're Invited to a Public Hearing on Solano County Transit Needs

Monday, December 15, 2008, 6 p.m.

Solano County Administration Center – Board Chambers
675 Texas Street, Fairfield, CA

The Metropolitan Transportation Commission (MTC) wants to hear your transit needs — both local and commuter services — in Solano County. We invite you to comment on any “unmet” transit needs in Solano County as well as offer support for services you currently use.

Unable to attend? Submit your written comments no later than 4 p.m. on Friday, December 19, 2008. (You may use the form on the back of this flyer.)

Mail to MTC Public Information,
101 Eighth Street, Oakland, CA 94607;
FAX to (510) 817-5848; or e-mail your
comments to info@mtc.ca.gov.

Public Transit is available to the hearing.

For information, call Solano Napa Commuter Information at **1(800)53KMUTE (535-6883)**.

Specialized transportation will be provided with advance reservations. Vallejo residents, please call Runabout at **(707)649-1999**. Benicia residents, please call Benicia Breeze Paratransit at **(707) 748-0808**. Rio Vista residents, please call Rio Vista Breeze at **(707) 374-2878**. All other county residents call Solano Paratransit at **(707)429-2400**.

See reverse for driving directions.

For more information regarding the hearing,
call MTC Public Information at:

(510) 817-5757

TDD (510) 817-5769



Driving Directions to Solano County Administration Center (SCAC), Board Chambers - 675 Texas St. Fairfield, CA

The Solano County Administration Center (SCAC) is located in downtown Fairfield on Texas Street. The Board Chambers are located on the First Floor just off the main lobby which can be reached from Texas St. or Union St. entries or the adjacent parking structure between Union and Jefferson south of the building. Free public parking is located on many of the adjacent streets as well as on the second level of the parking structure.

Driving Directions from I-80

From the WEST

(Vallejo/Benicia/Bay Area)

- Take I-80 East to Hwy 12/East.
- Take Hwy 12 East to Pennsylvania St. (approx. 2.5 miles).
- Turn left Pennsylvania to W. Texas St.
- Turn right on W. Texas St.
- The SCAC is 6 blocks down on the right between Jefferson and Union Streets.

From the EAST

(Vacaville/Dixon/Sacramento)

- Take I-80 West to Travis Blvd.
- Turn left from the off-ramp to Travis Blvd.
- Take Travis Blvd to Pennsylvania St. (approx. 1 mile).
- Turn right at Pennsylvania to W. Texas.
- Turn left at W. Texas
- The SCAC is 6 blocks down on the right between Jefferson and Union streets.

Driving Directions from Rio Vista/Hwy 12

- From Rio Vista, take Hwy 12 to Jackson St exit.
- Take Jackson Street 5 blocks to W. Texas St.
- Turn right on W. Texas St.
- The SCAC is 2 blocks down on the right between Jefferson and Union streets.

Yes, I'd like to comment on transit services in Solano County and offer ideas for improved service.

(Please note specific transit service, when appropriate.)

Name.....

Address.....

City..... State..... Zip.....

E-Mail Address.....

Comments *(please be specific regarding transit services):*

.....

.....

.....

.....

.....

.....

.....

Please e-mail your comments to info@mtc.ca.gov or mail this form to: MTC Public Information, 101-8th Street, Oakland, CA 94607 or fax it to (510) 817-5848 no later than 4 p.m. December 19, 2008.



DATE: December 10, 2008
TO: STA TAC
FROM: Sam Shelton, Project Manager
RE: Project Delivery Update

Background:

As the Congestion Management Agency for Solano County, the Solano Transportation Authority (STA) coordinates obligations and allocations of state and federal funds between local project sponsors, Caltrans, and the Metropolitan Transportation Commission (MTC). To aid in the delivery of locally sponsored projects, the STA continually updates the STA’s Technical Advisory Committee (TAC) on changes to State and Federal project delivery policies and reminds the TAC about upcoming project delivery deadlines.

