



**California  
Transportation  
Commission**

**1999 ANNUAL REPORT  
TO  
CALIFORNIA LEGISLATURE**

**Volume I**

**2000 Issues**



**Pursuant to Government Code, Sections 14535-14536**

**Adopted December 8, 1999**

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**STATUTORY REQUIREMENT  
FOR  
ANNUAL REPORT TO THE LEGISLATURE**

(GOVERNMENT CODE)

CHAPTER 3. ANNUAL REPORT

**Commission's Annual Report**

*Amended: Statutes of 1984, Chapter 95 (SB 283)*

14535. The commission shall adopt and submit to the Legislature, by December 15 of each year, an annual report summarizing the commission's prior-year decisions in allocating transportation capital outlay appropriations, and identifying timely and relevant transportation issues facing the State of California.

**Contents of Annual Report**

*Amended: Statutes of 1997, Chapter 622 (SB 45)*

14536. (a) The annual report shall include an explanation and summary of major policies and decisions adopted by the commission during the previously completed state and federal fiscal year, with an explanation of any changes in policy associated with the performance of its duties and responsibilities over the past year.

(b) The annual report may also include a discussion of any significant upcoming transportation issues anticipated to be of concern to the public and the Legislature.

**CALIFORNIA TRANSPORTATION COMMISSION**  
**1999 ANNUAL REPORT TO CALIFORNIA LEGISLATURE**

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## California Transportation Commission

### 1999 Annual Report to the Legislature

#### Executive Summary

2000 marks the start of the new Millennium and the second year of the California Legislature's 1999-2000 Session, as well as the second year of the Davis Administration. The Commission's 1999 Annual Report to the California Legislature builds upon, and in many ways is a complement to, its 1998 Annual Report which was presented last year at the start of the new Legislative Session and the new Administration.

The principal themes of this year's Annual Report echo those of last year: **Funding and Delivery**. Specifically, Californians are now facing the consequences of thirty years of under-investment in its transportation systems. The growth in transportation revenue for new capacity that might have been expected from increases in drivers, vehicles, and miles traveled, were in fact negated by the effects of greater fuel efficiency, inflation, and the growing needs of maintaining and repairing these aging systems.

For much of the past thirty years, Californians have been living off of the capacities paid for and built during prior generations. Congestion has been the inevitable bi-product of increases in driving that have out-paced population growth nearly three-fold, and of population growth that has out-paced increases in roadway capacity two-fold. And while the State has, in recent years, ramped up the level of reinvestment in State highways, local streets, roads and transit have not had that luxury and now, along with insufficient capacities, also face the urgent and growing need for repair. Illustrating this need, the Commission's May 1999 report on California's ten-year transportation funding needs, pursuant to Senate Resolution 8 (Burton, 1999), compiled **funding needs for highways, transit, streets and roads totaling \$118 billion**, as reported by cities, counties, transit operators, ports, Native American tribes, regional agencies and Caltrans.

While the prevailing themes of under-investment in transportation and the structural decline in fuel tax/user fees have been a mainstay of the Commission's Annual Report to the Legislature, this year's report focuses on four specific topics:

**Loss of Local Sales Tax Options (Section I-A-1)** - In the coming decade, starting in the next few years, California stands to lose the funding stream derived from limited-term/local-option sales taxes that are in effect in 16 counties. These measures, combined, will have contributed some \$18.5 billion for expenditures, divided almost evenly among highways, roadways and transit--both for capacity and for basic operations, maintenance and repair. The renewal of these measures requires elusive two-thirds votes or confusing tandem ballot measures. Senate Constitutional Amendment 3 (Burton, Karnette) was introduced in 1999 to facilitate the renewal of these measures along with similar measures in the 40 other counties. The Commission has supported SCA 3 which remains pending in the Legislature as 2000 approaches.

