



SOLANO TRANSPORTATION AUTHORITY

Member Agencies:
Benicia ♦ Dixon ♦ Fairfield ♦ Rio Vista ♦ Suisun City ♦ Vacaville ♦ Vallejo ♦ Solano County

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TECHNICAL ADVISORY COMMITTEE (TAC) AGENDA

1:30 p.m., Wednesday, November 18, 2015
Solano Transportation Authority
One Harbor Center, Suite 130
Suisun City, CA 94585

<u>ITEM</u>	<u>STAFF PERSON</u>
1. CALL TO ORDER	Daryl Halls, Chair
2. APPROVAL OF AGENDA	
3. OPPORTUNITY FOR PUBLIC COMMENT (1:30 -1:35 p.m.)	
4. REPORTS FROM MTC, STA STAFF, AND OTHER AGENCIES (1:35 -1:40 p.m.)	
5. CONSENT CALENDAR <u>Recommendation:</u> Approve the following consent items in one motion. (1:40 – 1:45 p.m.)	
A. Minutes of the TAC Meeting of September 30, 2015 <u>Recommendation:</u> Approve TAC Meeting Minutes of September 30, 2015. Pg.	Johanna Masiclat
6. ACTION FINANCIAL ITEMS	
A. None.	

TAC MEMBERS

Graham Wadsworth	Joe Leach	George Hicks	Dave Melilli	Tim McSorley	Steve Hartwig	David Kleinschmidt	Matt Tuggle
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

7. ACTION NON FINANCIAL ITEMS

A. Comprehensive Transportation Plan (CTP) Update – Arterials, Highways, and Freeways Element – Goals

Robert Macaulay

Recommendation:

Forward a recommendation to the STA Arterials Highways and Freeways and the STA Board to adopt the Arterials Highways and Freeways Element Goal as shown in Attachment C.

(1:45 – 1:55 p.m.)

Pg.

B. Draft 2015 Solano Travel Safety Plan

Ryan Dodge

Recommendation:

Forward a recommendation to the STA Board to release the Draft 2015 Solano Travel Safety Plan for public comment.

(1:55 – 2:10 p.m.)

Pg.

8. INFORMATIONAL ITEMS – DISCUSSION

A. Sustainable Communities Strategy and One Bay Area Grant Update

Robert Macaulay

(2:10 – 2:20 p.m.)

Pg.

B. Draft 2015 Solano County Annual Pothole Report

Anthony Adams

(2:20 – 2:25 p.m.)

Pg.

C. Legislative Update

Robert Macaulay

(2:25 – 2:30 p.m.)

Pg.

INFORMATIONAL ITEMS – NO DISCUSSION

D. Summary of Funding Opportunities

Drew Hart

Pg.

E. STA Board and Advisory Committee Meeting Schedule for the Remainder of Calendar Year 2015 and Draft Meeting Schedule for Calendar Year 2016

Johanna Masiclat

Pg.

9. UPCOMING TAC AGENDA ITEMS

December 2015

A. Draft Priority Conservation Areas (PCA) Plan – Drew Hart

B. Solano ReGIS Update – County of Solano

C. Approval of 2016 SolanoExpress Marketing Plan – Jayne Bauer

10. ADJOURNMENT

The next regular meeting of the Technical Advisory Committee is scheduled at, **1:30 p.m. on Wednesday, December 16, 2015.**

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TECHNICAL ADVISORY COMMITTEE
Minutes for the meeting of
September 30, 2015

1. CALL TO ORDER

The regular meeting of the STA's Technical Advisory Committee (TAC) was called to order by Daryl Halls at approximately 1:33 p.m. in the Solano Transportation Authority (STA)'s Conference Room 1.

TAC Members

Present:

Graham Wadsworth	City of Benicia
Christina Castro for Joe Leach	City of Dixon
George Hicks	City of Fairfield
Dave Melilli	City of Rio Vista
(Arrived at the meeting at 1:40 p.m.)	
Tim McSorley	City of Suisun City
Steve Hartwig	City of Vacaville
David Kleinschmidt	City of Vallejo
Nick Burton for Matt Tuggle	Solano County
(Arrived at the meeting at 1:40 p.m.)	

STA Staff and

Others

Present:

(In Alphabetical Order by Last Name)

Anthony Adams	STA
Jayne Bauer	STA
Ryan Dodge	STA
Sarah Fitzgerald	STA
Daryl Halls	STA
Drew Hart	STA
James Hsiao	Caltrans District 4
Philip Kamhi	STA
Robert Macaulay	STA
Johanna Masiclat	STA
John McKenzie	Caltrans District 4
Liz Niedziela	STA
Garland Wong	City of Fairfield

2. APPROVAL OF THE AGENDA

On a motion by Steve Hartwig, and a second by David Kleinschmidt, the STA TAC unanimously approved the agenda. (6 Ayes).

3. OPPORTUNITY FOR PUBLIC COMMENT

None presented.

4. REPORTS FROM CALTRANS, MTC AND STA STAFF

A. Caltrans – Current Projects & 2016 SHOPP

Presented by James Hsiao, Caltrans

B. Solano Transportation Improvement Authority (STIA) Update

Presented by Daryl Halls

C. OBAG Cycle 2 Update

Presented by Robert Macaulay

D. Active Transportation Plan Update

Presented by Drew Hart

Nick Burton and Dave Melilli arrived the meeting at this time.

5. CONSENT CALENDAR

On a motion by Dave Melilli, and a second by Nick Burton, the STA TAC approved Consent Calendar Items A, B, D-G. Item C, Solano Community College Transportation Fee Proposal was tabled by the SolanoExpress Intercity Transit Consortium at their meeting on September 29, 2015 until a future meeting. (8 Ayes)

A. Minutes of the TAC Meeting of August 26, 2015

Recommendation:

Approve TAC Meeting Minutes of August 26, 2015.

B. Solano Intercity Taxi Scrip Program Proposed Fare Change

Recommendation:

Forward a recommendation to the STA Board to release for public comment the following modifications to the Solano Intercity Taxi Scrip Program:

1. Increase the cost of scrip booklets from the current level of \$15 for \$100 worth of scrip to:
 - o \$40 for \$100 worth of scrip for non-low income patrons,
 - o \$20 for \$100 worth of scrip for low income patrons,
2. Set the low-income threshold for the discount fare at 138% of the Federal Poverty Level, consistent with the Medi-Cal program.

C. Tabled - Solano Community College Transportation Fee Proposal

D. Request for Qualifications: On Call Public Private Partnership Service

Recommendation:

Forward a recommendation to the STA Board to issue a Request for Proposals for Public-Private Partnership (P3) Services to assist in the SR 37 Corridor P3 Study.

E. STA's Local Preference Policy 4th Annual Report

Recommendation:

Forward a recommendation to the STA Board to receive and file.

F. Fiscal Year (FY) 2014-15 Abandoned Vehicle Abatement (AVA) Program Fourth Quarter Report

Recommendation:

Forward a recommendation to the STA Board to receive and file.

G. Solano Napa Commuter Information (SNCI) Program Annual Report for FY 2014-15 and Work Plan for FY 2015-16

Recommendation:

Forward a recommendation to the STA Board to receive and file.

6. ACTION FINANCIAL ITEMS

A. Draft Regional Transportation Impact Fee (RTIF) 2nd Annual Report

Robert Guerrero presented the Draft RTIF Annual Report for Fiscal Year 2014-15 (FY 2014-15). He noted that a total of \$1,374,391 was collected for eligible RTIF projects in FY 2014-15 (after accounting for STA's two percent administrative fee), and \$382,574 was carried over from the last two quarters of the previous fiscal year for a total of \$1,756,965 available for eligible RTIF projects. He also touched on the RTIF collection details for FY 2014-15 by quarter which he noted was included as Exhibit C on page 7 of the Draft RTIF Annual Report.

Recommendation:

Forward a recommendation to the STA Board to approve the Solano County Regional Transportation Impact Fee (RTIF) Annual Report for FY 2014-15.

On a motion by Dave Melilli, and a second by George Hicks, the STA TAC unanimously approved the recommendation. (8 Ayes)

B. Caltrans Sustainable Transportation Planning Grant Application for the SR 37 Corridor Feasibility Study

Robert Guerrero reviewed staff's recommendation to submit a grant proposal for the Caltrans Sustainable Communities category for a Feasibility Study for the SR 37 Corridor. He cited that STA staff has been coordinating with Caltrans and the three other North Bay counties (Napa, Marin and Sonoma) to focus on opportunities to improve SR 37. He added that STA staff proposes to request the maximum grant of \$500,000 from the Sustainable Communities category to conduct a feasibility study evaluating corridor improvement options on SR 37. He concluded by stating that the results and data of the feasibility study will feed into a future Project Initiation Document (PID), and the document's necessity to define the purpose and need for improving the corridor, and more importantly commits Caltrans and its partners to improving the corridor.

Recommendation:

Forward a recommendation to the STA Board to:

1. Authorize the Executive Director to submit a Sustainable Communities grant application for the SR 37 Corridor Feasibility Study; and
2. Dedicate up to \$64,972 from a fund source subject to grant approval.

On a motion by David Kleinschmidt, and a second by Dave Melilli, the STA TAC unanimously approved the recommendation. (8 Ayes)

7. ACTION NON FINANCIAL ITEMS

A. STA's Draft 2016 Legislative Priorities and Platform and Legislative Update

Jayne Bauer reviewed the development of the STA's Legislative Platform and Priorities initially submitted by staff in draft form. She noted that the draft is then distributed to STA member agencies and members of our federal and state legislative delegations for review and comment prior to adoption by the STA Board. She added that STA staff will then request feedback from the STA Board in October, with a recommendation to distribute the draft document for review and comment. She concluded by stating that the Final Draft 2016 Legislative Platform and Priorities will be placed on the November 2015 agenda of the TAC and Consortium, and forwarded to the STA Board for consideration of adoption in December 2015.

Recommendation:

Forward a recommendation to the STA Board to distribute the STA's Draft 2016 Legislative Priorities and Platform for review and comment.

On a motion by Steve Hartwig, and a second by Christina Castro, the STA TAC unanimously approved the recommendation. (8 Ayes)

B. 2015 Solano Congestion Management Program Update

Robert Macaulay provided an update to the development of the 2015 Solano Congestion Management Program. He noted that the updated information has been provided from the recent State of the System reports for transit and ridesharing, from the Annual Pothole Report, and from traffic counts done for the update of the travel demand model. He noted that at an earlier meeting, the Solano Express Intercity Transit Consortium approved to amend the recommendation and to forward to the STA Board to release the document for public review at their October 14, 2015 meeting. He concluded by stating that since the Board will not meet in November, the TAC may still submit final comments by October 30, 2015, then final adoption by the STA Board at their December 9, 2015 meeting.

Recommendation:

Forward a recommendation to the STA TAC and Board to ~~adopt~~ **release** the 2015 Solano Congestion Management Plan (CMP) **for a 30-day review and public comment.**

On a motion by David Melilli, and a second by Nick Burton, the STA TAC unanimously approved the recommendation as amended shown above in ~~strikethrough~~ **bold italics.** (8 Ayes)

C. Draft 2015 Solano Travel Safety Plan Priority Locations

Ryan Dodge distributed and reviewed the list (**Revised**) of the highest priority locations that were recommended by the Solano Safety Plan Technical Working Group at their September 29, 2015.

Recommendation:

Forward a recommendation to the STA Board to approve the 2015 Solano Travel Safety Plan priority locations for all member agencies as shown in Attachment A (**Revised**).

On a motion by David Kleinschmidt, and a second by Nick Burton, the STA TAC unanimously approved the recommendation. (8 Ayes)

D. Comprehensive Transportation Plan (CTP) – Arterials, Highways, and Freeways Element – State of the System Report

Robert Macaulay noted that no other changes to the format and content of the Arterials, Highways, and Freeways Element - State of the System report since the Committee met on September 23, 2015. Staff is recommending to forward the report to the STA Board for approval at their October 14, 2015 meeting.

Recommendation:

Forward a recommendation to the STA Board to approve the attached Arterials, Highways, and Freeways Element – State of the System Report as shown in Attachment B.

On a motion by David Kleinschmidt, and a second by Steve Hartwig, the STA TAC unanimously approved the recommendation. (8 Ayes)

E. Sustainable Communities (SCS)/Regional Transportation Plan (RTP) – Priority Projects for Solano County

Robert Macaulay outlined all the principles and projects/programs totaling \$700 million based on STA’s estimates of project costs. He cited that at an earlier meeting, the *Consortium requested increasing the MLIP Support from \$100 million to \$150 million.* In addition, the *City of Dixon requested adding the Parkway Boulevard Overcrossing to the project list.* After further discussion, the TAC concurred with both modifications.

Recommendation:

Forward a recommendation to the STA Board to approve the SCS project list in Attachment E.

On a motion by George Hicks, and a second by Christina Castro, the STA TAC unanimously approved the recommendation to include modifications noted above in *bold italics.* (8 Ayes)

Nick Burton left the meeting at this time.

8. INFORMATIONAL – DISCUSSION

A. Draft 2015 Solano County Annual Pothole Report

Anthony Adams provided an update to the development of the 2015 Solano County Annual Pothole report. He cited that staff STA is seeking input on the table of contents and financial projections included in the report. He noted that all member agencies have provided STA with the necessary budget information to allow for more accurate PCI projections and funding shortfalls.

NO DISCUSSION ITEMS

B. Transit Corridor Study Public Outreach

C. SolanoExpress 2015 Marketing Plan Update

D. Summary of Funding Opportunities

E. Draft Meeting Minutes of STA Board & Advisory Committees

**F. STA Board and Advisory Committee Meeting Schedule
for the Remainder of Calendar Year 2015 and Draft Meeting Schedule for Calendar
Year 2016**

9. FUTURE STA TAC AGENDA ITEMS

A summary of the agenda items for November 2015 were presented.

10. ADJOURNMENT

The meeting was adjourned at 3:05 p.m.

The next regular meeting of the Technical Advisory Committee is scheduled at, **1:30 p.m. on
Wednesday, November 18, 2015.**



DATE : November 9, 2015
TO: STA TAC
FROM: Robert Macaulay, Director of Planning
RE: Comprehensive Transportation Plan (CTP) Update Arterials, Highways and Freeways Element Goals

Background:

The Solano Comprehensive Transportation Plan (CTP) is one of STA's foundational documents. The current CTP was adopted in 2005. The Solano CTP is currently being updated. The new Active Transportation Element has been adopted, but two additional elements – Arterials, Highways and Freeways, and Transit and Rideshare – are still being developed.

On September 23, 2015, the Arterials, Highways and Freeways Committee approved the 2015 Arterials, Highways and Freeways State of the System Report. The next steps in the update of the Element are to review and, if appropriate, amend the Element goals, and then to analyze the gap between the current state of the system and the desired state as expressed in the goals.

Discussion:

At the September 23rd meeting of the STA Arterials, Highways and Freeways Committee, STA staff introduced a proposal to update the Goals of the Arterials, Highways and Freeways Element of the Solano CTP. On October 29th, the staff report and attachments from the Committee meeting were distributed to TAC members in an e-mail. The existing goals of the Solano CTP and the Arterials, Highways and Freeways Element are provided as Attachments A and B. The proposed new Arterials, Highways and Freeways Goals are provided as Attachment C.

The new proposed Arterials Highways and Freeways Element Goals are provided as Attachment C. The specific recommended goals fall into five general categories:

1. Create an AHF System that improves mobility for all modes of travel.
2. Improve system safety
3. Maintain the system at an appropriate level
4. Support the creation of Solano County jobs and other locally-decided land uses
5. Anticipate and mitigate system construction and operation impacts

Within these categories, there are several key policies worth noting.

- Prioritize funds for projects that improve Routes of Regional Significance (RORS). These are the roadways that are most important for inter-city and intra-regional travel and that provide direct access to employment and transit centers.
- Prepare and periodically update corridor studies to identify and prioritize specific projects. This allows specific projects to be identified and prioritized by more detailed studies, and frees the Solano CTP from the burden of becoming a programming, rather than a planning, document.

- Seek to fund an average PCI rating of all RORS as Good, with no RORS being rated as Poor. This Goal is based on the engineering analysis that shows how rapidly road maintenance costs accelerate when the PCI drops below 60 (from Good into Poor).

Once the new Goals are adopted (or the exiting Goals affirmed), STA staff can prepare the Goal Gap Analysis to show the difference between the major roadway system as it exists and the system that is desired. Following the gap analysis, staff can then draft policies to help identify, prioritize and implement programs and projects to fill those gaps.

Fiscal Impact:

None at this time.

Recommendation:

Forward are recommendation to the STA Arterials Highways and Freeways and the STA Board to adopt the Arterials Highways and Freeways Element Goal as shown in Attachment C.

Attachments:

- A. Solano CTP Goals
- B. Adopted Arterials Highways and Freeways Element Goals
- C. Draft Arterials Highways and Freeways Element Goals

COMPREHENSIVE TRANSPORTATION PLAN

Approved by STA Board 1/9/08

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

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

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

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

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

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

Arterials, Highways, and Freeways Element

Purpose Statement and Goals

OVERALL COMPREHENSIVE TRANSPORTATION PLAN

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

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

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

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

- 6) Update Solano County's Routes of Regional Significance to implement the STA's 50/50 policy*.

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

- 7) Prioritize roadway projects for available and future funding with the following criteria:
 - a. Project Deliverability
 - b. Safety improvements
 - c. Increased system efficiency
 - d. Capacity improvements
 - e. Goods movement enhancements
 - f. Climate change policies
 - g. Routes of Regional Significance
 - h. Economic Development

- 8) Prepare and maintain an up-to-date travel demand model for Solano and Napa counties. The model should have the following characteristics:
 - a. Consistent with MTC requirements, including use of ABAG projections.
 - b. Use a future year adequate to meet Caltrans requirements.
 - c. Substantially revised after each decennial census, and updated with new ABAG projections.
 - d. Ensure traffic model provides information relevant to traffic congestion and air pollution reduction strategies.

- 9) Anticipate and fully mitigate arterial, highway, and freeway project's environmental impacts
 - a. Special emphasis should be given to air emission and greenhouse gas reduction.

 - b. Where appropriate, be consistent with the Solano County Habitat Conservation Plan's (HCP) avoidance and mitigation measures.

- 10) Identify and prioritize Right of Way (ROW) needed to preserve to meet long-term traffic demands.

- 11) Identify and obtain potential funding sources to implement the Arterials, Highways and Freeways Element of the Solano Comprehensive Transportation Plan.

Arterials, Highways, and Freeways Element

Purpose Statement and Goals

OVERALL COMPREHENSIVE TRANSPORTATION PLAN

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

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

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

Create an AHF System that improves mobility for all modes of travel.

- Prioritize funds for projects that improve Routes of Regional Significance
- Freeways – support development and operation of a comprehensive Express/HOV network on I-80 and I-680
- Seek consistent width to avoid congestion caused by reduction in number of lanes
- Implement Complete Streets appropriate to the context of the roadway
- Improve system efficiency through technology prior to adding lanes
- Identify and preserve needed rights of way for future transportation projects
- Prepare and periodically update corridor studies to identify and prioritize specific projects
- Identify and improve freight mobility and safety.

Improve system safety

- Identify locations with above-average number or rates of collisions, and fund improvements to reduce collisions to average

Maintain the system at an appropriate level

- Seek to fund an average PCI rating of all RORS as 75, with no RORS being rated below 60
- Work with Caltrans to ensure that a similar standard is maintained on the State system

Support the creation of Solano County jobs and other locally-decided land uses

- Identify roadway improvements that improve goods movement or reduce the impact of goods movement in Solano County

- Identify roadway improvements that support retention or expansion of regionally important employment centers, retail centers and civic facilities
- Prioritize available funds to support PDAs and PCAs, with special emphasis being given to support for Transit Facilities of Regional Significance
 - All TFORS are in or adjacent to PDAs

Anticipate and mitigate system construction and operation impacts

- Special emphasis should be given to projects and designs that reduce emissions of criteria pollutants and greenhouse gasses
 - Support projects that reduce emissions of criteria pollutants in sensitive communities or Communities of Concern
- Where possible, use the avoidance and mitigation standards from the Solano Habitat Conservation Plan for STA transportation projects



DATE: November 9, 2015
TO: STA TAC
FROM: Ryan Dodge, Associate Planner
RE: Draft 2015 Solano Travel Safety Plan

Background:

In 2005, the STA updated the 1998 Solano Travel Safety Plan. Between 2005 and 2015, the 2005 Solano Travel Plan was useful for funding projects to improve safety throughout Solano County. Forty-five safety related projects were completed at listed locations in the 2005 plan.

The Solano Safety Plan Technical Working Group members are as follows:

<u>Member</u>	<u>Agency</u>
Jason Riley	City of Benicia
Nouae Vue	City of Benicia
Christina Castro	City of Dixon
Garland Wong	City of Fairfield
David Melilli	City of Rio Vista
Nick Lozano	City of Suisun City
Ozzie Hilton	City of Vacaville
Allan Panganiban	City of Vallejo
Nick Burton	County of Solano

Discussion:

The 2015 Solano Travel Safety Plan (Plan) addresses safety concerns of all people traveling on public roadways in Solano County. The Plan documents safety-related projects completed since the most recent plan update in 2005, lists locations of current (2015) priority project locations, and proposes changes to improve safety throughout the County. The Safety Plan will guide STA when prioritizing funding for plans, programs, and projects in preparation for future funding opportunities that may become available to address safety concerns at various locations throughout Solano County.

For the 2015 plan update, the STA formed the Solano Safety Plan Technical Working Group with representatives from each member agency to identify current locations where safety concerns have been identified. The priorities have all been determined by member agency staff members.

The Plan is comprised of four sections: Introduction (Preamble; 1998 and 2005 Solano Travel Safety Plans; 2015 Solano Travel Safety Plan; and Solano County Collision Safety); Projects Completed Since the 2005 Solano Travel Safety Plan; Priority Locations for Safety Project Development; and Next Steps.

STA and member agency staff members met several times individually and as a group in order to update the Plan.

The Solano Safety Plan Technical Working Group last met on November 5, 2015 and approved the Draft 2015 Solano Travel Safety Plan and now forwards the Plan to the TAC. The Draft Plan will be presented as an informational item to the STA Board at the December 9, 2015 meeting and is scheduled for final approval at the January 13, 2016 STA Board meeting. TAC comments and feedback are welcome leading up to the January STA Board meeting.

Recommendation:

Forward a recommendation to the STA Board to release the Draft 2015 Solano Travel Safety Plan for public comment.

Attachment:

- A. Draft 2015 Solano Travel Safety Plan



Solano Travel Safety Plan

November 10, 2015 (DRAFT)

Solano Transportation Authority (STA)

- 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*



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Executive Summary

The Solano Travel Safety Plan (Safety Plan) has been updated by the Solano Transportation Authority (STA) and staff from our member agencies (Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, Vallejo, and unincorporated Solano County). The plan identifies locations where there is a traffic safety concern on local streets and roads throughout Solano County. The Safety Plan will guide the STA when prioritizing funding for plans, programs, and projects in the goal to eliminate all fatalities and severe injuries on our roadways.