Discussion:

There were 4 project delivery reminders this month:

1. FY STP/CMAQ 2008-09 Federal Obligation Plan:
MTC has adopted new federal funding obligation request deadlines, changing them from March 1, 2009 to February 1, 2009 and the receive deadline from May 31, 2009 to April 30, 2009. This is in response to Caltrans moving up their Obligation Authority (OA) release date from June 1st to May 1st. With leftover OA becoming available sooner, MTC wants Bay Area projects ready to obligate.

<u>Projects included in FY STP/CMAQ 2008-09 Federal Obligation Plan</u>			
<ul style="list-style-type: none"> - \$7.86M in Federal funding - Last changes due to STA by October 3, 2008. - Submit E76 Request by February; receive E76 by April 30, 2009 			
Agency	TIP ID	Project	Status/Deadlines
Benicia	SOL070045	State Park Road Bridge	\$1.67 M for CON (CMAQ & TE) Currently in PE phase. Submitted CTC allocation request.
Dixon	SOL070046	SR-113 Pedestrian Improvements	\$90,000 for CON. Currently in ENV/PE.
Fairfield	SOL070027	W. Texas St. Gateway Project Phase I & II	\$85,000 for CON Currently in concept/ENV.
Fairfield/ Solano County	SOL070012	“Cordelia Hill Sky Valley Enhancement Project” (McGary Road)	\$640,000 in STIP-TE between FY 2008/09 & 2009/10. Complete funding plan being developed.
Solano County	SOL050024	Vacaville - Dixon Bike Route Phase II and III	\$337,000 for CON Phase II obligated.

Agency	TIP ID	Project	Status/Deadlines
Solano County	SOL050046	Old Town Cordelia	\$500,000 for CON.
Vacaville	SOL050013	Vacaville Intermodal Station	\$3,028,000 for CON to be listed in the 2009 TIP.
Vacaville	SOL070028	Downtown Creekwalk	\$53,000 for PS&E \$694,000 for CON
Vacaville	SOL070029	Ulatis Creek – Allison to I-80	\$169,000 for CON
Vacaville	SOL070047	Peabody & Marshall Road Pedestrian Improvements	\$150,000 for CON. Currently in ENV/PE.
Vallejo	SOL010027	Vallejo – Lemon St. Rehabilitation	\$672,000 for CON. Currently in PS&E.
Vallejo	SOL050048	Downtown Vallejo Pedestrian Enh. - Phase I	\$580,000 for CON. Currently in PS&E.

2. Inactive Obligations

To adhere to FHWA project delivery guidelines and MTC's Resolution 3606, project sponsors must invoice for obligated projects every 6 months.

More information can be found on Caltrans Local Assistance website:

<http://www.dot.ca.gov/hq/LocalPrograms/Inactiveprojects.htm>

Currently listed Inactive Projects			
Review Period: 07/01/08 – 09/30/08			
Invoice Submission Due to LPA: 11/17/08			
Justification Due to DLAE: 12/01/08			
Agency	Project	Unexpended Funds	Status
Vallejo	Intersection of SR 29 and Carolina Street, Install Signal	\$24,771	To be deobligated at the request of Vallejo. Project is complete.
Fairfield	In Fairfield @ East Tabor Ave and UPRR Xing , Grade Crossing Hazard Elimination	\$500,000	Part of UPRR project with Suisun City. Will file justification form with Caltrans.
Projects that will become inactive by December 2008			
Fairfield	Travis Blvd. From Oliver Rd. To N. Texas St. , Signal Upgrade, Traffic Sign Install	\$170,537	Authorized 06/26/05. Last Billed, 10/06/06.
Projects that will become inactive by March 2009			
Dixon	N. 4th St.And East A Street	\$130,000	Authorized 04/18/07
Vacaville	Various Locations In Vacaville And Dixon	\$10,000	Authorized 09/08/02

Projects that will become inactive by March 2009, Continued			
Fairfield	Linear Park Between N. Texas St. & Dover Ave.	\$330,000	Authorized 04/18/07
Fairfield	Texas St. And Union Street/Downtown Fairfield	\$309,855	Authorized 04/26/07

3. Caltrans D4 Local Assistance, New Environmental Planner Contact

Boris Deunert is the new District 4 Environmental Clearance coordinator, who schedules field reviews and approves Preliminary Environmental Study (PES) forms. After submitting your E76 or PES and Field review forms to the District Local Assistance Engineering (DLAE), Boris Deunert will be the environmental staff contact. As the single point of contact between local agencies and other Caltrans environmental staff, he hopes to expedite the environmental clearance process for categorical exclusions.

