



Economic &
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Real Estate Economics
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FINAL REPORT

SAN JOAQUIN REGIONAL TRANSPORTATION IMPACT FEE

Prepared for:

San Joaquin Council of Governments

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I. INTRODUCTION AND RESULTS

This Technical Report is designed to provide participating jurisdictions in San Joaquin Region with the necessary technical documentation and nexus analysis supporting the adoption of a Regional Transportation Impact Fee (RTIF) Ordinance. It has been prepared by Economic & Planning Systems, Inc. (EPS) and Fehr & Peers Associates Inc., with input and guidance from the San Joaquin Council of Governments (SJCOG). The RTIF program described in this Report is based on current growth projections and infrastructure requirements and is consistent with the most recent relevant case law and the principles of AB1600 or Government Code Section 66000 et seq (“Fees for Development Projects”; except where specific citations are provided, this statute will be referred to in this Report as AB 1600).

Following this introductory chapter, **Chapter II** discusses the land use growth projections used in this analysis and **Chapter III** describes the RTIF capital costs. **Chapter IV** describes the modeling techniques used to establish nexus for the RTIF program and the resulting RTIF program fee calculation by land use category.

PURPOSE OF PROPOSED FEES AND TECHNICAL REPORT

The RTIF program described in this Report will provide funding for regional transportation improvements required to serve new development and to ensure that existing service levels can be maintained. To the extent that required improvements serve both new and existing development, or travel through the San Joaquin Region, only the portion that is attributable to new development inside the region is included in the RTIF program. It is expected that the RTIF program funding will be augmented by other revenue sources to meet overall funding requirements, particularly Measure K funding and State and Federal Grants.

This Report also provides a schedule of fees to be established by the RTIF Ordinance and/or Resolution. This Report and the technical information it contains should be maintained and reviewed periodically by the SJCOG and participating jurisdictions as necessary to ensure its accuracy and to enable the adequate programming of funding sources. To the extent that improvement requirements, costs, or development potential changes over time, the RTIF program will need to be updated.

The proposed RTIF program fee, if approved, will need to be enabled through adoption by participating jurisdictions of a new Ordinance or Resolution. The enabling Ordinance would allow the jurisdiction to adopt, by Resolution, a fee schedule consistent with supporting technical analysis and findings. The Resolution approach to setting the fee allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling Ordinance.

SUMMARY OF MAXIMUM AND PROPOSED FEES

A summary of the maximum fees calculated in this RTIF Technical Report by land use category are provided in **Table 1** and summarized below. Because of insufficient data on office growth projection, office category is included as part of the commercial/industrial category.

- \$2,512 per single-family unit
- \$1,542 per multifamily unit
- \$4.65 per retail square foot
- \$2.13 per commercial/industrial square foot

The fees shown above represent the maximum fee that can be charged based on the nexus findings described in this Report. These fees are calculated to generate sufficient revenue to cover the RTIF capital facility costs associated with new development in the County. Participating jurisdictions may as a matter of policy decide to charge a fee below the maximum fee for any or all of the land uses. However, the revenue shortfall to the RTIF program that would result from reducing the fees must be made up by other non-RTIF revenue sources. Specifically, the fee levels for certain land uses cannot be raised to cover revenue shortfalls that result from lowering the fees on other land uses.

SJCOG in conjunction with participating agencies have proposed to charge a fee below the maximum amount legally allowed based on the nexus calculations presented above. A comparison between the maximum RTIF fee and the proposed RTIF fee is presented in **Table 1** of this report.

The fee reduction is based on key stakeholders (i.e., developers, elected officials, city/county officials) goal to mitigate the impact new growth has on the regional transportation system as well as continue to foster economic development, job creation, and sales tax generation. The proposed fees represent a consensus reached by the region's leaders based on the analysis of economic drivers pertinent to the San Joaquin region.

IMPLEMENTATION AND LEGAL CONSIDERATIONS

ANNUAL REVIEW

AB 1600 (at Gov. C. §§ 66001(c), 66006(b)(1)) stipulates that each local agency that requires payment of a fee make specific information available to the public annually within 180 days of the last day of the fiscal year. This information includes the following:

Table 1
Regional Transportation Impact Fee Amount
San Joaquin RTIF Nexus Study; EPS #15040

Category	Maximum RTIF Fee	Proposed RTIF Fee
Total Fee Revenue	\$410,230,388	\$374,620,076
Fee Per Single-Family Unit	\$2,512	\$2,500
Fee Per Multi-Family Unit	\$1,542	\$1,500
Fee Per Retail Sqft.	\$4.65	\$1.00
Fee Per Commercial/Industrial Sqft. (1)		
Office	\$2.13	\$1.25
Industrial	\$2.13	\$0.75

(1) The maximum RTIF fee calculation combines office and industrial land use categories due to insufficient data to separate the two categories.

- A description of the type of fee in the account.
- The amount of the fee.
- The beginning and ending balance of the fund.
- The amount of fees collected and interest earned.
- Identification of the improvements constructed.
- The total cost of the improvements constructed.
- The fees expended to construct the improvement.
- The percent of total costs funded by the fee.

If sufficient fees have been collected to fund the construction of an improvement, the agency must specify the approximate date for construction of that improvement. Because of the dynamic nature of growth and infrastructure requirements, participating jurisdictions and the SJCOG should monitor development activity, the need for infrastructure improvements, and the adequacy of the fee revenues and other available funding. Formal annual review of the CFF program should occur, at which time adjustments should be made. Costs associated with this monitoring and updating effort can be included in the RTIF program.

SURPLUS FUNDS

AB 1600 also requires that if any portion of a fee remains unexpended or uncommitted in an account for five years or more after deposit of the fee, the City Council shall make findings once each year: (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund (§66001(d)).

If adequate funding has been collected for a certain improvement, an approximate date must be specified as to when construction on the improvement will begin. If the findings show no need for the unspent funds, or if the conditions discussed above are not met, and the administrative costs of the refund do not exceed the refund itself, the local agency that has collected the funds must refund them (Gov. C §66001(e)(f)).

SECURING SUPPLEMENTAL FUNDING

The RTIF program identifies \$561 million in capital projects that can be funded in full or in part by impact fee revenue. However, the RTIF revenue generated is itself not sufficient or appropriate for funding the full amount of the RTIF capital projects identified in this Technical Report. For example, out of the \$561 million in RTIF capital projects, approximately \$128 million can be attributable to trips that originate or end outside the San Joaquin Region. The new facility costs attributable to these “external trips” cannot be covered by impact fee revenue. In addition, the SJCOG Board may

approve fee levels that are lower than the maximum amount allowed based on the nexus analysis, further reducing the revenue available to the RTIF program. Thus, to fully implement the RTIF program, the SJCOG will have to obtain funding and pay for improvements not covered by impact fee revenue. Examples of such sources include Measure K funds; CALTRANS funding; and other local, State and federal sources. Ultimately, funding for the entire cost of the RTIF program must be identified and allocated during the life of the RTIF program.

