

V. FINANCIAL ELEMENT

The purpose of the Financial Element is to provide a summary of the projected costs of transportation facilities listed in the RTP and the revenue sources required to fund those facilities. This section includes a summary of the costs to implement programs discussed in the Action Element (Chapter IV) and a discussion of the potential revenue available to fund them (refer to Appendix D for a detailed summary of funding sources, and Appendix E for TEA-21 Fact Sheets of each funding program). Surpluses and deficits resulting from the difference in projected revenues and planned expenditures are identified, along with the ramifications of implementing only those improvements that have secure funding. Finally, alternative sources of funding are recommended and a summary of potential funding strategies is presented.

COST SUMMARY

Table 28 contains a summary of the RTP improvement costs identified for the roadway, public transit, bicycle and pedestrian, and aviation components of the Calaveras County transportation system. Approximately \$111,500,000 of candidate SHOPP projects from Table 17 are included in the roadway total. The amount of available SHOPP funding to construct these projects is not known at the present.

Transportation System Component	Short-Range Improvement Cost	Long-Range Improvement Cost	Total Cost
Roadway(includes SHOPP)	\$212,201	\$82,520	\$294,721
Public Transit	\$300	\$400	\$700
Bicycle and Pedestrian	\$479	\$2,427	\$2,906
Aviation	\$1,158	\$0	\$1,158
Total	\$214,138	\$85,347	\$299,485

EXPECTED REVENUES

During the development of the RTP, it is important to make reasonable estimates of expected revenues during the 20-year life of the Plan. Table 29 provides a summary of the expected revenues from federal, state, and local sources over the 20-year life of the RTP.

Table 29 Summary of 2022 Regional Transportation Plan Revenues for Calaveras County	
Revenue Category	Revenue
Regional Transportation Improvement Program (RTIP) ¹	\$59,500,000
Regional Surface Transportation Program (RSTP) ²	\$7,460,000
State Highways Operations and Projection Program (SHOPP) ³	\$25,000,000
Local Transportation Fund (LTF) - 1/4 cents sales tax for Transit ⁴	\$7,000,000
Local Transportation Fund (LTF) - 2% allocation to Bike/Pedestrian Account	\$234,000
State Transit Assistance (STA)	\$2,230,000
Federal Hazard Elimination and Safety Program (HES)	TBD
Highway Bridge Replacement and Rehabilitation Program (HBRR)	\$2,445,000
Discretionary Grant Funding	TBD
Total Anticipated Revenues from Existing Sources	\$103,869,000
Notes:	
¹ Based on 10-year estimate of 32.1 million and inflated 3% every two years to 2022.	
² Based on 2000/2001 Net apportionment of \$373,000 expanded over 20 years.	
³ Assumes continuation of average past funding of \$1,250,000 per year for 20 years.	
⁴ Due to rising transit contract costs, none of these funds have been assumed to be available for roadway improvement funding.	
Source: Calaveras Council of Governments; Caltrans; Fehr & Peers Associates, Inc. 2001	

COMPARISON OF ROADWAY IMPROVEMENT COSTS TO EXPECTED REVENUES

Table 30 compares the expected costs of roadway improvements to the expected revenues. This table shows a shortfall of approximately \$109 million is projected to occur during the 20-year planning period. This shortfall may not be realized depending on the availability of state funding and federal funding. The assumption that approximately \$60 million will be available in RTIP funds over the next 20-years is conservative. The 2000 STIP allocation for Calaveras County is approximately 3 million with an additional \$9 million expected in the 2002 STIP. Also, the revenue projections assume no ITIP funding through Caltrans and does not include any revenues from the RIM program.

Table 30					
Roadway Improvement Projects Summary of Costs and Revenues					
(\$1,000s of 2001 Dollars)					
Inprovement Projects	Short-Range Costs	Long-Range Costs	Total Costs	Estimated Funding	Surplus/ (Deficit)
STIP Funded Highway Projects	\$77,623	\$14,642	\$92,265	\$59,500	-\$32,765
SHOPP/MINOR Funded Projects	\$111,474	\$0	\$111,474	\$25,000	-\$86,474
HBRR Projects	\$1,726	\$719	\$2,445	\$2,445	\$0
Hazard Elimination and Safety (HES) Projects	\$12,056	\$355	\$12,411	TBD	TBD
Local County and City Projects	\$9,322	\$66,804	\$76,126	TBD	TBD
Total	\$212,201	\$82,520	\$294,721	\$86,945	-\$207,776

Notes: SHOPP total includes \$94 million in candidate projects over the next 10 years
Assumes continuation of average past SHOPP expenditures of \$1,250,000 per year.

COMPARISON OF TRANSIT COSTS AND REVENUES

Table 31 summarizes the expected costs and revenues for transit capital improvements. No funding deficit is anticipated.