Mr. Deunert has considerable experience with environmental reviews and expects much more thorough PES forms before he schedules field reviews. He recommends reviewing the latest changes to the Local Assistance Procedures Manual (LAPM) as the PES form has changed.

Recently, the City of Vacaville has experienced project delivery delays related to these new changes. STA Staff is working with both Caltrans Local Assistance and the City of Vacaville to help resolve any issues.

Fiscal Impact:

None.

Recommendation:

Informational.



DATE: December 2, 2008
TO: STA TAC
FROM: Sara Woo, Planning Assistant
RE: State Route (SR) 12 Jameson Canyon Road – Bicycle and Pedestrian Connections Plan Update

Background:

A primary route identified in the Solano Countywide Bicycle Plan is the I-80/I-680/SR 12 Interchange Project – Cordelia to Napa bicycle route. The plan calls for a future Class II and Class I bicycle route connecting Solano County in Cordelia at Green Valley and Red Top Road to Napa County at the SR 29/SR 12 interchange.

There are other agencies with bicycle and pedestrian plans located along SR 12 Jameson Canyon corridor in addition to the STA, specifically:

1. Napa County Transportation and Planning Agency (NCTPA)
2. Bay Area Ridge Trail Council
3. City of Fairfield
4. County of Solano

Not all of the proposed bicycle routes and pedestrian improvements are consistent. As more improvements are proposed for SR 12 Jameson Canyon corridor, it will be beneficial to have a clear, concise, and coordinated plan for bicycle and pedestrian improvements. This will enable agencies involved with constructing improvements to have better clarity and guidance on how to address bicycle and pedestrian issues and improvements within the corridor.

On July 9, 2008, the STA Board authorized the Executive Director to enter into an agreement with the California Coastal Conservancy to accept the Bay Area Ridge Trail Grant and to issue a Request for Proposals (RFP) for the SR 12 Jameson Canyon Road – Bay Area Ridge Trail Bicycle and Pedestrian Connections Plan. The STA Board also authorized the Executive Director to enter into an agreement with the selected consultant for an amount not to exceed \$55,000.

Discussion:

Questa Engineering Corporation (Questa) has been selected to assist STA to collaborate with the various agencies that have plans along the SR 12 Jameson Canyon Road corridor through a partnership/working group (see Attachment A). Through the working group, Questa will be coordinating with agencies and key stakeholder groups to develop a conceptual plan that will identify the potential alternatives for bicycle and pedestrian connectivity from Solano County to

Napa County along SR 12 Jameson Canyon Road. Attachment B shows a list of the plans and documents the working group will be teaming up to coordinate. The first working group meeting is scheduled for January 2009 to develop the goals, objectives, and policies for the plan.

Fiscal Impact:

The Bay Area Ridge Trail Grant will provide \$55,000 to complete the study. As part of the local match, STA staff will provide in-kind services to administer the project. No impact to the STA general fund.

Recommendation:

Informational.

