



**REGIONAL TRANSPORTATION IMPACT FEE (RTIF)
TECHNICAL WORKING GROUP**

**September 12, 2011
1:30 p.m. – 3:00 p.m.**

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

I. CALL TO ORDER/INTRODUCTIONS Sam Shelton, STA
(1:30 – 1:33 p.m.)

II. APPROVAL OF THE AGENDA
(1:33 – 1:35 p.m.)

III. CONSENT CALENDAR
(1:35 – 1:40 p.m.)

A. RTIF Technical Working Group Meeting Minutes of June 13, 2011. Jessica McCabe, STA
Recommendation:
Approve the RTIF Technical Working Group Meeting Minutes of June 13, 2011.

IV. ACTION ITEMS

A. Preliminary Project Cost Estimates Sasha Dansky,
Recommendation: Mark Thomas & Co.
Approve the use of the Preliminary Project Cost Estimates for the RTIF Nexus Study as shown in Attachment A.
(1:40 – 2:00 p.m.)

B. Maximum Nexus Methodology & Draft Calculations Jason Moody, EPS
Recommendation:
Approve the use of the Maximum Nexus Methodology for the RTIF Nexus Study as shown in Attachment B.
(2:00 – 2:20 p.m.)

COMMITTEE MEMBERS

<u>City of Benicia</u>	<u>City of Dixon</u>	<u>City of Fairfield</u>	<u>City of Rio Vista</u>	<u>City of Suisun City</u>	<u>City of Vacaville</u>	<u>City of Vallejo</u>	<u>County of Solano</u>
Charlie Knox	Morrie Barr	George Hicks	David Melilli	Dan Kasperson	Rod Moresco	David Kleinschmidt	Bill Emlen
Melissa Morton	Dave Dowswell	Erin Beavers		April Wooden	Maureen Carson	Michelle Hightower	Matt Tuggle

**RTIF Committee packet information is available on
STA's website: www.solanolinks.com**

C. Revised RTIF Implementation Options & Revenue Estimates Jason Moody, EPS
Recommendation:
Forward to the RTIF Policy Committee the list of feasible RTIF Implementation Options & Revenue Projections as shown in Attachment A.
 (2:20 – 2:40 p.m.)

V. NEXT MEETING TOPICS

- **Direction from RTIF Policy Committee on Program Development & Fee Schedule,** Sam Shelton, STA
- **Draft Nexus Study & Economic Analysis**

VI. CLOSING COMMENTS FROM COMMITTEE MEMBERS Committee Members
 (2:40 – 3:00 p.m.)

VII. ADJOURNMENT

The next Regional Transportation Impact Fee (RTIF) Technical Working Group Meeting will be determined, based on input from the RTIF Policy Committee in October 2011.

COMMITTEE MEMBERS

<u>City of Benicia</u>	<u>City of Dixon</u>	<u>City of Fairfield</u>	<u>City of Rio Vista</u>	<u>City of Suisun City</u>	<u>City of Vacaville</u>	<u>City of Vallejo</u>	<u>County of Solano</u>
Charlie Knox	Morrie Barr	George Hicks	David Melilli	Dan Kasperson	Rod Moresco	David Kleinschmidt	Bill Emlen
Melissa Morton	Dave Dowswell	Erin Beavers		April Wooden	Maureen Carson	Michelle Hightower	Matt Tuggle

RTIF Committee packet information is available on STA's website: www.solanolinks.com



**SOLANO TRANSPORTATION AUTHORITY
Regional Transportation Impact Fee (RTIF)
Technical Working Group Meeting Minutes of
Monday, June 13, 2011**

I. CALL TO ORDER

The RTIF Technical Working Group was called to order at approximately 1:30 p.m. in the Solano Transportation Authority's Main Conference Room.

MEMBERS

PRESENT:

Matt Tuggle	Solano County
George Hicks	City of Fairfield
Dan Kasperson	City of Suisun City
Janet Koster	City of Dixon
Paul Wiese	County of Solano
Erin Beavers	City of Fairfield
MJ Lanni	City of Vallejo
Ozzie Hilton	City of Vacaville

MEMBERS

ABSENT:

Charlie Knox	City of Benicia
Dave Doswell	City of Dixon
Gene Cortright	City of Fairfield
Morrie Barr	City of Rio Vista
Gary Leach	City of Vallejo
Michelle Hightower	City of Vallejo
Jim Fiack	County of Solano
April Wooden	City of Suisun City
Emi Theriault	City of Rio Vista
Jeff Knowles	City of Vacaville

STAFF

PRESENT:

Robert Macaulay	STA
Jessica McCabe	STA
Janet Adams	STA
Jason Moody	Economic Planning Systems
Julie Morgan	Fehr & Peers
Sasha Dansky	Mark Thomas & Company

II. APPROVAL OF AGENDA

With a motion from Janet Koster and a second from MJ Lanni, the STA RTIF Technical Working Group unanimously approved the agenda.

III. CONSENT CALENDAR

With a motion from Janet Koster and a second from MJ Lanni, the STA RTIF Technical Working Group unanimously approved the meeting minutes of January 13, 2011 and April 17, 2011.

A. RTIF Technical Working Group Meeting Minutes of January 13, 2011 and April 17, 2011

Recommendation:

Approve the RTIF Committee Meeting Minutes of January 13, 2011 and April 17, 2011.

IV. ACTION ITEMS

A. Preliminary Project Cost Estimates

Sasha Dansky explained that after some discussions at the last RTIF meeting, they looked at all the projects on the list and came up with course level generic costs and linear foot costs for widening of particular roadways. Providing an example, Mr. Dansky described how a brand new interchange would be estimated at \$50M, and retrofitting an interchange would be estimated at \$20M, but noted that detailed cost estimates would be done for the final published results. For projects where more detailed cost estimates were available (i.e. – Jepson Parkway), then those estimates were used in place of the course level estimates. Sam Shelton added that some of the cost information came from the RTP project submittals. In reference to the Vaughn Rd. Railroad Bypass project, Janet Koster commented that the use of the \$20M grade separation cost is incorrect because the four-lane bypass is very different. Ms. Koster explained that there is no grade separation, and the cot should be taken down to \$5M.