The Safety Plan documents work completed since the last Solano Travel Safety Plan was updated in 2005, and sets new priorities to actively secure funding to implement new safety projects.

Each year on all roads in Solano County an average of over 2,500 people are injured in over 4,700 collisions. On local roads alone, each year an average of nearly 1,400 people are injured in nearly 2,500 collisions. Motor vehicle collision victims and their families, their employers, and society at large are affected in a number of ways: directly by injuries, lost work time and the cost of vehicle repair or replacement; and indirectly through traffic congestion, environmental damage and emotional distress. It is to help alleviate or eliminate these impacts that STA and its member agencies are updating this plan.

1. Introduction

This 2015 Solano Travel Safety Plan (Safety Plan) addresses safety concerns of all people traveling on local streets and roads in Solano County, roads which are under member agency control. The California Department of Transportation (Caltrans) owns and operates Interstate Routes 80, 505, 680, and 780, and State Routes 12, 29, 37, 84, 113, and 128. The Solano County Sheriff's Office enforces traffic laws and responds to reported traffic collisions in the unincorporated areas of Solano County while local police departments cover their respective cities.

The Safety Plan documents 45 safety-related projects completed since the most recent plan update in 2005, lists 76 locations of current (2015) priority project locations, and formulates next steps in improving safety throughout the County. The Safety Plan will guide STA in preparation for future funding opportunities that may become available to address safety concerns at various locations throughout Solano County.

For the purposes of the 2015 Solano Travel Safety Plan, the term safety is defined to include incidents on the public roadway system that result in physical harm, property damage or environmental damage for all system users such as pedestrians, bicyclists, transit riders, motorists, and commercial vehicle operators¹. The Solano Travel Safety Plan does not address incidents on private property, or those involving air, rail or water transportation.

1998 and 2005 Solano Travel Safety Plans

STA adopted its first Solano Travel Safety Plan in 1998. In 2005, the STA updated the 1998 Solano Travel Safety Plan. The 2005 Solano Travel Safety Plan provided collision data between 1998 and 2004 for motor vehicle crash rates for 63 local intersections (per million entering vehicles); collision rates for 13 state and interstate roadway segments (per million vehicle miles), including types of collisions (sideswipe, rear end, and fixed object); bicycle and pedestrian crash rates (per 1,000 population); recently completed or funded but not-yet-completed projects at the 63 local intersections; safety-related projects on state and interstate roadways; continuous California Highway Patrol (CHP) enforcement programs; and potential funding sources for future safety-related projects.

Between 2005 and 2015, the 2005 Solano Travel Plan was used to identify and help fund projects to improve safety throughout Solano County.

2015 Solano Travel Safety Plan

The 2015 Solano Travel Safety Plan departs from the methodology used in the 2005 Solano Travel Safety Plan primarily due to a lack of recent and comprehensive motor vehicle volume count data, which is required for determining collision rates. Instead, this plan utilizes the engineering judgement and collected data of local agency staff members and incorporates reported collision data from state resources to identify locations known or perceived to have safety concerns.

¹ Washington, S., Meyer, M., van Schalkwyk, I., Dumbaugh, E., Mitra, S., & Zoll, M. (2006). *Guidance: Incorporating Safety into Long-Range Transportation Planning*. National Cooperative Highway Research Program: NCHRP 8-44

Solano County Collision Safety

Motor vehicle collision victims and their families, their employers, and society at large are affected in a number of ways: directly, by injuries, lost work time and the cost of vehicle repair or replacement, and indirectly through traffic congestion, environmental damage and emotional distress. It is to help alleviate or eliminate these impacts that STA and its member agencies are updating this plan.

Financial Impact

Every year in Solano County dozens of people are killed and thousands of people are injured in reported vehicle collisions. That is not the entire picture, as it is estimated that over half of all non-injury crashes and about a quarter of all non-fatal injury crashes are not reported to police². Even if an individual has not directly been injured by a traffic collision, every person has a one in 112 odds of being involved in a fatal collision in their lifetime. Statistics show that a person is three times more likely to be involved in a fatal collision than being assaulted with a firearm³.

Using the methodology introduced in National Highway Traffic Safety Administration's (NHTSA) "The Economic and Societal Impact of Motor Vehicle Crashes"², the estimated economic costs of all reported motor vehicle collisions in Solano County were estimated to be \$150 million in 2014 (in 2010 dollar values). The economic cost for collisions on local roads only is estimated to be \$78 million in 2014 (in 2010 dollar values). Society at large or people not directly involved in car crashes paid over three quarters of the cost primarily through insurance premiums, travel delay, fuel usage, and taxes. Figure 1 below highlights the estimated economic impact of motor vehicle collisions in Solano County between 2005 and 2014.

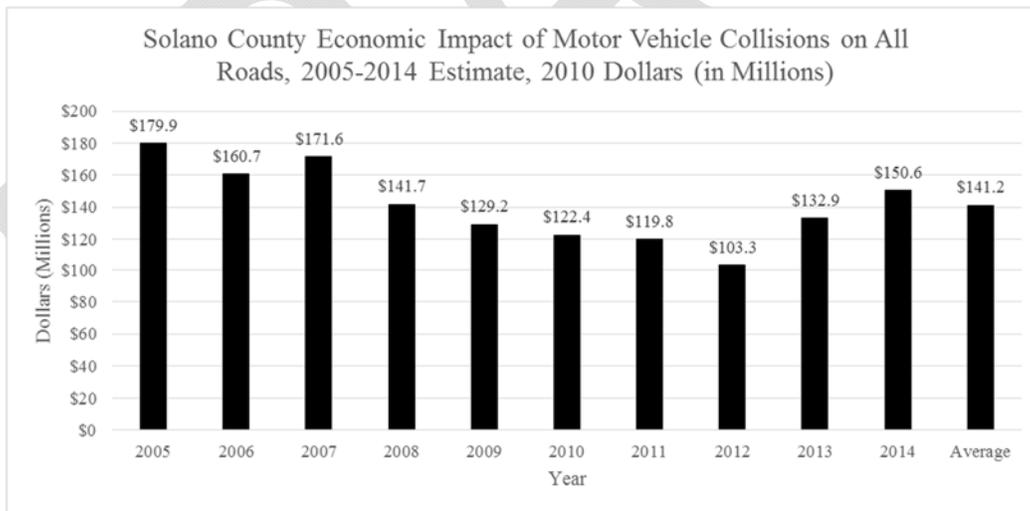


Figure 1. Solano County Economic Impact of Motor Vehicle Collisions on All Roads, 2005-2014 Estimate, 2010 Dollars (in Millions)^{2,4}

² Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). *The economic and societal impact of motor vehicle crashes, 2010. (Revised)* (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration.

³ National Safety Council, Odds of Dying. Retrieved October 5, 2015 from <http://www.nsc.org/act/events/Pages/Odds-of-Dying-2015.aspx>

⁴ California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), retrieved August 18, 2015 (years 2005-2009) and September 16, 2015 (years 2010-2014)

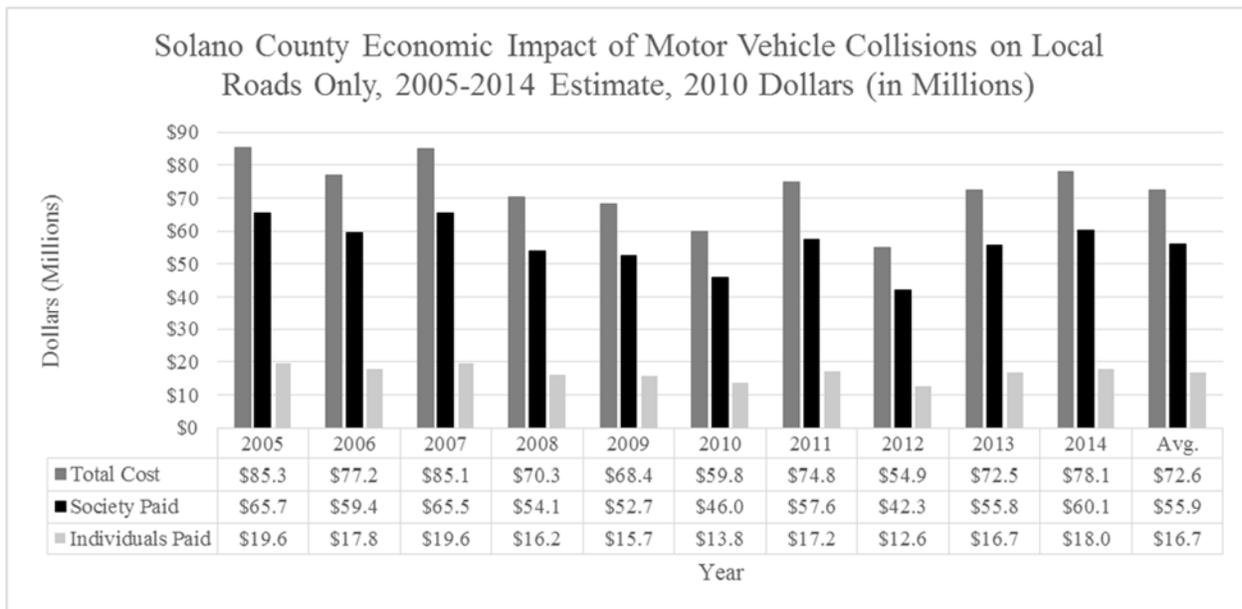


Figure 2. Solano County Economic Impact of Motor Vehicle Collisions on Local Roads Only, 2005-2014 Estimate, 2010 Dollars (in Millions)^{2,4}

Vehicle Hours of Delay

Vehicle collisions not only have a financial impact, they also contribute to time delay due to congestion on our roadways. Motor vehicle crashes result in significant time delays to other motorists who are inconvenienced by lane closures, police, fire, or emergency services activity, detours, and general traffic slowdowns resulting from rubbernecking and chain reaction braking. This results in a significant time penalty for those affected, which can be valued based on wage rates and the value people place on their free time². In addition, it is not uncommon to have additional crashes in the traffic backed up behind the initial incident.

Environmental

Traffic crashes also results in wasted fuel, and therefore increased greenhouse gas production, and increased pollution as engines idle while drivers are caught in traffic jams and slowdowns. These impacts affect drivers' transportation costs and negatively impact the health and economic welfare of Solano County and the Nation². Crashes can also spill fuel or other fluids into the environment, and can cause vegetation fires.

Solano County Collision Trend

Figure 3 below highlights Solano County's fatality collision rate from data provided by the Statewide Integrated Traffic Records System (SWITRS). Solano County's highest fatal collision occurred in 2005 with a steady trend through 2007. A small dip in the trend occurred between 2008 and 2012. In more recent years, the fatal and severe collisions have started to increase closer to the collision rates reported in 2005 and 2006.

² Blincoc, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). *The economic and societal impact of motor vehicle crashes, 2010. (Revised)* (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration.

⁴ California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), retrieved August 18, 2015 (years 2005-2009) and September 16, 2015 (years 2010-2014)

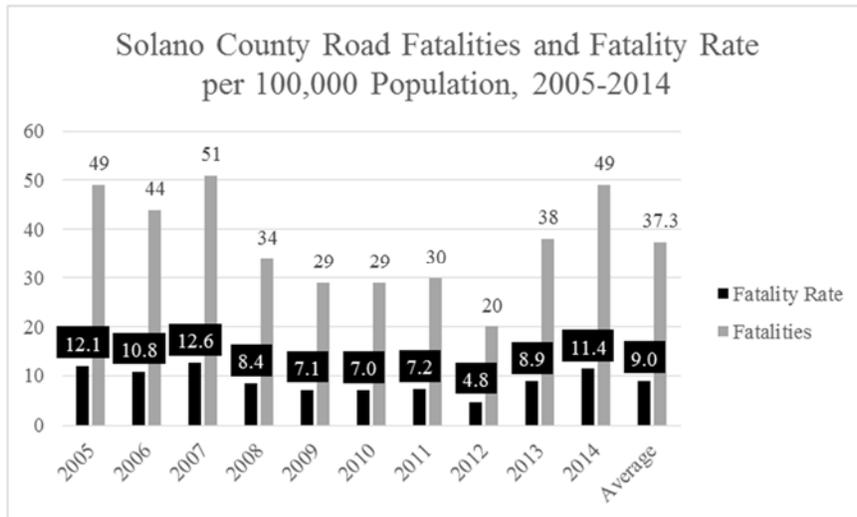


Figure 3. Solano County Road Fatalities per 100,000 Population, 2005-2014⁴

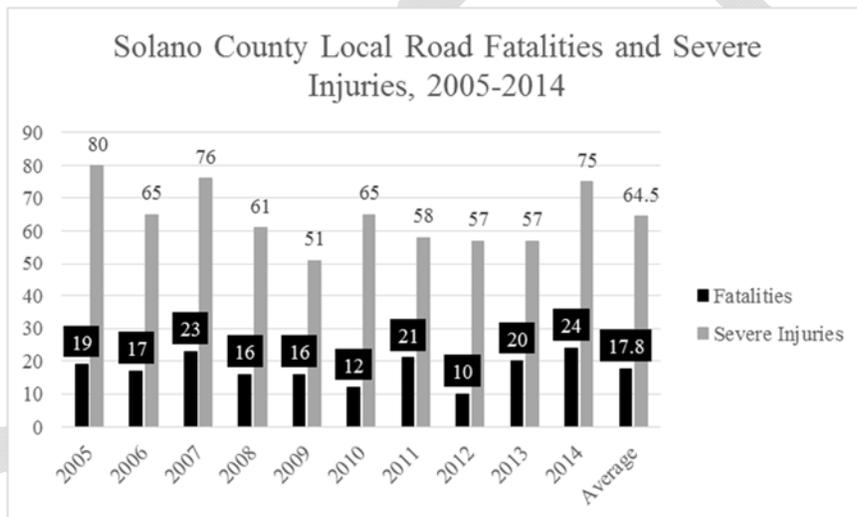


Figure 4. Solano County Local Road Fatalities and Severe Injuries, 2005-2014⁴

The fatality rate in Solano County varies by year but averaged 9 deaths per 100,000 population for the last 10 years^{4,5}. For comparison purposes, between 2009 and 2013, Solano County's average fatality rate of 7 was the same rate for the average combined rate of the four adjacent counties (Contra Costa, Napa, Sacramento, and Yolo Counties)^{4,5}. In 2013 (the most recent year of data) the United States fatality rate was 10.35⁶ and California's fatality rate was 7.8^{5,7}.

⁴ California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), retrieved August 18, 2015 (years 2005-2009) and September 16, 2015 (years 2010-2014)

⁵ Population figures used for calculations, retrieved using Google which cites United States Census Bureau as one of the sources.

⁶ National Highway Traffic Safety Administration (NHTSA), Fatality Analysis Reporting System (FARS), retrieved October 8, 2015 from <http://www-fars.nhtsa.dot.gov/Main/index.aspx>

⁷ California Office of Traffic Safety (OTS) California Traffic Safety Quick Facts, retrieved October 6, 2015 from http://www.ots.ca.gov/OTS_and_Traffic_Safety/Score_Card.asp

Auto collisions are not accidents that just happen randomly without cause. The precise time and location cannot be predicted, but we know:

1. drivers may make poor choices while driving (speeding and otherwise not obeying traffic laws and signs/signals, using cell phones/in-car media dashboards, or drinking and driving);
2. the design of our roadways and adjacent land uses influence how we travel (whether we walk, bike, drive, or ride transit, or whether or not we speed while driving);
3. equipment we use to travel may fail us (brakes failing or tire blowouts); and,
4. the environment sometimes makes it more difficult (heavy rain, rising or setting sun).

Most of these issues can be addressed, and the underlying causes can be prevented. The good news is that motor vehicle collisions can be prevented if there is adequate funding and resources, which may allow the collection, management, and analysis of data required to perform advanced road safety analysis.

DRAFT

2. Projects Completed Since the 2005 Solano Travel Safety Plan

The 2005 Solano Travel Safety Plan listed 63 intersections throughout Solano County as well as various other locations that were determined to have safety-related problems. The table below summarizes changes made to 45 locations since 2005 that were listed the 2005 plan.

Projects completed since 2005 at locations listed in the 2005 Solano Travel Safety Plan:

ID	AGENCY	LOCATION	CHANGES SINCE 2005
1	City of Benicia	East 2nd Street at Military East	(2012) Pedestrian activated flashing no-right-turn sign for motor vehicles installed to allow pedestrians to more safely cross the roadway
2	City of Dixon	Lincoln Street at West A Street	(2008) STOP signs installed, stopping West A Street; crosswalks installed on the north and south legs, crossing Lincoln Street
3	City of Fairfield	Clay Bank Road at East Tabor Avenue	All way STOP signs installed on East Tabor Avenue, at Clay Bank Road as an interim measure. Intersection meets traffic signal warrants
4	City of Fairfield	East Tabor Avenue	Radar speed display signs were installed fronting Grange Middle School and along East Tabor Avenue, intersecting Tolenas Road for Tolenas Elementary (located in Solano County)
5	City of Fairfield	East Tabor Avenue at North Texas Street	Traffic signals retimed on North Texas Street
6	City of Fairfield	Gateway Boulevard at Travis Boulevard	Red light cameras installed and later removed; Traffic signals retimed
7	City of Fairfield	Jefferson Street at Texas Street	Traffic signals retimed
8	City of Fairfield	North Texas Street at Pacific Avenue	Traffic signals retimed
9	City of Fairfield	North Texas Street at Travis Boulevard	Median islands and additional channelization installed
10	City of Fairfield	Pennsylvania Avenue at Travis Boulevard	Traffic signals retimed
11	City of Fairfield	Pennsylvania Avenue at Utah Street	Signal modified to include protected left-turn phases on Pennsylvania Avenue
12	City of Fairfield	Travis Boulevard at Union Avenue	Right-turn lanes installed for eastbound and northbound traffic
13	City of Suisun City	CA-12 at Marina Boulevard	(2015) Traffic signal changes: permitted phasing changed to split phasing (northbound and southbound approaches); upgraded traffic signal poles and mast arms (northeast and southwest corners); additional traffic signal heads installed
14	City of Suisun City	CA-12 at Sunset Avenue	(2015) Traffic signal timing updated for morning, mid-day, and afternoon peak periods along Sunset Avenue
15	City of Suisun City	Pintail Drive at Sunset Avenue	(2015) Traffic signal timing updated for morning, mid-day, and afternoon peak periods along Sunset Avenue

Projects completed since 2005 at locations listed in the 2005 Solano Travel Safety Plan continued:

ID	AGENCY	LOCATION	CHANGES SINCE 2005
16	City of Suisun City	Railroad Avenue East at Sunset Avenue	(2009) Traffic signal installed; (2015) Traffic signal timing updated for morning, mid-day, and afternoon peak periods along Sunset Avenue
17	City of Suisun City	Railroad Avenue West at Sunset Avenue	(2009) Traffic signal modified; (2015) Traffic signal timing updated for morning, mid-day, and afternoon peak periods along Sunset Avenue
18	City of Vacaville	Alamo Drive at Alamo Lane	(2009) Roadway asphalt concrete (AC) overlay; signs and markings update
19	City of Vacaville	Alamo Drive at Mariposa Avenue	(2009) Roadway asphalt concrete (AC) overlay; signs and markings update
20	City of Vacaville	Alamo Drive at Marshall Road	(2009) Roadway asphalt concrete (AC) overlay; signs and markings update
21	City of Vacaville	Alamo Drive at Merchant Street	(2011) Roadway asphalt concrete (AC) overlay; signs and markings update
22	City of Vacaville	Alamo Drive at Nut Tree Road	(2012) Roadway asphalt concrete (AC) overlay; signs and markings update
23	City of Vacaville	Alamo Drive at Peabody Road	(2009) Roadway asphalt concrete (AC) overlay; signs and markings update
24	City of Vacaville	Allison Drive at East Monte Vista Avenue	(2014) Roadway asphalt concrete (AC) overlay; signs and markings update
25	City of Vacaville	Allison Drive at Elmira Road	(2009) Roadway asphalt concrete (AC) overlay; signs and markings update
26	City of Vacaville	Allison Drive at Nut Tree Road	(2014) Roadway asphalt concrete (AC) overlay; signs and markings update
27	City of Vacaville	Callen Street at East Monte Vista Avenue	(2005) Roadway slurry seal; signs and markings update
28	City of Vacaville	Cliffside Drive at Peabody Road	(2012) Roadway asphalt concrete (AC) overlay; signs and markings update
29	City of Vacaville	Depot Street at Mason Street	(2014) Roadway asphalt concrete (AC) overlay; signs and markings update
30	City of Vacaville	East Monte Vista Avenue at Depot Street / Markham Avenue	(2011) Roadway asphalt concrete (AC) overlay; signs and markings update
31	City of Vacaville	Elmira Road at Nut Tree Road	(2012) Roadway asphalt concrete (AC) overlay; signs and markings update
32	City of Vacaville	Elmira Road at Peabody Road	(2012) Roadway asphalt concrete (AC) overlay; signs and markings update
33	City of Vacaville	Fairview Drive at Nut Tree Road	(2005) Roadway asphalt concrete (AC) overlay; signs and markings update
34	City of Vacaville	Marshal Road at Peabody Road	(2009) Peabody & Marshall Safety Improvements; (2012) Roadway asphalt concrete (AC) overlay; signs and markings update
35	City of Vacaville	Nut Tree Road at Ulatris Drive	(2006) Roadway asphalt concrete (AC) overlay; signs and markings update

Projects completed since 2005 at locations listed in the 2005 Solano Travel Safety Plan continued:

ID	AGENCY	LOCATION	CHANGES SINCE 2005
36	City of Vallejo	Admiral Callaghan Lane at Tennessee Street	Left-turn pockets with raised medians installed for all approaches; roadway repaved
37	City of Vallejo	Alameda Street at Georgia Street	Road diet implemented (Georgia Street); Designated lane movements striped (Alameda Street)
38	City of Vallejo	Broadway Street at CA-37 / Marine World	(2005) Overpass installed over Broadway Street (Caltrans State Route 37 Improvement Project)
39	City of Vallejo	CA-29 / Sonoma Boulevard at CA-37 / Marine World	(2005) Overpass installed over CA-29 / Sonoma Boulevard (Caltrans State Route 37 Improvement Project)
40	City of Vallejo	CA-29 / Sonoma Boulevard at Georgia Street	Traffic signal modified; left-turn pockets installed (Georgia Street)
41	City of Vallejo	Columbus Parkway at Lake Herman Road	Roadway widened to four travel lanes with turning lanes at controlled intersections (Columbus Parkway from CA-37 / I-80 to Springs Road)
42	City of Vallejo	Mariposa Street at Solano Avenue	Median installed at eastbound Solano Avenue; left-turn lanes striped for all approaches
43	City of Vallejo	Oakwood Avenue at Tennessee Street	Left-turn lanes striped for all approaches; (2010) roadway repaved
44	City of Vallejo	Sereno Drive at Tuolumne Street	Left-turn lanes and traffic signals installed (Tuolumne Street)
45	County of Solano	Abernathy Road at Rockville Road	(2006) Roundabout installed