Attachments:

- A. SR 12 Jameson Canyon Road Bicycle and Pedestrian Connections Plan: Working Group Participants List
- B. SR 12 Jameson Canyon Road Bicycle and Pedestrian Connections Plan: Inventory of Related Plans

SR 12 Jameson Canyon Road Bicycle and Pedestrian Connections Plan Working Group Participants List

Name	Agency
Dee Swanhuysen	Bay Area Ridge Trail Council
Matt Tuggle	County of Solano
Dan Sykes	County of Solano – Parks and Recreation
Brian Miller	City of Fairfield
Eliot Hurwitz	Napa County Transportation and Planning Agency (NCTPA)
John Woodbury	County of Napa – Parks and Recreation
Keith Wayne	Caltrans District 4 Community Planning
Sara Woo	STA
Mick Weninger	BAC (STA)
Glen Grant	BAC (STA)
Carol Day	PAC (STA)
Kathy Hoffman	PAC (STA)
Mark Lucas	BAC (NCTPA)
Richard Warren	BAC (NCTPA)

SR 12 Jameson Canyon Road Bicycle and Pedestrian Connections Plan: Inventory of Related Plans

Bay Area Ridge Trail

Bay Area Ridge Trail
1. See maps from GreenInfo Network

City of Fairfield

City of Fairfield
1. General Plan: Circulation Element (Objective CI 9 and Objective CI 10) http://www.ci.fairfield.ca.us/GeneralPlan.htm
2. City of Fairfield Master Trails Plan

Napa County

Napa County Transportation and Planning Agency (NCTPA)	County of Napa
1. Napa Greenway Feasibility Study	1. General Plan http://www.co.napa.ca.us/GOV/Departments/DeptDefault.asp?DID=8 a. Circulation Element b. Recreation and Open Space Element
2. 2003 Countywide Bicycle Plan http://www.nctpa.net/docs/NCTPA%202003%20Countywide%20Bicycle%20Plan.pdf	

Solano County

Solano Transportation Authority (STA)	County of Solano
1. Solano Countywide Bicycle Plan http://solanolinks.com/plans2.html#bikeplan	1. General Plan http://www.solanocountygeneralplan.net/ a. Transportation and Circulation Element
2. Solano Countywide Pedestrian Plan http://solanolinks.com/plans2.html#pedplan	
3. North Connector TLC Concept Plan http://solanolinks.com/plans2.html#nc (scroll down to just past middle of page)	
4. Cross State Bicycle Plan	
5. Jameson Canyon EIR Final Draft	
6. McGary Road Extension Feasibility Study	

San Francisco Bay Trail

San Francisco Bay Trail
1. Gap Analysis Report http://baytrail.abag.ca.gov/gap-analysis.html



DATE: December 17, 2008
TO: STA TAC
FROM: Sara Woo, Planning Assistant
RE: Funding Opportunities Summary

The following funding opportunities will be available to STA member agencies during the next few months. Also attached are summary fact sheets for each program. Please distribute this information to appropriate departments within your jurisdiction.

Fund Source	Application Available From	Application Due
2008-09 Environmental Enhancement and Mitigation Program (EEMP)*	Laurie Heller, California Resources Agency (916) 651-7593	December 22, 2008

* New funding opportunity



FUNDING OPPORTUNITY
2008-09 Environmental Enhancement and Mitigation Program (EEMP)
Applications Due December 22, 2008

TO: STA TAC
FROM: Sara Woo, Planning Assistant

This summary of the EEMP is intended to assist jurisdictions plan projects that are eligible for the program. STA staff is available to answer questions regarding this funding program and provide feedback on potential project applications.

- Eligible Project Sponsors: State, local federal or 501(c)(3) non-profit entities.
- Program Description: This program, as provided by Streets and Highways Code Section 164.56, authorizes the allocation of up to \$10 million each year for grants to mitigate the environmental impacts of modified or new public transportation facilities.
- Funding Available: Up to \$10 million per year and up to \$350,000 per individual project.
- Eligible Projects: The categories of environmental enhancement and mitigation projects eligible for funding are:
- Highway Landscape and Urban Forestry
 - Projects designed to offset vehicular emissions of carbon dioxide through the planting of trees and other suitable plans
 - Resource Lands
 - Projects for acquisition, restoration or enhancement of resource lands to mitigate the loss of, or the detriment to, resource lands lying within or near the right-of-way acquired for transportation improvements
 - Roadside Recreation
 - Acquisition/development of roadside recreational opportunities (i.e. parks and greenways, roadside rests, scenic overlooks, trails, and sno-parks)
- Further Details: <http://resources.ca.gov/eem/Guidelines.EEMP.08-09.pdf>
- Program Contact Person: Laurie Heller, Program Coordinator (California Resources Agency), (916) 651-7593
eemcoordinator@resources.ca.gov
- STA Contact Person: Sara Woo, STA Planning Assistant, (707) 399-3214
swoo@sta-snci.com