**Fragmentation of Funding (Section I-A-2)** - Available transportation funds, while collectively insufficient for California to catch up with three decades of under-investment, are further burdened and constrained by fragmentation, resulting in their under-utilization, raising the specter, for the first time in California's history, of turning back unused funds to the federal government. Distribution of the local share of California's state gas tax among 532 cities and counties has resulted in a relatively constant, unexpended balance of around \$500 million, equivalent to half a year's local gas tax subvention. Similarly, distribution of federal fuel taxes among cities, counties and regional agencies has resulted in a combined, unexpended balance in federal apportionments (i.e., CMAQ and RSPT) exceeding \$800 million. Moreover, the subdivision of the State Transportation Improvement Program (STIP) into Regional and Interregional components, and the further subdivision of the Regional component into 58 individual county shares has resulted in unprogrammed reservations and balances exceeding \$500 million. This fragmentation of funding carries inefficiencies that make the pooling of these dollars and their timely use more difficult to achieve. Moreover, they contribute to excessive cash balances, such as nearly \$2 billion in the State Highway Account at the end of 1999, compared to \$440 million, which Caltrans estimates it needs to manage that account. These high cash balances tend to mask the underlying need for increased levels of transportation investments.

**Innovative Financing (Section I-A-3)** - In recent years, federal and State legislation have authorized innovative financing mechanisms to advance funding and programming capacities from outer years to facilitate increases in transportation investments. Under federal law, there is the Federal Transportation Infrastructure Financing and Innovation Act (TIFIA) aimed at projects exceeding \$100 million with user charges or dedicated revenue streams for repayments. Also under federal law, California has been designated to establish the California Transportation Finance Bank, designed to leverage private sector investments in transportation. Short-term loans of less than four years from the State Highway Account, were authorized by AB 1012 (Torlakson, 1999). Longer-term loans against future federal apportionments known as highway grant anticipation notes or GARVEE bonds, were authorized by SB 928 (Burton, 1999). Lastly, STIP reform legislation, SB 45 (Kopp, 1997), allows Caltrans and counties with populations under one million to advance against their future STIP programming capacities, under certain circumstances. All of these devices are intended to expand the size of the funding pipeline for transportation investments.

**Public Transit Account Insolvency (Section I-A-4)** - The Public Transit Account is facing a fiscal crisis by FY 2001-02, with a cumulative shortfall of \$50 million projected by FY 2003-04, this despite a one-time \$91.5 million reimbursement from the State's General Fund. The Public Transit Account is the principal source of funding for the State Transit Assistance (STA) program, intercity passenger rail operations, and various transportation planning and administrative activities of Caltrans, the California Transportation Commission, the Institute of Transportation Studies, the High Speed Rail Authority and the Public Utilities Commission. Moreover, these funds can be used for certain capital projects, such as rail rolling stock, ineligible for State Highway Account funds, making them strategically important. The largest single cause of this insolvency is the rapid increase in funding required for intercity passenger rail operations, more than doubling from \$29 million in FY 1994-95 to \$63 million in FY 1999-00, and projected up to \$342 million by FY 2008-09. The second largest factor was the

statutory change (SB 45-Kopp, 1997) in how funds are divided among the STA program and other uses.

The 1999 Annual Report attempts a different and ambitious examination of **Program Delivery**, that is the means by which projects are readied for construction. While repeating the concern that laggardly delivery of projects contributes to excessive build-up in cash balances and masks the underlying need for increased investments in transportation, this year's Annual Report takes a closer look at the entire process that culminates in a project becoming operational and available for use by the general public. This review is offered as an explanation of why a transportation problem, when first identified by an elected official or a constituent, can often take a decade or longer to address. This review summarizes each of the following four phases, offering suggested reforms for each; it also offers, for those interested, a more detailed description of each phase:

**Planning and Programming (Section I-B-1)** - This phase of project delivery entails eight steps including preparation of: long range transportation plans; air quality conformity analyses of the plans; congestion management plans; individual project study reports; programs for regional and interregional transportation improvements and highway rehabilitation; the STIP; air quality conformity analyses of the programs; and lastly, a comprehensive federal transportation improvement program for all projects seeking federal funding. Plans and air quality analyses can require one to two years or more; and because these plans are funding constrained and long-term in nature, new projects likely must be identified at least ten years in advance. Project study reports, a prerequisite for a project being added to a specific program, require up to six months, but on occasion can take much longer. The programming process can take up to one year. The Annual Report identifies 13 areas of possible reform.

