



Solano Transportation Authority

SOLANO TRANSPORTATION AUTHORITY

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

... working for you!

One Harbor Center, Suite 130, Suisun City, CA 94585-2473 ♦ Telephone (707) 424-6075 / Facsimile (707) 424-6074
Email: staplan@sta-snci.com ♦ Website: solanolinks.com

ARTERIALS, HIGHWAYS & FREEWAYS Meeting Agenda

March 18, 2010
1:30 p.m.

STA Conference Room
One Harbor Center, Suite 130
Suisun City, CA 94585

ITEM	COMMITTEE MEMBER/ STAFF PERSON
I. CALL TO ORDER	Chair Augustine
II. APPROVAL OF AGENDA	Chair Augustine
III. OPPORTUNITY FOR PUBLIC COMMENT	Chair Augustine
IV. APPROVAL OF LAST COMMITTEE MEETING MINUTES: JANUARY 20, 2010	Chair Augustine
V. ACTION ITEMS	
A. Arterials, Highways, and Freeways Goal Gap Analysis <u>Recommendation:</u> Forward a recommendation to the STA Board to approve the Arterials, Highways, and Freeways Goal Gap Analysis Pg. 5	Robert Macaulay
VI. INFORMATION ITEMS-	

Arterials, Highways, and Freeways Committee Members

Len Augustine Chair City of Vacaville	Elizabeth Patterson City of Benicia	Rick Fuller City of Dixon	Harry Price City of Fairfield	Jan Vick City of Rio Vista	Pete Sanchez City of Suisun City	Mike Reagan County of Solano	Paul Wiese STA TAC Representative
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A. Arterials, Highways, and Freeways Goal: Pavement Condition Index (PCI)
Recommendation:
Informational
Pg. 13

Robert Guerrero
Rod Moresco

B. Future Funding Estimates for Roadways
Recommendation:
Informational
Pg. 16

Robert Macaulay

VII. NEXT AGENDA TOPICS

Robert Macaulay

- A. Solano County State Highway Operations and Protection (SHOPP) Priorities
- B. Routes of Regional Significance: Priorities by Corridor
- C. Implementation of MTC's Freeway Performance Initiative: Near Term Projects and Potential Funding

VIII. COMMITTEE MEMBER COMMENTS

Committee Members

IX. ADJOURNMENT

Chair Augustine



Solano Transportation Authority

Arterials, Highways, and Freeways Committee Meeting Minutes

Wednesday January 20, 2010 1:30 – 3:00 p.m.

STA Conference Room One Harbor Center, Suite 130 Suisun City, CA 94585-2473

I. CALL TO ORDER

Chair Len Augustine called the meeting to order at 1:30 p.m. A quorum was confirmed.

MEMBERS PRESENT: Len Augustine, Chair City of Vacaville Jack Batchelor, Jr City of Dixon Harry Price City of Fairfield Jan Vick City of Rio Vista Pete Sanchez City of Suisun City Mike Reagan County of Solano Paul Wiese TAC Member

MEMBERS ABSENT: Elizabeth Patterson City of Benicia

STA STAFF PRESENT: Daryl Halls Executive Director Janet Adams Deputy Executive Director/Director of Projects Robert Macaulay Director of Planning Robert Guerrero Senior Planner Sam Shelton Project Manager

STA TAC MEMBERS PRESENT: Mike Roberts City of Benicia Public Works

OTHERS PRESENT: Kevin Aguigui Kimley Horn

II. APPROVAL OF AGENDA

Robert Macaulay, STA requested the Committee consider switching the order of Agenda Items C and B for discussion. On a motion by Supervisor Mike Reagan and a second by Mayor Jack Batchelor, the committee approved the January 20, 2009 Arterials, Highways and Freeways Agenda with the requested change.

III. ARTERIALS, HIGHWAYS AND FREEWAYS MEETING MINUTES OF SEPTEMBER 9, 2009

On a motion by Mayor Jack Batchelor and a second by Mayor Harry Price, the Committee approved the September 9, 2009 Arterials, Highways and Freeways meeting minutes.

IV. ACTION ITEMS

A. I-80/I-680/I-780 Corridor Operations Improvements Plan:

Recommendation:

Forward a recommendation to the STA Board to adopt the I-80/I-680/I-780 Corridor Operations Improvements Plan.

On a motion from Mayor Jack Batchelor and a second from Mayor Pete Sanches, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Sam Shelton, STA presented the I-80/I-680/I-780 Corridor Operations Plan. Mr. Shelton discussed the process for the Plan's development and how it related to Caltrans' Corridor Management Plans and MTC's Freeway Performance Initiative.

The committee discussed signs along the freeway. Mayor Len Augustine expressed his concern about the proliferation of signs along the highways. Mayor Augustine discussed how too many signs might diminish the attractiveness of paid billboards. Mayor Jack Batchelor expressed his concern that Caltrans wanting to eliminate signs for small cities. After further discussion on signs, the committee agreed that standards may be needed but that caution should be taken when limiting sign options.

Kevin Aguigui, Kimley Horn presented the Plan's project implementation sequencing. Mr. Aguigui presented displays illustrating where the projects were located and what the projects addressed.

The committee discussed ramp metering. Mayor Len Augustine noted that the cities may be resistant to ramp metering. Janet Adams, STA mentioned that ramp metering is a requirement for High Occupancy Vehicle (HOV) lanes. Mayor Augustine commented that ramp metering facilities need to have adequate lanes and the funding will need to be provided for these lanes.

Daryl Halls, STA summarized his discussion with Mayor Elizabeth Patterson regarding this Agenda Item. Mr. Halls noted that Mayor Patterson called him in advance of the meeting because she couldn't attend. Mayor Patterson wanted the committee to know that she was concerned that the I-80/I-680/I-780 Corridor Operations Plan needed a more robust public outreach in Benicia.

B. Comprehensive Transportation Plan (CTP) Draft Project list*

Recommendation:

Forward a recommendation to the STA Board to adopt the Draft CTP list.

On a motion by Mayor Jack Batchelor and a second by Mayor Jan Vick, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Robert Macaulay, STA presented the Comprehensive Transportation Plan (CTP) Project’s list for the Arterials, Highways and Freeways Element. Mike Roberts, City of Benicia asked for clarification on the purpose for the CTP list. Mr. Macaulay noted the difference between projects lists from this committee’s CTP element and lists developed for the other two elements.

*This item was moved for discussion after Agenda Item IV.C.

C. Comprehensive Transportation Plan Update- Routes of Regional Significance

Recommendation:

Forward a recommendation to the STA Board to designate the following as Routes of Regional Significance:

- a. Parkway Boulevard Overcrossing and associated roadways;
- b. Vaughn Road Railroad Bypass; and,
- c. California Drive Freeway Overcrossing.

On a motion by Mayor Harry Price and a second by Mayor Jack Batchelor, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Robert Macaulay, STA provided a background overview of the purpose of the Routes of Regional Significance and presented the three new segments for the committee to consider including.