**Solano Transportation Authority
Board Meeting Highlights
December 10, 2008
6:00 p.m.**

TO: City Councils and Board of Supervisors
(Attn: City Clerks and County Clerk of the Board)
FROM: Johanna Masiclat, STA Clerk of the Board
RE: Summary Actions of the December 10, 2008 STA Board Meeting

Following is a summary of the actions taken by the Solano Transportation Authority at the Board meeting of December 10, 2008. If you have any questions regarding specific items, please call me at (707) 424-6008.

BOARD MEMBERS PRESENT:

Jim Spering (Chair)	County of Solano
Pete Sanchez (Vice Chair)	City of Suisun City
Elizabeth Patterson	City of Benicia
Jack Batchelor	City of Dixon
Harry Price	City of Fairfield
Jan Vick	City of Rio Vista
Len Augustine	City of Vacaville
Osby Davis	City of Vallejo

SWEARING-IN OF TWO NEW STA BOARD MEMBERS

Mayor Jack Batchelor, Jr. was sworn in as STA's new Board Member representing the City of Dixon.

Mayor Jan Vick was sworn in as STA's new Board Member representing the City of Rio Vista.

ACTION – FINANCIAL ITEMS

A. Environmental Mitigation for the North Connector Project

Authorize the Executive Director to:

1. Enter into an agreement with the Solano Community College for implementation of the mitigation site for the North Connector and other adjacent I-80 projects on Solano Community College property, with constructing a commensurate amount of additional parking or pathway improvements on Solano Community College property; and
2. Enter into an agreement to purchase 13 VELB mitigation credits at the off-site French Camp Conservation Bank for an amount not-to-exceed \$60,000.

On a motion by Board Member Price, and a second by Board Member Patterson, the STA Board approved the recommendation.

B. Funding Agreements for the McGary Road/Solano Bikeway Phase 2 Project Recommendation:

Approve the following:

1. Authorize the Executive Director to work with Solano County, the City of Fairfield, and the Solano Land Trust to develop funding agreements for the delivery of the McGary Road/Solano Bikeway Phase 2 Project; and
2. ***Commit up to 3 years of TDA Article 3 funding for trail improvements associated with the SLT/County project.***

On a motion by Board Member Patterson, and a second by Board Member Price, the STA Board approved the recommendation as amended shown above in ***bold italics***.

C. Lifeline State Transit Assistance Funds (STAF) and Proposition 1B Call for Projects

Recommendation:

Approve the following:

1. The 2008 Solano Lifeline Prop 1B and STAF Project Funding Plan as specified in Attachment A;
2. Authorize the Executive Director to submit the Lifeline Project Funding Plan to MTC; and
3. Authorize the Executive Director to enter into agreements with Lifeline Project Sponsors by February 2009.
4. Authorize STA staff to work with the three project sponsors for bus shelters and develop a coordinated approach for design and signing and report back to the STA Board.

On a motion by Board Member Price, and a second by Board Member Davis, the STA Board approved the recommendation.

ACTION – NON FINANCIAL ITEMS

A. Comprehensive Transportation Plan (CTP) Update – Transit Facilities of Regional Significance, State of the Transit System Report and Transit Element Introduction Chapter

Recommendation:

Approve the following documents for inclusion in the 2008 CTP:

1. The Transit Facilities of Regional Significance criteria, project list and map included as Attachments A and B; and
2. The “State of the System – Transit and Rideshare” Report included as Attachment C; and
3. The Introduction Chapter to the Transit Element of the Solano CTP included as Attachment D.