II. RTIF GROWTH PROJECTIONS

The RTIF program fee is a one-time fee levied on new development at a rate proportional to its demand for transportation capital improvements. Thus, a forecast of new development in the San Joaquin Region is required to calculate the fee. This Chapter documents the land use growth assumptions used to calculate the RTIF program fee. Specifically, it describes the amount of residential, retail, and commercial/industrial land use development expected to occur in San Joaquin Region through the year 2030. These estimates are used for the following primary purposes in the fee calculation:

- Estimates of existing and future development are used to evaluate future traffic levels and determine the need for transportation improvements in the San Joaquin Region.
- Estimates of future development are used to allocate the costs of required transportation improvements and ultimately to calculate a fee per unit of new growth.

The following sections describe the development projections and the key assumptions underlying them.

TIME HORIZON

The time horizon for an impact fee program is important because it determines the type and amount of transportation improvements that will be included in the fee program as well as the level of growth these improvements will serve. A longer time horizon will result in more transportation improvements being included in the RTIF program fee because of the added traffic demands from the increased population and jobs that will occur by that future date. A shorter time horizon typically reduces the number of improvements in the RTIF program fee because it includes only those improvements needed to accommodate a lower level of population and employment growth.

There are two ways that the time interval can be set in an impact fee analysis. One approach is to consider all improvements needed through the “build out” of a community’s General Plan. Another approach is to establish a future date, typically before “build out” occurs, which is consistent with forecast data or improvement cycles. Both techniques are used in impact fee technical reports.

This Technical Report is based on a time horizon that ends in the year 2030. This corresponds to the timeframe used in the Regional Transportation Plan (RTP) which specifies the priority transportation projects in the San Joaquin Region, as approved by SJCOG. The timeframe also corresponds to the household and employment projections available for use in this Report, as further described below.

GROWTH PROJECTIONS

The regional household and employment projections, provided by SJCOG, form the basis for developing growth forecasts by land use category. Specifically, household growth projections are used to estimate future residential development, whereas employment growth projections are used to estimate future retail and commercial/industrial development. The household and employment projections used in this Report are based on standard methodology developed in the 2030 Regional Transportation Plan, which is adopted throughout the San Joaquin Region. **Table 2** summarizes the projection data.

For employment projections, approximately 350 square feet per retail employee and 700 square feet for all other employment categories are assumed to estimate the commercial/industrial development. In addition, an average vacancy rate of 7 percent for retail and commercial/industrial space is also assumed. The allocation of employment into retail and commercial/industrial land use categories is based on the historical employment proportions reported in data approved by the SJCOG.

DWELLING UNIT EQUIVALENTS

This analysis relies on Dwelling Unit Equivalent (DUE) factors to compare and evaluate future development across land use categories. Specifically, DUE factors compare residential, retail, and commercial/industrial land uses to one another based on their vehicle trip generation rates in order to develop a common metric for analysis. The factors used to convert residential, commercial/industrial, and retail growth into DUEs are shown in **Table 3**, and are based on standard assumptions regarding trip generation and trip diversion.¹ The DUE factors are then used to calculate total DUE growth by land use, as shown in **Table 4**.

¹ Assumptions based on data from the Institute of Transportation Engineers (ITE) Trip Generation Model (6th Edition) and the San Diego Council of Governments (SANDAG) Brief Guide to Vehicular Traffic Generation Rates, July 1998.

Table 2
Projected Development by Land Use
San Joaquin RTIF Study; EPS #11212

Category	Year		Total Growth	Avg. Annual Growth
	2005	2030		
Single Family Residential (Units)	165,334	287,943	122,609	2%
Multy-Family Residential (Units)	80,122	111,990	31,868	1.3%
Retail				
Employment	47,347	59,311	11,964	0.9%
Square Feet (1)	15,411,449	19,305,731	3,894,282	0.9%
Commercial/Industrial				
Employment	247,161	272,355	25,194	0.4%
Square Feet (2)	160,901,811	177,303,105	16,401,294	0.4%

(1) Assumes 350 SF per Retail employee, and a 7.0% vacancy rate.

(2) Assumes 700 SF per Commercial / Industrial employee, and a 7.0% vacancy rate.

**Table 3
Dwelling Unit Equivalent Calculation Factors
San Joaquin RTIF Nexus Study; EPS #15040**

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

(1) Peak hour trip rate based on ITE Trip Generation Manual, 6th Edition.

(2) Percent new trips based on SANDAG Brief Guide of Vehicular Traffic Generation Rates

Table 4
Total Dwelling Unit Equivalent Growth
San Joaquin RTIF Nexus Study; EPS #15040

Unit Type	DUE Growth (2005 - 2030)
Single Family Residential	122,609
Multi-Family Residential	19,563
Retail Square Feet	7,210
Commercial/Industrial Square Feet	<u>13,937</u>
Grand Total	163,319

III. RTIF CAPITAL PROJECTS AND COSTS

This chapter documents the transportation improvements included in the RTIF capital project list and their corresponding costs. The RTIF Master Project List was selected based on the inclusion criteria described herein and refined based on funding need. The eligible RTIF capital project list includes all the projects that are assumed to be funded, in full or in part, by RTIF revenue.

RTIF PROJECT INCLUSION CRITERIA

The road and transit projects proposed for funding by the RTIF are included in an initial RTIF Master Project List. The RTIF project list is composed of improvements that fall on the “RTIF Network”, a unified system of roadways, transit linkages, and other transportation facilities that confer benefits upon development throughout the County. This network is illustrated in **Figure 1**. The RTIF Network was developed and defined as part of the RTIF planning and policy formulation process.²

While an initial RTIF Master Project List has been established as part of this Technical Report, it is recognized that the list of transportation projects may need to be amended over time as circumstances change. As a result, during the RTIF planning process a number of screening criteria were considered and evaluated as a method for selecting the type of projects that would possibly be funded by RTIF revenue. These screening criteria are designed to distinguish projects where the nexus with new development throughout the San Joaquin Region is strong. It is the adherence to the screening criteria that assures that the required “nexus” findings and other requirements of Government Code Section 66000 et seq. are respected.