Mayor Len Augustine commented that in the future the City of Vacaville’s Vacavalley Parkway may be a key connector from the city to Napa. Mayor Augustine suggested considering Vacavalley Parkway as a route of regional significance at that point. Supervisor Mike Reagan cautioned that transportation funds should be balanced to where traffic actually travels and to facilities that are supposed to accommodate the traffic. Mayor Jack Batchelor commented on the importance of including Parkway Blvd. as a route of regional significance in the City of Dixon for current and future traffic.

V. INFORMATION ITEMS

A. Draft Arterials, Highways, and Freeways Goal Gap Analysis

Recommendation:

Informational

Robert Macaulay, STA presented the draft Arterials, Highways, and Freeways Goal Gap Analysis. Mr. Macaulay indicated that he would like to have the committee review the

report and come back at a future meeting to recommend the STA Board adopt it. Robert Guerrero, STA commented that in developing the report there was some minor inconsistencies with a few adopted goals. Mr. Guerrero explained that the committee will need to re-evaluate those goals at the next meeting as well.

Daryl Halls, STA mentioned that the committee may want to reconsider increasing the Pavement Condition Index (PCI) score goal to something above the current score of 63 (PCI fair rating). Mayor Pete Sanchez mentioned that he would like to have a more in dept discussion on the PCI ratings in Solano County. Mayor Sanchez noted that he believed that Suisun's rating was not correct and would like to understand where the discrepancy is.

VI. NEXT MEETING.

The committee discussed scheduling the next meeting for March 17th.

The discussion items include:

- Arterials, Highways, and Freeways Goal Gap Analysis
- Pavement Condition Index (PCI)

VII. ADJOURNMENT

The Arterials, Highways, and Freeways Committee meeting was adjourned at 3:00 p.m.



DATE: March 11, 2010
TO: STA Arterials, Highways, and Freeways Committee
FROM: Robert Macaulay, Director of Planning
RE: Comprehensive Transportation Plan (CTP) Update – Arterials, Highways, and Freeways: Goal Gap Analysis

Background:

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

The first task completed by the CTP – Arterials, Highways, and Freeways committee was the adoption of an Arterials, Highways, and Freeways Element Purpose Statement and Goals document in July of 2008. In October 2009, the STA Board adopted the first-ever State of the System – Arterials, Highways and Freeways report, describing the components and existing conditions of the freeway and major arterial system.

STA staff's current task is to identify the gap between the Purpose Statement and Goals and the State of the System.

Discussion:

In order to perform this 'gap analysis,' STA staff has reviewed each of the Goals adopted for the Arterials, Highways, and Freeways Element, and prepared an analysis of whether the Goal:

- **Completed** – this is a goal with a specific end-point that has been reached, such as the construction of a facility or the identification of Transit Facilities of regional Significance. This also includes the initiation of an on-going program.
- **Significant Progress** – this is a project with substantial completion; typically, more than 10% Plans, Specifications and Estimates (PS&E) but not yet into construction or completion. It also includes studies where data collection and analysis has started, but final recommendations have not been adopted.
- **Preliminary Proposal** – finally, this category covers projects that have less than 10% PS&E, plans that have not started data collection, and programs that have no administrative and/or financial commitments and no start date.

The Arterials Highways and Freeways Element: Goal Gap Analysis Report is included as Attachment A. STA staff brought a draft report to the Arterials Committee in January for

review. There were some minor inconsistencies with the goals that were clarified at the last meeting related to the Pavement Conditions Index. This item is discussed in more detail under Information Item VI.A. The attached revised draft report reflects these minor revisions.

Fiscal Impact:

None. However, the gap analysis will help direct STA staff when preparing draft implementation policies and the subsequent development of funding strategies and recommendations.

Recommendation:

Informational

Attachments:

- A. Arterials Highways and Freeways Element: Goal Gap Analysis Report

Arterials, Highways, and Freeways Element

DRAFT Goals Gap Analysis

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.

Measuring Goals. The following criteria are used to measure the progress on meeting the goals of the Transit Element:

- **Completed** – this is a goal with a specific end-point that has been reached, such as the construction of a facility or the identification of Transit Facilities of regional Significance. This also includes studies that have been adopted (even if recommendations have not yet been implemented) and the initiation of an on-going program.
- **Significant Progress** – this is a project with substantial completion; typically, more than 10% Plans, Specifications and Estimates (PS&E) but not yet into construction or completion. It also includes studies where data collection and analysis has started, but final recommendations have not been adopted.
- **Preliminary Proposal** – finally, this category covers projects that have less than 10% PS&E, plans that have not started data collection, and programs that have no administrative and/or financial commitments and no start date.

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) on the STA's Routes of Regional Significance.

Preliminary Proposal. The STA currently allocates federal Surface Transportation Program funds for Local Streets and Roads projects through a funding distribution formula. Funding amounts are determined based on a percentage of population, lane mileage, arterial and collector shortfall, and preventative maintenance. The formula may be amended to include PCI scores.

Pavement conditions are rated by their PCI score with the following ranks:

Score	Rating
80-89	Very Good
70-79	Good
60-69	Fair
50-59	At-Risk
25-49	Poor

Note that a PCI goal for Solano County is being re-evaluated and will be brought back as an action item at the next Arterial, Highways and Freeways Committee meeting. The STA has not adopted a policy that mandates the formula consider a PCI score in distributing Local Streets and Roads funding. In addition, the city or county agency has discretion for which roads receive Local Streets and Roads funding. Agencies do not have to use the funds to maintain a specified PCI level on the Routes of Regional Significance.

- 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.

Significant Progress. STA adopted the Solano Travel Safety Plan in 1998. The 2001 SR 12 MIS contained a significant segment on accident data; in 2006, the STA reactivated the SR 12 committee, and made a major investment in SR 12 safety, including sponsoring an Office of Traffic Safety grant, designation of a double fine zone and dedication of the Officer David Frank Lamoree memorial highway, and the dedication of \$150,000 of STIP PPM funds for FY 09-10 and 10-11 to help produce a new SR 12 MIS. Safety and accident data was collected and analyzed as a part of the SR 113 MIS. However, there is not an overarching schedule of safety data gathering and analysis, and not all plans use the same safety statistics in analyzing roadway safety.

- 3) Develop performance measures for funding and prioritizing arterials, highways, and freeway projects in Solano County.

Significant Progress. STA has developed performance measures for highways, freeways and roadway corridors through Major Investment Studies (MIS) and other similar documents. Performance measures are not developed or monitored for local roads.

Typical performance measures include:

1. Level of Service (LOS)
2. Vehicle Hours Delayed (VHD)
3. Accidents rates compared to statewide average for similar types of facilities

Other Performance Measures exist and incorporated in separate plans and documents; however, the STA currently does not have standardized performance measurement 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

Preliminary Proposal. MTC created Routine Accommodations as part of resolution 3765 and calls for creation and implementation of a checklist that promotes the routine accommodation of non-motorized travelers in project planning and design. Solano County's Routes of Regional Significance and Transit Facilities of Regional Significance were developed as part of the current CTP update. The STA needs to determine what MTC's Routine Accommodations (also known as Complete Streets) means for Solano County. STA has planned complete streets/multimodal corridors including the Jepson Parkway and the North Connector. Complete Streets concepts will be developed as part of the Alternative Modes Element of the STA's Comprehensive Transportation Plan.