On a motion by Board Member Price, and a second by Board Member Batchelor, the STA Board approved the recommendation.

B. Regional Transportation Impact Fee (RTIF) Nexus Study Scope of Work

Recommendation:

Approve the following:

1. RTIF Nexus Study Scope of Work as specified in Attachment B; and
2. Authorize the Executive Director to issue a request for proposal and retain a consultant to conduct a RTIF Nexus Study consistent with the specified scope of work.

After discussion, the STA Board amended the recommendation to include all input to the Scope of Work from the RTIF Policy Committee at future working meetings.

On a motion by Board Member Price, and a second by Board Member Batchelor, the STA Board approved the recommendation to include all input to the Scope of Work from the RTIF Policy Committee at future working meetings.

C. STA’s Draft 2009 Legislative Priorities and Platform

Recommendation:

Release STA’s Draft 2009 Legislative Priorities and Platform for a 21-day review and comment period.

On a motion by Board Member Price, and a second by Board Member Batchelor, the STA Board approved the recommendation.

CONSENT CALENDAR ITEMS

On a motion by Board Member Patterson, and a second by Board Member Sanchez, the STA Board approved Consent Calendar Items A thru I with the exception of Item F, Regional Measure 2 (RM 2) Benicia Intermodal Facilities Resolution of Support. Board Member Patterson, City of Benicia, declared she had a conflict on this item therefore did not vote on Item F.

- A. STA Board Meeting Minutes of October 8, 2008**
Recommendation:
Approve STA Board Meeting Minutes of October 8, 2008.
- B. Review TAC Draft Minutes for the Meeting of November 19, 2008**
Recommendation:
Receive and file.
- C. STA's Annual Audit Fiscal Year (FY) 2007-08**
Recommendation:
Accept the FY 2007-08 Annual Audit for STA.
- D. Fiscal Year (FY) 2007-08 4th Quarter Budget Report**
Recommendation:
Review and file.
- E. STA Employee 2009 Benefit Summary Update**
Recommendation:
Review and file.
- F. Regional Measure 2 (RM 2) Benicia Intermodal Facilities Resolution of Support**
Recommendation:
Approve Resolution No. 2008-09 authorizing the funding allocation for Regional Measure 2 funds from the Metropolitan Transportation Commission to the City of Benicia for the Solano County Express Bus North Intermodal Facilities – Benicia Intermodal Facilities.
- G. North Connector Contract Amendment – BKF Engineers**
Recommendation:
Approve a contract amendment for BKF Engineers to perform right of way engineering and construction design support services for an amount not-to-exceed \$220,000.
- H. Fiscal Year (FY) 2008-09 Transportation Development Act (TDA) Article 3 Bike Projects**
Recommendation:
Approve the attached FY 2008-09 TDA Article 3 Resolution No. 2008-10.
- I. Paratransit Coordinating Council (PCC) Appointment**
Recommendation:
Appoint Jamie Johnson as a Social Service representative to the PCC for a 3-year term.

COMMENTS FROM METROPOLITAN TRANSPORTATION COMMISSION (MTC), CALTRANS, AND STAFF:

A. Caltrans Report:

Doanh Nguyen, Project Manager, Caltrans District 4 reported on the construction progress of the I-80 Pavement Rehabilitation, I-80 HOV Lanes Project, Jameson Canyon SR 12 Truck Climbing Lane Project, and bid opening of SR 12 East Project.

B. MTC Report:

Chair Sperring commented that MTC announced on December 3, 2008 the awarding of \$9 million in RM 2 bridge toll funds to the Fairfield/Vacaville Rail Station. He stated that this additional funding is projected to fully fund phase 1 of the project which has been approved by the Capitol Corridor Joint Powers Board for new intercity rail service once the phase 1 project is completed.