Dan Kasperson asked if the cost estimates include things like environmental or land acquisition costs. Mr. Dansky replied that they do include, generically, the costs associated with environmental and/or land acquisition. Jason Moody commented that before a formal nexus study is done, they want to get the big-picture nexus analysis. IN reference to Suisun City's projects, Mr. Kasperson noted that the RTIF list combines the Railroad Avenue Widening and the Railroad Avenue Extension, and asked if they could be separated. Sam Shelton commented that the projects could be separated as they get further along with the nexus study. Mr. Dansky commented that the intent is to get an average, providing an example of how one interchange might be \$12M and another might be \$30M, but the average is about \$20M each Mr. Dansky noted that the more detailed-level programmatic estimates would be provided further along with the nexus study.

Paul Wiese commented that some of the costs were enormously high. Mr. Wiese referenced Midway Road, stating it was 4 miles of adding shoulders to the road, and it should be more along the lines of \$1M per mile versus \$12M per mile. Mr. Dansky explained that with the Midway Road project has been flagged because the project description wasn't entirely clear. Mr. Wiese noted that Dixon's Vaughn Road project was high, and could be more around \$1-\$1.5M per mile.

The committee reviewed the assumptions that were made for new roadway, enhancements, interchange modifications, intersection modifications, and new interchanges. Mr. Shelton asked Mr. Dansky how he came up with the cost assumptions. Mr. Dansky answered that they took large cost items and added a fairly large contingency to those cost items, and were conservative on the cost percentages of things like right of way and utilities. Mr. Dansky added that they didn't want too low of cost estimates and stated that there will be an opportunity to refine the numbers. Mr. Shelton commented that once a recommendation that the preliminary project cost estimates and methodology is sufficient for the ballpark project costs, then the RTIF WG can take action and come back with any amended changes.

After reviewing projects on the list, the committee made suggestions to reduce the costs shown for McCormack Road, North Connector, Dixon's projects and Solano County's projects. Mr. Shelton noted that changes would be made to the methodology and the specific changes to the projects, which would likely change the total cost of \$1.1 billion by 10-20%.

The STA RTIF Technical Working Group agreed to table the item, so that the recommended revisions could be made.

B. Maximum Nexus Methodology & Draft Calculations

Julie Morgan explained that the approximately twenty capacity enhancing projects were incorporated into the STA model. They looked at the regional contribution of the listed facilities (Attachment B), and the regional trips generated. Ms. Morgan described the three basic categories of trips listed (local, thru, and regional), and explained that they are using on “the regional growth as a percentage of total trips in 2030” (percentage of new regional trips from new regional growth) as the basis for charging a regional impact fee. Ms. Morgan noted that Jason Moody used those percentages in the maximum nexus calculations. Ozzie Hilton asked how the interchanges were analyzed. Ms. Morgan explained that an average of all the approaches (all on and off ramps) to the interchange were used. Robert Macaulay asked how a trip that starts in Sacramento and ends in San Francisco, but has a stop in Solano County (i.e. – stopping at a coffee shop) would be counted. Ms. Morgan answered that the model is not that sensitive and would count that type of trip as regional versus a thru trip which would be those that don’t stop in the County.

Robert Macaulay asked if the nexus study takes into consideration a facility that is a large existing deficiency with only small growth increment, and would it cover only a percentage of the improvements that the facility equals in growth. Mr. Moody answered that they are only showing a portion of those trips of those facilities that are totally new, which is all the development fee covers. Mr. Moody noted that there is a related memo that explains more of the details of the methodology and footnotes can always be added for further clarity.

Jason Moody described how he used the percentages to calculate the maximum nexus (as described in Table 1 – Preliminary Maximum RTIF Calculation). In reference to the Vaughn Road project, Janet Koster commented that it was a bit unusual that all the trips shown were regional, and thus the formula might not be appropriate in this case, since 100% of the growth is regional. Mr. Moody explained that they aren’t charging different fees for every project, and that the regional fee is based on taking all of the costs and multiplying it by the percentage (52%) to get the regional fee. Ms. Morgan added that the Vaughn Road project is unique because of where the project is located, and the definition of what is a regional trip is (one that crosses a regional boundary).

Sam Shelton asked the working group if there was consensus around the maximum nexus methodology - how Julie came up with the modeling numbers, and how Jason used them to calculate a maximum nexus. Paul Wiese commented that it wasn’t a sophisticated or detailed as he had wanted, however if it was legally defensible, then it should get the job done. Mr. Moody commented that, from his experience, the more complex the methodology and calculation is, the more scrutinized it tends to be.

Dan Kasperson noted that Suisun City was not listed on the Tables (Tables 2a and 2b).

With a motion from Paul Wiese and a second from Dan Kasperson, the STA RTIF Technical Working Group agreed to table the item.

C. Revised RTIF Implementation Options & Revenue Estimates

Sam Shelton explained that Tables 2a and 2b illustrate the calculation, based on a \$1,000 fee, what total fee revenue would look like by district and jurisdiction.

Mr. Shelton then reviewed the table on page 17 of the RTIF WG agenda packet, which illustrates how if the fee is raised, the RTIF pays for more of the total cost of the RTIF project list. Paul Wiese asked if the last three columns relate to the RTIF, and rather just show how much money is available without the RTIF. Mr. Shelton answered that it shows what happens if they are combined in a funding strategy for these projects, and it shows the total available amount of money for RTIF projects.

Dan Kasperson asked of the purpose of the chart was to show the RTIF money when contributed with other money. Mr. Shelton answered that it also shows how much of the total list of projects would get done. In reference to the chart on page 17 of the RTIF agenda packet, Mr. Kasperson asked if the center column shows, based on what the fee level is, whether it will be up to 52%, and commented that if even if the maximum fee is charged, there will only be half of the cost for doing projects. Mr. Shelton answered that Mr. Kasperson was correct in his interpretation.