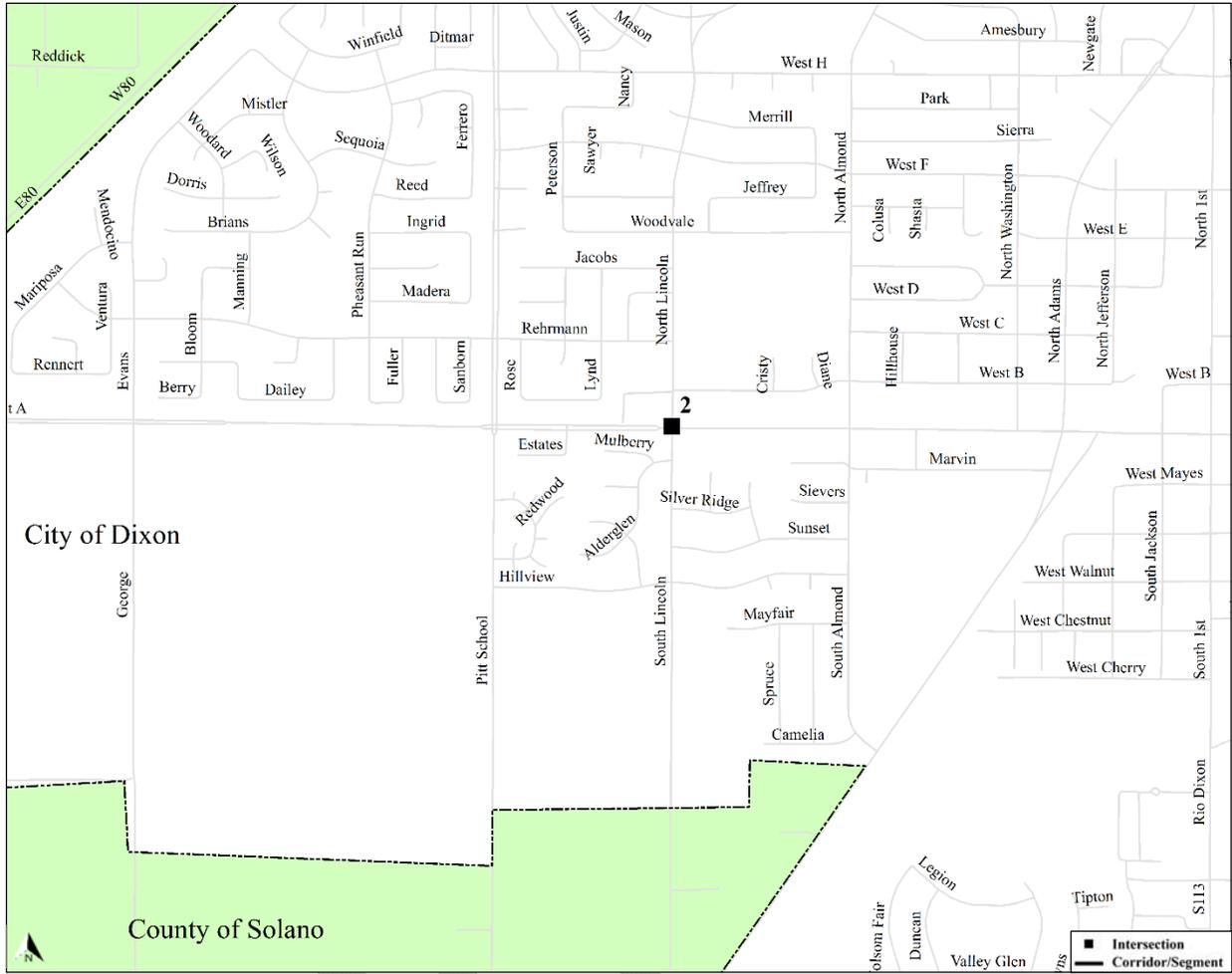


Map 1. Overview Map of All Projects Completed Since the 2005 Solano Travel Safety Plan



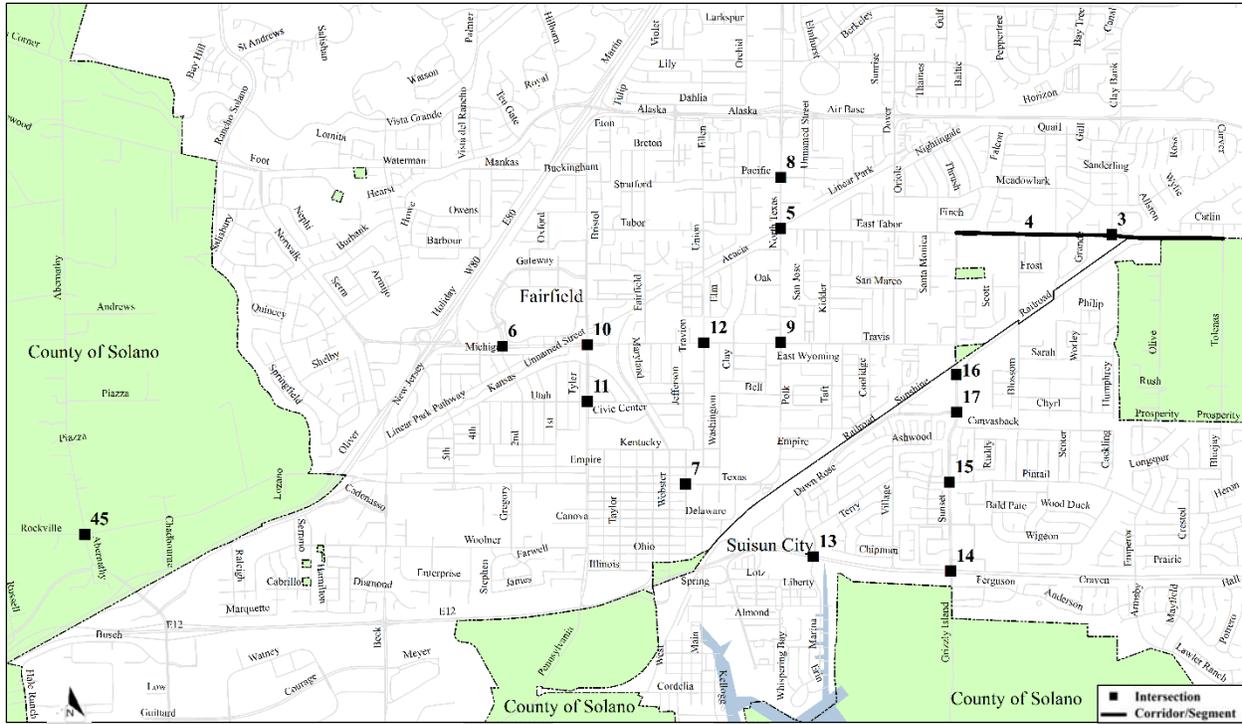
Map 2. Project Completed Since the 2005 Solano Travel Safety Plan, City of Benicia

ID	AGENCY	LOCATION
1	City of Benicia	East 2nd Street at Military East



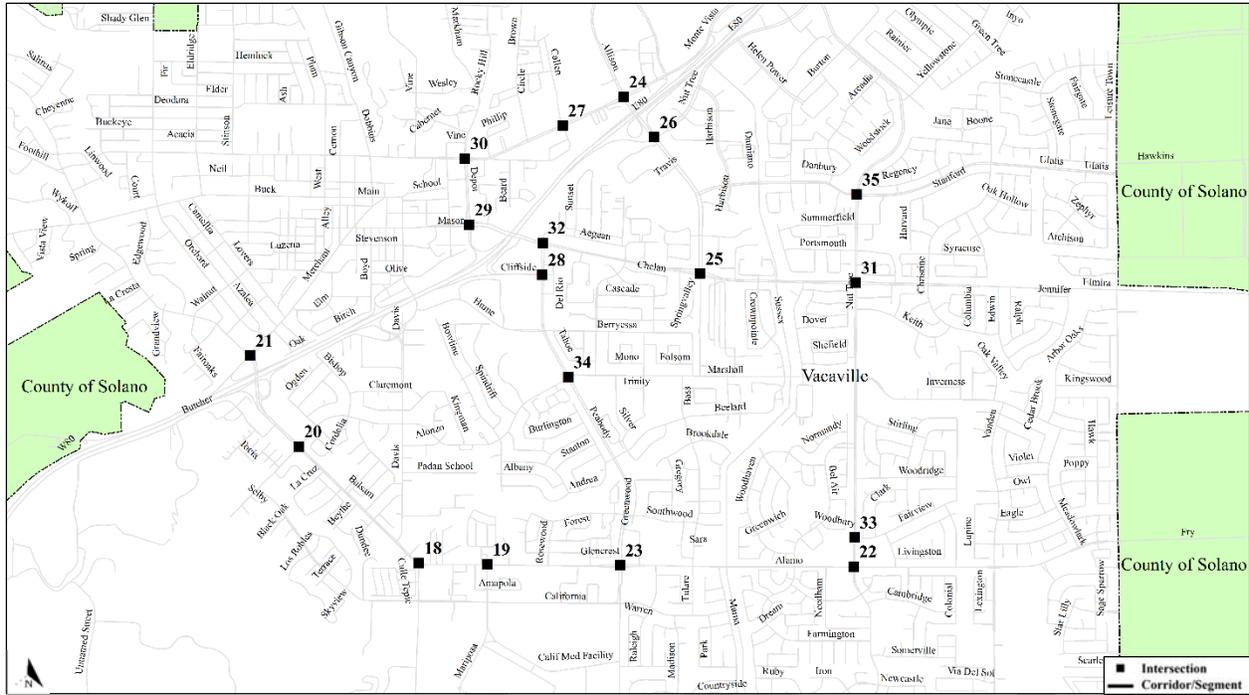
Map 3. Project Completed Since the 2005 Solano Travel Safety Plan, City of Dixon

ID	AGENCY	LOCATION
2	City of Dixon	Lincoln Street at West A Street



Map 4. Projects Completed Since the 2005 Solano Travel Safety Plan, City of Fairfield, City of Suisun City, and County of Solano

ID	AGENCY	LOCATION
3	City of Fairfield	Clay Bank Road at East Tabor Avenue
4	City of Fairfield	East Tabor Avenue
5	City of Fairfield	East Tabor Avenue at North Texas Street
6	City of Fairfield	Gateway Boulevard at Travis Boulevard
7	City of Fairfield	Jefferson Street at Texas Street
8	City of Fairfield	North Texas Street at Pacific Avenue
9	City of Fairfield	North Texas Street at Travis Boulevard
10	City of Fairfield	Pennsylvania Avenue at Travis Boulevard
11	City of Fairfield	Pennsylvania Avenue at Utah Street
12	City of Fairfield	Travis Boulevard at Union Avenue
13	City of Suisun City	CA-12 at Marina Boulevard
14	City of Suisun City	CA-12 at Sunset Avenue
15	City of Suisun City	Pintail Drive at Sunset Avenue
16	City of Suisun City	Railroad Avenue East at Sunset Avenue
17	City of Suisun City	Railroad Avenue West at Sunset Avenue
45	County of Solano	Abernathy Road at Rockville Road



Map 5. Projects Completed Since the 2005 Solano Travel Safety Plan, City of Vacaville

ID	AGENCY	LOCATION
18	City of Vacaville	Alamo Drive at Alamo Lane
19	City of Vacaville	Alamo Drive at Mariposa Avenue
20	City of Vacaville	Alamo Drive at Marshall Road
21	City of Vacaville	Alamo Drive at Merchant Street
22	City of Vacaville	Alamo Drive at Nut Tree Road
23	City of Vacaville	Alamo Drive at Peabody Road
24	City of Vacaville	Allison Drive at East Monte Vista Avenue
25	City of Vacaville	Allison Drive at Elmira Road
26	City of Vacaville	Allison Drive at Nut Tree Road
27	City of Vacaville	Callen Street at East Monte Vista Avenue
28	City of Vacaville	Cliffside Drive at Peabody Road
29	City of Vacaville	Depot Street at Mason Street
30	City of Vacaville	East Monte Vista Avenue at Depot Street / Markham Avenue
31	City of Vacaville	Elmira Road at Nut Tree Road
32	City of Vacaville	Elmira Road at Peabody Road
33	City of Vacaville	Fairview Drive at Nut Tree Road
34	City of Vacaville	Marshal Road at Peabody Road
35	City of Vacaville	Nut Tree Road at Ulatis Drive



Map 6. Projects Completed Since the 2005 Solano Travel Safety Plan, City of Vallejo

ID	AGENCY	LOCATION
36	City of Vallejo	Admiral Callaghan Lane at Tennessee Street
37	City of Vallejo	Alameda Street at Georgia Street
38	City of Vallejo	Broadway Street at CA-37 / Marine World
39	City of Vallejo	CA-29 / Sonoma Boulevard at CA-37 / Marine World
40	City of Vallejo	CA-29 / Sonoma Boulevard at Georgia Street
41	City of Vallejo	Columbus Parkway at Lake Herman Road
42	City of Vallejo	Mariposa Street at Solano Avenue
43	City of Vallejo	Oakwood Avenue at Tennessee Street
44	City of Vallejo	Sereno Drive at Tuolumne Street

3. Priority Locations for Safety Project Development

The 2015 Solano Travel Safety Plan includes 76 locations throughout Solano County that have been identified as having one or more safety-related concerns. This section includes the primary safety concern(s) at each location, proposed changes to address safety concerns, and general cost estimates for addressing these concerns.

Locations were identified by the Solano Travel Safety Plan Working Group members using multiple sources of information. Contact member agencies directly for additional information.

City of Benicia

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Benicia typically relies on citizens or the City Council to notify City staff of any observed or perceived safety concerns on Benicia's roadways. Traffic safety issues are also brought up through the Traffic Pedestrian and Bicycle Safety (TPBS) Committee which meets quarterly.

City of Benicia priority locations:

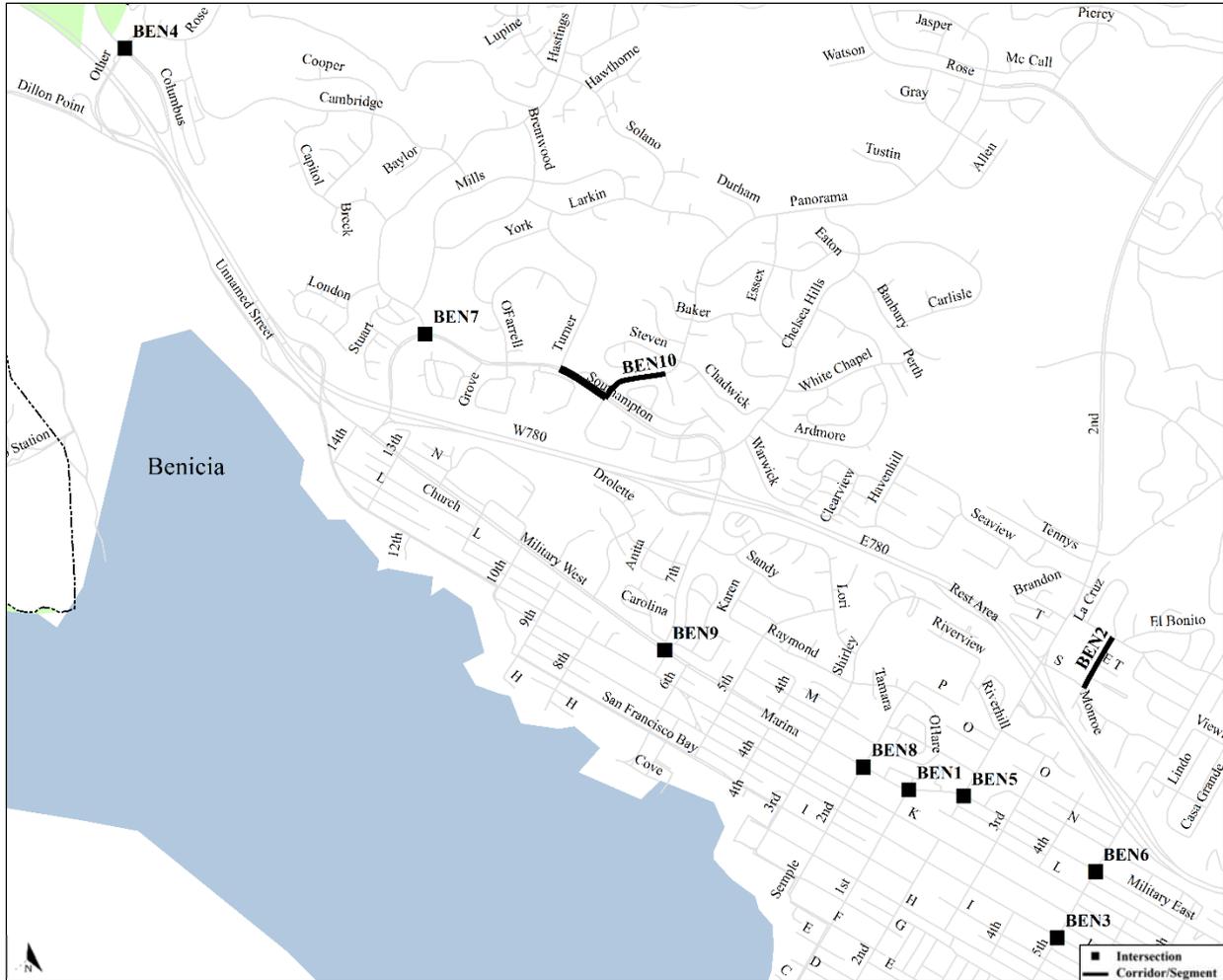
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
BEN1	1st Street at Military	Pedestrian crossing safety	Further detailed analysis needed to determine mitigations	\$
BEN2	3rd Street, from East S Street to Hillcrest Avenue (Robert Semple Elementary School)	Narrow sidewalks and lack of sidewalk in some areas	Widen sidewalks and install new sidewalks where needed	\$
BEN3	5th Street at East J Street (St. Dominic's School)	Pedestrian crossing safety concern at uncontrolled crosswalk.	Install pedestrian-actuated flashing beacon to aid safe crossing.	\$
BEN4	Columbus Parkway at Rose Drive	Unprotected turn phases; High traffic volumes with few gaps for left-turning vehicles	Conduct traffic study; construct traffic signal improvements	\$
BEN5	East 2nd Street at Military East	Pedestrian crossing safety; high turn volumes	Further detailed analysis needed to determine mitigations	\$
BEN6	East 5th Street at Military East	Unprotected turn phases; thru vehicles pass turning vehicles within intersection on all approaches	Conduct traffic study; construct traffic signal improvements	\$\$
BEN7	Hastings Drive at Southampton Road	Pedestrian crossing safety; high speed curve	Further detailed analysis needed to determine mitigations	\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 7. City of Benicia Priority Locations for Safety Project Development

ID	LOCATION
BEN1	1st Street at Military
BEN2	3rd Street, from East S Street to Hillcrest Avenue (Robert Semple Elementary School)
BEN3	5th Street at East J Street (St. Dominic's School)
BEN4	Columbus Parkway at Rose Drive
BEN5	East 2nd Street at Military East
BEN6	East 5th Street at Military East
BEN7	Hastings Drive at Southampton Road
BEN8	Military West at West 2nd Street
BEN9	Military West at West 7th Street
BEN10	Southampton Road / Turner Road, from James Court to Panorama Drive (Benicia Middle School)

City of Dixon

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Dixon typically relies on citizens to report to city staff any safety concerns. City staff review requests and formulate recommendations based on the City of Dixon Resolution 98-36 (Yield and Stop Sign Policy and Warrants) and the most recent version of the California Manual on Uniform Traffic Control Devices (MUTCD). Staff recommendations are then presented to the City of Dixon Transportation Advisory Commission (TAC), formed in 2004, which “shall act as an advisory body to the City Council in all matters relating to traffic, transportation and transit as shall be referred to it.”