Table 31					
Summary of Costs and Revenues for Transit Projects					
(\$1,000s of 2001 Dollars)					
Transit Improvements	Short-Range Costs	Long-Range Costs	Total Costs	Revenues	Surplus/ (Deficit)
All Projects	\$200	\$500	\$700	\$700	\$0

Notes:
Based on STIP and LTF funding

COMPARISON OF BIKEWAY AND PEDESTRIAN COSTS AND REVENUES

Table 32 summarizes the expected costs and revenues for bikeway and pedestrian capital improvements. The known revenue source for bike and pedestrian projects is the 2 percent set aside of LTF funds. Additional competitive sources may include Bicycle Transportation Act funding. This source has been increased to approximately \$5 million dollars a year statewide beginning in 2003. As mentioned previously, the completion of the 1998 BMP will assist the County in securing BTA funds for high priority bike and pedestrian projects. This will help reduce the overall shortfall.

Table 32					
Summary of Costs and Revenues for Bike and Pedestrian Projects					
(\$1,000s of 2001 Dollars)					
Improvements	Short-Range Costs	Long-Range Costs	Total Costs	Revenues	Surplus/ (Deficit)
All Projects	\$479	\$2,427	\$2,906	\$234	-\$2,672
Notes:					
Does not include potential competitive grant funding.					

COMPARISON OF AVIATION COSTS AND REVENUES

Table 33 summarizes the expected costs and revenues for aviation projects. The current sources of aviation funding are the Federal Airport Improvement Program (AIP) administered by the FAA, and the State of California Aid to Airports Program (CAAP). Successful competition for these competitive grants may reduce the shortfall to zero.

Table 33					
Summary of Costs and Revenues for Aviation Projects					
(\$1,000s of 2001 Dollars)					
Transit Improvements	Short-Range Costs	Long-Range Costs	Total Costs	Anticipated Revenues	Surplus/ (Deficit)
All Projects	\$1,158	\$0	\$1,158	\$1,158	\$0
Notes:					
Based on anticipated AIP and CAAP funding					

FUNDING STRATEGY

The 2001 RTP for Calaveras County identifies key short-term (0-10 years) and long-term (11-20 years) roadway improvements for the County’s regional road system. Funding sources for these projects come from various sources including STIP, SHOPP and local funding. The RTP also identifies a series of multi-modal projects and programs such as transit improvements, bicycle improvements, and pedestrian improvements. However, none of the improvements address one of the most critical needs of Calaveras County during the next several years. That need is County road maintenance.

Recognizing that transportation funds are limited in spite of the increases brought about by TEA-21, and SB-45, the following funding issues remain important to Calaveras County.

How should limited transportation funds be prioritized to meet the needs of motorists, transit riders, commerce, bicyclists, pedestrians and visitors over the next 20 years?

Which specific transportation improvement projects and/or programs should be funded with regional dollars?

What type of funding strategy should Calaveras County adopt to provide the needed transportation improvements to its transportation system?

RTP LINKAGES

To help answer the above questions, the RTP Guidelines require that the RTP show linkages to the STIP, RTIP and ITIP. In addition, proposed projects in the RTP must address purpose and need and be selected and prioritized with the help of program level performance measures. To show these links, the Calaveras 2001 RTP provides the following information:

- Performance measures in the RTP (Table 15) reference specific goals and objectives from the Policy Element (Chapter III).
- Project tables in the Action Element (Tables 16 through 27) include a qualitative assessment designating whether the project provides congestion relief, a safety improvement, and/or multi-modal benefits. These categories are included to help identify the purpose and need for the project.
- The Financial Element includes a cost effectiveness measure (cost per new trip served) for projects proposed on State highways (Table 34 below).

POTENTIAL FUNDING STRATEGIES

Potential funding strategies are described below. The first three strategies focus on prioritizing projects based on projected funding revenues while the four strategy outlines options for increase local revenues.

STRATEGY 1 - PRIMARY FOCUS ON STATE HIGHWAYS

This approach would channel the majority of revenues to State highway projects and target those areas that show the greatest deficiencies. The deficiencies are identified through the analysis of level of service (Table 9), accident rates (Table 11) and other performance measures (Table 14). Projects would be prioritized by the Calaveras COG, in cooperation with Caltrans and the City of Angels.

STRATEGY 2 - BALANCE SPENDING ON STATE HIGHWAYS AND LOCAL ROADS

This approach would consider needed capacity, safety and/or rehabilitation improvements on local streets and roads of regional significance, in addition to critical State highway projects. Improvements would be based on the purpose and need assessment from the Action Element as well as the cost effectiveness calculations identified in the Financial Element.

STRATEGY 3 – MULTI-MODAL EMPHASIS

In addition to highways and roads, this approach would channel some funds into multi-modal improvements including transit, bicycle and pedestrian facilities. Opportunities for implementing

congestion reducing TSM and TDM strategies would take a higher priority in concert with capacity increasing measures. Although investment in multi-modal projects does provide increased air quality benefits, their effectiveness in reducing automobile trips through mode shifting can be somewhat limited in rural areas. The type and extent of investment would have to be weighed against these limitations.