Paul Wiese asked what the difference was between Table 2a and Table 2b. Mr. Moody answered that Table 2a shows the districts, while Table 2b shows the jurisdictions. Mr. Moody added that they could include the map that shows each district, if needed.

With a motion from Janet Koster and a second from George Hicks, the STA RTIF Technical Working Group agreed to table the item.

V. NEXT MEETING TOPICS

- **Direction from RTIF Policy Committee on Program Development & Fee Schedule**
- **Draft Nexus Study & Economic Analysis**

The previously proposed meeting topics for the next RTIF WG meeting were removed. The proposed items for the next meeting were:

- **Preliminary Project Cost Estimates**
- **Maximum Nexus Methodology & Draft Calculations**
- **Revised RTIF Implementation Options & Revenue Estimates**

VI. CLOSING COMMENTS FROM COMMITTEE MEMBERS

No closing comments from committee members.

VII. ADJOURNMENT

The next Regional Transportation Impact Fee (RTIF) Technical Working Group Meeting will be determined, based on input from the RTIF Policy Committee in July 2011.



DATE: August 9, 2011
TO: RTIF Working Group
FROM: Sam Shelton, Project Manager
RE: Action and Information Item Summaries

Agenda Overview:

The purpose of this RTIF Working Group meeting is to understand if working group members are comfortable with RTIF technical information prior to discussing RTIF fee program potential with the RTIF Policy Committee, composed of mayors, city managers, a county supervisor, and the county administrator. This agenda's action items propose the approval of nexus study technical information and do not request the RTIF Working Group to support or oppose a potential RTIF Program.

Action Item Summaries:

Item IV. A. Preliminary Project Cost Estimates (Sasha Dansky, Mark Thomas & Co.)

At the April and June 2011 RTIF Working Group meetings, Sasha Dansky described his project cost estimation methodology. As a first step towards estimating project costs for a maximum nexus calculation, Mr. Dansky recalculated preliminary project cost estimates for RTIF projects approved at the January 2011 RTIF Working Group meeting. The following are a few of Mr. Dansky's assumptions:

- New Roadway: \$8,000,000/lane mile
- New Roadway-Rural: \$2,000,000/mile
- Widening of existing 2-lane rural road to current standards: \$1,000,000/mile
- "Enhancements" with no new capacity: \$6,000,000/mile per each side of the road (for a total of \$12,000,000/mile for both sides of the road)
- Interchange Modifications: \$20,000,000
- Intersection Modifications: \$2,000,000 (Only used on the SR 12/Church Road and Amerada Intersections)
- New Interchange: \$50,000,000
- New Grade Separation Project: \$20,000,000

Using these preliminary project cost estimates, Mr. Dansky estimates the total cost of RTIF listed projects would be \$1,023,200,000 (see Attachment A).

STA staff recommends more rigorous project cost estimation after the RTIF Policy Committee decides to pursue the development of an RTIF fee program with specific agencies. Mr. Dansky will discuss his preliminary project cost estimates with the RTIF Working Group and answer any questions.

Recommendation:

Approve the use of the Preliminary Project Cost Estimates for the RTIF Nexus Study as shown in Attachment A.

Item IV. B. Maximum Nexus Methodology & Draft Calculations (Jason Moody, EPS)

At the April 2011 RTIF Working Group meeting, Jason Moody and Julie Morgan described how the STA's Travel Demand Model was accepted by the STA Model TAC and described the model's regional trip allocations by RTIF project. On average, 50% of trips from regional growth as a percentage of all 2030 project trips are projected to travel along RTIF projects (see Attachment B).

Jason Moody calculated a draft Maximum Nexus by multiplying the total RTIF Project Cost (\$1.023M) by 50% to calculate a total eligible RTIF Cost of \$511M. By dividing that cost by the total projected 2030 dwelling-unit-equivalent (DUE) growth (66,902 DUEs), Mr. Moody calculated a draft maximum RTIF fee of \$7,650 per DUE. Mr. Moody will discuss his proposed Maximum Nexus Methodology with the RTIF Working Group and answer any questions.

Recommendation:

Approve the use of the Maximum Nexus Methodology for the RTIF Nexus Study as shown in Attachment B.

Item IV. C. Revised RTIF Implementation Options & Revenue Estimates (Jason Moody, EPS)

At the April 2011 RTIF Working Group meeting, Jason Moody presented six different RTIF Implementation Options ranging from a regionally focused program (Option #1, STIA Allocated) to a locally focused program (Option #6, Return-to-Source) and four options in between including partial return to source programs, regional transit capital programs, and county roadway programs.

All options included revenue estimates based on a \$1,000 per DUE for illustrative purposes. These options were described in two tables, dividing estimated revenues by geographic district (Table 6a, Attachment C) and by individual jurisdiction (Table 6b, Attachment D). Jason Moody has not made substantive changes to these tables since the April RTIF Working Group meeting, where members asked to table the approval of these options until their next meeting. Mr. Moody will answer any additional questions about these tables during the meeting.

Recommendation:

Forward to the RTIF Policy Committee the list of feasible RTIF Implementation Options & Revenue Projections as shown in Attachments C and D.

Item V. Next Meeting Topics

Direction from RTIF Policy Committee on Program Development & Fee Schedule

Given that the total project cost of the RTIF program is \$1.023M and the maximum allowable fee per DUE is \$7,650, the following table of fee ranges describes how much of the overall project cost an RTIF program would be able to address.

Depending on the Fee Level and foreseeable funding, a RTIF Program could start a 19% of RTIF projects or help complete 89% of RTIF projects.

Fee Level	Total Collected Fees		Fee Share of Project Costs		2030-2040 Funding Strategy for RTIF projects, over percent of funded RTIF Projects		
	By 2020	By 2030	Percent of Max Nexus (\$607M)	Percent of Total RTIF Project Cost (\$1,165M)	Low Local impact fees without RTP assumptions.	Med RTP Committed with STA 50/50 policy	High Expects new non-local funds, federal & state
\$0	\$0	\$0	0%	0%	\$130 M 13%	\$267 M 26%	\$402 M 39%
\$1,000	\$33 M	\$66 M	13%	6%	\$196 M 19%	\$333 M 33%	\$468 M 46%
\$2,000	\$66 M	\$132 M	26%	13%	\$262 M 26%	\$399 M 39%	\$534 M 52%
\$4,000	\$132 M	\$264 M	52%	26%	\$394 M 39%	\$531 M 52%	\$666 M 65%
\$7,650 (Max)	\$255 M	\$510 M	100%	50%	\$640 M 63%	\$777 M 76%	\$912 M 89%

\$0 Fee Level

Without a fee, 13% to 39% of RTIF listed projects could be built, depending on the certainty of new funding from non-local sources.