- 4a. Preliminary Proposal.** Local agencies, along with the STA, will need to determine what complete streets means for their jurisdiction.

- 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.

Significant Progress. A complete HOV Lane Network for I-80 and I-680 is planned for Solano County. HOV lanes were recently constructed on I-80 between Fairfield from Red Top Road to Air Base Parkway. The STA is currently working with MTC to help fund an extension of the current HOV network through Express Lanes.

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

Preliminary Proposal. Eligible projects on Solano County's Routes of Regional Significance are being considered. The 50/50 policy will be updated once the project's list is completed.

*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

Significant Progress. STA has begun to develop a process for prioritization of roadway project funds, including identifying priority projects by community, determining project readiness and needs, and comparing project putting projects in the context of adopted studies such as the I-80/I-680/I-780 Operations Plan. This draft funding strategy does not use all of the criteria identified in this CTP Goal. In addition, the STA has developed criteria through the Regional Transportation Impact Fee (RTIF) study to rate potential RTIF-recipient projects.

- 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.

Significant Progress. Current model was originally adopted in 2005 and was recently updated in 2008. The model continues (and will continue) to have ongoing refinements. Over the last two years, the model was refined to include updated land use information and forecasted traffic counts for the years 2010 and 2030. A broader update of the model is expected to occur relative to the 2010 census. The STA has taken steps to formalize the Model Technical Advisory Committee to include a land use subcommittee.

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

Significant progress. Individual environmental documents will need to meet requirements of SB 375 and AB 32. The STA is currently working on a climate change strategy in partnership with the local agencies. In addition, STA is working with MTC and ABAG on the Sustainable Communities Strategy.
 - b. Where appropriate, be consistent with the Solano County Habitat Conservation Plan's (HCP) avoidance and mitigation measures.

Significant progress. The HCP standards were used in the development in the Jepson Parkway and North Connector Environmental Documents.

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

Preliminary Proposal. An inventory of ROW needs has not been completed.

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

Significant progress. STA continues to identify and monitor Federal, State, and Regional funding opportunities. This will continue to be an ongoing activity. In addition, STA is exploring local funding opportunities such as a Regional Traffic Impact Fee and Express Lanes



Date: March 11, 2010
To: Arterials, Highways, and Freeways Committee
From: Robert Guerrero, Senior Planner
Re: Arterials, Highways, and Freeways Goal: Pavement Condition Index

Background:

The Pavement Condition Index (PCI) is a performance measure for local streets and roads pavement conditions throughout the Bay Area. The Metropolitan Transportation Commission (MTC) tracks the PCI scores for each jurisdiction through their Streetsaver Program. Each city and the County of Solano participate in MTC's Streetsaver Program with the majority providing PCI data annually to MTC. Pavement with a PCI score below 25 is in severe distress; in contrast, pavement with a PCI score above 89 is in optimal condition. The PCI score is determined through a combination of annual pavement survey information of similar pavement types and/or estimations based on prior year averages.

Pavement conditions are categorized by the following PCI scores:

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

On July 8, 2008, the STA adopted a minimum PCI goal of 63 ("Fair" rating) for funding investments on the STA's Routes of Regional Significance. The Arterials, Highways and Freeways goal states:

*"Invest available funds in maintaining a minimum Pavement Conditions Index (PCI) of **63** on the STA's Routes of Regional Significance."*

The recommended score was based on the average PCI score for the Bay Area Region as published in MTC's 2004 State of the System Report.

Some Arterials, Highways, and Freeways committee members made the point that a 63 PCI goal may be too low of a standard for the entire County and requested this issue be brought back for further discussion.

Discussion:

PCI Score Update

The Arterials, Highways and Freeways Committee members expressed concern that the PCI scores included in the December 2009 State of the System Report became outdated when MTC published a more recent PCI report for Solano County in January 2010. STA staff agrees and is proposing to amend the PCI Matrix included in the Arterials, Highways and Freeways State of the System Report to show the following PCI Scores for the year 2009:

Agency	2009	Rating
Benicia	66	Fair
Dixon	76	Good
Fairfield	73	Good
Rio Vista	45**	Poor
Solano County	64	Fair
Suisun City	55	At-Risk
Vacaville	77	Good
Vallejo	53	At-Risk
	63.6	Fair

It should be noted that while the majority of cities have experienced a drop with their PCI score, Solano County and the City of Suisun improved their scores. In fact, MTC recently recognized the City of Suisun City for having their PCI score improved by 5 points.

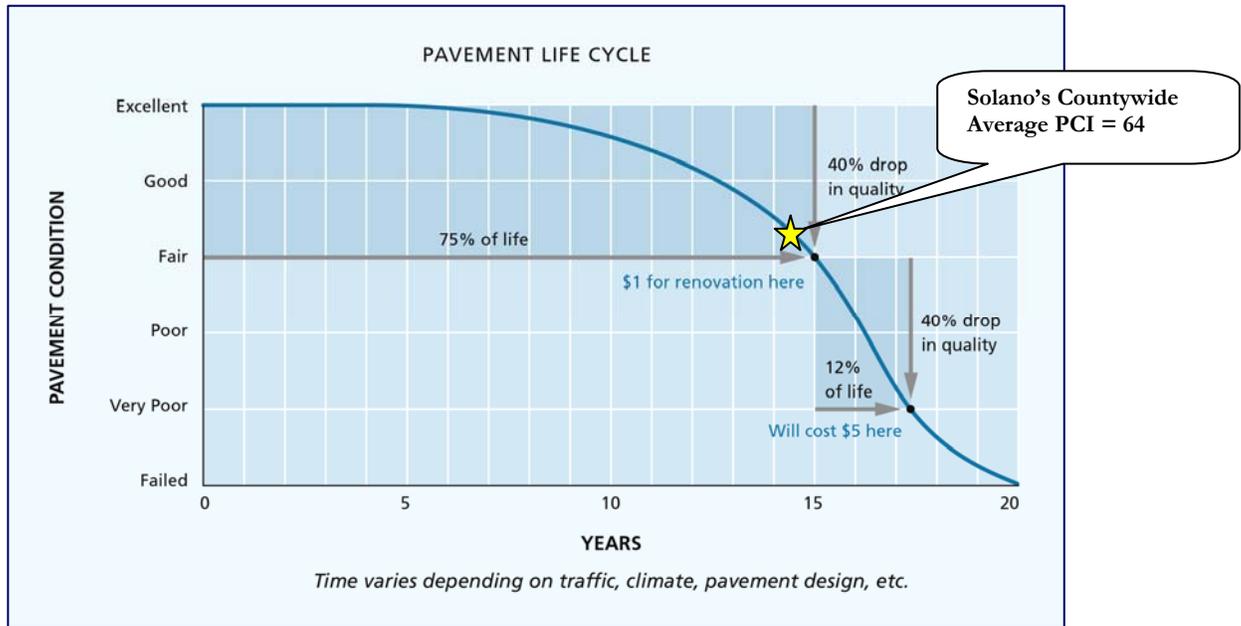
PCI Goal Amendment

MTC's 2035 Regional Transportation Plan (RTP) has an overall PCI goal of 75 (Good) for the Bay Area region. MTC's goal was supported by the *Local Streets and Roads Pavement, Non-Pavement and Bridge Needs Analysis Report* which was completed as part of the MTC's 2009 RTP. The Report concluded that it costs far less to keep roads in good condition through preventative maintenance than it costs to allow the roadways to deteriorate to a point where major rehabilitation or reconstruction is required. The report provided the following example:

The average serviceable life of a pavement, if no treatment is applied to it, is about 20 years. By the time a roadway reaches a PCI of 60, it has already lived 75% of its serviceable life (approximately 15 years) and it will have only experienced a 40% drop in quality of pavement. However, when a roadway reaches a PCI of 60, rapid deterioration begins to take place. In only the next few years, the same roadway will experience another 40% drop in quality. Studies show that for every one dollar it takes to treat a roadway with a PCI of 70 or higher, it will cost approximately \$10 dollars to fix the same roadway once it has deteriorated to the point where major rehabilitation or reconstruction is necessary.

The following graph illustrates the report's point further:

Pavement Life Cycle



STA staff recommends amending the currently adopted PCI goal from 63 on the Routes of Regional Significance to a higher PCI goal of 75 for the County. This would be consistent with MTC's goal for the region and would encourage regular maintenance to prolong the pavement's life cycle and save on costly repairs. A higher PCI goal would imply that the STA would work with agencies to maintain their PCI score if they currently exceed the score. Consequently, the STA will work with agencies to obtain the goal if they do not currently meet the goal. At present, the cities of Dixon and Vacaville exceed the recommended Countywide PCI goal.

STA staff recommendations to amend the PCI Matrix and PCI Goal is scheduled for discussion and feedback at the March 31, 2010 Technical Advisory Committee (TAC) meeting. The TAC may have concerns about having a PCI Goal of 75 since the shortfall projected by MTC for local streets and roads in Solano County amounts to an estimated \$1.8 billion over the next 10 years. With a higher PCI goal, some members of the TAC have commented that local streets and roads funding flexibility might be lost if the STA directs the funding to maintain a higher PCI on the Routes of Regional Significance.

STA staff will bring the PCI Matrix and PCI Goal back to the Arterials, Highways, and Freeways Committee for action after comments from the TAC are considered. In the meantime, City of Vacaville Public Works Director Rod Moresco is scheduled to provide a presentation on how the city calculates PCI and what the city uses the data for.

Recommendation:

Informational.

Attachment:

- A. Arterials, Highways and Freeways State of the System Report PCI Matrix Proposed Amendment

Arterials, Highways and Freeways State of the System Report PCI Matrix Proposed Amendment

Agency	Total Lane Miles	Three-year Moving Average			<i>Proposed Amendment</i>	Rating
		2005	2006	2007	2009	
Benicia	190	70	70	68	66	Fair
Dixon	129	79	81	77	76	Good
Fairfield	702	78	77	75	73	Good
Rio Vista	45	55	51	48*	45**	Poor
Solano County	1168	59	58	61	64	Fair
Suisun City	145	56	53	50	55	At-Risk
Vacaville	527 533	76	78	79*	77	Good
Vallejo	657	54	54	54	53	At-Risk
	Average PCI	66.1	65.8	65.2	63.6	Fair

*Three-year moving average score is an estimate based on inspections done in 2007

**Three-year moving average score is an estimate based on inspections done in 2006 or earlier.



DATE: March 11, 2010
TO: Arterials, highways and Freeways Committee
FROM: Robert Macaulay, Director of Planning
RE: Future Funding Estimates for Roadways

Background:

Construction and improvement of Routes of Regional Significance in Solano County comes from a variety of sources: federal, state, regional and local. In order to develop a funding strategy and priority list for CTP projects, including those on freeways, highways and arterial roads, it is important to know what fund sources are available, and what the anticipated revenues are from each source.

Discussion:

The following fund sources are available for projects on the Routes of Regional Significance:

- **Federal:** Federal money comes from formula distribution (based upon population) of funds in the federal transportation authorization legislation such as the current *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). Federal transportation bill funding goes into the State Highway Account, and is then allocated through the State Transportation Improvement Program (STIP) by the California Transportation Commission (CTC). STIP funds for the Bay Area are finally distributed by the Metropolitan Transportation Commission (MTC). In past years, federal funds have been used for major capacity improvement projects, but the current Regional Transportation Plan (RTP) only anticipates \$6 billion in roadway improvement funds for the entire 9-county Bay Area between 2009 and 2035. Federal money can also fund projects specified in the federal transportation authorization legislation and, special earmarks in federal appropriations bills.
- **State:** The STIP, generally distributed on population formula, is used for project construction. The STIP is composed of two sub-elements: the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). MTC is responsible for developing regional project priorities for the RTIP for the nine counties of the Bay Area. The biennial RTIP is then submitted to the CTC for inclusion in the STIP. The California Department of Transportation (Caltrans) is responsible for developing the ITIP.

State Highway Operation & Protection Program (SHOPP) primarily funds maintenance and safety projects. Other state funds include voter-approved bonds, such as Proposition 1B for one-time projects. Solano County projects with state bond funds include the I-80/I-680/SR 12 interchange, SR 12 Jameson Canyon widening and the Cordelia Truck

Scale (eastbound) project. Sixty percent of STA's project funding for Routes of Regional Significance comes from state sources

- **Regional:** Bridge Tolls such as Regional Measure (RM) 2 (primarily dedicated to transit facilities) are a regional fund source. The RM 2 legislation included specific roadway projects, such as the I-80/I-680/SR 12 interchange, as eligible fund recipients, but general roadway improvement work is not covered by RM 2. MTC also provides targeted funding, such as Transportation for Livable Communities (TLC) program. Funds from the Bay Area Air Quality Management District (BAAQMD) and Yolo Solano Air Quality Management District (YSAQMD) can be used for signal timing and preemption projects on Routes of Regional Significance, as well as for construction of bicycle lanes on roadways. MTC also uses federal transportation bill funds for regional initiatives such as the Freeway Performance Initiative.
- **Local:** Highway Users Tax Account (HUTA); Proposition 42 gas tax. City-collected development impact fees are also spent on specified roadway improvements, which sometimes include work on Routes of Regional Significance.