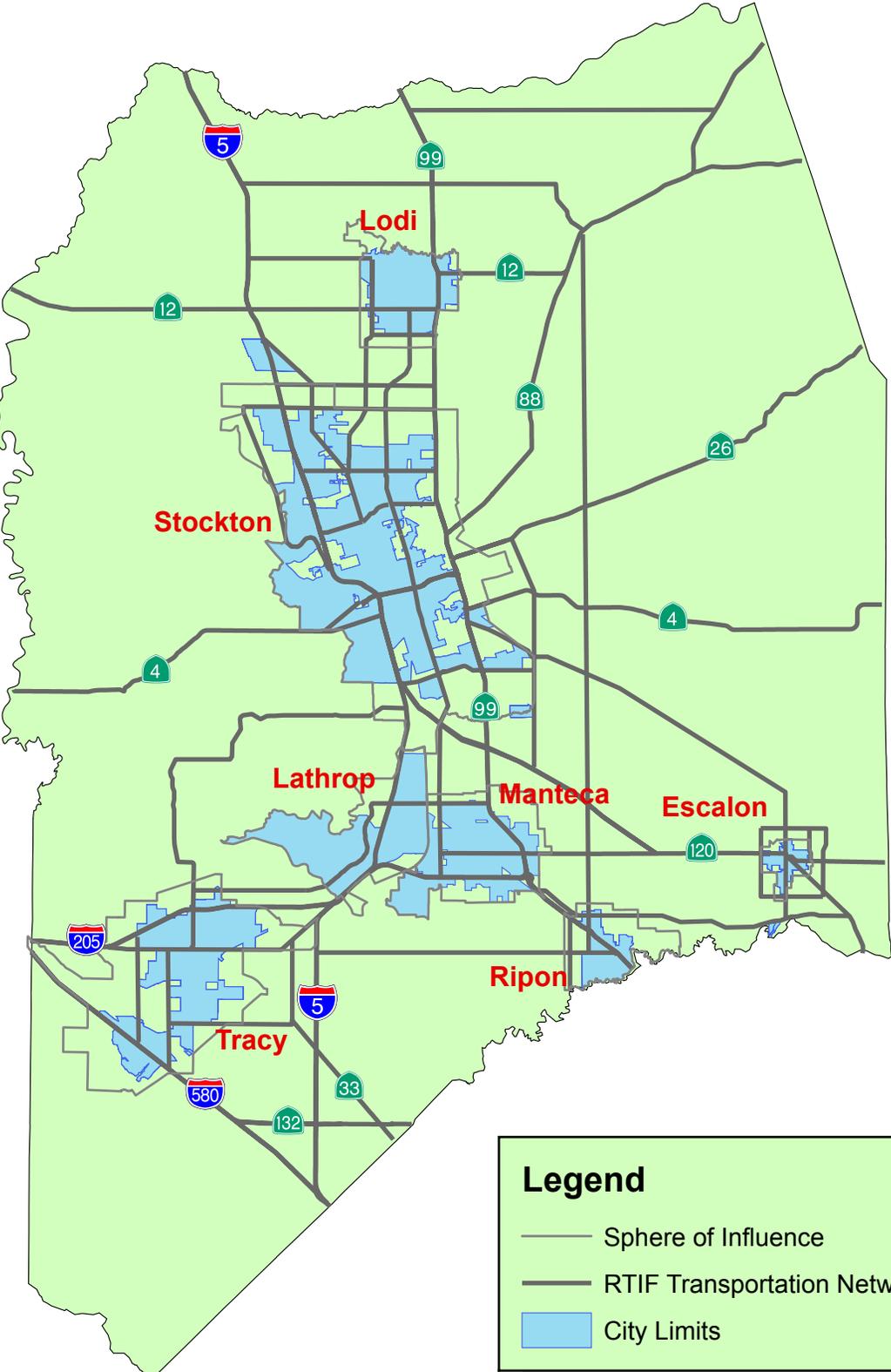
In order to be included in the RTIF Master Project List, Highway Widening, Interchange and Local Roadway Improvement projects must meet all of the following criteria:

- A. All projects must be part of the RTIF Network;
- B. All projects must be scheduled for delivery within the time horizon of the nexus analysis; and³
- C. All projects, except interchange improvements, must involve a capacity improvement of one or more through travel or passing lanes, or auxiliary lanes (i.e., turn lanes).

² The RTIF Network is based on the Congestion Management Program (CMP) network of major facilities of regional significance and supplemented with additional major arterials that serve inter-community travel in San Joaquin County.

³ All RTIF highway widening, interchange, regional roadway, and public transit projects must be identified in the SJCOG Board adopted RTIF project list and Regional Transportation Plan (RTP) prior to delivery. The current time horizon for the RTP is 2005 – 2030.

Figure 1: Regional Transportation Network



In order to be included in the RTIF Master Project List, all Public Transit projects must satisfy the following criteria:⁴

- A. All projects must be scheduled for delivery within the time horizon of the nexus analysis; and
- B. All projects must involve an improvement to an existing or new service/facility which connects at least two or more cities or regions.

The RTIF nexus fee is based on a combination of highway widening, interchange, and regional roadway projects. The RTIF Master Project List is further refined to ensure that appropriate projects receive necessary funding to complete delivery. These projects were selected from the RTIF Master Project List based on the following:

- A. Currently identified in Tier I of the RTP;
- B. Regional roadway and interchange projects that are in Tier I of the RTP and/or are Measure K Renewal projects; and,
- C. All remaining regional roadway projects which fall on the current SJCOG-Board adopted Regional Transportation Network.

A description of the master and eligible RTIF projects and costs are provided in **Table 5**.

CHANGES TO RTIF MASTER PROJECT LIST

As needs and priorities change over time, on a semi-annual basis, a jurisdiction can exchange any one of their RTIF projects from the RTIF Master Project List with one or more of their projects in Tier I of the RTP. This level of flexibility is intended to help jurisdictions adapt to changes in funding availability and transportation priorities. However, the following conditions need to be met to secure an exchange:

- RTP meets air quality conformity requirements;
- The projects are categorized in Tier I of the RTP. Tier I RTP projects are priority projects for which funding sources have been identified; and,
- RTIF nexus requirements are maintained.

⁴ Examples of regional transit projects include: (a) capital purchase of rolling stock; (b) bus shelters and associated amenities; and, (c) multi-modal stations and associated amenities.

ALLOCATION OF ELIGIBLE RTIF COSTS

RTIF funds represent one source of funding. These funds, combined with other local, state and federal funds ensure the complete delivery of the RTIF transportation project. Based on the multiple funding mechanisms, the following rationale was used to allocate net RTIF costs to fiscally constrain the projects and establish the nexus:

- A. **RTIF Projects currently in Tier I of the RTP** - RTIF gross project costs were compared to the costs programmed in the RTP. The cost differentials between the RTIF/Tier I RTP projects were offset with net eligible RTIF costs.
- B. **Regional roadway/interchange projects in Tier I of the RTP and/or MK Renewal** - These projects have multiple funding mechanisms and will require RTIF funds to ensure delivery. As part of the nexus, 23 percent of the gross project costs were used not to exceed the eligible RTIF net project costs.
- C. **Remaining regional roadway projects** - Nexus fee includes full RTIF costs attributable to new development for all remaining Regional Roadway Projects which fall on the adopted Regional Transportation Network.

The impact of this cost allocation is summarized in **Table 5**. As shown, there are 120 separate RTIF projects with an estimated total capital cost of about \$5.4 billion. Of the total, 48 RTIF projects with a total cost of \$561 million were selected for purposes of calculating the fee amount. This amount reflects to proportion of the projects for which funding sources have not yet been identified. The cost estimates are based on the best information available at the time of this Report. To the extent that this project list and/or the corresponding cost estimates are updated, the maximum fee amount will change accordingly.