**Environmental (Section I-B-2)** - This phase of project delivery, following upon the programming of a project, entails seven steps including: notice of preparation; agency consultation and decisions about alternatives; environmental studies and preliminary engineering; draft environmental documents; agency and public review; final environmental document/project approval report; and notice of determination/opportunity for lawsuit. Projects with the most significant environmental impacts must go through all seven steps, with a full Environmental Impact Report (EIR) taking at least two years, sometimes three to five years, and as many as ten years for the most complex and complicated projects. Projects with few if any impacts require at least a few months, up to one or two years, for studies. Projects that must comply with both federal and State environmental processes will unquestionably take longer. The Annual Report identifies 13 areas of possible reform.

**Project Approval and Development (Section I-B-3)** - This phase of project delivery overlaps with the environmental project, resulting in project approval by Caltrans and, where required, by the Federal Highway Administration. Project engineering is divided between preliminary engineering (typically to 30% completion which can precede project approval) and detailed engineering. Detailed engineering entails seven steps, including: maps and site plans; project design/structures design/right of way engineering; right of way appraisals and acquisitions; project cost estimates; right of way certification; permits/local agreements/route adoptions/hazardous materials; and final plans, specifications and estimate and ready to list. Smaller projects typically require six to twelve months for project approval and development

while larger projects require eighteen to forty-eight months, even longer for corridor-type projects. The Annual Report identifies 4 areas of possible reform.

**Fund Allocation and Construction (Section I-B-4)** - This phase of project delivery is the final phase before a project is opened for public use. Project allocation follows the final engineer's estimate of construction costs, based on full and complete engineering plans and specifications. Advertisement/bids/bid opening ensures best possible price and value for dollars expended. Construction engineering/change orders ensures conformance with contracts, plans and specifications and accurate payments to contractors, as well as flexibility for needed changes during construction. Claims/contract acceptance/close-out allows for final claims for compensation, final inspections, project acceptance, and preparation of final expenditure reports and as-built plans. This phase can require six to twelve months for small projects, eighteen to twenty-four months for larger projects, and as much as two to three years or even longer for corridors and major interchanges. The Annual Report identifies 3 areas of possible reform.

\* \* \* \* \*

The Commission's **1999 Annual Report to the Legislature** identifies **ten other key issues for attention during 2000**. These include: the 2000 STIP Process; the July 2000 Deadline for Proposition 116 Funds; the implementation of the Federal Surface Transportation Act (TEA-21); Trade and Commerce Issues; California Transportation Planning Directions Statement; the State's Role in Transit; High Speed Intercity Passenger Rail; Native American Tribal Transportation Issues; Seismic Safety of the San Francisco-Bay Bridge; and Rural Transportation Issues. These ten issues are summarized below:

**Outlook for 2000 STIP (Section I-C)** - The 2000 STIP is scheduled for adoption in March 2000. Under SB 45 (Kopp, 1997), the STIP was redefined in length from seven years to four, with the 1998 STIP sized at a transitional six years. Therefore, the 2000 STIP (at four years in length) is co-terminous with the 1998 STIP, ending in FY 2003-04. Accordingly, there are no new years to be added to the 2000 STIP. However, there are two opportunities for added programming in the 2000 STIP: first, several dozen regional agencies retain unprogrammed reserves against their "county share" entitlements, totaling some \$500 million at the end of 1999; these can be programmed at any time, including the upcoming 2000 STIP; second, AB 1012 (Torlakson, 1999) authorizes additional programming in each STIP for project design work only, over and above the estimate of available funds, tied to 25% of the projection of funds in the two years immediately beyond the STIP's fourth year; for the 2000 STIP, that comes to \$375 million for environmental and engineering work, divided among regional agencies and Caltrans.

**July 2000 Deadline for Proposition 116 Rail Projects (Section I-D)** - Proposition 116, a \$2 billion initiative approved in 1990, set an interim deadline of July 1, 2000, after which the Legislature, by two-thirds vote, can redirect funds earmarked in the initiative for alternate passenger rail projects within the same jurisdiction. Of the \$1.99 billion authorized in Proposition 116, all but \$0.2 billion have been approved, leaving the following for application:

\$120 million - City of Irvine	\$ 16 million - Monterey County
\$ 17 million - Sonoma County	\$ 11 million - Marin County
\$ 11 million - Santa Cruz County	\$ 29 million - Caltrans (intercity rail)

Unless these funds can be applied for and allocated by July 2000, the Legislature can earmark their use within the same jurisdictions, consistent with the intent of Proposition 116.