City of Dixon priority locations:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
DXN1	1st Street / CA-113 railroad track crossing, from East C Street to East E Street	1st Street is a skewed crossing with high auto traffic and moderate train volume where 2 of the 3 collisions that have occurred since 1976 have involved pedestrians. The grade crossing separates a nearby school from a mainly residential area and a school crossing exists just south of the crossing. 1st street grade crossing currently has no sidewalk or pedestrian improvements, which would be recommended at this crossing based on collision data and the speed of trains (70 mph) as they move over the crossing.	Install gates and improve sidewalk.	\$
DXN2	1st Street / CA-113, from A Street to Parkway Boulevard	Primary route to and from Dixon High School with multiple modes (bicycle, pedestrian, motor vehicle, and large trucks) for different trip purposes (school, work, residential, local land-use access, and pass through) on high speed (45-mph posted) urban/suburban arterial. Multiple intersections along corridor.	Install signal or lighted crosswalk.	\$\$
DXN3	I-80 On and Off Ramps at CA-113	Motor vehicles with varying speeds, lane changes, and turning movements have been observed for traffic exiting and approaching I-80.	Install signal and widen overcrossing.	\$\$\$
DXN4	I-80 On and Off Ramps at Dixon Avenue / West A Street	Motor vehicles with varying speeds, lane changes, and turning movements have been observed for traffic exiting and approaching I-80.	Install signal and widen overcrossing.	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Dixon priority locations continued:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
DXN5	I-80 On and Off Ramps at Pitt School Road	Motor vehicles with varying speeds, lane changes, and turning movements have been observed for traffic exiting and approaching I-80.	Install signal and widen overcrossing.	\$\$\$
DXN6	Pedrick Road railroad crossing, north of Vaughn Street	Pedrick Road Crossing is a crossing that is recommended for monitoring. It is a skewed crossing with moderate daily auto traffic and fairly low train volume. It is used primarily by locals as a side street and is used heavily by trucks during the harvest months, which makes for a large seasonal peak in traffic that is not necessarily shown in the average daily traffic (ADT) counts. Because of this, it is recommended that more current traffic data be determined including vehicle mix. The crossing has had past issues with drive-arounds and currently has no medians. If peak traffic levels and vehicle usage show that this crossing is a high risk crossing, the crossing should be reevaluated for further improvements, including the installation of medians.	Vaughn Road improvements will eliminate the vehicle traffic between Pedrick Road and Vaughn Road to bypass two railroad crossings	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

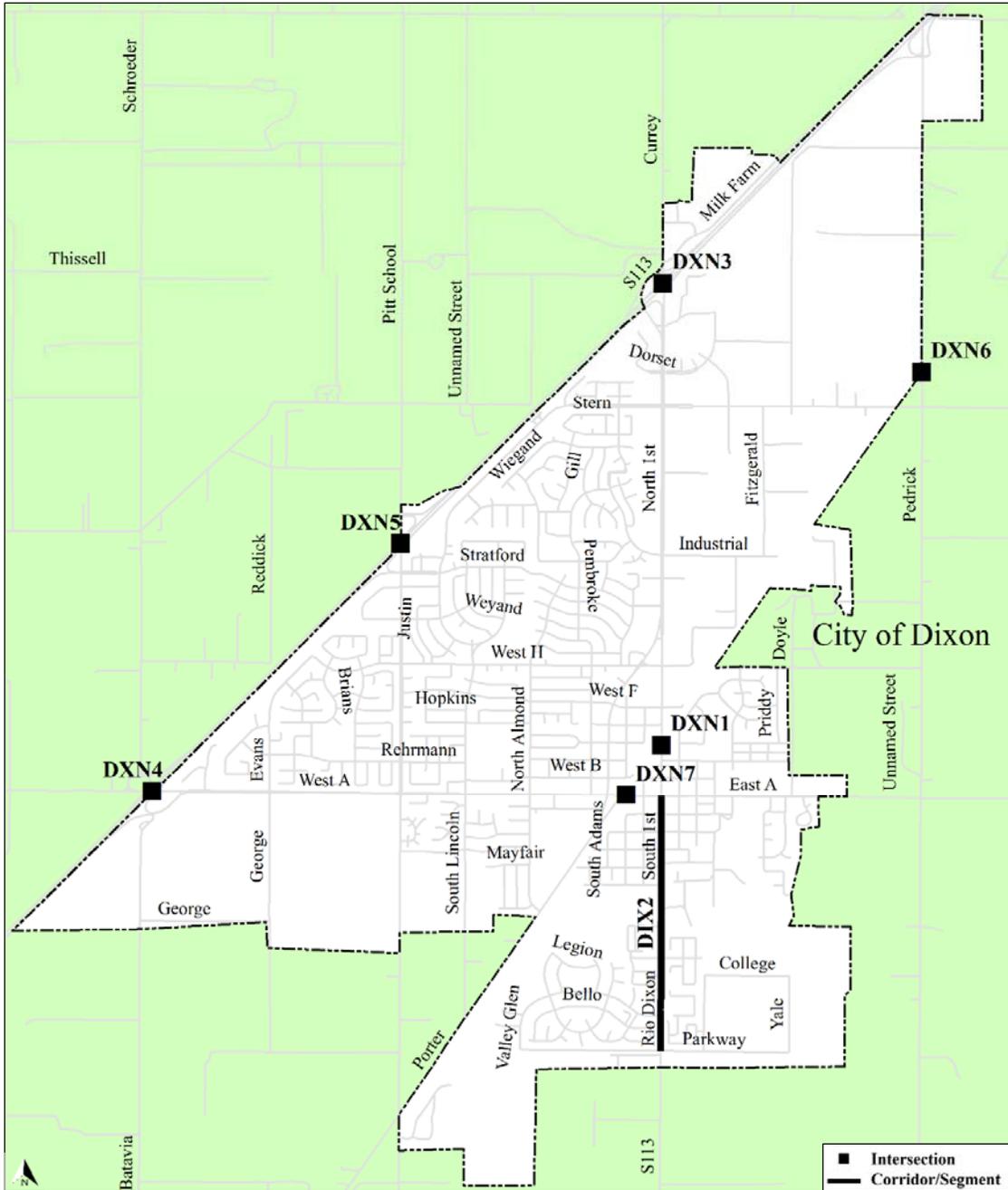
\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Dixon priority locations continued:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
DXN7	West A Street railroad crossing, from North Adams Street / Porter Street to North Jackson Street / South Jackson Street	A Street has been a crossing of concern since the 2011 Final Rail Crossing Inventory was written. While there are few recent collisions at the crossing, eastbound queuing is a significant issue and traffic counts are high enough that it is a good candidate for a queue cutter traffic signal. A Street has also been a candidate for a grade separation per the 2011 Final Rail Crossing Inventory. While a grade crossing would eliminate the queuing issue, until the grade separation is complete, queuing will still be an issue. The crossing may also be impacted such that the crossing will have lower peak traffic levels and therefore less queuing once the Parkway Boulevard Grade Separation is complete. Therefore, it is recommended that a queue cutter be installed until a grade separation is implemented. Any increases to the RR signal timing would be at an additional cost.	Short-term: Install a queue cutter traffic signal. Long-term: grade separation.	\$

*Total Project Cost Estimate
 \$ - Less than \$250,000
 \$\$ - Between \$250,000 and \$1,000,000
 \$\$\$ - Over \$1,000,000



Map 8. City of Dixon Priority Locations for Safety Project Development

ID	LOCATION
DXN1	1st Street / CA-113 railroad track crossing, from East C Street to East E Street
DXN2	1st Street / CA-113, from A Street to Parkway Boulevard
DXN3	I-80 On and Off Ramps at CA-113
DXN4	I-80 On and Off Ramps at Dixon Avenue / West A Street
DXN5	I-80 On and Off Ramps at Pitt School Road
DXN6	Pedrick Road railroad crossing, north of Vaughn Street
DXN7	West A Street railroad crossing, from North Adams Street / Porter Street to Jackson Street

City of Fairfield

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Fairfield primarily uses reported collision data as well as motor vehicle volume count data to determine and respond to safety concerns on Fairfield's roadways.

The City of Fairfield Police Department provides the City of Fairfield Public Works Department with timely motor vehicle collision report information and data, which is entered into a software program (Crossroads Traffic Collision Database).

Crossroads Traffic Collision Database is a software program used by many municipalities to more efficiently and effectively determine where and what type of collisions are occurring, by providing the resources for staff to:

- Manage collision data
- Query data
- Create collision diagrams
- Run reports
- Create graphs and charts

The close working relationship between the Police and Public Works Departments, in conjunction with timely data, allows Public Works staff to identify high collision locations within a short-time frame following reported collisions, versus solely relying on California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) data to be released, which typically lags six or months behind.

City of Fairfield priority locations:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
FRFD1	Air Base Parkway at Heath Drive; and Air Base Parkway, from Heath Drive to the I-80 Eastbound Off-Ramp	Midblock, rear-end collisions due to weaving and proximity of the I-80 off-ramp to Heath and the volume of traffic exiting the freeway onto the surface street.	The City has taken some proactive measures including improving visibility of signal faces or adding additional signal faces where the structures can handle the additional load, and improving signal timing. While the signal timing has improved, the extension of Manuel Campos can provide a significant benefit giving motorists an alternative route. The extension of this roadway is set for 2016/17 and triggered by a developer. This is a developer-driven improvement that has more widespread positive impacts.	\$-\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Fairfield priority locations continued:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
FRFD2	Air Base Parkway, from Clay Bank Road to the pedestrian bridge (mid-point between Clay Bank Road and Dover Avenue)	Midblock, rear-end collisions	Air Base Parkway at Clay Bank are set to be modified to include additional lanes when development reaches established thresholds determined by the City. Furthermore while the signal timing has improved, the extension of Manuel Campos can provide a widespread benefit giving motorists an alternative route and alleviating some congestion along Air Base Parkway. The extension of this roadway is set for 2016/17 and triggered by a developer. This is a developer-driven improvement that has more widespread positive impacts. This is a developer-driven improvement that has more widespread positive impacts.	\$-\$\$\$
FRFD3	CA-12, from Pennsylvania Avenue to I-80	SWITRS, 2010-2014. High speed saturated conditions, signals.	Increase capacity. Improve signal timing. Portions of roadway improvements are included in the I-80/680/12 project managed by STA.	\$\$\$
FRFD4	East Tabor Avenue railroad track crossing, west of Railroad Avenue	East Tabor Avenue is a crossing with higher than average auto traffic, high train traffic and high train speeds. The crossing had many issues with autos driving around gates in the past, and had medians installed, which have mitigated that issue. Based on recent discussions with the City, there are current issues with students crossing the tracks to get to and from a middle and elementary school. The school district currently provides a crossing guard to assist the students, but no sidewalk or other pedestrian improvements have been implemented.	<p>A California State Rail Grant was implemented at the crossing upgrading the signals and installing the median to prevent vehicles from passing in 2012.</p> <p>It is recommended that sidewalks be extended on the north side of East Tabor Avenue to the crossing to allow students to safely cross the at-grade crossing and that protected bicycle facilities be implemented.</p> <p>An ATP grant was submitted in May of 2015 but was not awarded funding. The City will continue seeking alternative funding opportunities.</p>	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Fairfield priority locations continued:

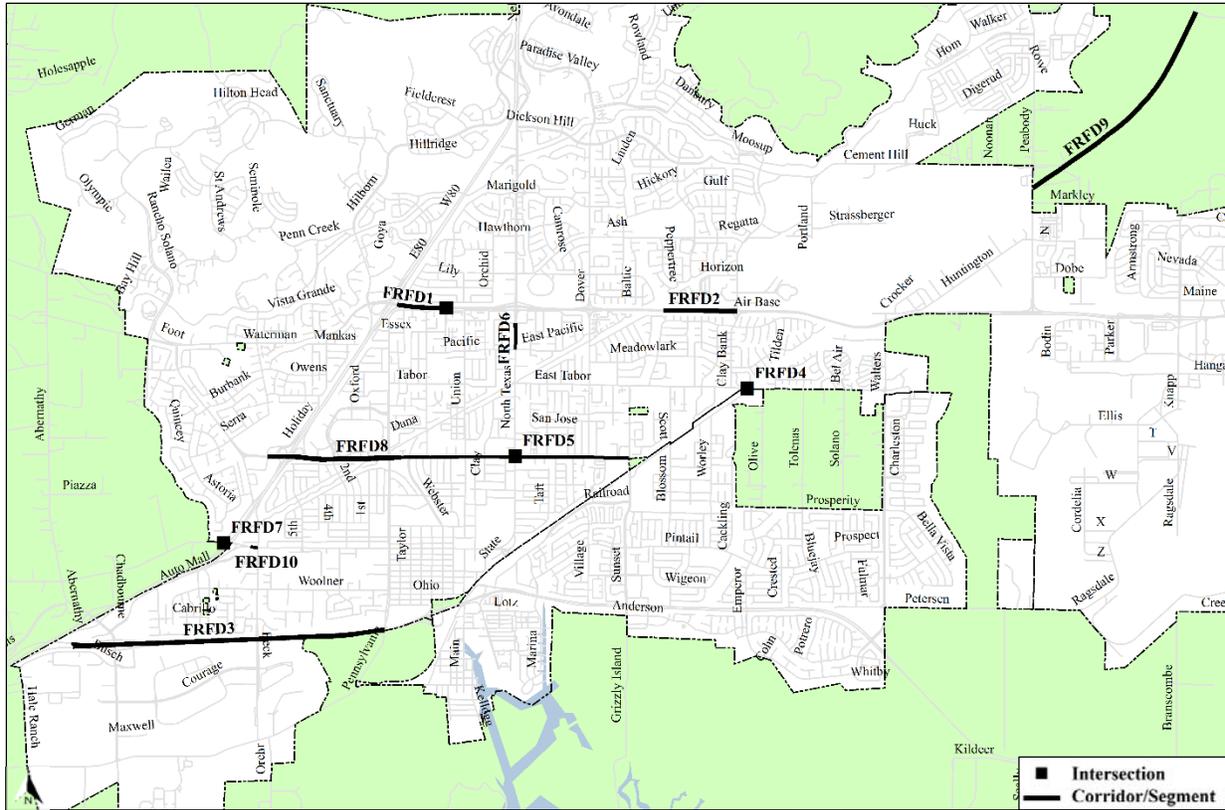
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
FRFD5	North Texas Street at Travis Boulevard	Rear-end, sideswipe, and broadside	Improved channelization. Location needs further studies; however, a new mast arm signal pole was on the southeast corner to provide an additional signal face for visibility. Furthermore, signing and striping changes were done. Further studies may be necessary.	\$\$
FRFD6	North Texas Street, from Alaska Avenue to East Pacific Avenue	Midblock, rear-end collisions	Signal timing improvements were implemented in 2012 but need to be revisited. Other possible mitigation is adding an additional signal face at all signalized intersections if pole can handle the additional load.	\$
FRFD7	Oliver Road at Rockville Road / West Texas Street	Left-turn conflicts due to increased traffic volume relating to I-80	Install two-way left-turn lane. Requires coordination with Caltrans. A letter was issued to Caltrans in support for the changes in the lane configuration along the segment. Caltrans responded to the letter and denied the request indicating that negative impacts would be created on the freeway segment.	\$
FRFD8	Travis Boulevard, from Oliver Road to Sunset Avenue	Midblock, rear-end.	Improved signal timing because of intersection spacing. Continuous improvement in timing will be necessary.	\$
FRFD9	Vanden Road, from Cannon Road to Peabody Road	87 total (including 50 injury) collisions reported 2010-2014 along entire corridor (Marshall Road to Peabody Road through the cities of Fairfield and Vacaville, and through unincorporated Solano County).	Widen to 4 lanes with curb and gutter and traffic signals upon completion of the Fairfield/Vacaville Train Station Project expected in 2016/17. Plans for the widening were submitted to Caltrans for review. The project complete will hinge on future funding. Furthermore, the 4 lane cross-section will be matched on the Vacaville portion of the Jepson Parkway as funding becomes available.	\$\$\$
FRFD10	West Texas Street, from I-80 to Beck Avenue	There is a weave issue from the I-80 EB Off ramp to Beck Avenue.	ATP Safe Routes to Transit project was submitted to modify the I-80 EB off at West Texas Street to remove the weave that currently exists on West Texas Street and provide a direct access to the Bus terminus. Grant was not awarded funding. The City will continue to seek funding. This project is linked to the future 1200 space parking structure.	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 9. City of Fairfield Priority Locations for Safety Project Development

ID	LOCATION
FRFD1	Air Base Parkway at Heath Drive; and Air Base Parkway, from Heath Drive to the I-80 Eastbound Off-Ramp
FRFD2	Air Base Parkway, from Clay Bank Road to the pedestrian bridge (mid-point between Clay Bank Road and Dover Avenue)
FRFD3	CA-12, from Pennsylvania Avenue to I-80
FRFD4	East Tabor Avenue railroad track crossing, west of Railroad Avenue
FRFD5	North Texas Street at Travis Boulevard
FRFD6	North Texas Street, from Alaska Avenue to East Pacific Avenue
FRFD7	Oliver Road at Rockville Road / West Texas Street
FRFD8	Travis Boulevard, from Oliver Road to Sunset Avenue
FRFD9	Vanden Road, from Cannon Road to Peabody Road
FRFD10	West Texas Street, from I-80 to Beck Avenue

City of Rio Vista

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Rio Vista primarily uses reported collision data as well as motor vehicle volume count data to determine and respond to safety concerns on Rio Vista's roadways.

Agency's High Priority Locations

City of Rio Vista staff identified high-priority locations based on collision data, motor vehicle volume count data, and staff observations.

City of Rio Vista priority locations:

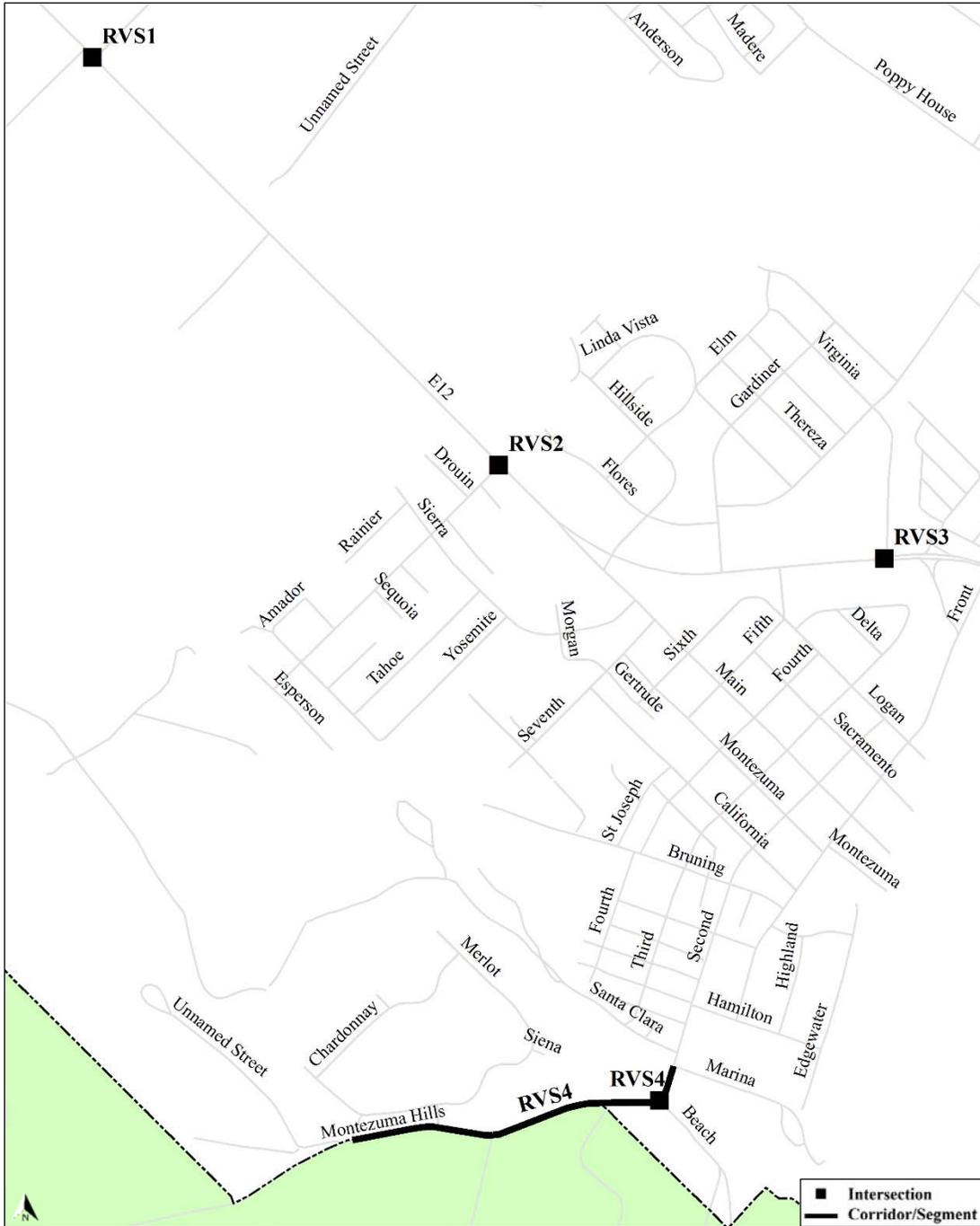
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
RVS1	CA-12 at Church Road	Substandard intersection geometry; Unsafe operating behavior observed; Left-turning and right-turning motor vehicles block throughway traffic, encouraging drivers to attempt to bypass stopped traffic, creating unpredictable and unexpected traffic movements within the intersection and its approaches	Realign roadway.	\$\$\$
RVS2	CA-12 at Drouin Drive	High volume and high speed traffic with few gaps to enter CA-12	Redesign roadway.	\$\$\$
RVS3	CA-12 at Virginia Drive	High volume and high speed traffic with few gaps to enter and exit CA-12; motor vehicle traffic heading westbound on CA-12 observed to travel too fast to negotiate right turn at Virginia Drive	Redesign intersection, part of Caltrans CA-12 project.	\$\$\$
RVS4	Montezuma Hills Road, from Burgundy Way to Marina Way; 2nd Street / Beach Drive / Montezuma Hills Road intersection (Riverview Middle School)	Lack of sidewalk on Montezuma Road, speeding, non-standard intersection geometry (2nd Street / Beach Drive / Montezuma Hills Road), and no direct connection between housing and school.	Design a safe route connecting school and neighborhood directly west of school.	\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 10. City of Rio Vista Priority Locations for Safety Project Development

ID	LOCATION
RVS1	CA-12 at Church Road
RVS2	CA-12 at Drouin Drive
RVS3	CA-12 at Virginia Drive
RVS4	Montezuma Hills Road, from Burgundy Way to Marina Way; 2nd Street / Beach Drive / Montezuma Hills Road intersection (Riverview Middle School)

City of Suisun City

Agency's Processes and Procedures for Identifying a Location of Safety Concern

City of Suisun City staff identifies locations with a safety concern through the Suisun City Traffic Committee, which consists of City department heads from the Police Department, Fire Department, Recreation & Community Services Department, Planning Department, and Public Works Department, as well as through citizen reports.