Table 5
RTIF Capital Projects
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Project Description	RTIF Master Project Costs (2)	Nexus Project Costs (3)
Mainline Highway Projections				
1	SR-99	Widen 4 to 6 lanes using inside median, Arch Road to Crosstown/99 interchange	\$158,000,000	-
2	SR-99	Widen 6 to 8 lanes (Outside), City of Manteca (Yosemite Ave) to City of Ripon (West Ripon Road)	\$203,000,000	-
3	I-5	Widen 6 to 8 lanes (Inside) from Monte Diablo Avenue under crossing to Otto Drive. Add aux. Possible HOV lane.	\$250,000,000	-
4	I-5	Widen 6 to 8 lanes (Inside), French Camp Road to Charter Way	\$228,000,000	-
5	I-5	Widen 6 to 8 lanes (Inside), SR 120 to French Camp Road	\$71,000,000	-
6	I-205	Widen 6 to 8 lanes (Inside/Outside) from I-580 to I-5	\$268,000,000	-
7	SR-4 Extension	New alignment from Fresno Ave. to Daggett Road	\$150,000,000	\$19,843,070
8	SR-99 Widening	Widen 6 to 8 lanes (Outside), Cherokee Road to Armstrong Road	\$100,000,000	-
9	SR-99	Widen 6 to 8 lanes (Outside), Crosstown to Cherokee Road	\$194,000,000	-
10	SR-99	Widen 6 to 8 lanes (Outside), Arch to Crosstown	\$86,000,000	-
11	SR-99 Widening	Widen 4 to 8 lanes (Outside), French Camp Road to Arch Road	\$100,000,000	-
12	I-5	Widen 6 to 8 lanes (Inside), Otto Drive to New Road A (One mile N. of Eight Mile Road)	\$25,000,000	-
13	SR-99 Widening	Widen 8 to 10 lanes (Outside), Mariposa Road to Cherokee Road	\$150,000,000	-
14	SR-4 Crosstown Widening	Widen 6 to 8 lanes, I-5 to SR-99	\$75,000,000	-
15	SR-26 Widening	Widen 6 to 8 lanes, SR-99 to Austin Road Extension	\$30,000,000	-
16	SR-4 Widening	Widen 6 to 8 lanes, SR-99 to Austin Road Extension	\$30,000,000	-
17	SR 99 @ Crosstown Freeway	Reconstruct Freeway to Freeway Interchange	\$30,000,000	-
18	I-5/SR 4 @ Crosstown Freeway	Reconstruct Freeway to Freeway Interchange	\$59,000,000	-
19	I-5/SR-120	New branch connections (2 Lane Structures). SR-120 West to I-5 North, and I-5 South to SR-120 East	\$35,500,000	\$6,640,000
20	SR-120	Widen 4 to 6 lanes (Inside) from I-5 to SR-99	\$54,000,000	-
21	SR-12	Widen 2 to 4 lanes (Outside), add turn lanes, from SR-99 to SR-88	\$50,500,000	\$31,480,000
22	SR-99	New capacity ~ widen 4 to 6 lanes (Inside), from Jct. 12 East to County line.	\$86,000,000	-
23	SR-99	New capacity ~ widen 4 to 6 lanes (Inside), from north of Harney to SR-12 East	\$11,250,000	-
24	I-5	Widen 4 to 6 lanes (Inside), SR-12 to County Line	\$91,000,000	-
25	I-5 Widening	Widen 8 to 10 lanes, Roth Road to Otto Drive	\$400,000,000	-
26	SR-12 @ I-5	Loop Ramps	\$11,250,000	-
27	SR-99 @ SR-88	Reconstruct interchange	\$19,500,000	-
28	SR-99 @ SR-26	Reconstruct interchange	\$19,500,000	-
29	SR-26	New capacity ~ widen 2 to 4 lanes (Outside), Cardinal (diverting canal) to Jack Tone Road	\$48,000,000	-
30	SR-120 West of Escalon	Widen from Jacktone 5 lane conventional to Sexton, new south alignment to McHenry	\$75,000,000	-
31	SR-120 East of Escalon	New south alignment from McHenry to existing 120 @ Harrold, widen to 5 lane conventional to county line	\$25,000,000	-
32	SR-88	Passing lanes, SR-12 to Amador County Line	\$24,000,000	-
Total Mainline Highway Projections			\$3,157,500,000	\$57,963,070
Interchange Modifications, Reconstructions, and Improvements				
33	I-5 @ Lathrop Road	4 lanes under I-5, modify interchange 0.3 miles north and south of Lathrop Road undercrossing	\$17,200,000	\$3,956,000
34	I-205 @ Paradise/Chrisman	Construction of new interchange	\$40,000,000	\$20,800,000
35	SR-99 @ SR-12 (Kettleman Lane)	Reconstruct interchange	\$20,000,000	\$4,600,000
36	SR-99 @ Harney Lane	Reconstruct interchange	\$20,000,000	-
37	SR-99 @ North Main	Construct new interchange	\$8,900,000	-
38	SR-99 @ Austin Road	Reconstruct/Improve Interchange	\$30,000,000	\$6,900,000