**Pursuing TEA-21 Implementation (Section I-E)** - The most recent federal surface transportation reauthorization legislation, TEA-21, was passed in 1997. California's efforts to maximize its return of funding from TEA-21 have encountered mixed results, mainly in three areas: **use of regional and local apportionments; discretionary programs; and high priority/demonstration projects.** The use of federal funds subvented to cities, counties and regional agencies is lagged badly. These apportionments, principally CMAQ and RSTP funds, are only being used at around 50%, leaving the State to step-in and use up the Obligation Authority left unused by local agencies before it is lost to other states; in another year or two, that may not be avoided. As for discretionary funding, TEA-21 specifies 21 discretionary programs offering \$21.6 billion. While California has been successful in some programs, its return has been quite disappointing in others, including: National Corridors and Border Infrastructure; Transportation and Community Preservation Pilot; Bus Replacement; Clean Fuel Vehicles; and Access to Jobs/Reverse Commute. As for high priority/demonstration projects, California received \$877 million earmarked for 156 demonstration projects. California's use of these funds is lagging, in part because most projects are only partially funded, and also because demonstration funds are fragmented over the six years of TEA-21. In order to improve use of local apportionments and obligation authority, the Annual Report calls for stepped-up enforcement of "use it or lose it" provisions and streamlining of the federal approval process. In pursuit of a fair share return of discretionary funding and more flexible treatment of the highly-fragmented demonstration funds, the Annual Report recommends a focused effort toward these ends with the State Legislature, the Administration and California's Congressional delegation.

**Trade and Commerce (Section I-F)** - California's combined transportation systems move 800 million tons of freight, worth \$640 billion, annually. The Annual Report focuses on additional investment needs related to trade and commerce focusing on seaport and airport ground access improvements, including: the I-710 Long Beach Freeway corridor from the ports to State Route 60; truck-only facilities in the SCAG region; the Alameda Corridor East (San Gabriel Valley) and other grade separations throughout Orange, Riverside and San Bernardino Counties; ground access improvements to California's 11 commercial seaports; and ground access improvements to California's commercial and general aviation airports.

**California Transportation Planning Directions Statement (Section I-G)** - The FY 1999-00 Budget contained control language directing the Business, Transportation and Housing Agency, with the assistance of the California Transportation Commission, to develop a *California Transportation Planning Directions Statement* to provide strategic objectives, guidance, and coordination in the development of regional and interregional transportation plans and programs. At the end of 1999, such a statement was being drafted for review and adoption early in 2000.

**Role of the State in Transit (Section I-H)** - Since 1997, Caltrans has been examining the State's role in public transit, prompted by the policy decision to devolve transportation decision-making to the lowest suitable level of government, pursuant to STIP reform legislation, SB 45 (Kopp, 1997). The Commission reviewed that study late in 1999, concluding that many key issues related to the State's role in transit were not being examined. The Commission found that public transit will only grow in importance as California contends with an aging population, a growing "welfare to work" workforce, and increased mainstreaming and self-dependency of the disabled. The Annual Report identifies several additional key issues related to the State's role in transit that warrant attention in 2000.

**High-Speed and Very High-Speed Intercity Passenger Rail (Section I-I)** – Since the mid-1980's, California has studied how to improve its intercity passenger rail service, with specific focus since 1990 on developing high-speed service. The California High-Speed Rail Commission (1993) and its successor agency, the California High Speed Rail Authority (1997), concluded that high speed rail was feasible. The Authority concluded that a 200+ mile per hour train, operating between San Diego, Riverside, Los Angeles, Bakersfield, Merced-to-Sacramento, Merced-to-San Jose, and San Francisco would cost **\$30-35 billion (escalated)**. The Authority also concluded such service would generate revenue sufficient to pay for its operations without public subsidy. The Authority also identified \$3 billion of improvements to California's intercity rail system to allow for 100+ mile per hour service. Under its charter, the Authority will sunset by July 2001, unless a funding plan is approved by voters in November 2000; at the end of 1999, such action appeared unlikely. The California Transportation Commission has concluded that, absent extending the Authority's charter, the high-speed rail program could be brought under its aegis and that of the Business, Transportation and Housing Agency and Caltrans. The Commission also endorsed the option of up-grading current intercity rail service and cautions against proceeding with incremental expenditures for high-speed rail (e.g., right-of-way) without first deliberating on and concluding to proceed with such a system in its entirety.