\$1,000 Fee Level

At this fee level, 19% to 46% of RTIF listed projects could be built, depending on the certainty of new funding from non-local sources. The RTIF pays for 6% of the total cost of the RTIF project list.

\$2,000 Fee Level

At this fee level, 26% to 46% of RTIF listed projects could be built, depending on the certainty of new funding from non-local sources. The RTIF pays for 13% of the total cost of the RTIF project list.

\$4,000 Fee Level

At this fee level, 39% to 65% of RTIF listed projects could be built, depending on the certainty of new funding from non-local sources. The RTIF pays for 26% of the total cost of the RTIF project list.

\$7,650 Max Fee Level

At this fee level, 63% to 89% of RTIF listed projects could be built, depending on the certainty of new funding from non-local sources. The RTIF pays for 50% of the total cost of the RTIF project list.

Draft Nexus Study & Economic Analysis

Regardless of the political outcome of RTIF Policy Committee meeting, the STA intends to complete the RTIF Nexus Study, should an opportunity for a RTIF Program present itself in the future. As part of the EPS scope of work, they will include an economic study to discuss the most appropriate fee schedule.

**Table A-2
 Dwelling Unit Equivalent Calculation Factors
 STA RTIF Nexus Study**

Category	Unit	Pk Hour Trip Rate (1)	% New Trips (2)	DUE	
Single Family Residential	DU	1.01	100%	1.00	
Multi Family Residential	DU	0.62	100%	0.61	
Retail	KSF	3.74	50%	1.85	
Commercial					
	Office	KSF	1.49	65%	0.96
	Industrial	KSF	0.88	85%	<u>0.74</u>
Office/Industrial Avg.				0.85	

Table 1
Maximum RTIF Calculation (Preliminary)

RTIF Calculation Category	Formula	Amount
Preliminary RTIF Program Costs Estimate ¹	a	\$1,023,200,000
% of RTIF Costs Attributable to New Growth ²	b	50%
Eligible RTIF Costs	$c = a * b$	\$511,829,552
Total DUE Growth (2010 - 2030) ³	d	66,902
Maximum Fee / DUE	$= c / d$	\$7,650

[1] See preliminary RTIF costs estimates provided by Mark Thomas & Company Inc.

[2] Weighted average equal to RTIF facility trips that are new and regional divided by total RTIF facility trips, as calculated by Fehr & Peers.

[3] See Table 3 for Dwelling Unit Equivalent calculations.

Table 2a

**Illustrative RTIF Implementation and Funding Options By RTIF District (see Map of Districts)
Average Annual and 10-year Total Fee Revenue by District for every \$1,000 per Dwelling Unit Equivalent (DUE) Fee Amount¹**

Entity / District	Funding Allocation by Illustrative Return-to-Source Option ²					
	Option #1: STIA Allocated	Option #2: 50% Return-to-Source	Option #3: Partial Return-to-Source and Transit	Option #4: Partial Return-to-Source and County	Option #5: 2/3 rd s Return-to-Source	Option #6: 100% Return-to-Source
% Allocation of RTIF Revenue	▪ STIA: 100% ▪ Districts: 0%	▪ STIA: 50% ▪ Districts: 50%	▪ STIA: 47.5% ▪ Districts: 47.5% ▪ Transit: 5%	▪ STIA: 40% ▪ Districts: 40% ▪ County: 20%	▪ STIA: 33% ▪ Districts: 67%	▪ STIA: 0% ▪ Districts: 100%
STIA						
10-year total	\$33,386,000	\$16,693,000	\$15,858,000	\$13,354,000	\$11,129,000	\$0
Avg. Annual	\$3,338,600	\$1,669,300	\$1,585,800	\$1,335,400	\$1,112,900	\$0
% of Total	100%	50%	47%	40%	33%	0%
District 1: Central County						
10-year total	\$0	\$3,330,000	\$3,163,000	\$2,664,000	\$4,439,000	\$6,659,000
Avg. Annual	\$0	\$333,000	\$316,300	\$266,400	\$443,900	\$665,900
% of Total	0%	10%	9%	8%	13%	20%
District 2: Jepson Parkway Corridor						
10-year total	\$0	\$3,306,000	\$3,141,000	\$2,645,000	\$4,408,000	\$6,612,000
Avg. Annual	\$0	\$330,600	\$314,100	\$264,500	\$440,800	\$661,200
% of Total	0%	10%	9%	8%	13%	20%
District 3: SR 12 Corridor						
10-year total	\$0	\$1,717,000	\$1,631,000	\$1,373,000	\$2,289,000	\$3,433,000
Avg. Annual	\$0	\$171,700	\$163,100	\$137,300	\$228,900	\$343,300
% of Total	0%	5%	5%	4%	7%	10%
District 4: Dixon and NE County						
10-year total	\$0	\$1,182,000	\$1,123,000	\$946,000	\$1,576,000	\$2,364,000
Avg. Annual	\$0	\$118,200	\$112,300	\$94,600	\$157,600	\$236,400
% of Total	0%	4%	3%	3%	5%	7%
District 5: Rio Vista and SE County						
10-year total	\$0	\$2,085,000	\$1,981,000	\$1,668,000	\$2,780,000	\$4,170,000
Avg. Annual	\$0	\$208,500	\$198,100	\$166,800	\$278,000	\$417,000
% of Total	0%	6%	6%	5%	8%	12%
District 6: Vallejo / Benicia						
10-year total	\$0	\$5,074,000	\$4,820,000	\$4,059,000	\$6,765,000	\$10,148,000
Avg. Annual	\$0	\$507,400	\$482,000	\$405,900	\$676,500	\$1,014,800
% of Total	0%	15%	14%	12%	20%	30%
County or Transit						
10-year total	\$0	\$0	\$1,669,000	\$6,677,000	\$0	\$0
Avg. Annual	\$0	\$0	\$166,900	\$667,700	\$0	\$0
% of Total	0%	0%	5%	20%	0%	0%
Total						
10-year total	\$33,386,000	\$33,387,000	\$33,386,000	\$33,386,000	\$33,386,000	\$33,386,000
Avg. Annual	\$3,338,600	\$3,338,700	\$3,338,600	\$3,338,600	\$3,338,600	\$3,338,600
% of total RTIF Facility Costs	3%	3%	3%	3%	3%	3%