Table 5
RTIF Capital Projects
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Project Description	RTIF Master Project Costs (2)	Nexus Project Costs (3)
39	SR-120 @ McKinley	Reconstruct/Improve Interchange	\$28,200,000	\$6,486,000
40	SR-99 @ Olive Rd.	Construct Interchange to include connection with River Road	\$40,000,000	\$15,760,000
41	SR-99 @ Eight Mile Road	Reconstruct Interchange (PM 35.1-35.5)	\$36,120,000	\$8,307,600
42	SR-99 @ March Lane/Wilson	New interchange - Construct combined Wilson Way, March Lane Interchange (P.M. 21.1-22.1)	\$100,000,000	\$23,000,000
43	I-5 @ Arch Sperry/French Camp	Modify existing I-5/French Camp Road Interchange (P.M. 20.8-21.2)	\$35,000,000	\$8,050,000
44	SR-99 @ French Camp Road	Reconstruct interchange	\$35,000,000	-
45	SR-99 @ Arch Sperry Road	Phase 2 interchange improvements	\$15,000,000	-
46	SR-99 @ Armstrong Road	Reconstruct interchange	\$35,000,000	-
47	I-5 @ New Road A (N. Gateway)	Construction of new interchange	\$35,000,000	-
48	SR-99 @ New Road A (N. Gateway)	Construction of new interchange	\$35,000,000	-
49	SR-99 @ Morada Lane	Reconstruct interchange	\$35,000,000	\$1,000,000
50	I-5 @ Eight Mile Road	Interchange Modification	\$17,000,000	\$3,910,000
51	I-5 @ Otto Drive	Construction of new interchange	\$42,000,000	\$9,660,000
52	I-5 @ Hammer Lane	Interchange Modification	\$47,000,000	\$10,810,000
53	SR-99 @ Mariposa Road	Reconstruct interchange	\$40,000,000	\$9,200,000
54	SR-99 @ New Road	Construction of new interchange between French Camp Road and Arch-Sperry Road	\$35,000,000	-
55	I-5 @ Matthews Road	Reconstruct interchange	\$35,000,000	-
56	I-5 @ Roth Road	Reconstruct interchange	\$35,000,000	-
57	SR-132 @ I-5 and Bird Road	Upgrade interchange, lengthen ramps, widen approaches, install signal controls	\$10,000,000	-
58	I-580 @ Lammers Road	Construction of new interchange	\$55,000,000	-
59	I-580 @ Coral Hollow Road	Modification of existing interchange	\$20,000,000	-
60	I-205 @ Lammers Road	Construction of new interchange	\$55,000,000	\$12,650,000
61	I-205 @ Grantline Road	Modification of existing interchange	\$30,000,000	\$6,900,000
Total Interchange Modifications, Reconstructions, and Improvements			\$986,420,000	\$151,989,600
Regional Roadway Improvements				
62	Lower Sacramento Road	Widen from 2 to 6 lanes, Eight Mile Road to Marada Lane	\$20,000,000	\$5,000,000
63	Lower Sacramento Road	Widen from 2 to 4 lanes, Armstrong Road to Eight Mile Road	\$10,000,000	-
64	Eight Mile Rd.	Widen from 2 to 8 lanes, I-5 to SR-99. Project involves 2 railroad grade separations.	\$50,000,000	\$11,500,000
65	Pacific Avenue	Widen from 6 to 8 lanes, Hammer Lane to March Lane	\$30,000,000	\$6,900,000
66	March Lane	Widen from 6 to 8 lanes, Claremont to West Lane	\$9,262,000	\$8,162,000
67	March Lane	Construct 8 lane Road from Holman to SR-99	\$25,000,000	\$5,000,000
68	West Lane	Widen from 4 to 6 lanes, Armstrong Road to Eight Mile Road	\$10,000,000	\$9,780,000
69	West Lane	Widen from 4 to 6 In.SPRR s/o Alpine-Calaveras River	\$44,200,000	\$43,669,600
70	West Lane	Widen from 6 to 8 lanes, Eight Mile Road to Alpine Avenue	\$35,000,000	\$33,390,000
71	West Lane/Airport Way	Widen from 4 to 6 lanes, Alpine Avenue to Arch Sperry Road	\$60,000,000	\$55,920,000
72	Airport Way	Widen from 2 to 6 lanes, French Camp Road to Roth Road	\$15,000,000	\$12,435,000
73	Airport Way	Widen from 4 to 8 lanes, Arch/Sperry Road to French Camp Road	\$20,000,000	\$15,960,000
74	New Road A	Construct 4 lanes, I-5 to SR-99. Project involves 2 railroad grade separations.	\$25,000,000	-
75	Thornton Road	Widen from 2 to 6 lanes, Bear Creek to Hammer Lane	\$20,000,000	\$4,600,000
76	Aksland Avenue	Construct 4 lanes, Otto Drive to March Lane	\$10,000,000	\$3,000,000
77	Ryde Avenue Bridge	Construct 4 lane bridge over the Calaveras River	\$5,000,000	-
78	Mariposa Road	Widen from 2 to 8 lanes, SR-99 to Austin Road	\$30,000,000	-

Table 5
RTIF Capital Projects
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Project Description	RTIF Master Project Costs (2)	Nexus Project Costs (3)
79	Austin Road	Construct 6 lanes, SR-26 to Main Street	\$10,000,000	-
80	Austin Road	Construct 8 lanes, Main Street to Mariposa Road	\$60,000,000	-
81	Austin Road	Construct 6 lanes, Mariposa Road to Arch Road	\$5,000,000	-
82	Austin Road	Construct 4 lanes, Arch Road to French Camp Road	\$20,000,000	-
83	Arch-Sperry Rd.	Construct 2 to 8 lanes, I-5 to Performance Drive	\$65,000,000	\$14,950,000
84	Arch-Sperry Rd.	Construct 2 to 8 lanes, Performance Drive to Frontier Way	\$35,000,000	\$22,595,000
85	Arch-Sperry Rd.	Widen from 2 to 6 lanes, Frontier Way to Austin Road	\$10,000,000	\$5,690,000
86	French Camp Road	Widen from 2 to 6 lanes, SR-99 to Arch-Sperry Road	\$40,000,000	-
87	Harney Ln.	Widen from 2 to 4 lanes, SR-99 to Lower Sacramento Road (2.6 Miles)	\$12,250,000	\$2,817,500
88	Jack Tone Rd.	Widen from 2 to 4 lanes entire length (SR-99 to SR-88)	\$27,000,000	\$6,210,000
89	Liberty Road	Widen from 2 to 4 lanes, SR-99 to SR-88	\$24,974,000	-
90	Peltier Road	Widen from 2 to 4 lanes, SR-99 to I-5	\$15,500,000	-
91	Peltier Road	Widen from 2 to 4 lanes, SR-99 to Elliott Road	\$25,573,000	-
92	Elliott Road	Widen from 2 to 4 lanes, SR-88 to Peltier Road	\$12,900,000	-
93	Yosemite Ave	Widen from 2 to 4 lanes, City limit to North Ripon Rd. 3.05 miles.	\$4,758,000	-
94	Mariposa Road	Widen from 2 to 4 lanes, Austin Road to Jack Tone Road	\$17,352,000	-
95	Mariposa Road	Widen from 2 to 4 lanes, Jack Tone Road to Escalon-Belota Road	\$20,063,000	-
96	French Camp Road	Widen from 2 to 4 lanes, SR-99 to SR-120	\$26,084,000	-
97	Tracy Boulevard	Passing lanes and channelization	\$21,202,000	-
98	Howard Road	Passing lanes and channelization	\$23,935,000	-
99	Airport Way	Widen from 4 to 6 lanes, Lathrop Road to Roth Road.	\$9,293,000	\$2,137,390
100	Escalon-Belota Road	Widen from 2 to 4 lanes, Mariposa Road to Escalon City limit	\$4,009,000	\$1,519,411
101	Airport Way	Widen from 2 to 4 lanes, Yosemite to SR-120	\$1,153,000	\$937,389
102	Airport Way	Widen from 4 to 6 lanes, SR120-Lathrop Road (Manteca)	\$4,900,000	\$4,209,100
103	Lathrop Rd.	Widen from 2 to 4 lanes from east of UPRR to SR-99	\$6,855,000	-
104	Golden Valley Parkway	Parallel facility along north/west side of I-5 from Lathrop Road to Paradise	\$59,290,000	\$40,910,100
105	Lathrop Rd.	Widen from 2 to 4 lanes, I-5 to east UPRR	\$2,560,000	-
106	Corral Hollow Road	Widen from 2 to 4 lanes, Grantline Road to Linne Road	\$20,000,000	-
107	Lammers Road	Widen from 2 to 4 Lanes, I-205 to I-580	\$40,000,000	-
108	Linne Road	Widen from 2 to 4 lanes, Corral Hollow Road to Chrisman Road	\$4,289,000	\$2,835,029
109	McHenry @ Ullrey Intersection	Intersection Improvement	\$800,000	\$499,200
110	Campbell Avenue	Widen from 2 to 4 lanes, From SR 120 north to Miller Road and east from Miller Road to Escalon-Belota Road	\$2,500,000	\$1,257,500
111	Campbell Avenue	Widen from 2 to 4 lanes, From Miller Road to Santa Fe Avenue.	\$2,500,000	-
112	Brennan Road	Widen from 2 to 4 lanes, SR 120 south to Jones Road and east from Jones Road to McHenry Avenue	\$2,500,000	-
113	Miller Road	Widen from 2 to 4 lanes, Escalon-Bellota Avenue to Campbell Avenue	\$1,123,005	-
114	South Arterial #1	Widen from 2 to 4 lanes, Brennan Avenue to Harrold Avenue	\$5,054,790	-
115	Jones Road	Widen from 2 to 4 lanes, Brennan Road to Harrold Avenue	\$2,000,115	-
116	River Road Plus Extension	Widen from 2 to 4 Lanes From McHenry Avenue to SR 120. Includes Parallel Facility to SR 99 North to SR 120 with extension of Olive Road south to SJC line. May include roundabout (River Road @ McHenry).	\$25,000,000	-
117	West Ripon Road (1)	Widen existing road from 2 to 4 lanes and extend Ripon Road West to I-5	\$50,000,000	-
Total Regional Roadway Improvements			\$1,138,879,910	\$321,884,219