STA staff estimates that federal fund will provide \$15 million to \$30 million over the next three to six years. This will be dependent upon Congress passing a new federal authorization bill, or providing on-going funding under the auspices of the current transportation bill. State funding for the same time period could be as much as \$15 million, but may disappear entirely as the state struggles with major financial shortfalls and raids local funds and infrastructure accounts to try and make up for the shortfall. Regional funds are expected to provide another \$20 million, and local funds a final \$5 million.

The STA Overall Work Plan (OWP) has 20 projects that are not funded or construction. The estimated cost of these projects exceeds \$2 billion. The Comprehensive Transportation Plan (CTP) project list, approved by the STA Board on March 10, 2010, has 50 arterial, highway and freeway projects identified, including the 20 OWP projects. Even though the entire CTP project list has not been analyzed for cost, it is clear that the shortfall of funds for Routes of Regional Significance construction projects will vastly exceed available resources.

As a result of this oversubscription of available construction and improvement funds for Routes of Regional Significance, one of the important tasks STA is undertaking is development of a strategy to identify, fund and deliver priority projects. This will allow STA and its member and partner agencies to then match up those small amounts of funding that are available with funding sources for which they are eligible. Identification of priority Routes of Regional Significance projects will be discussed further by the Arterials, Highways and Freeways committee at subsequent meetings.

Recommendation:

Informational



Solano Transportation Authority

Arterials, Highways, and Freeways Committee Meeting Minutes

Wednesday January 20, 2010 1:30 – 3:00 p.m.

STA Conference Room One Harbor Center, Suite 130 Suisun City, CA 94585-2473

I. CALL TO ORDER

Chair Len Augustine called the meeting to order at 1:30 p.m. A quorum was confirmed.

MEMBERS PRESENT: Len Augustine, Chair City of Vacaville Jack Batchelor, Jr City of Dixon Harry Price City of Fairfield Jan Vick City of Rio Vista Pete Sanchez City of Suisun City Mike Reagan County of Solano Paul Wiese TAC Member

MEMBERS ABSENT: Elizabeth Patterson City of Benicia

STA STAFF PRESENT: Daryl Halls Executive Director Janet Adams Deputy Executive Director/Director of Projects Robert Macaulay Director of Planning Robert Guerrero Senior Planner Sam Shelton Project Manager

STA TAC MEMBERS PRESENT: Mike Roberts City of Benicia Public Works

OTHERS PRESENT: Kevin Aguigui Kimley Horn

II. APPROVAL OF AGENDA

Robert Macaulay, STA requested the Committee consider switching the order of Agenda Items C and B for discussion. On a motion by Supervisor Mike Reagan and a second by Mayor Jack Batchelor, the committee approved the January 20, 2009 Arterials, Highways and Freeways Agenda with the requested change.

III. ARTERIALS, HIGHWAYS AND FREEWAYS MEETING MINUTES OF SEPTEMBER 9, 2009

On a motion by Mayor Jack Batchelor and a second by Mayor Harry Price, the Committee approved the September 9, 2009 Arterials, Highways and Freeways meeting minutes.

IV. ACTION ITEMS

A. I-80/I-680/I-780 Corridor Operations Improvements Plan:

Recommendation:

Forward a recommendation to the STA Board to adopt the I-80/I-680/I-780 Corridor Operations Improvements Plan.

On a motion from Mayor Jack Batchelor and a second from Mayor Pete Sanches, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Sam Shelton, STA presented the I-80/I-680/I-780 Corridor Operations Plan. Mr. Shelton discussed the process for the Plan's development and how it related to Caltrans' Corridor Management Plans and MTC's Freeway Performance Initiative.

The committee discussed signs along the freeway. Mayor Len Augustine expressed his concern about the proliferation of signs along the highways. Mayor Augustine discussed how too many signs might diminish the attractiveness of paid billboards. Mayor Jack Batchelor expressed his concern that Caltrans wanting to eliminate signs for small cities. After further discussion on signs, the committee agreed that standards may be needed but that caution should be taken when limiting sign options.

Kevin Aguigui, Kimley Horn presented the Plan's project implementation sequencing. Mr. Aguigui presented displays illustrating where the projects were located and what the projects addressed.

The committee discussed ramp metering. Mayor Len Augustine noted that the cities may be resistant to ramp metering. Janet Adams, STA mentioned that ramp metering is a requirement for High Occupancy Vehicle (HOV) lanes. Mayor Augustine commented that ramp metering facilities need to have adequate lanes and the funding will need to be provided for these lanes.

Daryl Halls, STA summarized his discussion with Mayor Elizabeth Patterson regarding this Agenda Item. Mr. Halls noted that Mayor Patterson called him in advance of the meeting because she couldn't attend. Mayor Patterson wanted the committee to know that she was concerned that the I-80/I-680/I-780 Corridor Operations Plan needed a more robust public outreach in Benicia.

B. Comprehensive Transportation Plan (CTP) Draft Project list*

Recommendation:

Forward a recommendation to the STA Board to adopt the Draft CTP list.

On a motion by Mayor Jack Batchelor and a second by Mayor Jan Vick, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Robert Macaulay, STA presented the Comprehensive Transportation Plan (CTP) Project’s list for the Arterials, Highways and Freeways Element. Mike Roberts, City of Benicia asked for clarification on the purpose for the CTP list. Mr. Macaulay noted the difference between projects lists from this committee’s CTP element and lists developed for the other two elements.

*This item was moved for discussion after Agenda Item IV.C.

C. Comprehensive Transportation Plan Update- Routes of Regional Significance

Recommendation:

Forward a recommendation to the STA Board to designate the following as Routes of Regional Significance:

- a. Parkway Boulevard Overcrossing and associated roadways;
- b. Vaughn Road Railroad Bypass; and,
- c. California Drive Freeway Overcrossing.

On a motion by Mayor Harry Price and a second by Mayor Jack Batchelor, the Arterials, Highways, and Freeways Committee unanimously approved the recommendation.

Robert Macaulay, STA provided a background overview of the purpose of the Routes of Regional Significance and presented the three new segments for the committee to consider including.

Mayor Len Augustine commented that in the future the City of Vacaville’s Vacavalley Parkway may be a key connector from the city to Napa. Mayor Augustine suggested considering Vacavalley Parkway as a route of regional significance at that point. Supervisor Mike Reagan cautioned that transportation funds should be balanced to where traffic actually travels and to facilities that are supposed to accommodate the traffic. Mayor Jack Batchelor commented on the importance of including Parkway Blvd. as a route of regional significance in the City of Dixon for current and future traffic.

V. INFORMATION ITEMS

A. Draft Arterials, Highways, and Freeways Goal Gap Analysis

Recommendation:

Informational

Robert Macaulay, STA presented the draft Arterials, Highways, and Freeways Goal Gap Analysis. Mr. Macaulay indicated that he would like to have the committee review the

report and come back at a future meeting to recommend the STA Board adopt it. Robert Guerrero, STA commented that in developing the report there was some minor inconsistencies with a few adopted goals. Mr. Guerrero explained that the committee will need to re-evaluate those goals at the next meeting as well.