(1) The \$1,000 DUE fee equates to a fee of \$1,000 per single family unit, \$614 per multi-family unit, \$1.85 per retail square foot, and \$.85 per square foot for office / industrial.

(2) Growth assumptions based on 2010 - 2030 year STA travel demand model and ABAG projection (the 10 year projections are equal to one-half of this growth).

Table 2b
Illustrative RTIF Implementation and Funding Options by Jurisdiction
Average Annual and 10-year Total Fee Revenue by District for every \$1,000 per Dwelling Unit Equivalent (DUE) Fee Amount¹

Entity / District	Funding Allocation by Illustrative Return-to-Source Option ²					
	Option #1: STIA Allocated	Option #2: 50% Return-to-Source	Option #3: Partial Return-to-Source and Transit	Option #4: Partial Return-to-Source and County	Option #5: 2/3 rd s Return-to-Source	Option #6: 100% Return-to-Source
% Allocation of RTIF Revenue	• STIA: 100% • Jurisdictions: 0%	• STIA: 50% • Jurisdictions: 50%	• STIA: 47.5% • Jurisdictions: 47.5% • Transit: 5%	• STIA: 40% • Jurisdictions: 40% • County: 20%	• STIA: 33% • Jurisdictions: 67%	• STIA: 0% • Jurisdictions: 100%
STIA						
10-year total	\$33,451,000	\$16,726,000	\$15,889,000	\$13,380,000	\$11,039,000	\$0
Avg. Annual	\$3,345,100	\$1,672,600	\$1,588,900	\$1,338,000	\$1,103,900	\$0
% of Total	100%	50%	48%	40%	33%	0%
City of Benicia						
10-year total	\$0	\$651,000	\$619,000	\$521,000	\$873,000	\$1,303,000
Avg. Annual	\$0	\$65,100	\$61,900	\$52,100	\$87,300	\$130,300
% of Total	0%	2%	2%	2%	3%	4%
City of Dixon						
10-year total	\$0	\$948,000	\$901,000	\$759,000	\$1,271,000	\$1,897,000
Avg. Annual	\$0	\$94,800	\$90,100	\$75,900	\$127,100	\$189,700
% of Total	0%	3%	3%	2%	4%	6%
City of Fairfield						
10-year total	\$0	\$3,973,000	\$3,775,000	\$3,179,000	\$5,324,000	\$7,946,000
Avg. Annual	\$0	\$397,300	\$377,500	\$317,900	\$532,400	\$794,600
% of Total	0%	12%	11%	10%	16%	24%
City of Rio Vista						
10-year total	\$0	\$1,921,000	\$1,825,000	\$1,537,000	\$2,575,000	\$3,843,000
Avg. Annual	\$0	\$192,100	\$182,500	\$153,700	\$257,500	\$384,300
% of Total	0%	6%	5%	5%	8%	11%
City of Suisun City						
10-year total	\$0	\$1,193,000	\$1,133,000	\$954,000	\$1,599,000	\$2,386,000
Avg. Annual	\$0	\$119,300	\$113,300	\$95,400	\$159,900	\$238,600
% of Total	0%	4%	3%	3%	5%	7%
City of Vacaville						
10-year total	\$0	\$3,219,000	\$3,058,000	\$2,575,000	\$4,314,000	\$6,439,000
Avg. Annual	\$0	\$321,900	\$305,800	\$257,500	\$431,400	\$643,900
% of Total	0%	10%	9%	8%	13%	19%
City of Vallejo						
10-year total	\$0	\$4,412,000	\$4,191,000	\$3,530,000	\$5,912,000	\$8,824,000
Avg. Annual	\$0	\$441,200	\$419,100	\$353,000	\$591,200	\$882,400
% of Total	0%	13%	13%	11%	18%	26%
Solano County						
10-year total	\$0	\$407,000	\$386,000	\$7,015,000	\$545,000	\$813,000
Avg. Annual	\$0	\$40,700	\$38,600	\$701,500	\$54,500	\$81,300
% of Total	0%	1%	1%	21%	2%	2%
Transit						
10-year total	\$0	\$0	\$1,673,000	\$0	\$0	\$0
Avg. Annual	\$0	\$0	\$167,300	\$0	\$0	\$0
% of Total	0%	0%	5%	0%	0%	0%
Total						
10-year total	\$33,451,000	\$33,450,000	\$33,450,000	\$33,450,000	\$33,452,000	\$33,451,000
Avg. Annual	\$3,345,100	\$3,345,000	\$3,345,000	\$3,345,000	\$3,345,200	\$3,345,100
% of total RTIF Facility Costs	3%	3%	3%	3%	3%	3%

(1) The \$1,000 DUE fee equates to a fee of \$1,000 per single family unit, \$614 per multi-family unit, \$1.85 per retail square foot, and \$.85 per square foot for office / industrial.

(2) Growth assumptions based on 2010 - 2030 year STA travel demand model and ABAG projection (the 10 year projections are equal to one-half of this growth).

(3) Growth projections are based on TAZ boundaries used in the STA model, which may not always precisely match the current city limit boundaries.