City of Suisun City priority locations:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
SUIS1	Buena Vista Avenue / Pintail Drive, from Marina Boulevard to Walters Road	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, potentially including pedestrian countdown signals and updating signals	\$\$
SUIS2	CA-12, from Pennsylvania Avenue to east of Walters Road	High volumes, varying speeds, and lane changes with limited intersection and stopping sight distances due to horizontal and vertical curves	Install advance warning devices such as flashing beacons and/or vehicle-activated changeable message sign boards; extend left-turn pockets	\$\$\$
SUIS3	Lawler Ranch Parkway, from CA-12 (easterly) to CA-12 (westerly)	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, potentially including pedestrian countdown signals and updating signals	\$\$
SUIS4	Main Street, from CA-12 to Cordelia Street	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, lane reconfiguration, and wayfinding signs	\$\$
SUIS5	Railroad Avenue East at Sunset Avenue	Red-light traffic signal non-compliance for Railroad Avenue East westbound traffic turning left for southbound Sunset Avenue during train traffic activated all-red traffic signal phase	Upgrade signal and equipment to enable westbound left-turn traffic to progress through the intersection when a train is present; widen first 250 feet of Railroad Avenue East, directly east of Sunset Avenue to allow the addition of a left turn pocket on westbound Railroad Avenue East, as well as provide a widened eastbound lane for a more comfortable turning movement from northbound Sunset Avenue to eastbound Railroad Avenue East.	\$
SUIS6	Railroad Avenue East, from Humphrey Drive to Olive Road	Complicated traffic patterns and movements due to close proximity to railroad tracks on Railroad Avenue at East Tabor Avenue	Realign Railroad Avenue from Humphrey Drive to Olive Road	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Suisun City priority locations continued:

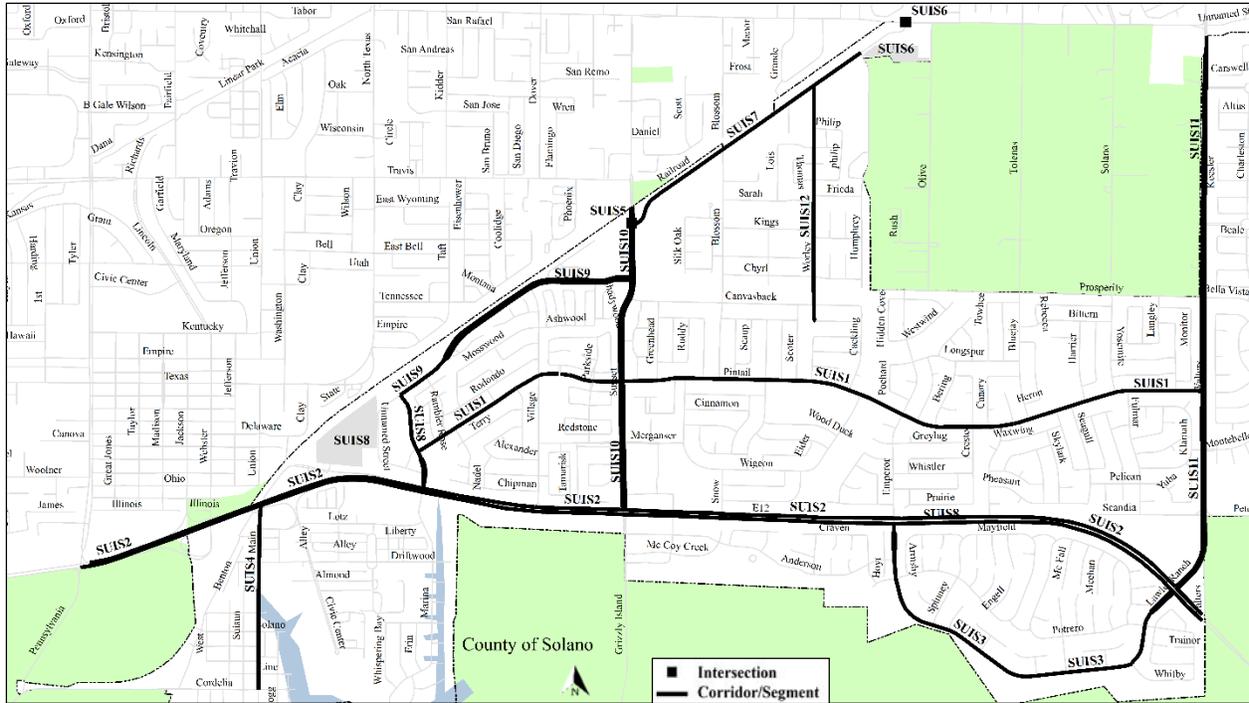
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
SUIS7	Railroad Avenue East, from Humphrey Drive to Sunset Avenue	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations. Lack of sidewalk.	Widen Railroad Avenue East to include a travel lane and bike lane in each direction, a center left-turn lane, curb/gutter along the north side, and sidewalk along the south side.	\$\$\$
SUIS8	Railroad Avenue West, from CA-12 to westerly terminus (west of Marina Boulevard)	Cut-through and/or high-speed traffic utilizing Marina Boulevard via Railroad Avenue, conflicts with local land uses serving vulnerable populations	Extend Railroad Avenue to the existing westbound State Route 12 on-ramp on Main Street to divert cut-through traffic from Marina Boulevard to Railroad Avenue	\$\$\$
SUIS9	Railroad Avenue West, from Marina Boulevard to Sunset Avenue	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations. Pedestrian crossing safety. Sidewalk gaps. Route to Crystal Middle School and Armijo High School.	Roadway geometry, traffic calming devices, and/or road diet potentially needed.	\$\$
SUIS10	Sunset Avenue, from the City of Fairfield / Suisun City border to the Solano County unincorporated area / Suisun City border	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, potentially including pedestrian countdown signals and updating signals	\$\$
SUIS11	Walters Road, from CA-12 to City of Fairfield / Suisun City border	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, potentially including pedestrian countdown signals and updating signals	\$\$
SUIS12	Worley Road, from Railroad Avenue East to Tule Goose Drive	Cut-through and/or high-speed traffic conflicts with local land uses serving vulnerable populations	Traffic calming, potentially including pedestrian countdown signals and updating signals	\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 11. City of Suisun City Priority Locations for Safety Project Development

ID	LOCATION
SUIS1	Buena Vista Avenue / Pintail Drive, from Marina Boulevard to Walters Road
SUIS2	CA-12, from Pennsylvania Avenue to east of Walters Road
SUIS3	Lawler Ranch Parkway, from CA-12 (easterly) to CA-12 (westerly)
SUIS4	Main Street, from CA-12 to Cordelia Street
SUIS5	Railroad Avenue East at Sunset Avenue
SUIS6	Railroad Avenue East, from Humphrey Drive to Olive Road
SUIS7	Railroad Avenue East, from Humphrey Drive to Sunset Avenue
SUIS8	Railroad Avenue West, from CA-12 to westerly terminus (west of Marina Boulevard)
SUIS9	Railroad Avenue West, from Marina Boulevard to Sunset Avenue
SUIS10	Sunset Avenue, from the City of Fairfield / Suisun City border to the Solano County unincorporated area / Suisun City border
SUIS11	Walters Road, from CA-12 to City of Fairfield / Suisun City border
SUIS12	Worley Road, from Railroad Avenue East to Tule Goose Drive

City of Vacaville

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Vacaville primarily uses data from local Police Department collision reports, as well as motor vehicle volume data to evaluate and monitor vehicle, bicycle and pedestrian safety on Vacaville's roadways. Information received from City Council, Police Department and residents is also considered. The City also uses a Traffic Advisory Committee made up of City Public Works Traffic Engineering, Police Department and School Districts (Vacaville and Travis Unified) staff representatives that meets bimonthly to address transportation safety issues as they arise.

City of Vacaville priority locations:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
VAC1	Alamo Drive, from Merchant Street to Monte Vista Avenue	HIGHEST PRIORITY. Wider four lane arterial with residential frontage and on-street parking. A School crosswalk with crossing guard at Edgewood Drive. Higher speeds and Seven (7: 1 in 2015, 6 in 2014) reported collisions	Install road diet – one lane in each direction, two-way left turn lane and dedicated bike lane. Maintain on street parking.	\$
VAC2	Crocker Drive / East Monte Vista at Vaca Valley Parkway	Increasing volume of motor vehicles entering and exiting I-505; relatively short intersection spacing with I-505 off-ramp at Vaca Valley Parkway, resulting in unsafe operating behavior	Install roundabout	\$\$\$
VAC3	I-505 Southbound Off-Ramps at Vaca Valley Parkway	Seven (7: 1 in 2015, 6 in 2014) collisions reported collisions and high volumes of motor vehicles with few gaps in traffic for south I-505 off-ramp to Vaca Valley Parkway, in close proximity to nearby signal-controlled intersection west	Install roundabout	\$\$\$
VAC4	Marshall Road at Peabody Road	Twenty-six (26 - 15 in 2013, 7 in 2014, 4 so far in 2015) reported collisions, conflicting movements, limited sight distances, and unsafe operating behavior	Extend existing left-turn pocket; enable a dedicated right-turn movement on approach to the intersection	\$
VAC5	Morning Glory Drive at Peabody Road	Increasing traffic volumes near direct access to elementary school. Four Hour and Interruption Signal Warrants met.	Signalize intersection	\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Vacaville priority locations continued:

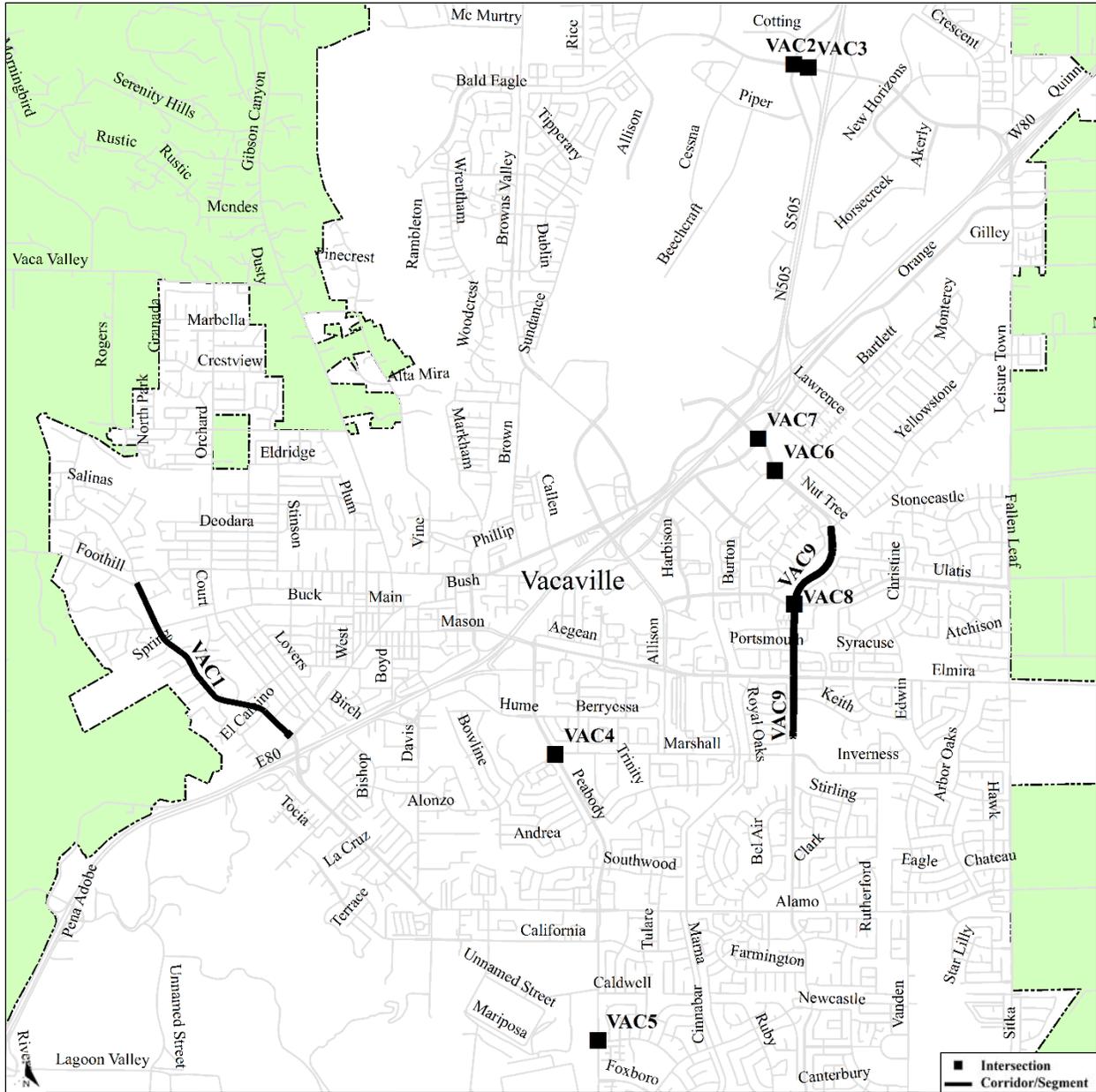
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
VAC6	Nut Tree Road at factory store access intersection (between Burton Drive and Nut Tree Parkway)	Limit vehicle pedestrian conflicts. Concern with conflicting vehicle pedestrian movements in an area with much higher pedestrian movements. ,	Modify existing signal timing and phasing to enable through / left-turn shared lanes and dedicated right-turn lanes for Nut Tree Road traffic. Consider pedestrian timing and phasing	\$
VAC7	Nut Tree Road at Orange Drive	Thirty-three (33 - 17 in 2013, 14 in 2014, 2 so far in 2015) reported collisions, conflicting movements, and unsafe operating behavior	Replace existing reflective markers for the east, north, and south approaches	\$
VAC8	Nut Tree Road at Ulatis Drive	Seven (7 - 3 in 2013, 4 in 2014) collisions reported collisions, conflicting movements, limited sight distances, and unsafe operating behavior	Extend existing left-turn pocket; remove median island trees	\$
VAC9	Nut Tree Road, from Drake Way to Yellowstone Drive	One fatal injury collision and six severe injury collisions reported 2010-2014.	Further detailed analysis needed to determine mitigations.	TBD

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 12. City of Vacaville Priority Locations for Safety Project Development

ID	LOCATION
VAC1	Alamo Drive, from Merchant Street to Monte Vista Avenue
VAC2	Crocker Drive / East Monte Vista at Vaca Valley Parkway
VAC3	I-505 Southbound Off-Ramps at Vaca Valley Parkway
VAC4	Marshall Road at Peabody Road
VAC5	Morning Glory Drive at Peabody Road
VAC6	Nut Tree Road at factory store access intersection (between Burton Drive and Nut Tree Parkway)
VAC7	Nut Tree Road at Orange Drive
VAC8	Nut Tree Road at Ulatis Drive
VAC9	Nut Tree Road, from Drake Way to Yellowstone Drive

City of Vallejo

Agency's Processes and Procedures for Identifying a Location of Safety Concern

The City of Vallejo typically relies on citizens to notify City staff of any observed or perceived safety concerns on Vallejo's roadways.

City of Vallejo priority locations:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
VAL1	Admiral Callaghan Lane, from Redwood Parkway to Tennessee Street	Seven severe injury collisions reported 2010-2014; lack of sidewalk along portions of the roadway	Further detailed analysis needed to determine mitigations.	\$\$
VAL2	Broadway Street at Valle Vista Avenue	Lack of sidewalk, substandard curb ramps.	Install ADA-compliant curb ramps and new sidewalks between Broadway and Alameda Street.	\$\$
VAL3	Broadway Street, from CA-37 to Tennessee Street	Three fatal injury collisions and eight severe injury collisions reported 2010-2014.	Further detailed analysis needed to determine mitigations.	\$
VAL4**	CA-29 / Sonoma Boulevard at Capitol Street (Lincoln Elementary School)	High speed traffic on Sonoma Blvd. Not a comfortable environment for pedestrians.	Construct bulb outs on all corners at signalized intersections on Sonoma Blvd from Carolina St to Alabama St.	\$\$
VAL5**	CA-29 / Sonoma Boulevard at Carolina Street (Lincoln Elementary School)	High speed traffic on Sonoma Blvd. Not a comfortable environment for pedestrians.	Construct bulb outs on all corners at signalized intersections on Sonoma Blvd from Carolina St to Alabama St.	\$\$
VAL6**	CA-29 / Sonoma Boulevard at Florida Street (Lincoln Elementary School)	High speed traffic on Sonoma Blvd. Not a comfortable environment for pedestrians.	Construct bulb outs on all corners at signalized intersections on Sonoma Blvd from Carolina St to Alabama St.	\$\$
VAL7**	Del Mar Avenue at Las Palmas Avenue (Cooper Elementary School)	Small sidewalk and narrow intersections do not give enough room for pedestrians.	Install traffic bulb-outs at the two listed intersections. Widen sidewalk.	\$\$
VAL8**	Del Mar Avenue at Tuolumne Street (Cooper Elementary School)	Small sidewalk and narrow intersections do not give enough room for pedestrians.	Install traffic bulb-outs at the two listed intersections. Widen sidewalk.	\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

**Received Active Transportation Program (ATP) Cycle 2 funding in 2015 for Safe Routes to School projects.

City of Vallejo priority locations continued:

ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
VAL9	Fairgrounds Drive from CA-37 to City Limits	Six severe injury collisions reported 2010-2014.	Improve lighting	\$
VAL10	Fifth Street, from Lemon Street to Magazine Street	Unsafe operating behavior (performing "donuts") frequently observed.	Install traffic circle	\$
VAL11	Gateway Drive, from Fairgrounds Drive to Sage Street	Unsafe operating behavior (performing "donuts") frequently observed.	Install traffic circle	\$
VAL12	Mini Drive, from Falcon Drive to Violet Drive	Unsafe operating behavior (performing "donuts") frequently observed.	Install traffic circle	\$
VAL13	Redwood Parkway / Street, from Foothill Drive to Tuolumne Street	Seven severe injury collisions reported 2010-2014.	Further detailed analysis needed to determine mitigations.	\$\$
VAL14	Sacramento Street, from CA-37 to Capitol Street	Substandard roadway lighting (CA-37 to Tennessee Street); Roadway provides more capacity than currently needed given existing traffic volumes, creating long distances for pedestrians to travel across roadway (CA-37 to Capitol Street).	Upgrade poles and luminaries; space installations per current standards (CA-37 to Tennessee Street). Install road diet (CA-37 to Capitol Street); repave roadway	\$
VAL15	Solano Avenue at Tuolumne / Virginia Streets	Substandard intersection geometry.	Install road diet or signalize intersection	\$\$
VAL16	Tennessee Street, from Columbus Parkway to Oakwood Drive	Roadway provides more capacity than currently needed given existing traffic volumes, creating long distances for pedestrians to travel across roadway.	Install road diet; repave roadway	\$
VAL17	Valle Vista Avenue, from Couch Street and CA-29 / Sonoma Boulevard	Lack of sidewalk. Pedestrians must go around railroad track crossing arms.	Relocate railroad crossing arms to enable construction of sidewalks on both sides of the street.	\$
VAL18	Citywide (Intersections on Principal Arterials & Major Collector Streets)	Limited visibility due to poor lighting	Upgrade illuminated street name sign street lighting to LED lamps at principal arterial and major collector street intersections.	\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000

City of Vallejo priority locations:

ID	LOCATION
VAL1	Admiral Callaghan Lane, from Redwood Parkway to Tennessee Street
VAL2	Broadway Street at Valle Vista Avenue
VAL3	Broadway Street, from CA-37 to Tennessee Street
VAL4**	CA-29 / Sonoma Boulevard at Capitol Street (Lincoln Elementary School)
VAL5**	CA-29 / Sonoma Boulevard at Carolina Street (Lincoln Elementary School)
VAL6**	CA-29 / Sonoma Boulevard at Florida Street (Lincoln Elementary School)
VAL7**	Del Mar Avenue at Las Palmas Avenue (Cooper Elementary School)
VAL8**	Del Mar Avenue at Tuolumne Street (Cooper Elementary School)
VAL9	Fairgrounds Drive from CA-37 to City Limits
VAL10	Fifth Street, from Lemon Street to Magazine Street
VAL11	Gateway Drive, from Fairgrounds Drive to Sage Street
VAL12	Mini Drive, from Falcon Drive to Violet Drive
VAL13	Redwood Parkway / Street, from Foothill Drive to Tuolumne Street
VAL14	Sacramento Street, from CA-37 to Capitol Street
VAL15	Solano Avenue at Tuolumne / Virginia Streets
VAL16	Tennessee Street, from Columbus Parkway to Oakwood Drive
VAL17	Valle Vista Avenue, from Couch Street and CA-29 / Sonoma Boulevard
VAL18	Citywide (Principal Arterials & Major Collector Street intersections) [not mapped]

**Received Active Transportation Program (ATP) Cycle 2 funding in 2015 for Safe Routes to School projects.

County of Solano (Unincorporated Areas)

Agency's Processes and Procedures for Identifying a Location of Safety Concern

Each year after all of the traffic collision reports have been received from the CHP, Solano County performs a systemic evaluation of accident data on the County's 586 miles of unincorporated roads. Each accident is mapped in an ARCGIS layer and corridors or locations where accidents occur at a higher rate or number in comparison to the whole county are identified; Accident maps from previous years are also considered and evaluated. Based on this evaluation the Traffic Collision Reports are pulled from the County's archive to gain a clearer picture of how the accidents are occurring.

Once County staff understands the limits of the corridor or location under review and has identified the type of collisions, a field inspection is conducted to gather information of site conditions and determine potential safety enhancements. After staff has discussed the location or corridor, the variety of traffic, Average Daily Traffic (ADT), collision type and field conditions, a consensus on which safety enhancement is appropriate based on available funds is selected. Once the safety enhancement is implemented at the location or corridor it is evaluated in subsequent years for effectiveness.

County of Solano priority locations:

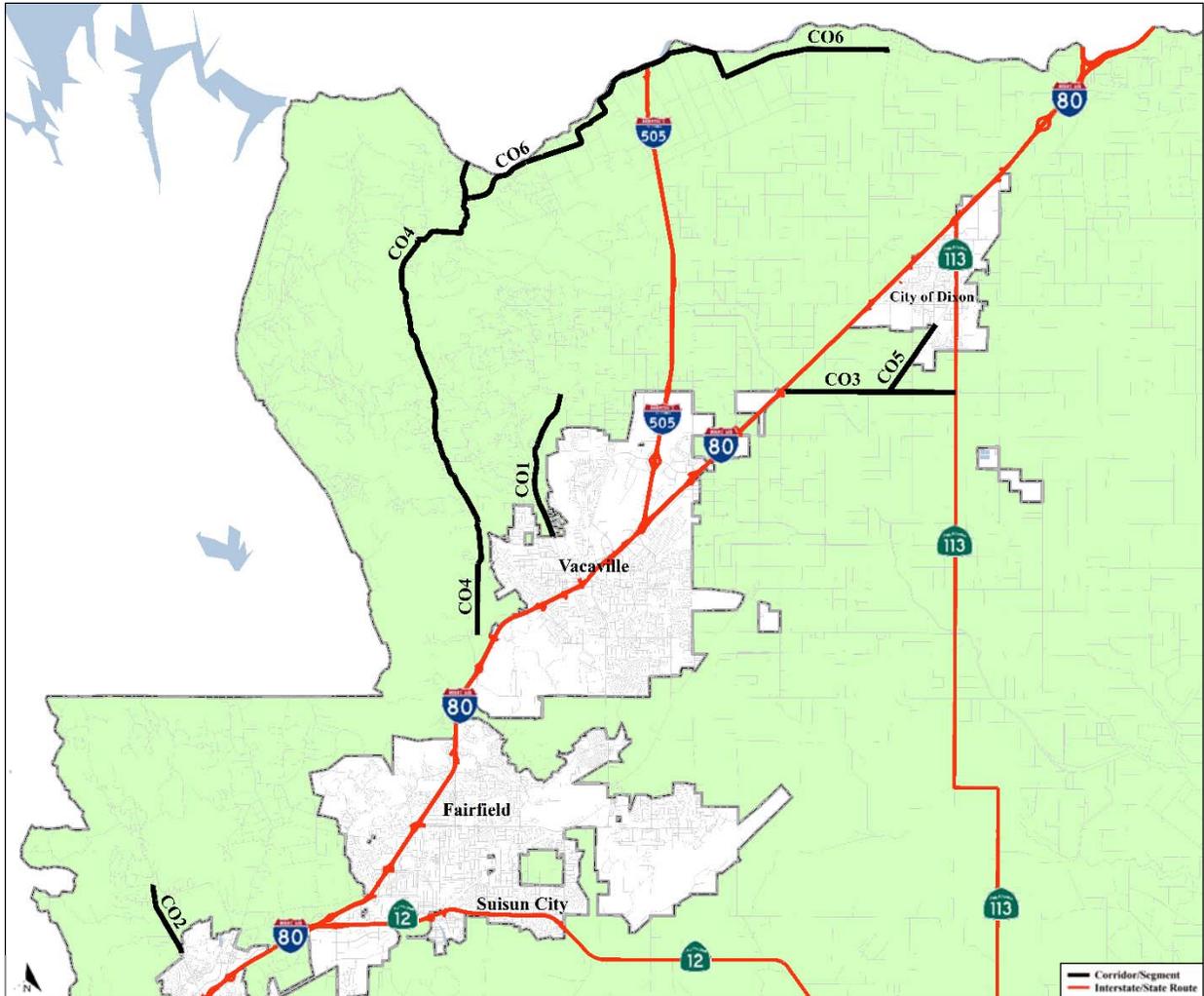
ID	LOCATION	SAFETY CONCERN	PROPOSED CHANGES	COST*
CO1	Gibson Canyon Road, from Cantelow Road to the Vacaville city limits	One fatal injury collision and four severe injury collisions reported 2010-2014.	Further detailed analysis needed to determine mitigations.	TBD
CO2	Green Valley Road, from the City of Fairfield city limit to Rockville Road	Substandard roadway, lane, and shoulder widths.	Widen and pave 4-foot shoulders	\$\$\$
CO3	Midway Road, from I-80 to Nunes Road	One fatal injury collision reported 2010-2014.	Widen and pave 4-foot shoulders	\$\$\$
CO4	Pleasants Valley Road, from Cherry Glen Road to the Solano County / Yolo County border	Substandard shoulder widths. Substandard lane widths.	Widen and pave 4-foot shoulders	\$\$\$
CO5	Porter Road, from Midway Road to South Almond Street	Two fatal injury collisions and three severe injury collisions reported 2010-2014.	Widen and pave 4-foot shoulders	\$\$
CO6	Putah Creek Road, from Pleasants Valley Road to Stevenson Bridge Drive	Two fatal injury collisions from 2009 to 2014	Widen and pave 4-foot shoulders	\$\$\$

*Total Project Cost Estimate

\$ - Less than \$250,000

\$\$ - Between \$250,000 and \$1,000,000

\$\$\$ - Over \$1,000,000



Map 14. County of Solano Priority Locations for Safety Project Development

ID	LOCATION
CO1	Gibson Canyon Road, from Cantelow Road to the Vacaville city limits
CO2	Green Valley Road, from the City of Fairfield city limit to Rockville Road
CO3	Midway Road, from CA-113 to I-80
CO4	Pleasants Valley Road, from Cherry Glen Road to the Solano County / Yolo County border
CO5	Porter Road, from Midway Road to South Almond Street
CO6	Putah Creek Road, from Pleasants Valley Road to Stevenson Bridge Drive

4. Next Steps

This section explores potential improvements in collecting, managing, and analyzing safety-related information that may be incorporated pending additional future funding and resources with the goal to eliminate fatalities and severe injuries on local streets and roads in Solano County. From the FHWA Roadway Safety Data Program:

The effectiveness of safety programs is directly linked to the availability of sound data analysis for informed decisions. Improving data involves identifying and improving data quality, quantity, types, storage, maintenance, accessibility, and use. Enhanced analytical processes use procedures to better identify safety problems and select countermeasures to achieve optimal returns on safety investments. The knowledge base created by these processes and procedures also improves the ability to learn from trends in the data and to recognize the relationships between safety and other issues such as highway design, roadway operation, and system planning.⁸

The following items may be explored in the near-term:

ITEM	CHALLENGE	POTENTIAL STRATEGY	POTENTIAL OUTCOMES
Motor vehicle collisions are currently hand-written on paper reports by local police departments.	Data is recorded twice (in the field and manually entered into a database), and potentially a third time by Public Works staff, which is labor-intensive and redundant.	Explore software and hardware options that allow police officers to digitally collect and enter data at the site of collision events (i.e. in-car computer and/or handheld electronic device).	Digitizing collision data in concert with an appropriate and optimized database management system (DBMS) may also provide real-time data access to engineers, planners, and project managers.
Reported collision data may not include all data needed to perform safety analysis.	Data-driven safety analysis requires having accurate, complete, and comprehensive data inputs, which are not currently being collected.	Utilize resources such as the Model Minimum Uniform Crash Criteria (MMUCC) and the Model Inventory of Roadway Elements (MIRE) guidebooks, to inventory current data elements collected by police officers at the scene of collision events as well as post-collision data collection needs by engineering, planning, and project management staff.	By reviewing the MMUCC and the MIRE guidebooks, staff may: Standardize a comprehensive list of the most important crash-related data elements; identify a comprehensive listing of roadway inventory data elements that may be necessary for various safety management activities; and prioritize roadway elements for future collection.