Daryl Halls, STA mentioned that the committee may want to reconsider increasing the Pavement Condition Index (PCI) score goal to something above the current score of 63 (PCI fair rating). Mayor Pete Sanchez mentioned that he would like to have a more in dept discussion on the PCI ratings in Solano County. Mayor Sanchez noted that he believed that Suisun's rating was not correct and would like to understand where the discrepancy is.

VI. NEXT MEETING.

The committee discussed scheduling the next meeting for March 17th.

The discussion items include:

- Arterials, Highways, and Freeways Goal Gap Analysis
- Pavement Condition Index (PCI)

VII. ADJOURNMENT

The Arterials, Highways, and Freeways Committee meeting was adjourned at 3:00 p.m.



DATE: March 11, 2010
TO: STA Arterials, Highways, and Freeways Committee
FROM: Robert Macaulay, Director of Planning
RE: Comprehensive Transportation Plan (CTP) Update – Arterials, Highways, and Freeways: Goal Gap Analysis

Background:

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

The first task completed by the CTP – Arterials, Highways, and Freeways committee was the adoption of an Arterials, Highways, and Freeways Element Purpose Statement and Goals document in July of 2008. In October 2009, the STA Board adopted the first-ever State of the System – Arterials, Highways and Freeways report, describing the components and existing conditions of the freeway and major arterial system.

STA staff's current task is to identify the gap between the Purpose Statement and Goals and the State of the System.

Discussion:

In order to perform this 'gap analysis,' STA staff has reviewed each of the Goals adopted for the Arterials, Highways, and Freeways Element, and prepared an analysis of whether the Goal:

- **Completed** – this is a goal with a specific end-point that has been reached, such as the construction of a facility or the identification of Transit Facilities of regional Significance. This also includes the initiation of an on-going program.
- **Significant Progress** – this is a project with substantial completion; typically, more than 10% Plans, Specifications and Estimates (PS&E) but not yet into construction or completion. It also includes studies where data collection and analysis has started, but final recommendations have not been adopted.
- **Preliminary Proposal** – finally, this category covers projects that have less than 10% PS&E, plans that have not started data collection, and programs that have no administrative and/or financial commitments and no start date.

The Arterials Highways and Freeways Element: Goal Gap Analysis Report is included as Attachment A. STA staff brought a draft report to the Arterials Committee in January for

review. There were some minor inconsistencies with the goals that were clarified at the last meeting related to the Pavement Conditions Index. This item is discussed in more detail under Information Item VI.A. The attached revised draft report reflects these minor revisions.

Fiscal Impact:

None. However, the gap analysis will help direct STA staff when preparing draft implementation policies and the subsequent development of funding strategies and recommendations.

Recommendation:

Informational

Attachments:

- A. Arterials Highways and Freeways Element: Goal Gap Analysis Report

Arterials, Highways, and Freeways Element

DRAFT Goals Gap Analysis

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.

Measuring Goals. The following criteria are used to measure the progress on meeting the goals of the Transit Element:

- **Completed** – this is a goal with a specific end-point that has been reached, such as the construction of a facility or the identification of Transit Facilities of regional Significance. This also includes studies that have been adopted (even if recommendations have not yet been implemented) and the initiation of an on-going program.
- **Significant Progress** – this is a project with substantial completion; typically, more than 10% Plans, Specifications and Estimates (PS&E) but not yet into construction or completion. It also includes studies where data collection and analysis has started, but final recommendations have not been adopted.
- **Preliminary Proposal** – finally, this category covers projects that have less than 10% PS&E, plans that have not started data collection, and programs that have no administrative and/or financial commitments and no start date.

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) on the STA's Routes of Regional Significance.

Preliminary Proposal. The STA currently allocates federal Surface Transportation Program funds for Local Streets and Roads projects through a funding distribution formula. Funding amounts are determined based on a percentage of population, lane mileage, arterial and collector shortfall, and preventative maintenance. The formula may be amended to include PCI scores.

Pavement conditions are rated by their PCI score with the following ranks:

Score	Rating
80-89	Very Good
70-79	Good
60-69	Fair
50-59	At-Risk
25-49	Poor

Note that a PCI goal for Solano County is being re-evaluated and will be brought back as an action item at the next Arterial, Highways and Freeways Committee meeting. The STA has not adopted a policy that mandates the formula consider a PCI score in distributing Local Streets and Roads funding. In addition, the city or county agency has discretion for which roads receive Local Streets and Roads funding. Agencies do not have to use the funds to maintain a specified PCI level on the Routes of Regional Significance.

- 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.

Significant Progress. STA adopted the Solano Travel Safety Plan in 1998. The 2001 SR 12 MIS contained a significant segment on accident data; in 2006, the STA reactivated the SR 12 committee, and made a major investment in SR 12 safety, including sponsoring an Office of Traffic Safety grant, designation of a double fine zone and dedication of the Officer David Frank Lamoree memorial highway, and the dedication of \$150,000 of STIP PPM funds for FY 09-10 and 10-11 to help produce a new SR 12 MIS. Safety and accident data was collected and analyzed as a part of the SR 113 MIS. However, there is not an overarching schedule of safety data gathering and analysis, and not all plans use the same safety statistics in analyzing roadway safety.

- 3) Develop performance measures for funding and prioritizing arterials, highways, and freeway projects in Solano County.

Significant Progress. STA has developed performance measures for highways, freeways and roadway corridors through Major Investment Studies (MIS) and other similar documents. Performance measures are not developed or monitored for local roads.

Typical performance measures include:

1. Level of Service (LOS)
2. Vehicle Hours Delayed (VHD)
3. Accidents rates compared to statewide average for similar types of facilities

Other Performance Measures exist and incorporated in separate plans and documents; however, the STA currently does not have standardized performance measurement 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

Preliminary Proposal. MTC created Routine Accommodations as part of resolution 3765 and calls for creation and implementation of a checklist that promotes the routine accommodation of non-motorized travelers in project planning and design. Solano County's Routes of Regional Significance and Transit Facilities of Regional Significance were developed as part of the current CTP update. The STA needs to determine what MTC's Routine Accommodations (also known as Complete Streets) means for Solano County. STA has planned complete streets/multimodal corridors including the Jepson Parkway and the North Connector. Complete Streets concepts will be developed as part of the Alternative Modes Element of the STA's Comprehensive Transportation Plan.

- 4a. Preliminary Proposal.** Local agencies, along with the STA, will need to determine what complete streets means for their jurisdiction.

- 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.

Significant Progress. A complete HOV Lane Network for I-80 and I-680 is planned for Solano County. HOV lanes were recently constructed on I-80 between Fairfield from Red Top Road to Air Base Parkway. The STA is currently working with MTC to help fund an extension of the current HOV network through Express Lanes.

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

Preliminary Proposal. Eligible projects on Solano County's Routes of Regional Significance are being considered. The 50/50 policy will be updated once the project's list is completed.