Table 3
DUE Growth (2010 - 2030)¹
STA RTIF Nexus Study

Category	City of Benicia	City of Dixon	City of Fairfield	City of Rio Vista	City of Suisun City	City of Vacaville	City of Vallejo	Solano County	County-wide
Single Family	793	2,720	6,863	5,866	3,003	7,404	9,151	993	36,792
Multi Family	162	557	1,404	1,200	325	802	991	203	5,645
Retail	0	147	2,337	351	886	2,107	2,658	87	8,575
Other Employment	1,651	370	5,289	268	558	2,565	4,848	343	15,890
Total	2,606	3,794	15,893	7,686	4,772	12,877	17,648	1,626	66,902

(1) Based on household and employment TAZ level growth projections in the travel demand model and ABAG projections (see Table A-1) and Dwelling Unit Equivalent (DUE) factors (see Table A-2).

#	CTP ID	Agency	Location/ Title	Description	Very Preliminary Order of Matnitude Cost	Assumptions and Notes	RTIF Cost Allocation	RTIF Costs
3	09CTP001	Benicia	I-680/Lake Herman Road Interchange	Install traffic signals and construct interchange improvements at I-680/Lake Herman Road. This project will link a rail station to an intermodal transportation station.	\$20,000,000	Flat Cost of Interchange Modifications Assumed	67.3%	\$13,452,304
7	09CTP010	Benicia	Columbus Parkway Reliever Route (I-780 to City Limits)	Widen Columbus Parkway from 2 to 4 lanes from I-780 to the City Limits with Vallejo.	\$35,000,000	Project Length of 10,800 LF assumed. 2 New lanes assumed	47.8%	\$16,716,237
14	09CTP215	Dixon	I-80/West A St. Interchange	Construct overcrossing and ramp improvements.	\$20,000,000	Flat cost of Interchange Modifications Assumed	50.8%	\$10,167,924
30	09CTP121	Fairfield	SR 12 and Red Top Road/Business Center Drive Interchange	Construct a new interchange linking the North Connector, Red Top Road and SR 12.	\$50,000,000	Flat Cost of New Interchange Assumed	40.5%	\$20,237,433
34	09CTP182	Fairfield / Suisun City	SR 12 and Pennsylvania Avenue Interchange	Replace the existing SR 12/Pennsylvania at-grade intersection with a new grade-separated interchange.	\$50,000,000	Flat Cost of New Interchange Assumed	44.0%	\$22,006,642
39	09CTP199	Rio Vista	SR 12/Church Road and Amerada Intersections	Improve the SR 12 and Church Road intersection. Construct 40 Space Park and Ride Lot at Church Road @ SR 12. The park-and-ride lot may be installed with development of a shopping center at this intersection. A PSR is being prepared for the project.	\$2,000,000	Flat Cost of Intersection Modifications Assumed	45.9%	\$918,960
44	09CTP034	Vallejo / Solano County	I-80 and SR 37 - Fairgrounds	Improve interchanges at SR 37/Fairgrounds Dr and at I-80/Redwood Pkwy. Also widen Fairgrounds Dr to 4 lanes between SR 37 and Redwood Pkwy.	\$65,000,000	Project Length of 7100 LF Assumed. No New Lanes. Cost per side of the street assumed at \$6,000,000/mile	41.0%	\$26,642,361
46	09CTP035	Solano County	Widen Peabody Road from 2 to 4 lanes	Widen Peabody Road to 2 lanes in each direction on the segment located in unincorporated County.	\$20,000,000	Project Length of 6900 LF Assumed. 2 new lanes assumed	63.2%	\$12,649,312
49	09CTP061	Suisun City	Main Street Improvements (Phase 2)	Pavement, curb, sidewalk and utility enhancements along Main Street from Morgan Street to Highway 12.	\$6,000,000	Project Length of 2400 LF Assumed. No New Lanes. Cost per side of the street assumed at \$6,000,000/mile	42.5%	\$2,551,677

#	CTP ID	Agency	Location/ Title	Description	Very Preliminary Order of Matnitude Cost	Assumptions and Notes	RTIF Cost Allocation	RTIF Costs
51	09CTP075	Suisun City	Railroad Avenue Widening and Realignment (Middle and East Segment)	Widen and reconstruct Railroad Avenue from Sunset Avenue to Humphrey Drive to a 3-lane arterial with class 2 bike lanes. Realign and widen Railroad Avenue from Humphrey Drive to East Tabor Avenue with new intersection at East Tabor Avenue and Olive Stree	\$6,000,000	Project Length of 5230 LF Assumed. "Enhancements" to one side of street at \$6 million/mile enhanced side of the street	45.8%	\$2,749,800
52	09CTP076	Suisun City	Railroad Avenue Extension (West Segment)	Extend Railroad Avenue from Marina Boulevard to Main Street/Highway 12 On-Ramp and make a signalized intersection at Main St/Hwy 12 On-Ramp.	\$9,600,000	Project Length of 2000 LF Assumed. Assumed a new 3 lane facility (1.2 lane miles) is assumed for the entire length at \$8 million/lane mile.	48.5%	\$4,652,489
61	09CTP083	Vacaville	I-80/California Drive Extension and Overcrossing	Extend California Drive as 4-lane arterial from Marshall Road to Pena Adobe Road. Construct new 4-lane overcrossing @ I-80 with no freeway connections.	\$60,000,000	Flat cost of New Overcrossing Assumed. Project Lenth (w/o overcrossing) of 6640 LF assumed. 4 Lanes total assumed	51.8%	\$31,102,534
62	09CTP085	Vacaville	I-505/Vaca Valley Pkwy Interchange	Widen the existing overcrossing to 2 lanes in each directionwith protected turn pockets. Modify existing spread diamond to provide partial cloverleaf design.	\$20,000,000	Flat Cost of Interchange Modifications Assumed	35.2%	\$7,043,586
84	09CTP029	STA	SR 12 East improvements from I-80 to Rio Vista, including the Rio Vista Bridge	Widen SR 12 from 4 lanes to 6 lanes from I-80 through Suisun City. Widen SR 12 from 2 lanes to 4 lanes from Walters Road to Rio Vista. This excludes replacing the Rio Vista Bridge over the Sacramento River.	\$400,000,000	Excludes Rio Vista bridge Replacement Costs. Project Length of 129,500 LF (w/o Bridge) Assumed	46.1%	\$184,460,081
91	09CTP033	STA	#91 - Jepson Parkway - Fairfield	Construct a 4-lane continuous expressway from SR 12, along Walters Road, Cement Hill Road, Vanden Road and Leisure Town Road to I-80. The project includes transit pull-outs and shelters, and Class I bike/ped facilities.	\$124,000,000	From STA Jepson Parway Technical Study	65.9%	\$81,731,566
92	09CTP033	STA	#92 - Jepson Parkway - Non-Fairfield		\$61,000,000	From STA Jepson Parway Technical Study	59.0%	\$36,008,044