C. STA Report :

1. Federal Legislative Report by Akin Gump's Susan Lent
2. Selection of Winners for Solano Commute Challenge by Board Members
3. Regional Measure 2 (RM 2) Presentations by Rod Moresco, City of Vacaville, Dan Schiada, City of Benicia, Wayne Lewis, City of Fairfield, and Gary Leach, City of Vallejo.

INFORMATIONAL ITEMS – NO DISCUSSION

- A. Regional Measure 2 (RM 2) Projects Update**
- B. Regional Transportation Plan (RTP) T2035 Update**
- C. Unmet Transit Needs Public Hearing for Fiscal Year (FY) 2009-10**
- D. State Route (SR) 12 Status Update**
- E. Project Delivery Update**
- F. Funding Opportunities Summary**
- G. STA Board Meeting Schedule for 2009**

ADJOURNMENT

The STA Board meeting was adjourned at 7:50 p.m. The next regular meeting of the STA Board is scheduled for **Wednesday, January 14, 2009, 6:00 p.m., Suisun City Hall Council Chambers.**



DATE: December 10, 2008
TO: STA TAC
FROM: Johanna Masiclat, Clerk of the Board
RE: STA Board and Advisory Committee Meeting Schedule for 2009

Background:

Attached are the STA Board and Advisory Committee meeting schedule for calendar year 2009 that may be of interest to the STA TAC.

Fiscal Impact:

None.

Recommendation:

Informational.

Attachment:

- A. STA Board and Advisory Committee Meeting Schedule for 2009



**STA BOARD AND ADVISORY
COMMITTEE MEETING SCHEDULE
CALENDAR YEAR 2009**

DATE	TIME	DESCRIPTION	LOCATION	STATUS
Wed., January 14	4:00 p.m.	RTIF Policy Committee	Suisun City Hall	Confirmed
Wed., January 14	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Wed., January 28	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., February 5	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Tues., February 10	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., February 11	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Wed., February 25	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., March 5	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., March 11	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Fri., March 20	12 noon	Paratransit Coordinating Council (PCC)	Fairfield Community Center	Confirmed
Thurs., March 19	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Wed., March 25	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., April 8	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Tues., April 14	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., April 29	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., May 7	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., May 13	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., May 14	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Tentative
Fri., May 15	12 noon	Paratransit Coordinating Council (PCC)	JFK Library - Vallejo	Confirmed
Wed., May 27	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Tues., June 9	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., June 10	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Wed., June 24	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., July 2	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Thurs., July 8	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., July 16	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Tentative
Fri., July 17	12:30 p.m.	Paratransit Coordinating Council (PCC)	Ulatis Community Center	Confirmed
July 29 (No Meeting)	SUMMER RECESS	Intercity Transit Consortium	N/A	N/A
		Technical Advisory Committee (TAC)	N/A	N/A
August 12 (No Meeting)	SUMMER RECESS	STA Board Meeting	N/A	N/A
Tues., August 11	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., August 26	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., September 3	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., September 9	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs. September 17	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Thurs., September 18	12:30 p.m.	Paratransit Coordinating Council (PCC)	Dixon Senior Center	Confirmed
Wed., September 30	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., October 7	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Tues., October 13	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., October 28	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Thurs., November 5	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., November 11	6:00 p.m.	STA's 11 th Annual Awards	TBD - Rio Vista	TBD
Thurs., November 19	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Tentative
Fri., November 20	12:30 p.m.	Paratransit Coordinating Council (PCC)	Suisun City Hall	Confirmed
Wed., November 25	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Tues., December 08	2:00 p.m.	Safe Routes to School (SR2S)	STA Conference Room	Tentative
Wed., December 09	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Wed., December 30	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Tentative
	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Tentative

SUMMARY:

STA Board: Meets 2nd Wednesday of Every Month
 Consortium/TAC: Meets *Last* Wednesday of Every Month
 PAC: Meets 3rd Thursday of every *Odd* Month
 PCC: Meets 3rd Friday of every *Odd* Month

BAC:
SR2S

Meets 1st Thursday of every *Odd* Month
 Meets 2nd Tuesday of every *Even* Month