⁸ Federal Highway Administration (FHWA) Roadway Safety Data Program (RSDP), retrieved October 23, 2015 from <http://safety.fhwa.dot.gov/rsdp/about.aspx>

Acknowledgements

STA Board of Directors

Elizabeth Patterson, Chair, City of Benicia
Jack Batchelor, City of Dixon
Harry Price, City of Fairfield
Norman Richardson, Vice Chair, City of Rio Vista
Pete Sanchez, City of Suisun City
Len Augustine, City of Vacaville
Osby Davis, City of Vallejo
Jim Spring, County of Solano

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Allan Panganiban, Senior Civil Engineer, City of Vallejo
Nick Burton, Senior Civil Engineer, County of Solano



DATE : November 11, 2015
TO: STA TAC
FROM: Robert Macaulay, Director of Planning
RE: Sustainable Communities Strategy and One Bay Area Grant Update

Background:

The Sustainable Communities Strategy (SCS), formerly known as the Regional Transportation Plan (RTP), is the primary planning and programming document for the Metropolitan Transportation Commission (MTC). The SCS is mandated to reduce greenhouse gas (GHG) emissions from cars and light trucks while also housing expend population growth. The last SCS, known as Plan Bay Area, was adopted in 2015. The update of Plan Bay Area must be adopted in 2017.

One of the primary funding programs in Plan Bay Area is the One Bay Area Grant (OBAG) program, which consists of block grants to the Congestion Management Agencies (CMAs) to use for funding local programs and project that advance Plan Bay Area goals.

Discussion:

MTC has proposed 13 performance targets to be used in evaluating projects for inclusion in the SCS. The evaluation, along with a benefit: cost assessment, will be used to help MTC decide which projects to include in the plan. The proposed evaluation criteria are included in an MTC staff memo dated November 6, 2015, and provided as Attachment A.

MTC has also developed draft criteria for distributing OBAG funds to the CMAs, and to assist the CMAs in sub-allocating funds to projects and programs. The draft guidelines are provided as part of the MTC staff report labeled Attachment B.

On November 4, the MTC Programming and Allocations Committee modified the staff report recommendation in order to provide 4 Bay Area cities, including Dixon, additional time to bring their Housing Elements into full compliance with state requirements. The deadline for these communities is June 30, 2016.

MTC also requires all jurisdictions to show compliance with Complete Streets requirements by either; 1) having an amended general plan, adopted since January 1, 2010, that incorporates the state Complete Streets standards, or 2) adopting a Resolution in a form provided by MTC committing to implement Complete Streets. Three Solano jurisdictions – the cities of Benicia and Dixon, and Solano County – will need to take action to meet this requirement and remain eligible to receive OBAG funds.

MTC is expected to adopt the OBAG cycle 2 guidelines in December 2015. STA staff will conduct public outreach to identify and evaluate potential OBAG funding projects and programs in the first half of 2016, and make a recommendation to the STA Board for OBAG cycle 2 funding in October 2016.

Fiscal Impact:

None at this time.

Recommendation:

Information.

Attachments:

- A. SCS Project Evaluation Criteria (draft) -
http://www.sta.ca.gov/docManager/1000005697/08.Aa_SCS%20and%20OBAG%20Attachment%20A.pdf
- B. OBAG Cycle 2 Policies (MTC staff report)
http://www.sta.ca.gov/docManager/1000005698/08.Ab_SCS%20and%20OBAG%20Attachment%20B.pdf



DATE: November 6, 2015
TO: STA TAC
FROM: Anthony Adams, Assistant Project Manager
RE: Draft 2015 Solano County Annual Pothole Report

Background:

The 2014 Solano County Annual Pothole Report was approved by the STA Board in October 2014 and was Solano County's first annual pothole report. Since that time, agency's local streets and roads budgets have changed and maintenance has occurred. With this new information, an updated look at the state of Solano County roadways and projections on future funding needs is justified. The Draft version of the 2015 Solano County Annual Pothole Report is ready for review and STA is seeking input from TAC members on the data and content.

Discussion:

STA is seeking input on the table of contents and financial projections included in the Draft 2015 Solano County Annual Pothole Report (Attachment A). The Report seeks to balance presenting a serious problem based on available funding and road maintenance data. At their November 4th meeting, the Project Delivery Working Group (PDWG) received the Draft report; comments are due to STA staff by November 13th. Comments from PDWG members will be communicated to TAC members at the meeting.

The 3-year average budget, including FY 15 budgets, shows that Solano County as a whole, is spending approximately \$20.5M annually, and needs to spend approximately \$39.5M to keep Solano County's roads maintained at an average PCI of 60. To reach the Countywide Transportation Plan goal of PCI 75, Solano countywide would need to spend \$79.5M annually.

Individual city summaries will be developed utilizing provided budget data received from PDWG members. These summaries will include graphs on past 3 year budget revenues and expenditures, 10 year roadway needs based on PCI 60 and PCI 75, and 10 year funding shortfall for PCI 60 and PCI 75. Individual city summaries will be provided to the TAC at the December 16th meeting and to the STA Board in January 2016.

PROPOSED SCHEDULE

Present Draft Outline to TAC	September 30 th
Present Draft Report to TAC (Information)	November 18 th
Present Draft Report to TAC (Action)	December 16 th
Present Draft Report to STA Board (30 Day Public Comment)	January 6 th
Present Final Report to STA Board (Adoption)	February 10 th

Recommendation:

Informational.

Attachment:

- A. Draft 2015 Solano County Annual Pothole Report

Solano County Pothole Report



October 2015

Solano Transportation Authority,

Streets and Roads Pavement and Rehabilitation Report



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DRAFT

Executive Summary

From a transportation standpoint, the lifeblood of a community is its roads, its network of streets, and the connections they enable. Perhaps no public improvement is as beneficial to commercial and business interests as street paving. What image is presented to a tourist when they visit our cities and see cracked roads in need of repair? It could be perceived that a community with poor roads does not care about the quality of life for its citizens and is not concerned about investment in its future. To attract new residents, businesses, and investment within Solano County, the quality of our roads must be such that they are smooth, level, and ready for commerce.

Figure 1: Pothole Example



While both the Metropolitan Transportation Commission (MTC) and Caltrans release Pothole Reports, they are not done annually and the information tends to be presented on a broad regional basis, with little local information available. The first Solano Pothole Report was released in October 2014 and provided locally specific roadway information. The purpose of this second report is to produce a comprehensive description of the current and projected condition of Solano County's local streets and roads pavement conditions.

Timely investment in roadway preservation can save cities millions of tax dollars in long-term maintenance costs. A municipality that spends \$1 on timely maintenance to keep a section of roadway in good condition would have to spend \$5 to restore the same road if the pavement is allowed to deteriorate to the point where major rehabilitation is necessary. (MTC, 2011) With this in mind, an analysis of Solano County's current roadway investment strategy is appropriate. This report will help to showcase financial shortfalls, which may assist public works staff with project planning and future funding requests.

As of October 2015, Solano County and its seven cities are cumulatively investing approximately \$20.5M annually in maintaining local streets and roads. In order to achieve an average countywide PCI goal of 60, an additional \$19M annually is needed over the next 10 years. Solano Countywide, needs to spend annually nearly twice as much as is being spent currently just to maintain local streets and roads in "fair condition." Since the costs of roadway rehabilitation increase substantially when PCI drops below 60 (roads categorized as "at-risk"), having a countywide goal of 60 would position our roads on the edge of a maintenance cliff. To reach the higher PCI goal of 75, the goal approved in the Solano Comprehensive Transportation Plan, an additional \$59M is needed annually over the next 10 years to reach a 'state of good repair' – more than two and a half times more than our current investment.

Without a healthy investment in our roadway infrastructure, Solano County will continue its downward trend in pavement quality. This deterioration hinders Solano County from attracting new jobs, housing, tourism, and business investment. More money spent now in long-term roadway maintenance can save Solano County and the seven cities millions in the future and strengthen our local economy.

Roads: The Network of Our Neighborhoods

Everyone Uses Roads

Whether a commuter, a student, or retiree, everyone uses roads. Roads make up the network that connects us to our jobs, schools, shopping, and entertainment. There are few local infrastructure investments used by almost every citizen, but nearly everyone benefits from local streets and roads (LS&R). From sidewalks and crosswalks, to neighborhood streets and 4-lane boulevards, well maintained LS&R promote mobility for Solano County residents. Every trip begins and ends with local streets and roads and nearly every mode of surface travel relies on quality local streets and roads infrastructure.

Maintaining quality infrastructure shows residents and visitors that we care about Solano County. Just like the welcome mat for your home, the local streets & roads system provides visitors and potential business investors a first impression of a community that can last a lifetime. Ignoring these critical facilities can affect quality of life and cost a city more than its roadway system. Economic vitality depends on new businesses and residents moving into our county in the future. The look and quality of our roads will be a factor in their decision to invest in our communities.

Pavement Condition Index (PCI): What it Means

The Pavement Condition Index (PCI) is a numerical index between 0 and 100 and is used by roadway engineers to measure the general condition of a pavement. When measuring PCI, 0 represents the worst possible condition and 100 represents the best possible condition. The PCI measures two conditions: (1) The type, extent and severity of pavement surface distresses and (2) the smoothness and ride comfort of the road. The classifications used to rate LS&R pavements are shown in table 1 below.

Table 1: Pavement Condition Categories

Very Good-Excellent (PCI = 80-100)	Pavements are newly constructed or resurfaced and have few if any signs of deterioration.
Good (PCI = 70-79)	Pavements require mostly preventive maintenance and have only low levels of distress, such as minor cracks or peeling or flaking off of the top layer of asphalt as a result of water permeation.
Fair (PCI = 60-69)	Pavements at the low end of this range have significant levels of distress and may require a combination of rehabilitation and preventive maintenance to keep them from deteriorating rapidly.
At Risk (PCI = 50-59)	Pavements are deteriorated and require immediate attention including rehabilitative work. Ride quality is significantly inferior to better pavement categories.
Poor (PCI = 25-49)	Pavements have extensive amounts of distress and require major rehabilitation or reconstruction. Pavements in this category affect the speed and flow of traffic significantly.
Failed (PCI = 0-24)	Pavements need reconstruction and are extremely rough and difficult to drive on.

(MTC, 2013)

Solano County Jurisdictions' Current Pavement Status

The goal specified by MTC's Regional Transportation Plan is a regional average PCI score of 75. The average condition of the Bay Area's LS&R network, which includes nearly 42,600 lane miles, was 66 as of 2014. This PCI rating places the region's roadway network in the "fair" category. The average condition of Solano County's LS&R network, which includes approximately 3,724 lane miles of roadway, is 64, also in the "fair" category. This score is based on a 3-year moving average:

Table 2: 3 - Year Moving PCI Average

	2012	2013	2014
BENICIA	60	59	59
DIXON	77	77	75
FAIRFIELD	73	71	71
RIO VISTA	51	58	57
SOLANO COUNTY	71	75	77
SUISUN CITY	67	62	59
VACAVILLE	70	68	69
VALLEJO	51	49	47
COUNTYWIDE	66	65	64

Using a three-year average provides a more accurate picture, since not all jurisdictions submit their streets and roads data at the same time, and a single project can cause a significant jump in the annual PCI score for a small city with just a few miles of streets.

Figure 2: Year to Year PCI Trends by Local Jurisdiction

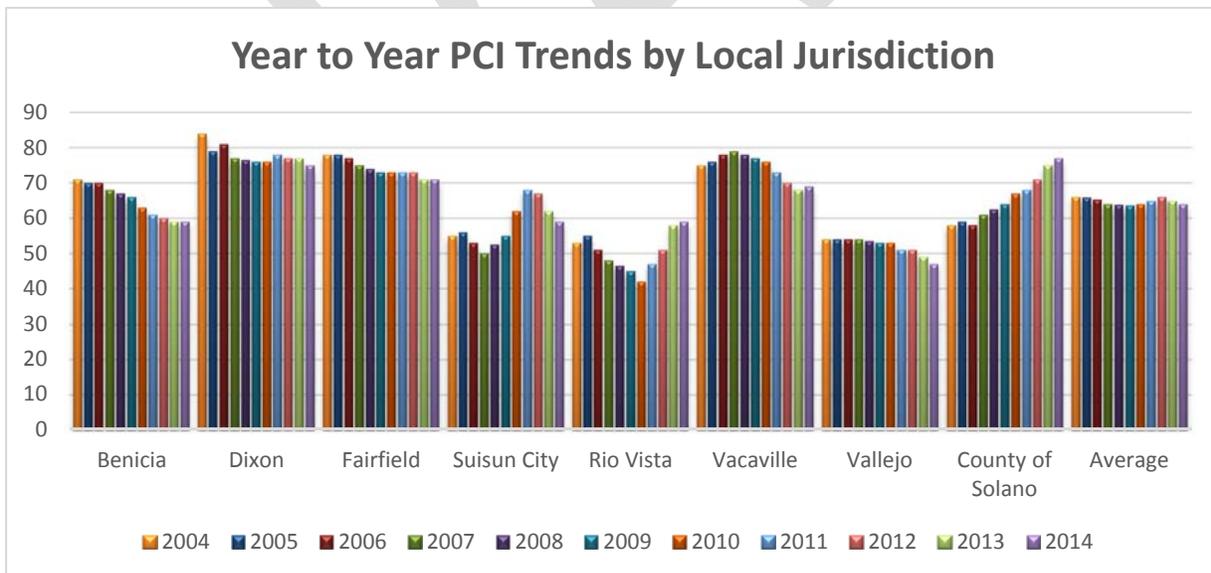


Figure 2 shown above provides a clear picture that over the past 10 years most jurisdictions, with the exception of unincorporated Solano County, have been experiencing a slow decline in pavement condition. In fact, if unincorporated Solano County were not included in the average score the PCI for the cities in Solano County would average a PCI of 62. With the vast majority of residents living within city limits, it is imperative that urban roadways be given timely maintenance.

What PCI Looks Like

The PCI of a local road is calculated by certified inspectors usually every 2-4 years. This calculation is based on visual inspection of sections of roadways, taking into account deficiencies such as cracking, spalling, chipping, and potholes. The density and severity of these deficiencies in a particular roadway area provides the inspector with a specific PCI score.

The photos displayed in figure 2 show streets and roads that represent a PCI rating of Excellent/Good, Fair, At-Risk, and Poor/Failed. Most of the streets and roads in Solano fall under the At-Risk (Fair) category. While this condition category may not look so bad on the surface, the costs associated with falling below this threshold can be rather significant.

Figure 3: PCI Rating and Visual Condition

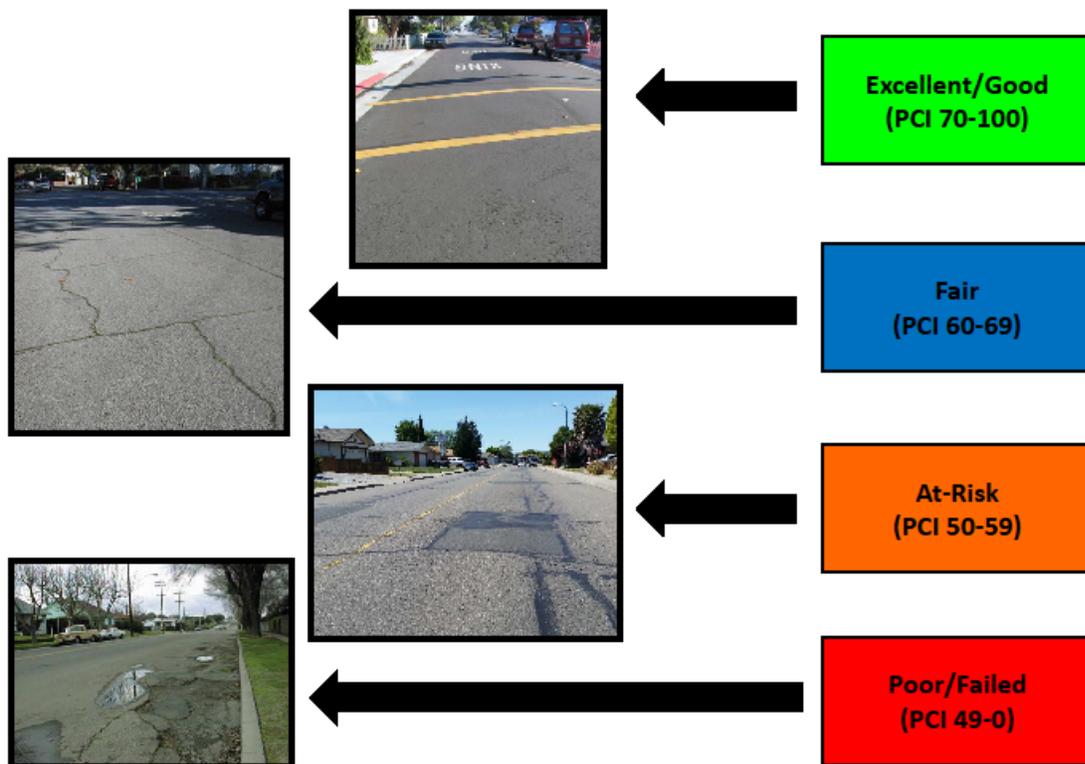
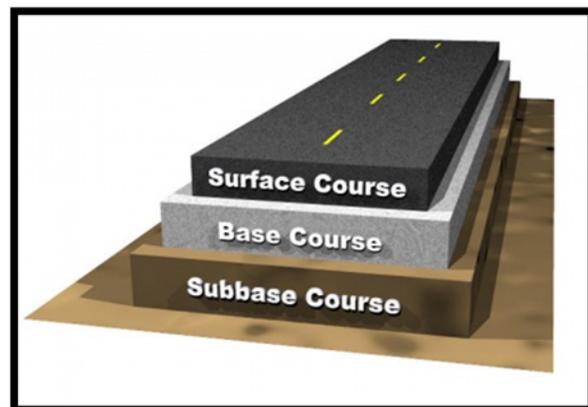


Figure 4: Typical Pavement Section



As cracks and potholes form in pavement, water can seep from the surface layer, see figure 4, and start to undermine the base and subbase course. The deeper the damage occurs, the more expensive the road becomes to repair and maintain. For maximum cost effectiveness in road maintenance, the surface course must remain sealed to prevent water and ice from intruding into the lower levels.

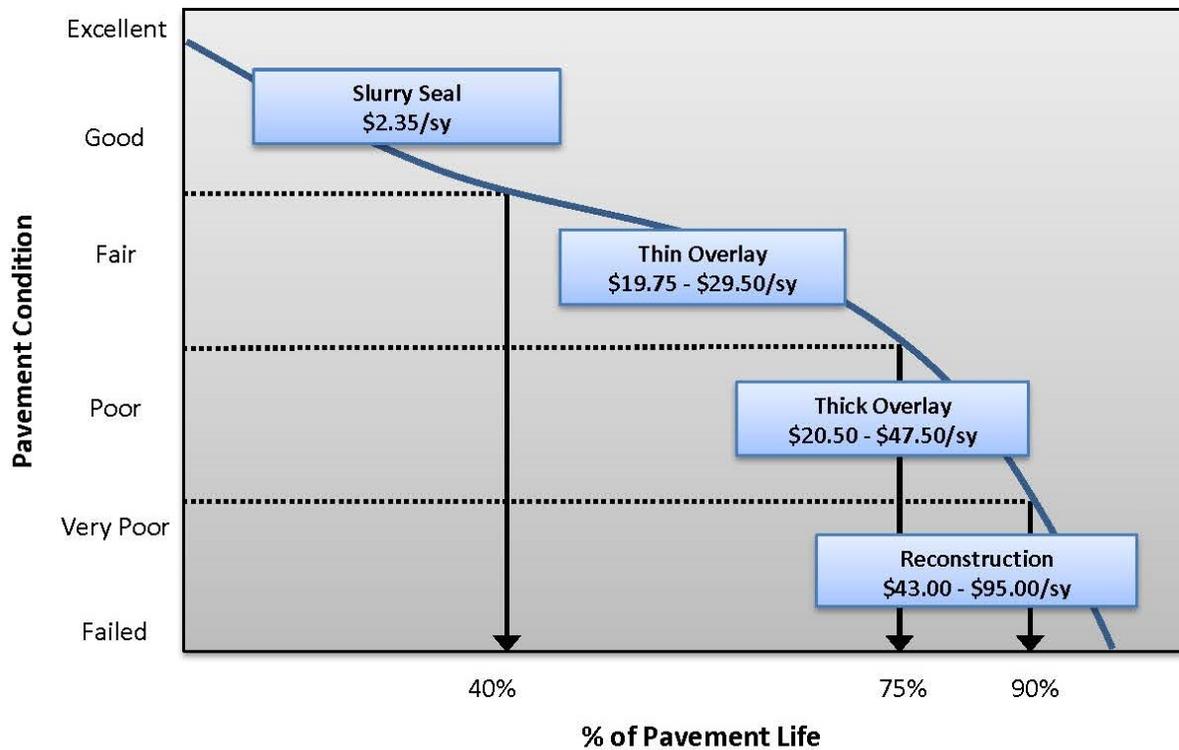
Cost of Maintaining our Roadways

The Cost of Doing Nothing

Of all the infrastructure investments a city must make, maintaining roads are among the most expensive. The more money a city can put into maintaining existing pavement and preventing roadways from degrading, the more money it will save in expensive pavement reconstruction in the long run. The roadway network of a city requires regular preventive maintenance to address issues such as cracks, crumbling, or potholes. If these small issues are not addressed in a timely manner, they can cause much larger problems that will result in the roadway degrading at a rapid pace.