#	CTP ID	Agency	Location/ Title	Description	Very Preliminary Order of Matnitude Cost	Assumptions and Notes	RTIF Cost Allocation	RTIF Costs
87	09CTP166	STA	McCormack Road	Improve McCormack Road, Canright Road and Azevedo Road from SR 113 to SR 12 to provide a parallel alternate to SR 12. Improve the roadways to County standard travel lanes and shoulders.	\$9,000,000	Project Length of 23,750 LF Assumed. A brand new 2 lane Rural facility is assumed. Per Sasha Assume 24' Pavement with 4' graded shoulders. New Drainage Ditches, 36" cross culverts every mile. No new R/W required. Cost Assumed at \$2 million/mile.	79.4%	\$7,147,955
88	09CTP032	STA	North Connector	Construct a 4-lane roadway parallel to I-80, from Abernathy Road across the lower Suisun Valley, along Business Center Drive, connecting to SR 12. The East & Central segments are complete. The West Segment will be a 2-lane roadway connecting Business Center Drive to SR 12 Jameson Canyon.	\$32,000,000	Project Length of 4,100 LF Assumed. 2 lane facility. Actual costs will depend on phasing in relationship to 80-680-12 Interchange project.	36.3%	\$11,602,427
13	09CTP214	Dixon	I-80/Pitt School Rd. Interchange	Construct overcrossing and ramp improvements.	\$20,000,000	Flat Cost of Interchange Modifications Assumed	64.4%	\$12,871,870
17	09CTP218	Dixon	Vaughn Road Railroad Bypass Project	Construct a four-lane bypass route of Vaughn Road to connect to Pedrick Road without crossing the UPRR tracks.	\$8,000,000	Project length of 2700 LF Assumed. A brand new 2 lane facility at \$8 million/lane mile	45.2%	\$3,613,990
89	09CTP036	Solano County	Midway Road	Improve Midway Rd from I-80 to SR 113 to County standards.	\$4,000,000	Project Length of 21200 LF Assumed. No New Lanes. Cost assumed at \$1 million/lane mile. Per Sasha Existing Pvmnt varies between 18 and 22'. Assume 20' to remain, and the rest is overlay. Assume 32' total Roadway width. Assume Ditch regrading and no utility costs.	59.6%	\$2,384,666

#	CTP ID	Agency	Location/ Title	Description	Very Preliminary Order of Matnitude Cost	Assumptions and Notes	RTIF Cost Allocation	RTIF Costs
90	09CTP036	Solano County	Pedrick Road	Improve Pedrick Rd from Dixon Avenue East to UPRR to County standards.	\$1,600,000	Project Length of 8660 LF Assumed. No New Lanes. Cost assumed at \$1 million/ mile. Per Sasha Existing Pvmt varies between 22-24'. Assume 20' to remain, and the rest is overlay. Assume 32' total Roadway width. Assume Ditch regrading and no utility costs.	69.9%	\$1,117,695
Total / Weighted Avg.					\$1,023,200,000		50.0%	\$511,829,552

**Table A-1
RTIF Growth By Jurisdiction (2010 - 2030)
STA RTIF Nexus Study**

Category	Household Growth	Retail Employment Growth	Non-Retail Employment Growth
City of Benicia	1,057	0	5,181
City of Dixon	3,627	227	1,161
City of Fairfield	9,150	3,607	16,597
City of Rio Vista	7,821	542	842
City of Suisun City	3,533	1,367	1,750
City of Vacaville	8,710	3,252	8,048
City of Vallejo	10,766	4,102	15,213
Solano County	<u>1,324</u>	<u>135</u>	<u>1,075</u>
Countywide Totals	45,988	13,232	49,867