**Native American Tribal Transportation Issues (Section I-J)** – In September 1999, the Commission conducted a special Workshop at the Morongo Indian Reservation in Cabazon, with representatives of Native American Tribal Governments, Caltrans, and Regional Transportation Agencies and Metropolitan Planning Organizations. The Workshop identified Native American transportation issues and discussed ways of improving Government-to-Government coordination of transportation planning and programming to better integrate land use policies and transportation needs of Tribal Governments into state and regional transportation planning. The Commission has taken specific actions as a result of the Workshop including: provisions added to the Regional Transportation Plan Guidelines relative to Tribal needs; a pledge to support transportation projects to better access Tribal lands; and correspondence to California's Congressional delegation and the Bureau of Indian Affairs, calling for a more equitable share of the federal Indian Reservation Roads Program (9.2%, rather than the 2.5% currently received). A second Workshop in Northern California will be held in January 2000.

**Solutions to Seismic Safety of the San Francisco-Oakland Bay Bridge (Section I-K)** – With the tenth anniversary of the Loma Prieta earthquake in October 1999, the Commission has joined with the Governor, the Metropolitan Transportation Commission and others to urge timely completion of the San Francisco-Oakland Bay Bridge replacement project on an alignment north of the existing span to assure seismic safety for that vital link. Other alternatives would only delay this objective and continue to expose drivers to the results of a seismic event and possibly the collapse of the bridge. The Annual Report reviews the positions of various federal, regional and local agencies on this issue and offers a chronology focusing on events in 1998 and 1999.

**Rural Transportation Issues (Section I-L)** - Rural counties face particular challenges. The shortfall of road maintenance funds and the backlog of deferred road maintenance is particularly acute in rural counties, with small populations, large road mileage, and very limited local funding capability. The Commission has allowed local road rehabilitation projects into the STIP, and sought streamlining of project delivery, especially for projects using federal funds. In addition, rural counties are in need of more planning funds.

# VOLUME I

## 2000 ISSUES

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# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **A. Funding Constraints on Transportation Investment**

- 1. Loss of Local Sales Tax Options**
- 2. Fragmentation of Funding**
- 3. Innovative Financing**
- 4. Public Transit Account Insolvency**



## I. 2000 ISSUES

### A. Funding Constraints on Transportation Investment

As the Twentieth Century draws to a close, California lacks a guiding vision for investment in its transportation infrastructure. After three decades of underinvestment, the state continues to live off the investments of past generations. Over this period, aging facilities have exceeded their design lives, while the population has grown twice as fast as roadway capacity and the volume of travel has grown almost three times as fast as population.

California's transportation revenues come mainly from fuel taxes, which over this time has been essentially a flat revenue base. Potential revenue growth resulting from increases in the number of vehicles and vehicle miles of travel has been canceled out by increases in vehicle fuel efficiency. Meanwhile, Caltrans' state operation costs have been increasing with inflation, gradually cutting into the amount available for capital programs. Within capital programs, the share needed for rehabilitation has increased steadily, leaving less and less for new and reconstructed facilities.

The present State Highway Account cash balance of almost \$2 billion belies this long-term underinvestment. As recently as 1996, the Commission was forced to ration STIP allocations. Projects programmed in the 1990 and 1992 STIPs were left without funding when ballot measures failed and funds were diverted to seismic retrofit work. For the 6 years between the 1992 and 1998 STIPs, no new STIP funding was added, most projects were rescheduled into later years awaiting available funds, and about \$500 million in projects were actually deleted. Caltrans' delivery resources were pared back to match anticipated capital funding. Then when a sudden and unanticipated infusion of new funding came along, there were not enough projects ready to put that funding to work right away. All of the funding was programmed, but it generally takes 4 to 7 years to bring major new projects to construction, so the money waits for project delivery to catch up. A major part of the new funding was from Proposition 192 (1996), a bond measure for seismic retrofit work that suddenly freed up \$1.35 billion that had been set aside in the State Highway Account for that purpose. Much of the remainder was due to an unanticipated increase in Federal programs under the 1997 Transportation Equity Act for the 21st Century (TEA-21). In May 1999, the California Transportation Commission issued its Inventory of Ten-Year Funding Needs for California's Transportation Systems, prepared in collaboration with Caltrans and the state's regional transportation planning agencies pursuant to SR 8 (Burton). The report presents a picture of needs far beyond anything the state could afford under current programs. It reflects a prolonged underinvestment in California's streets, roads, highways, and bus and rail transit systems. What is yet lacking is a Legislative consensus on a vision for California's transportation future and the fiscal means for achieving it.