*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

Significant Progress. STA has begun to develop a process for prioritization of roadway project funds, including identifying priority projects by community, determining project readiness and needs, and comparing project putting projects in the context of adopted studies such as the I-80/I-680/I-780 Operations Plan. This draft funding strategy does not use all of the criteria identified in this CTP Goal. In addition, the STA has developed criteria through the Regional Transportation Impact Fee (RTIF) study to rate potential RTIF-recipient projects.

- 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.

Significant Progress. Current model was originally adopted in 2005 and was recently updated in 2008. The model continues (and will continue) to have ongoing refinements. Over the last two years, the model was refined to include updated land use information and forecasted traffic counts for the years 2010 and 2030. A broader update of the model is expected to occur relative to the 2010 census. The STA has taken steps to formalize the Model Technical Advisory Committee to include a land use subcommittee.

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

Significant progress. Individual environmental documents will need to meet requirements of SB 375 and AB 32. The STA is currently working on a climate change strategy in partnership with the local agencies. In addition, STA is working with MTC and ABAG on the Sustainable Communities Strategy.
 - b. Where appropriate, be consistent with the Solano County Habitat Conservation Plan's (HCP) avoidance and mitigation measures.

Significant progress. The HCP standards were used in the development in the Jepson Parkway and North Connector Environmental Documents.

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

Preliminary Proposal. An inventory of ROW needs has not been completed.

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

Significant progress. STA continues to identify and monitor Federal, State, and Regional funding opportunities. This will continue to be an ongoing activity. In addition, STA is exploring local funding opportunities such as a Regional Traffic Impact Fee and Express Lanes



Date: March 11, 2010
To: Arterials, Highways, and Freeways Committee
From: Robert Guerrero, Senior Planner
Re: Arterials, Highways, and Freeways Goal: Pavement Condition Index

Background:

The Pavement Condition Index (PCI) is a performance measure for local streets and roads pavement conditions throughout the Bay Area. The Metropolitan Transportation Commission (MTC) tracks the PCI scores for each jurisdiction through their Streetsaver Program. Each city and the County of Solano participate in MTC's Streetsaver Program with the majority providing PCI data annually to MTC. Pavement with a PCI score below 25 is in severe distress; in contrast, pavement with a PCI score above 89 is in optimal condition. The PCI score is determined through a combination of annual pavement survey information of similar pavement types and/or estimations based on prior year averages.

Pavement conditions are categorized by the following PCI scores:

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

On July 8, 2008, the STA adopted a minimum PCI goal of 63 ("Fair" rating) for funding investments on the STA's Routes of Regional Significance. The Arterials, Highways and Freeways goal states:

"Invest available funds in maintaining a minimum Pavement Conditions Index (PCI) of 63 on the STA's Routes of Regional Significance."

The recommended score was based on the average PCI score for the Bay Area Region as published in MTC's 2004 State of the System Report.

Some Arterials, Highways, and Freeways committee members made the point that a 63 PCI goal may be too low of a standard for the entire County and requested this issue be brought back for further discussion.

Discussion:

PCI Score Update

The Arterials, Highways and Freeways Committee members expressed concern that the PCI scores included in the December 2009 State of the System Report became outdated when MTC published a more recent PCI report for Solano County in January 2010. STA staff agrees and is proposing to amend the PCI Matrix included in the Arterials, Highways and Freeways State of the System Report to show the following PCI Scores for the year 2009:

Agency	2009	Rating
Benicia	66	Fair
Dixon	76	Good
Fairfield	73	Good
Rio Vista	45**	Poor
Solano County	64	Fair
Suisun City	55	At-Risk
Vacaville	77	Good
Vallejo	53	At-Risk
	63.6	Fair

It should be noted that while the majority of cities have experienced a drop with their PCI score, Solano County and the City of Suisun improved their scores. In fact, MTC recently recognized the City of Suisun City for having their PCI score improved by 5 points.

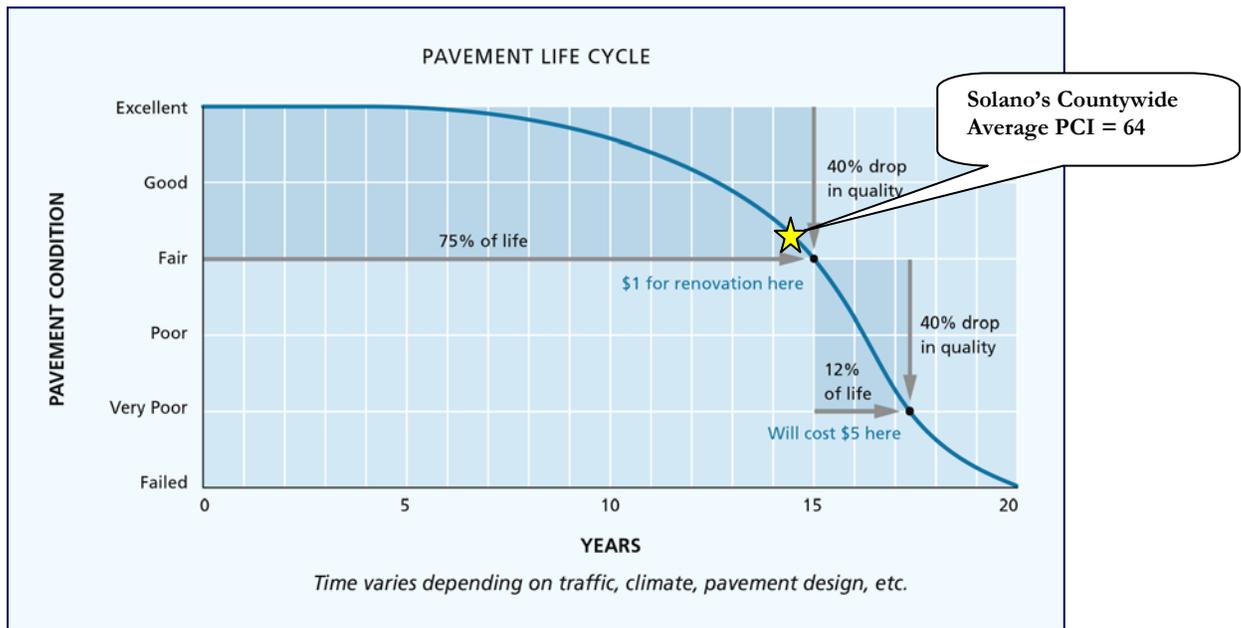
PCI Goal Amendment

MTC's 2035 Regional Transportation Plan (RTP) has an overall PCI goal of 75 (Good) for the Bay Area region. MTC's goal was supported by the *Local Streets and Roads Pavement, Non-Pavement and Bridge Needs Analysis Report* which was completed as part of the MTC's 2009 RTP. The Report concluded that it costs far less to keep roads in good condition through preventative maintenance than it costs to allow the roadways to deteriorate to a point where major rehabilitation or reconstruction is required. The report provided the following example:

The average serviceable life of a pavement, if no treatment is applied to it, is about 20 years. By the time a roadway reaches a PCI of 60, it has already lived 75% of its serviceable life (approximately 15 years) and it will have only experienced a 40% drop in quality of pavement. However, when a roadway reaches a PCI of 60, rapid deterioration begins to take place. In only the next few years, the same roadway will experience another 40% drop in quality. Studies show that for every one dollar it takes to treat a roadway with a PCI of 70 or higher, it will cost approximately \$10 dollars to fix the same roadway once it has deteriorated to the point where major rehabilitation or reconstruction is necessary.