STRATEGY 4 - INCREASE LOCAL REVENUE

Elimination of the projected funding shortfalls without reduction in the list of improvement projects will require new revenue sources. Calaveras County has recognized this potential problem and is currently developing the road improvement mitigation (RIM) program to create a traffic impact fee. The following steps have been completed:

- State highway and County roadway improvements were identified based on LOS deficiencies for inclusion in the fee program,
- Cost estimates for each improvement were developed,,
- Alternative strategies for requiring new development to mitigate traffic impacts were analyzed,
- A comparison was made of development fees in surrounding jurisdictions,
- Alternative sources of funding in addition to the fee program were estimated,
- A determination was made as to the “fair share” contribution by new development, and
- A recommended road mitigation fee level and fee program structure was developed.

The RIM program has undergone several iterations of analysis and alternatives development. The County is reviewing the program and considering it for possible adoption. If adopted, the program will be used to fund various transportation improvements throughout the County. However, the RIM program alone is not likely to generate sufficient funding to eliminate the funding shortfalls identified above. Other funding sources such as a local sales tax measure would be required to provide sufficient funding.

SUPPORT ACTIONS TO MAXIMIZE LIMITED FUNDS

No matter what funding strategy is ultimately selected, the following actions are recommended to help maximize the use of limited transportation funds:

- Use STIP funds in the most congested areas on State highways and regionally significant county roads. The COG should implement the highest priority projects from the Action Element based on purpose and need, the performance measure assessment for each project, and the cost effectiveness calculation from the Financial Element.
- Continue the three County MOU. This approach has provided additional funding for critical projects for each County through trade-offs and exchange. It is recommended that the MOU process continue.
- Aggressively pursue Discretionary and Grant-based Funding Programs. The COG should pursue funding through all discretionary and grant-based programs referenced in the Financial Element.
- Development of New Local Revenue Source for County Road Maintenance. The COG should consider the various options outlined in the RTP for creating a more stable source of local funding for road maintenance. The COG and County should lobby the CTC for a new source of maintenance

funding to help replace the lost funds from timber receipts.

- SHOPP Partnerships. The COG and County should partner with Caltrans, wherever possible, to attract additional SHOPP projects in the County.
- Cost-Effectiveness Consideration. Decision makers should consider the cost-effectiveness of improvement projects when establishing implementation priorities. Cost effectiveness was listed as one of the key performance measures in Table 14. The measure (for roadway improvements) is calculated by dividing the estimated construction cost of a project by the difference in current and future average daily traffic (ADT) volume on the affected road segment. For informational purposes, this measure was applied to the State highway improvement projects contained in this RTP. The results are summarized in Table 34.

Table 34				
State Highway Improvement Cost Effectiveness Summary				
Improvement	Cost (1,000s of 2001 Dollars)	ADT		Cost Effectiveness (Cost per New Trip)
		Existing	2022	
State Highways				
4 - In Angels Camp, north of junction Route 49 to east of Roller Road - construct 2-lane expressway (North Angels Bypass)	\$31,400	13,000	23,000	\$3,140
4 - Near Arnold - west of Black Springs - construct passing lane (eastbound)	\$2,783	1,600	3,000	\$1,988
4 - Wagon Trail- from 2.1 miles east of O'Brynes Ferry Rd./Rock Creek Rd. To 2.0 miles west of SR 49 construct 2-lane expressway (Phase 1 & 2) - PSR completed	\$27,000	3,900	9,000	\$5,294
12 - Near Valley Springs, from 1.3 miles west to 1.3 miles east of West Jct. SR 26 construct 2-lane arterial on new alignment (Valley Springs)	\$10,000	7,500	11,600	\$2,439
12 - Construct two-way center left-turn lane from Burson Rd. to the El Pagagallo Restaurant	\$1,150	5,300	11,000	\$202
12 - Improve sight distance at the SR 12 /Pettinger Rd. intersection	\$690	6,600	10,600	\$173
26 - Realignment at Hogan Dam Road	\$1,150	8,800	10,400	\$719
4 - From Angels Bypass to Murphys - construct passing lanes	\$3,450	5,200	15,400	\$338
4 - Near Altaville - 2.4 miles east of O'Brynes Ferry Road - realign curve (Safety)	\$1,745	3,600	9,000	\$323
26 - Valley Springs - Silver Rapids Road - realign existing curve (Safety)	\$4,076	3,600	10,600	\$725
12 - Near Wallace - east of Southworth Road to Route 26 (Rehabilitation)	\$6,451	4,200	8,100	\$1,654
4 - Near Murphys and Sonora - on Route 4 and at Soulsbyville Rd. - construct two sand storage facilities (Operations)	<i>Not Applicable</i>			
49 - Widen and add passing lanes from 0.4 miles north of Cherokee Creek Br. To 0.1 miles north of Angels Rd.	\$11,242	8,600	22,300	\$821
26 - Install left turn lane at Garner Place	\$1,000	3,600	10,600	\$143
4 - Construct passing lanes from the Stanislaus Co. line to west of Reeds Turnpike	\$2,400	4,200	8,100	\$615

VI. ENVIRONMENTAL REVIEW AND CHECKLIST