The Commission has written extensively in previous Annual Reports to the Legislature on the issue of insufficient investment in transportation—most recently, last year's Report at the start of the current Legislative Session. This year's Report focuses primarily on four topics: renewal of the local sales tax measures provided for under current law, plus three topics that concern structural funding constraints and remedies. The latter are short-term measures focused on making more effective use of limited state funding; however, they are not a substitute for a long-term investment strategy.





## I. 2000 ISSUES

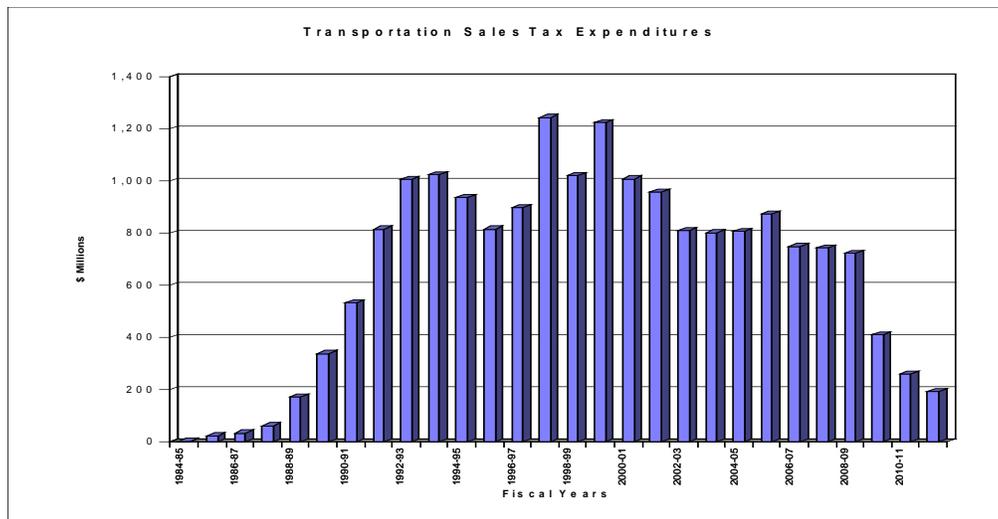
### A. Funding Constraints on Transportation Investment

#### 1. Loss of Local Sales Tax Options

Since the mid-1980's, the decline in the State's transportation investments has been offset in part by local transportation sales tax measures in 17 counties, which include over 80% of the state's population (Alameda, Contra Costa, Fresno, Imperial, Los Angeles, Madera, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Mateo, Santa Barbara, and Santa Clara). Without new legislation, however, revenues for all of these counties except Los Angeles—a level of funding roughly equal to the State Transportation Improvement Program—will soon be lost.

In 1984, the Legislature and Governor approved the Local Transportation Authority and Improvement Act, authorizing counties to enact local transportation sales tax measures for terms of up to 20 years, after a local majority vote. Under this law, the sales tax revenues are available not only for the construction of transportation improvements, but for local road maintenance and operations and for transit operations. By 1992, 16 counties had approved such limited-term measures, the first one a 10-year 1984 measure approved in Santa Clara County. Los Angeles County enacted its two transportation sales taxes, which do not “sunset” but remain in effect until repealed, under separate legislation applying only to Los Angeles.

The 16 limited-term county measures will fund about \$18.5 billion in expenditures over the 28-year period from 1984 to 2012. The annual distribution of these expenditures is displayed in the chart below. As the chart indicates, this funding source is currently at its peak and will decline rapidly over the next decade unless replacement measures are approved. Because most of the counties have dedicated some portion of their sales tax to transit operations and local road maintenance, this revenue loss means more than a cutback in capital investments. For many counties, it may create a transit operating crisis and a further scaling back in road maintenance.