Table 5
RTIF Capital Projects
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Project Description	RTIF Master Project Costs (2)	Nexus Project Costs (3)
Public Transit				
118	Bus Rapid Transit (BRT)	Regional/Inter-Regional BRT system	\$100,412,410	\$19,931,535
119	Regional Busses	Purchase of buses for service expansion (Intercity/Interregional)	\$10,000,000	\$2,100,000
120	Altamont Commuter Express (ACE)	Acquisition of ACE Corridor between Lathrop and Niles Junction	\$45,000,000	\$6,950,000
Total Public Transit			\$155,412,410	\$28,981,535
TOTAL ALL PROJECTS			\$5,438,212,320	\$560,818,424

- (1) Project delivery is contingent on the results of a feasibility study and pending analysis of the region's expressway needs.
(2) Represent all projects in the RTIF network. All projects are selected based on Inclusion Criteria.
(3) Represents RTIF projects/costs used to establish nexus.

IV. RTIF MODEL AND FEE CALCULATION

This chapter describes the modeling techniques used to identify eligible transportation projects and calculate the fee for the RTIF program. The fee is based on the RTIF capital project list costs attributable to new growth within the San Joaquin Region divided by projected development by land use category in the region.

TRANSPORTATION MODEL

This Technical Report relies on the SJCOG travel demand model, a regional model used to conduct long-range planning and assess transportation impacts of major development projects in the County. The model has recently been updated, and was used in preparing the 2030 RTP. Therefore, the model is the best tool available for conducting a project such as the RTIF Report. The SJCOG model contains land use estimates for the year 2005, and projections for the year 2030. Both the 2005 and 2030 models were used in the RTIF Report.

EXISTING DEFICIENCIES

As noted in **Chapter III**, the RTIF program excludes the proportion of a project cost that are attributable in whole or in part to correct “existing deficiencies” or pre-existing problems in the regional transportation system. Consequently, the transportation model was used to identify existing deficiencies in the RTIF Network. Specifically, the 2005 model was applied, and the Level of Service (LOS) of each facility in the network was assessed. Traffic volume thresholds for LOS calculation purposes were provided by SJCOG staff. These thresholds were based on the standard highway capacity tables prepared by the Florida Department of Transportation, and have been used in the preparation of the 2030 SJCOG RTP and other regional planning documents.

The operational standard for roads in the San Joaquin Region is LOS D. Therefore, all facilities that were estimated to operate at LOS E or F during the AM peak hour in the 2005 model were designated as having existing deficiencies. Any improvements designed to correct the deficiencies in the RTIF Network have been adjusted to exclude the portion that is attributable to existing deficiencies.

Because of limitations in the analytical methods available, no existing deficiency analysis was conducted for interchange; rather, it was assumed that these improvements were to be supported entirely by new development.

TRAFFIC CONTRIBUTION

The total amount of traffic on each facility is broken down into two components: the traffic coming from or going to areas inside the San Joaquin Region (called “Internal Trips”) and the traffic coming from or going to areas outside the Region (called

“External Trips”). These External Trips are not the responsibility of the new development within San Joaquin Region, and thus need to be excluded from the fee calculation. This analysis was done on the basis of trip ends; therefore, the so-called I-X and X-I trips (trips that have one end in the region and one end outside the region) were considered to be one-half attributable to Internal Trips, and one-half attributable to External Trips.

The difference in total traffic volume on each project between 2005 and 2030 was calculated, and became the denominator of the traffic contribution ratio. The difference in volume associated with each of the categories described above was also calculated, and these became the numerators of the calculation. For example, if total traffic on a particular facility increased by 1,000 vehicles between 2005 and 2030, and if the traffic attributable to the San Joaquin Region area increased by 200 vehicles, then the percent contribution to that facility within the region would be $200/1,000$ or 20 percent. The remaining 80 percent of the growth in traffic would be similarly calculated from the External Trips.

The trip distribution between inside and outside of the San Joaquin Region for all the RTIF projects is shown in **Table 6**. The values in Internal and External Trips should sum to 1.0, or 100 percent, for each RTIF project. With the External Trips screened out, Table 7 also shows the net RTIF project costs by multiplying the Internal Trips factors by the total project costs.

PUBLIC TRANSIT CONTRIBUTION

The total share of the public transit costs is determined by new development within the San Joaquin Region. Specifically, the total public transit share is calculated by multiplying the incremental DUE growth as a percent of the total DUE in 2030. Between 2005 and 2030, the DUE in the San Joaquin Region is estimated to increase by 163,319, as illustrated in **Table 4**. The new growth would contribute approximately 30 percent of the total DUE in 2030. As shown in **Table 6**, \$8.7 million of the public transit costs is supported by the RTIF program.

MAXIMUM FEE CALCULATION

The maximum fee calculation is based on the net RTIF capital project costs attributable to the Internal Trips throughout the region divided by the projected number of new housing units, retail and commercial/industrial square feet developed in the County through year 2030. Specifically, the net RTIF capital project cost is divided by the total DUE growth, as calculated in **Table 4**, to obtain total cost per DUE for the San Joaquin Region as a whole.

A summary of the RTIF per DUE by project and for the San Joaquin Region as a whole is provided in **Table 7**. The actual fees by land use category are derived based on the DUE factors shown in **Table 3** (total fee per DUE multiplied by the DUE factor by land use category).