Solano Countywide has a 2014 current PCI average score of 64; considered in the “fair” category (PCI 60-69). This PCI score indicates a critical need for maintenance because of the rapid increase in rehabilitation cost that occurs once below this threshold. Once a pavement’s condition rating reaches 60, it will begin to deteriorate rapidly and costs to repair will increase rapidly. As shown in Figure 5, a new pavement will deteriorate slowly for the first 12 years of its standard 20 year life span. Without any intervention, the pavement will drop from the fair category to the “failed” category in the next five years. This deterioration holds serious implications for the cost of system preservation. **Pavements that are still in good condition (a PCI of 70 or above) can be preventively maintained at a low cost, whereas pavements that need significant rehabilitation or reconstruction require 5 to 15 times the amount of funding.** Thus, a PCI of 65 should be viewed with caution, as it indicates that our local streets and roads are positioned on the edge of a maintenance cliff. “Every dollar invested in maintenance saves taxpayers from future repairs that are 10 times more expensive,” said Caltrans Director Malcolm Dougherty.

Figure 5: PCI Condition and Cost of Rehabilitation



As showcased in Table 3 below, by deferring maintenance, cities balloon the cost of street rehabilitation projects, resulting in uncomfortable tradeoffs for cities (e.g., building new community centers vs. repairing failed streets). When cities wait until streets reach critical and expensive maintenance needs, cities must pay for additional labor and materials to rebuild the road, potentially magnifying the cost.

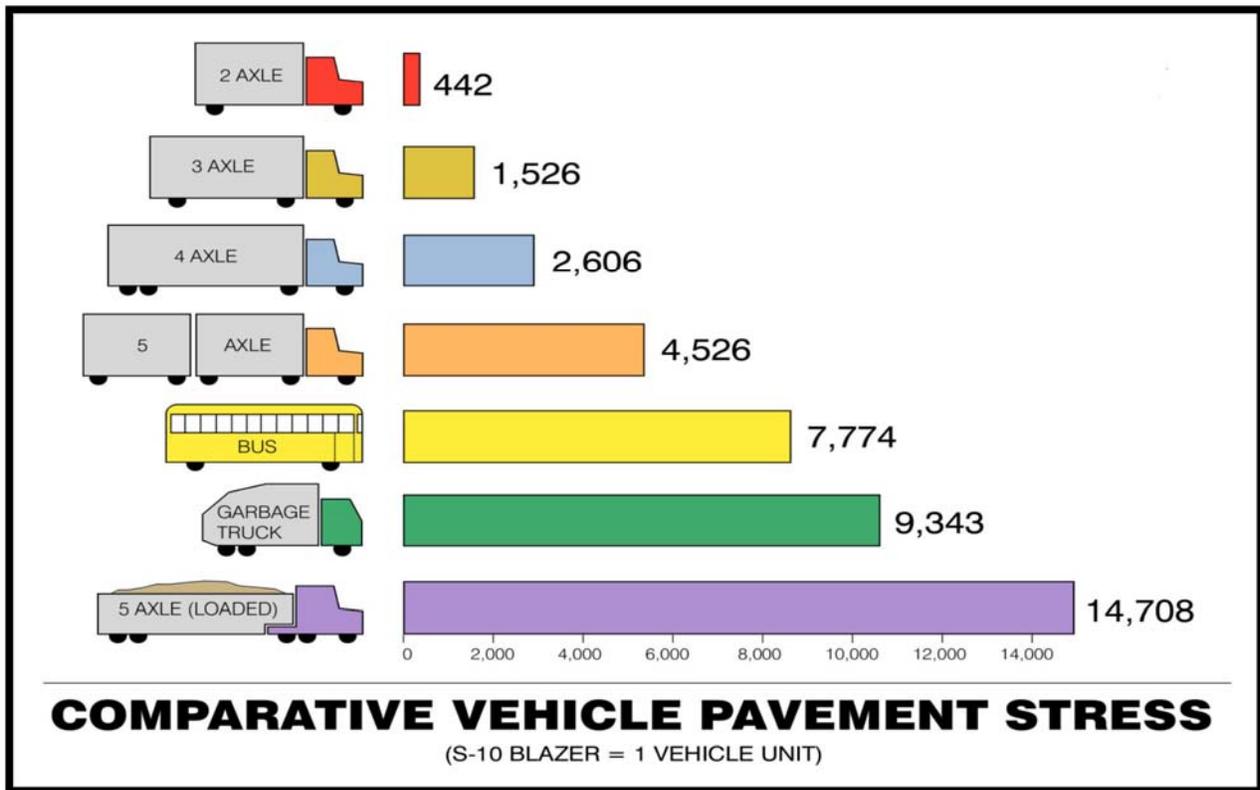
Table 3: Approximate Cost to Maintain/Repair Roads

Rating	PCI Range	Approximate Cost to Repair Range (per mile)
Excellent	80+	n/a
Good	70-79	\$10,000
Fair	60-69	\$16,500
At-risk	50-59	\$137,723 - \$207,680
Poor	25-49	\$144,320 - \$334,000
Very poor/failed	0-24	\$302,270 - \$668,000

Source: Federal Highway Administration: <http://www.fhwa.dot.gov/pavement/preservation/pubs/perfeval/perfeval.pdf>

Our roads are not only traveled by cars, trucks, and bicycles; freight trucks, buses, and garbage trucks also utilize these same roads on a daily basis. Unfortunately for a city's roadway repair budget, not all vehicles cause the same amount of stress and damage to roadways. As shown in figure 6, a simple delivery truck causes the equivalent of 442 sport utility vehicles (SUV) units of stress to a roadway. Buses which run frequently on some streets and garbage trucks, which on a weekly basis run on every street in an urbanized area, cause 7,774 and 9,343 SUV units of stress, respectively, on a roadways. While these large trucks cause massive stress to city streets there is no direct funding mechanism in Solano County to offset the damage they cause.

Figure 6: Pavement Stress per Trip (1 vehicle unit = 1 SUV)



Source: Pavement Engineering, Inc.

In addition to the cost of repairing roadways, the damage done to cars from poor roads can quickly add up. A recent report by the Washington-based research and advocacy group TRIP estimated the additional cost of auto repairs and traffic due to bad roads to be \$2,200 annually per vehicle. This individual expense is largely not quantified in calculations when it comes to the costs and benefits of the quality of our roadways.

Funding Sources for Solano County Roadways

There are numerous possible funding sources for maintaining and building local streets and roads. These sources can be classified into three major categories, Federal, State, and Local. Federal funds are usually one-time funds that are provided to county congestion management agencies and then dispersed to local jurisdictions during a federal funding cycle of between 4-5 years. State funds, like the gas tax, are annual disbursements to local jurisdictions whose amount vary depending on the amount of gas tax received in the previous year. Local funds, like general funds or local sales tax measures, are budgeted by a local jurisdiction annually.

Federal (22%)

- Surface Transportation Program (STP) – This funding source has been packaged as part of the OneBayArea Grant (OBAG) program. This program has increased the level of regulation and limited the use of funds, with at least 50% of funds in Solano County going to priority development areas or must be used on complete streets projects.

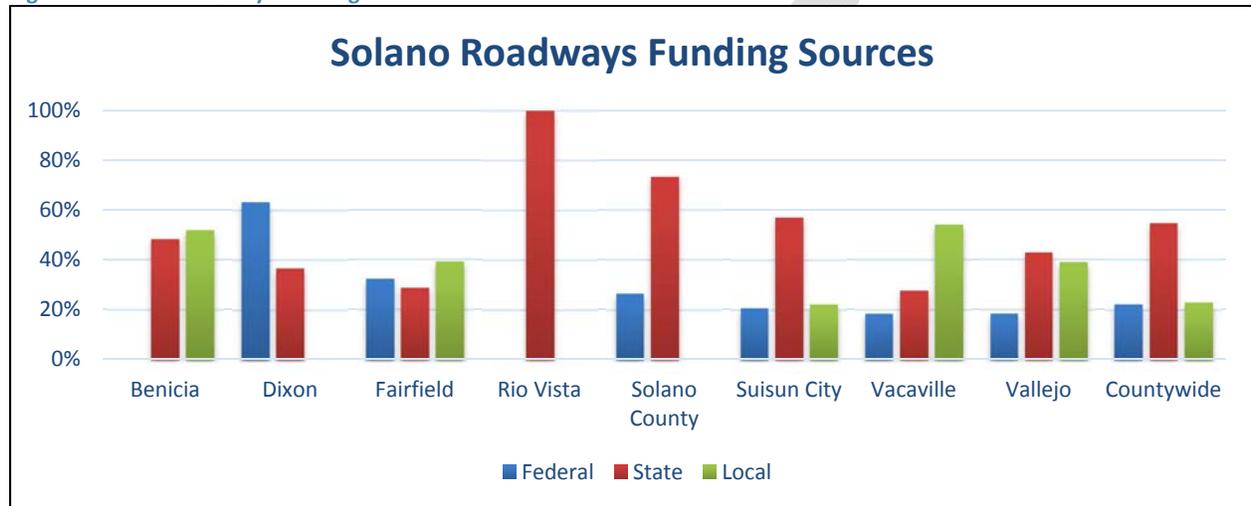
State (55%)

- Gas Tax – State gas tax revenues are collected by the State and then distributed to local jurisdictions by formula. The amount that is dispersed annually depends on the amount of tax collected. A portion of the tax is based on the price of gas as well, so if the price of gas decreases, then the amount of tax collected with also decrease, and the amount dispersed to cities will also decline.

Local (23%)

- City or County General Fund
- Countywide or Local Sales Tax Measures

Figure 7: Solano Roadways Funding Sources



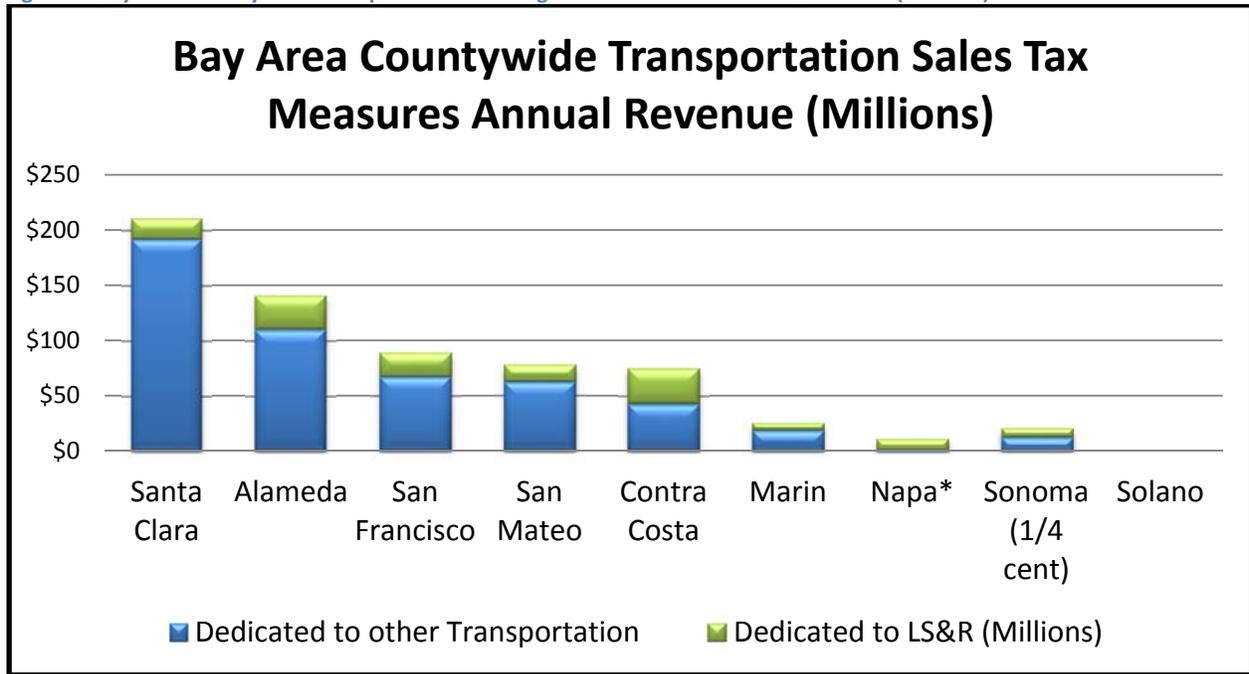
As showcased in Figure 7, the majority of funds used for LS&R investments come from state sources. Over the past decade the percentage of funds coming from the federal government has declined and the percentage coming from local sources has increased. The federal gas tax was last raised in 1993, nearly 22 years ago. According to the Federal Highway Administration, the purchasing power of the federal gas tax has dropped approximately 30 percent since 1997. The state gas tax has also not been raised since 1994, nearly 21 years ago. This trend of declining revenues and increasing costs is important going forward, as local agencies might have to rely on local funding measures for their roadway needs.

A local transportation funding source would help to alleviate some local funding shortfalls and would provide a reliable and steady source of revenue for roadway maintenance needs. In fact, Solano County is the only county within the 9 county San Francisco Bay Area that does not have a local countywide funding source dedicated to transportation improvements and roadway maintenance. Some Bay Area counties have also adopted a fee based on vehicle licensing through the Department of Motor Vehicles that directly funds transportation projects.

How much revenue can a countywide funding source provide? Figure 8 below shows that tens, or even hundreds of millions of dollars are generated annually for transportation projects through local voter-approved sales tax measures. Depending on how the measure was written, many of these local measures have a significant amount of funding dedicated to LS&R maintenance. Solano County, as the

only Bay Area County to not have passed a transportation sales tax measure, is currently not receiving any dedicated LS&R revenue. This has contributed to a higher back-log of roadway maintenance needs that will have to be addressed in future years, at increased cost.

Figure 8: Bay Area Countywide Transportation Funding Source Annual Revenue Estimates (Millions)



*Napa’s Measure T goes into effect in 2018.

Local Streets and Roads Budgets

Among the many needs for which a local jurisdiction must budget, its local streets and roads may be the most visible. Whenever a jurisdiction decides to invest in its roads, or defer maintenance, everyone can see it. Construction crews or potholes? Smooth streets or rough roads?

A jurisdiction’s total local streets and roads budget is comprised of various categories including maintenance and operations, overlay, reconstruction, and preventive maintenance. Within these categories there are pavement and non-pavement (sidewalks, curb ramps, gutters, lights, etc.) costs. Table 4 below provides a summary of the average 3 year pavement budget, average 3 year non-pavement budget, and average 3 year total LS&R pavement budgets for each Solano County jurisdiction.

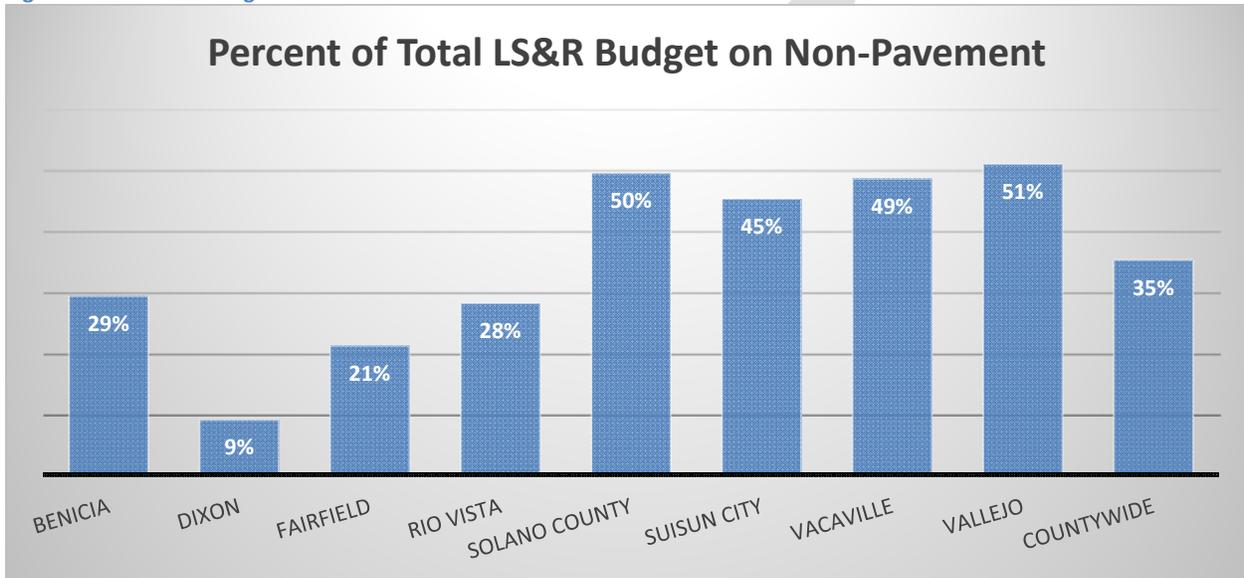
Table 4: Solano Jurisdiction LS&R Budget Breakdown (Thousands)

SOLANO JURISDICTION	Avg. 3 Year Pavement Budget (Thousands)	Avg. 3 Year Non-Pavement Budget (Thousands)	Avg. 3 Year Total LS&R Budget (Thousands)
BENICIA	\$ 909,766	\$ 378,367	\$ 1,288,133
DIXON	\$ 504,222	\$ 50,072	\$ 554,294
FAIRFIELD	\$ 6,012,333	\$ 1,620,000	\$ 7,632,333
RIO VISTA	\$ 123,000	\$ 58,333	\$ 234,667
SOLANO COUNTY	\$ 8,021,790	\$ 6,107,834	\$ 12,329,624
SUISUN CITY	\$ 611,906	\$ 507,513	\$ 1,119,419

VACAVILLE	\$ 2,401,577	\$ 2,272,401	\$ 4,673,978
VALLEJO	\$ 3,718,687	\$ 3,873,454	\$ 7,592,141
COUNTYWIDE	\$ 20,503,218	\$ 14,857,974	\$ 35,424,589

As shown in table 4 above, a large portion of each jurisdiction’s local streets and roads budgets is devoted to non-pavement needs. It is important to remember these non-pavement needs when considering how much a city is budgeting to local streets and roads. Figure 9 below shows that some jurisdictions are spending well over 40% of their LS&R budgets on non-pavement needs. Countywide, a total of 35% of the total local streets and roads budgets are spent on non-pavement needs.

Figure 9: Percent of Budget on Non-Pavement Needs



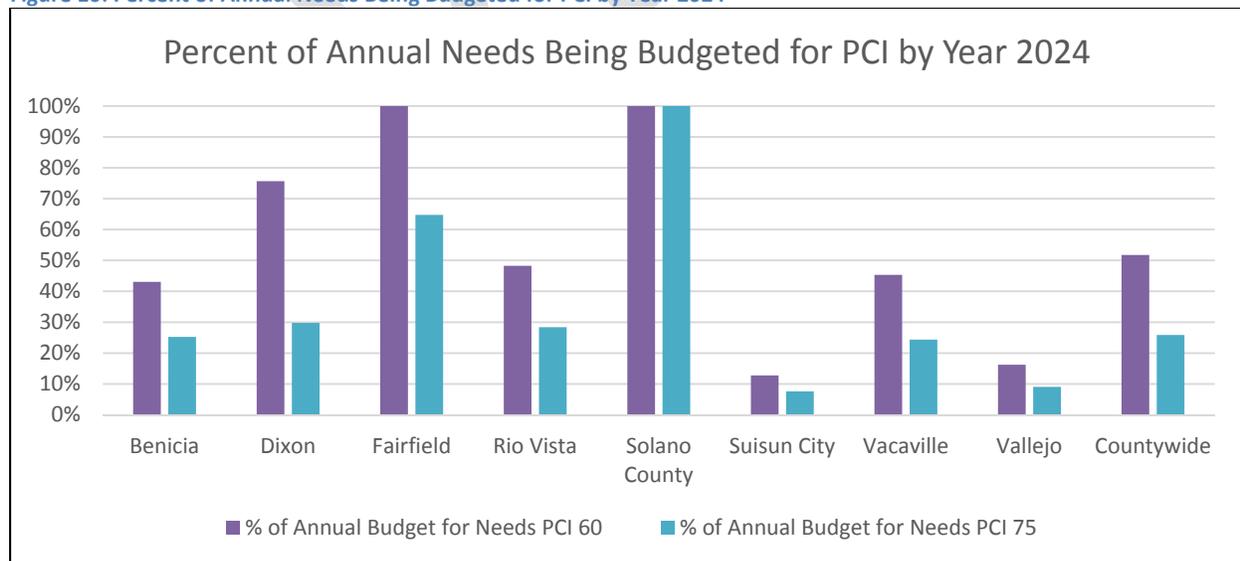
Long-Term Funding Shortfall for Local Streets & Roads

How much a city must spend to attain a particular PCI by a certain year is called its “Needs.” STA and its member agencies utilize a pavement management program named StreetSaver. This program takes inputs such as roadway maintenance records, roadway inspections, and roadway maintenance budgets to calculate future roadway conditions. At the end of every year, City staff, or a hired consultant, enter what roads have undergone improvement. Every 2-4 years every road in each city is inspected by a certified PCI inspector and that PCI is entered into StreetSaver. Finally a city’s budget helps to inform StreetSaver how much maintenance work can be expected in the future. All of these inputs help to provide a projection of a city’s PCI in any given future year.