The following graph illustrates the report's point further:

Pavement Life Cycle



STA staff recommends amending the currently adopted PCI goal from 63 on the Routes of Regional Significance to a higher PCI goal of 75 for the County. This would be consistent with MTC's goal for the region and would encourage regular maintenance to prolong the pavement's life cycle and save on costly repairs. A higher PCI goal would imply that the STA would work with agencies to maintain their PCI score if they currently exceed the score. Consequently, the STA will work with agencies to obtain the goal if they do not currently meet the goal. At present, the cities of Dixon and Vacaville exceed the recommended Countywide PCI goal.

STA staff recommendations to amend the PCI Matrix and PCI Goal is scheduled for discussion and feedback at the March 31, 2010 Technical Advisory Committee (TAC) meeting. The TAC may have concerns about having a PCI Goal of 75 since the shortfall projected by MTC for local streets and roads in Solano County amounts to an estimated \$1.8 billion over the next 10 years. With a higher PCI goal, some members of the TAC have commented that local streets and roads funding flexibility might be lost if the STA directs the funding to maintain a higher PCI on the Routes of Regional Significance.

STA staff will bring the PCI Matrix and PCI Goal back to the Arterials, Highways, and Freeways Committee for action after comments from the TAC are considered. In the meantime, City of Vacaville Public Works Director Rod Moresco is scheduled to provide a presentation on how the city calculates PCI and what the city uses the data for.

Recommendation:

Informational.

Attachment:

- A. Arterials, Highways and Freeways State of the System Report PCI Matrix Proposed Amendment

Arterials, Highways and Freeways State of the System Report PCI Matrix Proposed Amendment

Agency	Total Lane Miles	Three-year Moving Average			<i>Proposed Amendment</i>	Rating
		2005	2006	2007	2009	
Benicia	190	70	70	68	66	Fair
Dixon	129	79	81	77	76	Good
Fairfield	702	78	77	75	73	Good
Rio Vista	45	55	51	48*	45**	Poor
Solano County	1168	59	58	61	64	Fair
Suisun City	145	56	53	50	55	At-Risk
Vacaville	527 533	76	78	79*	77	Good
Vallejo	657	54	54	54	53	At-Risk
	Average PCI	66.1	65.8	65.2	63.6	Fair

*Three-year moving average score is an estimate based on inspections done in 2007

**Three-year moving average score is an estimate based on inspections done in 2006 or earlier.



DATE: March 11, 2010
TO: Arterials, highways and Freeways Committee
FROM: Robert Macaulay, Director of Planning
RE: Future Funding Estimates for Roadways

Background:

Construction and improvement of Routes of Regional Significance in Solano County comes from a variety of sources: federal, state, regional and local. In order to develop a funding strategy and priority list for CTP projects, including those on freeways, highways and arterial roads, it is important to know what fund sources are available, and what the anticipated revenues are from each source.

Discussion:

The following fund sources are available for projects on the Routes of Regional Significance:

- **Federal:** Federal money comes from formula distribution (based upon population) of funds in the federal transportation authorization legislation such as the current *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). Federal transportation bill funding goes into the State Highway Account, and is then allocated through the State Transportation Improvement Program (STIP) by the California Transportation Commission (CTC). STIP funds for the Bay Area are finally distributed by the Metropolitan Transportation Commission (MTC). In past years, federal funds have been used for major capacity improvement projects, but the current Regional Transportation Plan (RTP) only anticipates \$6 billion in roadway improvement funds for the entire 9-county Bay Area between 2009 and 2035. Federal money can also fund projects specified in the federal transportation authorization legislation and, special earmarks in federal appropriations bills.
- **State:** The STIP, generally distributed on population formula, is used for project construction. The STIP is composed of two sub-elements: the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). MTC is responsible for developing regional project priorities for the RTIP for the nine counties of the Bay Area. The biennial RTIP is then submitted to the CTC for inclusion in the STIP. The California Department of Transportation (Caltrans) is responsible for developing the ITIP.

State Highway Operation & Protection Program (SHOPP) primarily funds maintenance and safety projects. Other state funds include voter-approved bonds, such as Proposition 1B for one-time projects. Solano County projects with state bond funds include the I-80/I-680/SR 12 interchange, SR 12 Jameson Canyon widening and the Cordelia Truck

Scale (eastbound) project. Sixty percent of STA's project funding for Routes of Regional Significance comes from state sources

- **Regional:** Bridge Tolls such as Regional Measure (RM) 2 (primarily dedicated to transit facilities) are a regional fund source. The RM 2 legislation included specific roadway projects, such as the I-80/I-680/SR 12 interchange, as eligible fund recipients, but general roadway improvement work is not covered by RM 2. MTC also provides targeted funding, such as Transportation for Livable Communities (TLC) program. Funds from the Bay Area Air Quality Management District (BAAQMD) and Yolo Solano Air Quality Management District (YSAQMD) can be used for signal timing and preemption projects on Routes of Regional Significance, as well as for construction of bicycle lanes on roadways. MTC also uses federal transportation bill funds for regional initiatives such as the Freeway Performance Initiative.
- **Local:** Highway Users Tax Account (HUTA); Proposition 42 gas tax. City-collected development impact fees are also spent on specified roadway improvements, which sometimes include work on Routes of Regional Significance.

STA staff estimates that federal fund will provide \$15 million to \$30 million over the next three to six years. This will be dependent upon Congress passing a new federal authorization bill, or providing on-going funding under the auspices of the current transportation bill. State funding for the same time period could be as much as \$15 million, but may disappear entirely as the state struggles with major financial shortfalls and raids local funds and infrastructure accounts to try and make up for the shortfall. Regional funds are expected to provide another \$20 million, and local funds a final \$5 million.

The STA Overall Work Plan (OWP) has 20 projects that are not funded or construction. The estimated cost of these projects exceeds \$2 billion. The Comprehensive Transportation Plan (CTP) project list, approved by the STA Board on March 10, 2010, has 50 arterial, highway and freeway projects identified, including the 20 OWP projects. Even though the entire CTP project list has not been analyzed for cost, it is clear that the shortfall of funds for Routes of Regional Significance construction projects will vastly exceed available resources.

As a result of this oversubscription of available construction and improvement funds for Routes of Regional Significance, one of the important tasks STA is undertaking is development of a strategy to identify, fund and deliver priority projects. This will allow STA and its member and partner agencies to then match up those small amounts of funding that are available with funding sources for which they are eligible. Identification of priority Routes of Regional Significance projects will be discussed further by the Arterials, Highways and Freeways committee at subsequent meetings.

Recommendation:

Informational