#	CTP ID	Agency	Location/ Title	Description	Existing Trips				Growth in Trips 2010 to 2030				Total 2030 # of Trips				Trips from Regional Growth as % of Total Trips in 2030
					Local	Thru	Regional	Total	Local	Thru	Regional	Total	Local	Thru	Regional	Total	
3	09CTP001	Benicia	#3 - I-680/Lake Herman Road Interchange	Install traffic signals and construct interchange improvements at I-680/Lake Herman Road. This project will link a rail station to an intermodal transportation station. This is a Route of Regional Significance.	4	0	450	454	1	0	935	936	5	0	1385	1390	67.3%
7	09CTP010	Benicia	#7 - Columbus Parkway Reliever Route	Widen Columbus Parkway from 2 to 4 lanes from I-780 to the City Limits with Vallejo. This is a Route of Regional Significance.	0	61	316	377	1	170	502	673	1	232	818	1050	47.8%
13	09CTP214	Dixon	#13 - I-80/Pitt School Rd. Interchange	Construct overcrossing and ramp improvements. This is a Route of Regional Significance.	2	0	1182	1184	1	0	2140	2142	3	0	3323	3326	64.4%
14	09CTP215	Dixon	#14 - I-80/West A St. Interchange	Construct overcrossing and ramp improvements. This is a Route of Regional Significance.	0	228	642	871	1	654	1578	2233	1	883	2220	3103	50.8%
17	09CTP218	Dixon	#17 - Vaughn Road Railroad Bypass Project	Construct a four-lane bypass route of Vaughn Road to connect to Pedrick Road without crossing the UPRR tracks. This is a Route of Regional Significance.	0	0	7	7	0	0	6	6	0	0	13	13	45.2%
30	09CTP121	Fairfield	#30 - SR 12 and Red Top Road/Business Center Drive Interchange	Construct a new interchange linking the North Connector, Red Top Road and SR 12. This is a Route of Regional Significance.	419	161	1238	1818	630	236	1825	2692	1049	397	3063	4510	40.5%
34	09CTP182	Fairfield	#34 - SR 12 and Pennsylvania Avenue Interchange	Replace the existing SR 12/Pennsylvania at-grade intersection with a new grade-separated interchange. This is a Route of Regional Significance.	300	14	695	1009	367	17	1096	1481	667	32	1791	2490	44.0%
39	09CTP199	Rio Vista	#39 - SR 12/Church Road and Amerada Intersections	Improve the SR 12 and Church Road intersection. Construct 40 Space Park and Ride Lot at Church Road @ SR 12. The park-and-ride lot may be installed with development of a shopping center at this intersection. A PSR is being prepared for the project. This is a Route of Regional Significance.	65	198	154	417	113	421	808	1342	178	619	962	1759	45.9%
44	09CTP034	Solano County	#44 - I-80 and SR 37 - Fairgrounds	Improve Fairgrounds Drive and Redwood Parkway, including the Redwood Parkway - I-80 Interchange, from SR 37 to Redwood Parkway. A Project Study Report for the project is complete. This is a Route of Regional Significance.	147	28	232	406	128	37	396	561	274	64	628	967	41.0%
46	09CTP035	Solano County	#46 - Peabody Road Widening	Widen Peabody Road to 2 lanes in each direction, plus a Class 2 bike/ped facility. This is a Route of Regional Significance.	58	1	475	534	145	2	1172	1319	204	3	1647	1854	63.2%
49	09CTP061	Suisun City	#49 - Main Street Improvements (Phase 2)	Pavement, curb, sidewalk and utility enhancements along Main Street from Morgan Street to Highway 12. A portion of this project is funded by ARRA. This is a Route of Regional Significance.	22	91	193	305	26	89	311	426	48	180	504	732	42.5%
51	09CTP075	Suisun City	#51 - Railroad Avenue Widening (Middle/East)	Widen and reconstruct Railroad Avenue from Sunset Avenue to Humphrey Drive to a 3-lane arterial with class 2 bike lanes. Realign and widen Railroad Avenue from Humphrey Drive to East Tabor Avenue with new intersection at East Tabor Avenue and Olive Stree	28	98	133	260	61	89	346	496	90	187	479	756	45.8%

#	CTP ID	Agency	Location/ Title	Description	Existing Trips				Growth in Trips 2010 to 2030				Total 2030 # of Trips				Trips from Regional Growth as % of Total Trips in 2030
					Local	Thru	Regional	Total	Local	Thru	Regional	Total	Local	Thru	Regional	Total	
52	09CTP076	Suisun City	#52 - Railroad Avenue Extension (West)	Extend Railroad Avenue from Marina Boulevard to Main Street/Highway 12 On-Ramp and make a signalized intersection at Main St/Hwy 12 On-Ramp. This is a Route of Regional Significance.	15	92	219	325	38	86	422	546	52	178	641	872	48.5%
61	09CTP083	Vacaville	#61 - I-80/California Drive Extension and Overcrossing	Extend California Drive as 4-lane arterial from Marshall Road to Pena Adobe Road. Construct new 4-lane overcrossing @ I-80 with no freeway connections. This is a Route of Regional Significance.	12	33	284	330	39	73	475	587	51	106	759	917	51.8%
62	09CTP085	Vacaville	#62 - I-505/Vaca Valley Pkwy Interchange	Widen the existing overcrossing to 2 lanes in each direction with protected turn pockets. Modify existing spread diamond to provide partial cloverleaf design. New bridge to accommodate pedestrian and Class 2 bicycle facilities. This is a Route of Regional Significance.	560	253	520	1332	311	1184	1537	3032	870	1437	2057	4364	35.2%
84	09CTP029	STA	#84 - SR 12 East improvements	Widen SR 12 from 4 lanes to 6 lanes from I-80 through Suisun City. Widen SR 12 from 2 lanes to 4 lanes from Walters Road to Rio Vista. This includes replacing the Rio Vista Bridge over the Sacramento River. This is a Route of Regional Significance.	0	479	392	871	0	967	1573	2541	0	1447	1966	3412	46.1%
87	09CTP166	STA	#87 - McCormack Road	Improve McCormack Road, Canright Road and Azevedo Road from SR 113 to SR 12 to provide a parallel alternate to SR 12. Improve the roadways to County standard travel lanes and shoulders. This is a Route of Regional Significance. This project was also submitted by the City of Rio Vista.	0	0	163	163	0	0	630	630	0	0	793	793	79.4%
88	09CTP032	STA	#88 - North Connector	Construct a 4-lane roadway parallel to I-80, from Abernathy Road across the lower Suisun Valley, along Business Center Drive, connecting to SR 12. the East Segment (Suisun Parkway) is under construction. The central segment is under construction. The West Segment will be a 2-lane roadway connecting Business Center Drive to SR 12 Jameson Canyon. The west segment status is currently unfunded. This is a Route of Regional Significance. This project was also submitted by the City of Fairfield and the County of Solano.	19	79	315	414	10	195	352	557	29	274	668	971	36.3%
89	09CTP036	Solano County	#89 - Midway Road	Improve Midway Rd from I-80 to SR-113 to County Standards	0	15	91	106	0	29	200	229	0	45	291	335	59.6%
90	09CTP036	Solano County	#90 - Pedrick Road	Improve Pedrick Rd from Dixon Avenue East to UPRR to County Standards	1	11	38	50	8	51	251	310	8	62	290	360	69.9%
91	09CTP033	STA	#91 - Jepson Parkway - Fairfield	Jepson Parkway project: portion inside Fairfield	76	52	338	466	165	49	1314	1528	241	101	1652	1994	65.9%
92	09CTP033	STA	#92 - Jepson Parkway - Non-Fairfield	Jepson Parkway project: portion outside of Fairfield	78	17	259	353	155	45	798	998	233	62	1056	1351	59.0%