For the purpose of this report the needs required for PCI 60, the score at which improvements become significantly more expensive, and PCI 75, the region-wide PCI goal, are being projected. According to StreetSaver, Solano countywide has a total need of \$396M to maintain at least PCI 60 by year 2024. This equates to an annual needed pavement budget countywide of \$39.6M. Solano countywide has an average 3 year budget total of \$20.5M; which is approximately 52% of the amount needed to keep the countywide average PCI in the “fair” category. The need to attain PCI 75 is \$793M over the next 10 years, of which Solano countywide is only spending approximately 26% of the amount needed annually.

Some local jurisdictions are doing better than others in regards to budgeting the amount of money that is needed to maintain or improve their PCI. Figure 10, below, provides visual evidence that while unincorporated Solano County is spending enough money to maintain their roads in PCI 75, some cities, including Vallejo and Suisun City, are spending less than 20% of the amount required to bring their roads up to PCI 60 by the year 2024.

Figure 10: Percent of Annual Needs Being Budgeted for PCI by Year 2024



Why Are Roads Failing Now?

Many people have been residents of Solano County for many years. They might be asking themselves, “Why are roads failing now, when they have been fine before?” To answer this question it is important to remember that a road generally has a lifespan of 20 years if it does not receive regular maintenance.

As has been stated previously in this report, federal and state investment in local streets & roads has been decreasing for the past 20 years (since 1994). The economic downturn that occurred between 2007 and 2011 also had a very serious impact on the quality of roads, with housing construction grinding to a halt, and the amount of money local jurisdictions were able to budget for road maintenance decreasing significantly. While the federal government did provide some relief with stimulus funds, these were short-lived and did not fully fill in the funding shortfall that local jurisdictions were facing.

The past 20 years is also a period in time in which many areas in Solano County experienced rapid growth. These newly constructed roads, with PCI around 100, helped to boost the average PCI score for a city overall, while doing very little for collectors and arterials. There is a serious issue with this approach, as new residential roads only carry a small percentage of a city's traffic. A city's collector and arterial roads carry the bulk of traffic, yet are given the same average PCI weighting as a new residential road, which serves to skew the average PCI score of a city. This only raised the "average" PCI and does nothing to maintain existing roads. Many Solano roadways are reaching the end of their designed life and the bill is coming due.

Summary and Conclusion

Whether commuting to work, dropping the kids off at school, or making a quick stop at the grocery store, nearly every trip begins and ends on local roadways. This is arguably one of the most important infrastructure investments a city can make. How and when we invest in our roads can have major implications on future budgets. Spending \$1 now on timely maintenance to keep a section of roadway in good condition would cost \$5 to restore the same road if the pavement deteriorates to the point of needing major rehabilitation. A quality roadway network promotes the movement of goods and services, which has a positive effect on economic activity.

As of October 2015, Solano County and its seven cities are cumulatively investing approximately \$20.5M annually in maintaining local streets and roads. In order to achieve an average countywide PCI goal of 60, an additional \$19M annually is needed over the next 10 years. This amount is almost twice as much as is being spent currently just to maintain local streets and roads in "fair condition." Since the costs of roadway rehabilitation increase substantially when PCI drops below 60 (roads categorized as "at-risk"), having a countywide goal of 60 would position our roads on the edge of a maintenance cliff. To reach the higher PCI goal of 75, the goal approved in the Solano Comprehensive Transportation Plan, an additional \$59M is needed annually over the next 10 years to reach a 'state of good repair' – more than two and a half times more than our current investment.

"Strategic investment in infrastructure produces a foundation for long-term growth."

-Roger McNamee

Without a healthy investment in our roadway infrastructure, Solano County will continue its downward trend in pavement quality. This deterioration hinders Solano County from attracting new jobs, housing, tourism, and business investment. More money spent now in long-term roadway maintenance can save Solano County and the seven cities millions in the future and strengthen our local economy.



DATE: November 10, 2015
TO: STA TAC
FROM: Jayne Bauer, Marketing and Legislative Program Manager
RE: Legislative Update

Background:

Each year, STA staff monitors state and federal legislation that pertains to transportation and related issues. On December 10, 2014, the STA Board approved its 2015 Legislative Priorities and Platform to provide policy guidance on transportation legislation and the STA's legislative activities during 2015.

Monthly legislative updates are provided by STA's State and Federal lobbyists and are incorporated in this report. An updated Legislative Bill Matrix listing state bills of interest is available at <http://tiny.cc/staleg>.

Discussion:

State Legislative Update (Shaw/Yoder/Antwih, Inc.):

Legislative Update

The Legislature recessed the first year of the two-year 2015-16 Legislative Session on September 11, 2015. The Governor had until October 11 to act on legislation sent to him in the final two weeks of the session. In total, the Governor signed 808 bills and vetoed 133 bills in 2015. The Legislature will reconvene on January 4, 2016.

Assembly Transportation Committee Chair Jim Frazier (D-Antioch) continues to work on a long-term transportation funding package. STA, Caltrans and CHP staff met with Assemblyman Frazier and the Assembly Transportation Committee staff on November 9, 2015 to provide information and a tour of some of Solano's priority projects: I-80 Cordelia Truck Scales, I-80/I-680/SR 12 Interchange, Green Valley Initial Construction Package, Jepson Parkway, and SR 12 East to Rio Vista.

STA's state legislative advocate will work with STA staff to schedule project briefings in early 2016 with each of Solano's state legislators and their staff (as well as key state agency staff) to provide the current status of STA priority projects and discuss future funding.

Transportation Special Session

On June 16, Governor Brown called on the Legislature to convene a special legislative session to address the state's transportation infrastructure needs, and proposed that the Legislature "enact pay-as-you-go, permanent and sustainable funding to: adequately and responsibly maintain and repair the state's transportation and critical infrastructure; improve the state's key trade corridors; and complement local infrastructure efforts." The Governor further proposed that the Legislature enact legislation necessary to: "...establish clear performance objectives measured by the percentage of pavement, bridges, and culverts in good conditions; and

incorporate project development efficiencies to expedite project delivery or reduce project costs.”

After several informational and policy hearings, the special session on transportation failed to produce a comprehensive transportation funding plan for consideration by the Legislature and the Governor prior to adjourning on September 11. In the final days of the legislative session, Governor Brown announced a \$3.6 billion proposal that would fund state highways, goods movement, local streets & roads, public transit, and complete streets, as well as \$890 million in one-time funding from early loan repayments. The ongoing proposal would be paid for using a mix of fuel excise tax increases, increased vehicle registration fees, and Cap and Trade revenue.

Governor’s Brown’s proposal failed to gain traction in the waning days of the session and it was ultimately decided that the Legislature would convene a conference committee to run parallel with the special session to explore new transportation funding. The conference committee is made up of five Senators and five Assembly Members. The make-up of the conference committee was established on September 23 and includes Senators Beall (D-San Jose, Co-Chair), Allen (D-Santa Monica), Leyva (D-Chino), Cannella (R-Ceres), and Gaines (R-El Dorado Hills), as well as Assembly Members Gomez (D-Los Angeles, Co-Chair), Mullin (D-South San Francisco), Burke (D-Inglewood), Melendez (R-Lake Elsinore) and Obernolte (R-Big Bear Lake). The conference committee held its first two hearings on October 16 (Sacramento) and October 21 (Ontario). The hearings were primarily focused on the needs of state highways and local streets & roads, but there was some discussion of the Governor’s proposal to fund transit and how the Cap and Trade funding would be appropriated. The hearings also served to illustrate the gulf between Democrats and Republicans on the question of whether the state should raise new revenues for transportation (i.e. rather than only utilize existing resources more efficiently). The special session will run past the September 11th adjournment of the regular session.

Cap and Trade

As mentioned above, the Governor proposed to use some Cap and Trade funding for transit. However, the Legislature has yet to propose a spending plan for the majority of the remaining 40 percent of the Cap and Trade revenues that aren’t subject to continuous appropriation. As part of his January 2016 Budget, the Governor proposed investments in clean transportation, sustainable forestry, clean energy, water efficiency, and waste diversion. The Air Resources Board conducted its first auction of the 2015-16 Fiscal Year on August 18, 2015 which yielded approximately \$650 million in revenues for the state. Using this as a base for estimating revenues for the fiscal year, there could be as much as \$2.6 billion in Cap and Trade revenues in 2015-16.

Under the rubric of the special session on transportation, various legislators and interest groups have put in calls for a share of Cap and Trade funds for transportation. For instance, some Republican legislators want funds for streets and roads projects, while some Democratic legislators want more Cap and Trade funds for public transit purposes. The Legislature and the Governor have agreed to tackle Cap and Trade funding when they return in January 2016.

Federal Legislative Update (Akin Gump):

STA staff is meeting with staff from the four cities collectively funding STA’s federal lobbyist to prepare for a 2016 visit to Washington DC.

Surface Transportation Legislation:

Congress appears to be on a path to pass multiyear surface transportation bill. The House and Senate extended current law until November 21 so that the House would have enough time to pass its transportation bill and the House and Senate could reconcile the two bills. On November 5, the House passed a six year, \$325 billion transportation bill after considering nearly 130 amendments. The House bill did not include a revenue title. The Senate passed its bill in July, which totaled \$350 billion and included three years of revenue offsets to supplement gas tax revenues. The House and Senate transportation committees will now convene a conference committee to reconcile the two bills and identify revenue offsets to fund the legislation. The total amount of funding available is currently being discussed with Senator James Inhofe, Chair of the Senate Environment and Public Works Committee, discussing the potential for passing a 5 year bill with higher funding levels. The conferees will attempt to wrap up their work and pass legislation before November 21, although Congress may be forced to pass another short term extension to allow sufficient time to reconcile the bills before Congress leaves for Christmas.

STA's federal legislative advocate previously provided a summary of the House bill. Highlights include:

- Creation of a new Surface Transportation Block Grant Program with expanded eligibilities, including ferry boat construction, border infrastructure projects, truck parking facilities, recreational trails and other activities that received separate funding in prior surface transportation bills (under Transportation Alternatives program).
- Creation of a \$750 million per year Nationally Significant Freight and Highway Projects Program that would provide grants to highway, bridge, rail-grade crossing, intermodal and freight rail projects costing more than \$100 million.
- Reinstatement of discretionary bus and bus facilities grants.
- New reforms designed to streamline the environmental review and project approval process.

Fiscal Year 2016 Appropriations

In his final act as Speaker of the House, John Boehner negotiated a bipartisan budget agreement with the Senate and the White House. The agreement increases the cap on discretionary spending for defense and nondefense accounts \$50 billion above the sequester level in fiscal 2016 and \$30 billion in fiscal 2017. The agreement requires the increased funding to be split evenly between defense and nondefense accounts. The funding is offset by cuts to entitlement programs and revenues generated by new fees. The budget agreement also suspends the debt limit until March 15, 2017. The President signed the agreement into law on November 2. With the budget agreement in place, Congress will attempt to pass omnibus legislation that funds the federal government for FFY 2016. The threat continues to be that conservative Republicans will attempt to attach controversial policy riders to the omnibus bill resulting in a Presidential veto threat. Congressional leadership will want to avoid a government shutdown making it unclear at this time whether Congress will be able to pass omnibus legislation or will be forced to pass another Continuing Resolution possibly until early 2016.

Fiscal Impact:

None.

Recommendation:

Informational.

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DATE: November 10, 2015
 TO: STA TAC
 FROM: Drew Hart, Associate Planner
 RE: Summary of Funding Opportunities

Discussion:

Below is a list of funding opportunities that will be available to STA member agencies during the next few months, broken up by Federal, State, and Local. Attachment A provides further details for each program.

	FUND SOURCE	AMOUNT AVAILABLE	APPLICATION DEADLINE
Regional			
1.	Carl Moyer Memorial Air Quality Standards Attainment Program (for San Francisco Bay Area)	Approximately \$15 million	Due On First-Come, First Served Basis
2.	Carl Moyer Off-Road Equipment Replacement Program (for Sacramento Metropolitan Area)	Approximately \$10 million	Due On First-Come, First-Served Basis
3.	Air Resources Board (ARB) Clean Vehicle Rebate Project (CVRP)	Up to \$2,500 rebate per light-duty vehicle	Due On First-Come, First-Served Basis (Waitlist)
4.	Bay Area Air Quality Management District (BAAQMD) Hybrid Electric Vehicle Purchase Vouchers (HVIP) (for fleets)	Approximately \$10,000 to \$45,000 per qualified request	Due On First-Come, First-Served Basis
5.	TDA Article 3	\$443,000	No Deadline
State			
1.	Affordable Housing Sustainable Communities Program*	TBD	Anticipated Beginning of Summer 2016
Federal			

*New funding opportunity

Fiscal Impact:

None.

Recommendation:

Informational.

Attachment:

- A. Detailed Funding Opportunities Summary

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The following funding opportunities will be available to the STA member agencies during the next few months. Please distribute this information to the appropriate departments in your jurisdiction.

Fund Source	Application Contact**	Application Deadline/Eligibility	Amount Available	Program Description	Proposed Submittal	Additional Information
Regional Grants¹						
Carl Moyer Memorial Air Quality Standards Attainment Program (for San Francisco Bay Area)	Anthony Fournier Bay Area Air Quality Management District (415) 749-4961 afournier@baaqmd.gov	Ongoing. Application Due On First-Come, First Served Basis Eligible Project Sponsors: private non-profit organizations, state or local governmental authorities, and operators of public transportation services	Approx. \$15 million	Carl Moyer Memorial Air Quality Standards Attainment Program provides incentive grants for cleaner-than-required engines, equipment, and other sources of pollution providing early or extra emission reductions.	N/A	Eligible Projects: cleaner on-road, off-road, marine, locomotive and stationary agricultural pump engines http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding-Sources/Carl-Moyer-Program.aspx
Carl Moyer Off-Road Equipment Replacement Program (for Sacramento Metropolitan Area)	Gary A. Bailey Sacramento Metropolitan Air Quality Management District (916) 874-4893 gbailey@airquality.org	Ongoing. Application Due On First-Come, First-Served Basis Eligible Project Sponsors: private non-profit organizations, state or local governmental authorities, and operators of public transportation services	Approx. \$10 million , maximum per project is \$4.5 million	The Off-Road Equipment Replacement Program (ERP), an extension of the Carl Moyer Program, provides grant funds to replace Tier 0, high-polluting off-road equipment with the cleanest available emission level equipment.	N/A	Eligible Projects: install particulate traps, replace older heavy-duty engines with newer and cleaner engines and add a particulate trap, purchase new vehicles or equipment, replace heavy-duty equipment with electric equipment, install electric idling-reduction equipment http://www.airquality.org/mobile/moyererp/index.shtml
Air Resources Board (ARB) Clean Vehicle Rebate Project (CVRP)*	Graciela Garcia ARB (916) 323-2781 ggarcia@arb.ca.gov	Application Due On First-Come, First-Served Basis (Currently applicants are put on waitlist)	Up to \$5,000 rebate per light-duty vehicle	The Zero-Emission and Plug-In Hybrid Light-Duty Vehicle (Clean Vehicle) Rebate Project is intended to encourage and accelerate zero-emission vehicle deployment and technology innovation. Rebates for clean vehicles are now available through the Clean Vehicle Rebate Project (CVRP) funded by the Air Resources Board (ARB) and implemented statewide by the California Center for Sustainable Energy (CCSE).	N/A	Eligible Projects: Purchase or lease of zero-emission and plug-in hybrid light-duty vehicles http://www.arb.ca.gov/mspr/og/aqip/cvrp.htm

¹ Regional includes opportunities and programs administered by the Solano Transportation Authority and/or regionally in the San Francisco Bay Area and greater Sacramento

Fund Source	Application Contact**	Application Deadline/Eligibility	Amount Available	Program Description	Proposed Submittal	Additional Information
Regional Grants¹						
Bay Area Air Quality Management District (BAAQMD) Hybrid Electric Vehicle Purchase Vouchers (HVIP)*	To learn more about how to request a voucher, contact: 888-457-HVIP info@californiahvip.org	Application Due On First-Come, First-Served Basis	Approx. \$10,000 to \$45,000 per qualified request	The California Air Resources Board (ARB) created the HVIP to speed the market introduction of low-emitting hybrid trucks and buses. It does this by reducing the cost of these vehicles for truck and bus fleets that purchase and operate the vehicles in the State of California. The HVIP voucher is intended to reduce about half the incremental costs of purchasing hybrid heavy-duty trucks and buses.	N/A	Eligible Projects: Purchase of low-emission hybrid trucks and buses http://www.californiahvip.org/
TDA Article 3	Cheryl Chi Metropolitan Planning Commission (510) 817-5939 cchi@mtc.ca.gov	No deadline	Approx. \$110,000	The Metropolitan Transportation Commission (MTC) administers TDA Article funding for each of the nine Bay Area counties with assistance from each of the county Congestion Management Agencies (e.g. STA). The STA works with the Pedestrian Advisory Committee (PAC), Bicycle Advisory Committee (BAC) and staff from the seven cities and the County to prioritize projects for potential TDA Article 3 funding.	N/A	

*New Funding Opportunity

**STA staff, Drew Hart, can be contacted directly at (707) 399-3214 or dhart@sta.ca.gov for assistance with finding more information about any of the funding opportunities listed in this report

Fund Source	Application Contact**	Application Deadline/Eligibility	Amount Available	Program Description	Proposed Submittal	Additional Information
State Grants						
Affordable Housing Sustainable Communities Program	Drew Hart STA 707/399.3214 dhart@sta.ca.gov	Anticipated early Summer 2016	TBD (Early estimates are around \$250M)	The purpose of the AHSC Program is to reduce greenhouse gas (GHG) emissions through projects that implement land-use, housing, transportation, and agricultural land preservation practices to support infill and compact development	N/A	http://www.sgc.ca.gov/docs/Draft_2015-16_Affordable_Housing_and_Sustainable_Communities_Program_Guidelines.pdf



DATE: November 12, 2015
TO: STA TAC
FROM: Johanna Masiolat, Clerk of the Board
RE: STA Board and Advisory Meeting Schedule for Calendar Year 2015

Discussion:

Attached is the STA Board and Advisory meeting schedule for the remainder of Calendar Year 2015 and STA Board and Advisory meeting schedule for Calendar Year 2016 that may be of interest to the STA TAC.

Fiscal Impact:

None.

Recommendation:

Informational.

Attachment:

- A. STA Board and Advisory Meeting Schedule for the remainder of Calendar Year 2015
- B. STA Board and Advisory Meeting Schedule for Calendar Year 2016

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**STA BOARD AND ADVISORY
COMMITTEE MEETING SCHEDULE
CALENDAR YEAR 2015**

SUMMARY:	
STA Board:	Meets 2 nd Wednesday of Every Month
Consortium :	Meets <i>Last</i> Tuesday of Every Month
TAC:	Meets <i>Last</i> Wednesday of Every Month
BAC:	Meets 1 st Thursday of every <i>Odd</i> Month
PAC:	Meets 3 rd Thursday of every <i>Even</i> Month
PCC:	Meets 3 rd Thursday of every <i>Odd</i> Month

DATE	TIME	DESCRIPTION	LOCATION	STATUS
Tues., September 29	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., September 30	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., October 14	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., October 15	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
No meeting due to STA's Annual Awards in November (No STA Board Meeting)		Intercity Transit Consortium	N/A	N/A
		Technical Advisory Committee (TAC)	N/A	N/A
November 4	6:00 p.m.	STA's 18 th Annual Awards	TBD - Benicia	Confirmed
Thurs., November 19	1:00 p.m.	Paratransit Coordinating Council (PCC)	John F. Kennedy Library	Tentative
Thurs., November 5	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., November 18	11:30 a.m.	Safe Routes to School Advisory (SR2S-AC)	STA Conference Room	Confirmed
Tues., November 17	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., November 18	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., December 9	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., December 17	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Tues., December 15	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., December 16	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed



**STA BOARD AND ADVISORY
COMMITTEE MEETING SCHEDULE
CALENDAR YEAR 2016**

SUMMARY:

STA Board: Meets 2nd Wednesday of Every Month
 Consortium : Meets Last Tuesday of Every Month
 TAC: Meets Last Wednesday of Every Month
 BAC: Meets 1st Thursday of every Odd Month
 PAC: Meets 3rd Thursday of every Even Month
 PCC: Meets 3rd Thursday of every Odd Month

DATE	TIME	DESCRIPTION	LOCATION	STATUS
Wed., January 13	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., January 14	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Thurs., January 21	1:00 p.m.	Paratransit Coordinating Council (PCC)	Solano Community College	Tentative
Tues., January 26	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., January 27	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., February 10	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Wed., February 17	1:30 p.m.	Safe Routes to School Advisory (SR2S-AC)	STA Conference Room	Confirmed
Thurs., February 18	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Tues., February 23	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., February 24	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., March 9	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., March 17	1:00 p.m.	Paratransit Coordinating Council (PCC)	Solano Community College	Tentative
Thurs., March 3	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Tues., March 29	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., March 30	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., April 13	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., April 21	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Tues., April 26	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., April 27	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., May 11	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., May 5	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., May 18	1:30 p.m.	Safe Routes to School Advisory (SR2S-AC)	STA Conference Room	Confirmed
Thurs., May 19	1:00 p.m.	Paratransit Coordinating Council (PCC)	City of Benicia	Tentative
Tues., May 24	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., May 25	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., June 8	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., June 16	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Tentative
Tues., June 28	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., June 29	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., July 13	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., July 21	1:00 p.m.	Paratransit Coordinating Council (PCC)	Fairfield Community Center	Tentative
Thurs., July 7	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
July 26 (No Meeting)	SUMMER	Intercity Transit Consortium	N/A	N/A
July 27 (No Meeting)	RECESS	Technical Advisory Committee (TAC)	N/A	N/A
August 10 (No Meeting)	SUMMER RECESS	STA Board Meeting	N/A	N/A
Wed., August 17	1:30 p.m.	Safe Routes to School Advisory (SR2S-AC)	STA Conference Room	Confirmed
Thurs., August 18	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Tues., August 30	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., August 31	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., September 14	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., September 15	1:00 p.m.	Paratransit Coordinating Council (PCC)	Ulatis Community Center	Tentative
Thurs., September 1	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Tues., September 27	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., September 28	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., October 12	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., October 20	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
No meeting due to STA's Annual Awards in November (No STA Board Meeting)		Intercity Transit Consortium	N/A	N/A
		Technical Advisory Committee (TAC)	N/A	N/A
November TBD	6:00 p.m.	STA's 18 th Annual Awards	TBD - Rio Vista	Confirmed
Thurs., November 17	1:00 p.m.	Paratransit Coordinating Council (PCC)	John F. Kennedy Library	Tentative
Thurs., November 3	6:30 p.m.	Bicycle Advisory Committee (BAC)	STA Conference Room	Confirmed
Wed., November 16	11:30 a.m.	Safe Routes to School Advisory (SR2S-AC)	STA Conference Room	Confirmed
Tues., November 15	10:00 a.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., November 16	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed
Wed., December 14	6:00 p.m.	STA Board Meeting	Suisun City Hall	Confirmed
Thurs., December 15	6:00 p.m.	Pedestrian Advisory Committee (PAC)	STA Conference Room	Confirmed
Tues., December 20	1:30 p.m.	Intercity Transit Consortium	STA Conference Room	Confirmed
Wed., December 21	1:30 p.m.	Technical Advisory Committee (TAC)	STA Conference Room	Confirmed