Table 6
RTIF Trip Distribution and Net Project Costs
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Trip Distribution		Net Nexus Project Costs
		Internal Trips	External Trips	
Mainline Highway Projections				
1	SR-99	48.3%	51.7%	-
2	SR-99	31.3%	68.7%	-
3	I-5	54.1%	45.9%	-
4	I-5	59.9%	40.1%	-
5	I-5	61.3%	38.7%	-
6	I-205	46.4%	53.6%	-
7	SR-4 Extension	43.5%	56.5%	\$7,708,140
8	SR-99 Widening	54.1%	45.9%	-
9	SR-99	57.8%	42.2%	-
10	SR-99	48.3%	51.7%	-
11	SR-99 Widening	42.6%	57.4%	-
12	I-5	47.2%	52.8%	-
13	SR-99 Widening	54.8%	45.2%	-
14	SR-4 Crosstown Widening	60.0%	40.0%	-
15	SR-26 Widening	60.7%	39.3%	-
16	SR-4 Widening	48.6%	51.4%	-
17	SR 99 @ Crosstown Freeway	62.5%	37.5%	-
18	I-5/SR 4 @ Crosstown Freeway	65.5%	34.5%	-
19	I-5/SR-120	33.2%	66.8%	\$2,204,480
20	SR-120	29.1%	70.9%	-
21	SR-12	78.7%	21.3%	\$24,774,760
22	SR-99	41.3%	58.7%	-
23	SR-99	48.0%	52.0%	-
24	I-5	45.2%	54.8%	-
25	I-5 Widening	58.1%	41.9%	-
26	SR-12 @ I-5	46.1%	53.9%	-
27	SR-99 @ SR-88	65.8%	34.2%	-
28	SR-99 @ SR-26	69.1%	30.9%	-
29	SR-26	57.0%	43.0%	-
30	SR-120 West of Escalon	30.6%	69.4%	-
31	SR-120 East of Escalon	26.7%	73.3%	-
32	SR-88	45.5%	54.5%	-
Interchange Modifications, Reconstructions, and Improvements				
33	I-5 @ Lathrop Road	70.5%	29.5%	\$2,788,980
34	I-205 @ Paradise/Chrisman	62.3%	37.7%	\$12,958,400
35	SR-99 @ SR-12 (Kettleman Lane)	86.0%	14.0%	\$3,956,000
36	SR-99 @ Harney Lane	86.9%	13.1%	-
37	SR-99 @ North Main	82.5%	17.5%	-
38	SR-99 @ Austin Road	67.7%	32.3%	\$4,671,300
39	SR-120 @ McKinley	77.5%	22.5%	\$5,026,650
40	SR-99 @ Olive Rd.	40.2%	59.8%	\$6,335,520
41	SR-99 @ Eight Mile Road	64.2%	35.8%	\$5,333,479
42	SR-99 @ March Lane/Wilson	73.0%	27.0%	\$16,790,000
43	I-5 @ Arch Sperry/French Camp	56.8%	43.2%	\$4,572,400
44	SR-99 @ French Camp Road	48.7%	51.3%	-
45	SR-99 @ Arch Sperry Road	57.5%	42.5%	-

Table 6

**RTIF Trip Distribution and Net Project Costs
San Joaquin RTIF Nexus Study; EPS #15040**

ID#	Project	Trip Distribution		Net Nexus Project Costs
		Internal Trips	External Trips	
46	SR-99 @ Armstrong Road	89.2%	10.8%	-
47	I-5 @ New Road A (N. Gateway)	97.6%	2.4%	-
48	SR-99 @ New Road A (N. Gateway)	71.5%	28.5%	-
49	SR-99 @ Marada Lane	65.4%	34.6%	\$654,000
50	I-5 @ Eight Mile Road	67.2%	32.8%	\$2,627,520
51	I-5 @ Otto Drive	65.9%	34.1%	\$6,365,940
52	I-5 @ Hammer Lane	91.1%	8.9%	\$9,847,910
53	SR-99 @ Mariposa Road	59.3%	40.7%	\$5,455,600
54	SR-99 @ New Road	60.8%	39.2%	-
55	I-5 @ Matthews Road	72.5%	27.5%	-
56	I-5 @ Roth Road	70.2%	29.8%	-
57	SR-132 @ I-5 and Bird Road	44.7%	55.3%	-
58	I-580 @ Lammers Road	50.5%	49.5%	-
59	I-580 @ Coral Hollow Road	36.5%	63.5%	-
60	I-205 @ Lammers Road	58.5%	41.5%	\$7,400,250
61	I-205 @ Grantline Road	70.8%	29.2%	\$4,885,200
Regional Roadway Improvements				
62	Lower Sacramento Road	83.2%	16.8%	\$4,160,000
63	Lower Sacramento Road	93.8%	6.2%	-
64	Eight Mile Rd.	69.5%	30.5%	\$7,992,500
65	Pacific Avenue	95.2%	4.8%	\$6,568,800
66	March Lane	93.2%	6.8%	\$7,606,984
67	March Lane	85.0%	15.0%	\$4,250,000
68	West Lane	96.1%	3.9%	\$9,398,580
69	West Lane	98.8%	1.2%	\$43,145,565
70	West Lane	94.9%	5.1%	\$31,687,110
71	West Lane/Airport Way	93.4%	6.6%	\$52,229,280
72	Airport Way	85.0%	15.0%	\$10,569,750
73	Airport Way	79.3%	20.7%	\$12,656,280
74	New Road A	67.9%	32.1%	-
75	Thornton Road	77.8%	22.2%	\$3,578,800
76	Aksland Avenue	87.0%	13.0%	\$2,610,000
77	Ryde Avenue Bridge	96.4%	3.6%	-
78	Mariposa Road	57.3%	42.7%	-
79	Austin Road	53.7%	46.3%	-
80	Austin Road	68.6%	31.4%	-
81	Austin Road	62.4%	37.6%	-
82	Austin Road	65.0%	35.0%	-
83	Arch-Sperry Rd.	61.4%	38.6%	\$9,179,300
84	Arch-Sperry Rd.	63.3%	36.7%	\$14,302,635
85	Arch-Sperry Rd.	64.0%	36.0%	\$3,641,600
86	French Camp Road	45.7%	54.3%	-
87	Harney Ln.	89.9%	10.1%	\$2,532,933
88	Jack Tone Rd.	55.3%	44.7%	\$3,434,130
89	Liberty Road	17.5%	82.5%	-
90	Peltier Road	39.2%	60.8%	-
91	Peltier Road	38.8%	61.2%	-

Table 6
RTIF Trip Distribution and Net Project Costs
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Trip Distribution		Net Nexus Project Costs
		Internal Trips	External Trips	
92	Elliott Road	52.2%	47.8%	-
93	Yosemite Ave	29.3%	70.7%	-
94	Mariposa Road	53.4%	46.6%	-
95	Mariposa Road	49.6%	50.4%	-
96	French Camp Road	52.1%	47.9%	-
97	Tracy Boulevard	47.0%	53.0%	-
98	Howard Road	55.5%	44.5%	-
99	Airport Way	80.6%	19.4%	\$1,722,736
100	Escalon-Belota Road	37.1%	62.9%	\$563,701
101	Airport Way	81.5%	18.5%	\$763,972
102	Airport Way	85.1%	14.9%	\$3,581,944
103	Lathrop Rd.	66.0%	34.0%	-
104	Golden Valley Parkway	68.7%	31.3%	\$28,105,239
105	Lathrop Rd.	69.0%	31.0%	-
106	Corral Hollow Road	74.1%	25.9%	-
107	Lammers Road	59.3%	40.7%	-
108	Linne Road	67.5%	32.5%	\$1,913,645
109	McHenry @ Ullrey Intersection	62.7%	37.3%	\$312,998
110	Campbell Avenue	51.7%	48.3%	\$650,128
111	Campbell Avenue	59.2%	40.8%	-
112	Brennan Road	37.6%	62.4%	-
113	Miller Road	50.1%	49.9%	-
114	South Arterial #1	52.4%	47.6%	-
115	Jones Road	52.4%	47.6%	-
116	River Road Plus Extension	14.9%	85.1%	-
117	West Ripon Road (1)	68.2%	31.8%	-
Public Transit (2)				
118	Bus Rapid Transit (BRT)	n/a	n/a	\$5,993,758
119	Regional Busses	n/a	n/a	\$631,506
120	Altamont Commuter Express (ACE)	n/a	n/a	\$2,089,985
Total				\$410,230,388

(1) Project delivery is contingent on the results of a feasibility study and pending analysis of the region's expressway needs.

(2) All public transit costs based on the incremental DUE growth as 30% of the total DUE in 2030.

Table 7
RTIF Fee Calculation
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Cost Per DUE (1)
Mainline Highway Projections		
1	SR-99	-
2	SR-99	-
3	I-5	-
4	I-5	-
5	I-5	-
6	I-205	-
7	SR-4 Extension	\$47.20
8	SR-99 Widening	-
9	SR-99	-
10	SR-99	-
11	SR-99 Widening	-
12	I-5	-
13	SR-99 Widening	-
14	SR-4 Crosstown Widening	-
15	SR-26 Widening	-
16	SR-4 Widening	-
17	SR 99 @ Crosstown Freeway	-
18	I-5/SR 4 @ Crosstown Freeway	-
19	I-5/SR-120	\$13.50
20	SR-120	-
21	SR-12	\$151.70
22	SR-99	-
23	SR-99	-
24	I-5	-
25	I-5 Widening	-
26	SR-12 @ I-5	-
27	SR-99 @ SR-88	-
28	SR-99 @ SR-26	-
29	SR-26	-
30	SR-120 West of Escalon	-
31	SR-120 East of Escalon	-
32	SR-88	-
Interchange Modifications, Reconstructions, and Improvements		
33	I-5 @ Lathrop Road	\$17.08
34	I-205 @ Paradise/Chrisman	\$79.34
35	SR-99 @ SR-12 (Kettleman Lane)	\$24.22
36	SR-99 @ Harney Lane	-
37	SR-99 @ North Main	-
38	SR-99 @ Austin Road	\$28.60
39	SR-120 @ McKinley	\$30.78
40	SR-99 @ Olive Rd.	\$38.79
41	SR-99 @ Eight Mile Road	\$32.66
42	SR-99 @ March Lane/Wilson	\$102.81
43	I-5 @ Arch Sperry/French Camp	\$28.00
44	SR-99 @ French Camp Road	-
45	SR-99 @ Arch Sperry Road	-
46	SR-99 @ Armstrong Road	-

Table 7
RTIF Fee Calculation
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Cost Per DUE (1)
47	I-5 @ New Road A (N. Gateway)	-
48	SR-99 @ New Road A (N. Gateway)	-
49	SR-99 @ Marada Lane	\$4.00
50	I-5 @ Eight Mile Road	\$16.09
51	I-5 @ Otto Drive	\$38.98
52	I-5 @ Hammer Lane	\$60.30
53	SR-99 @ Mariposa Road	\$33.40
54	SR-99 @ New Road	-
55	I-5 @ Matthews Road	-
56	I-5 @ Roth Road	-
57	SR-132 @ I-5 and Bird Road	-
58	I-580 @ Lammers Road	-
59	I-580 @ Coral Hollow Road	-
60	I-205 @ Lammers Road	\$45.31
61	I-205 @ Grantline Road	\$29.91
Regional Roadway Improvements		
62	Lower Sacramento Road	\$25.47
63	Lower Sacramento Road	-
64	Eight Mile Rd.	\$48.94
65	Pacific Avenue	\$40.22
66	March Lane	\$46.58
67	March Lane	\$26.02
68	West Lane	\$57.55
69	West Lane	\$264.18
70	West Lane	\$194.02
71	West Lane/Airport Way	\$319.80
72	Airport Way	\$64.72
73	Airport Way	\$77.49
74	New Road A	-
75	Thornton Road	\$21.91
76	Aksland Avenue	\$15.98
77	Ryde Avenue Bridge	-
78	Mariposa Road	-
79	Austin Road	-
80	Austin Road	-
81	Austin Road	-
82	Austin Road	-
83	Arch-Sperry Rd.	\$56.20
84	Arch-Sperry Rd.	\$87.57
85	Arch-Sperry Rd.	\$22.30
86	French Camp Road	-
87	Harney Ln.	\$15.51
88	Jack Tone Rd.	\$21.03
89	Liberty Road	-
90	Peltier Road	-
91	Peltier Road	-
92	Elliott Road	-
93	Yosemite Ave	-

Table 7
RTIF Fee Calculation
San Joaquin RTIF Nexus Study; EPS #15040

ID#	Project	Cost Per DUE (1)
94	Mariposa Road	-
95	Mariposa Road	-
96	French Camp Road	-
97	Tracy Boulevard	-
98	Howard Road	-
99	Airport Way	\$10.55
100	Escalon-Belota Road	\$3.45
101	Airport Way	\$4.68
102	Airport Way	\$21.93
103	Lathrop Rd.	-
104	Golden Valley Parkway	\$172.09
105	Lathrop Rd.	-
106	Corral Hollow Road	-
107	Lammers Road	-
108	Linne Road	\$11.72
109	McHenry @ Ullrey Intersection	\$1.92
110	Campbell Avenue	\$3.98
111	Campbell Avenue	-
112	Brennan Road	-
113	Miller Road	-
114	South Arterial #1	-
115	Jones Road	-
116	River Road Plus Extension	-
117	West Ripon Road (2)	-
Public Transit		
118	Bus Rapid Transit (BRT)	\$36.70
119	Regional Busses	\$3.87
120	Altamont Commuter Express (ACE)	\$12.80
Total		\$2,511.84

(1) Net RTIF project cost divided by total DUE of 163,319

(2) Project delivery is contingent on the results of a feasibility study and pending analysis of the region's expressway needs.