The renewal of the Santa Clara County transportation sales tax, Measure A of 1992, was approved by 54% of the voters but was overturned in December 1995 by the California Supreme Court, in *Guardino v Santa Clara Local Transportation Authority*. The Court found that sales tax measures require a two-thirds voter approval under the provisions of Proposition 62, a statutory initiative that had been approved by voters in 1986 and then ruled unconstitutional by a lower court in 1988. The *Guardino* decision was not made retroactive, so the remaining sales tax programs were allowed to stand. However, the original San Benito measure expired in 1998, while a proposed renewal measure failed to receive the necessary two-thirds. All the remaining county sales taxes, except for Los Angeles County, sunset between 2001 and 2010 and will require a two-thirds voter approval for renewal. Of all the current measures, only the one in Riverside received a two-thirds approval. County transportation sales tax measures are now set to expire in Alameda in 2001; Madera and Santa Clara in 2005; Fresno and San Diego in 2007; Contra Costa, Riverside, Sacramento, and San Mateo in 2008; Imperial, San Bernardino, and Santa Barbara in 2009; and Orange, San Francisco, and San Joaquin in 2010.

Santa Clara County succeeded in enacting its replacement tax measure by placing a proposal before the voters in two linked parts at the November 1996 election, one part imposing a general tax and the other advising how the taxes should be spent, with each part requiring only majority approval. On the same ballot, statewide Proposition 218, a Constitutional initiative, expanded the two-thirds vote requirement to all special taxes. Although Santa Clara County Measures A & B were upheld by the courts, there may be additional legal issues to be tested if another county using the two measure approach gains approval from the voters. The two measure approach failed in both Marin and Sonoma Counties at the November 1998 election. Another concern with the two measure approach is that a County Board of Supervisors might legally ignore the advisory measure and spend the new general tax revenues on non-transportation purposes.

To resolve these problems and open the way to retaining local sales tax measures, the Commission has supported the approach proposed in SCA 3 (Burton, Karnette) in the current Legislative session. As last amended, September 1, 1999, SCA 3 would place before the voters a Constitutional amendment that would impose a 20-year ½-cent sales tax for transportation in any county that has adopted a transportation expenditure plan. In the 16 counties that currently have limited-term taxes, the new tax would take effect only when the existing tax is repealed or becomes inoperative. No new tax would be added in Los Angeles. This approach would not only continue the current use of local transportation sales tax measures, but would allow a greater use of this approach in the 41 other counties that, as a practical matter, have never had access to this funding.

If county transportation sales taxes cannot be restored as a viable way to fund transportation improvements on a broad scale in California, either the state fuel tax must be increased significantly (perhaps seven to ten cents a gallon) to replace this funding source, or the level of transportation investment in the state must drop dramatically.

## I. 2000 ISSUES

### A. Funding Constraints on Transportation Investment

#### 2. Fragmentation of Funding

The fragmentation of funding by geographic area acts as a serious constraint on California's ability to make full and timely use of State and Federal transportation funds. It has contributed to the accumulation of large cash balances in the State Highway Account, even while pressing transportation needs go unmet for lack of funding. Funding fragmentation has even threatened the State with the loss of Federal funds. Fragmentation is a concern both for the regional program of the State Transportation Improvement Program (STIP) and for the two major State-administered Federal local assistance programs, the Regional Surface Transportation Program (RSTP) and the Congestion Mitigation and Air Quality (CMAQ) Program.

Under State law, the funds for each of these programs are fragmented into many individual pots of money, with each pot controlled by a separate agency and limited to projects within a specific geographic area. The State law implementing each program was intended to provide greater regional control and responsibility for project decision-making. However, each law used a fixed formula that essentially guaranteed that funds would be available for each area on demand, indefinitely, regardless of need and regardless of project delivery. This situation has led to the accumulation of unspent balances for at least three reasons:

- The agency managing each separate pot of money finds a need to hold back some funding in reserve, either to save for future projects or as a contingency against unforeseen circumstances. The greater the number of separate pots, the more funding is placed in reserves overall.
- The fixed formulas do not match either need or project delivery. While some agencies make full use of available funds, others let much of it accumulate for lack of need, lack of decision-making, or lack of project delivery.
- The unlimited guarantees in State law have encouraged some agencies to use other funding sources first and to let these funds accumulate. In particular, local agencies sometimes make Federal funds (including RSTP, CMAQ, and most STIP funds) their last choice, due to the extra burdens and delays, real or perceived, that come with meeting Federal funding procedures and requirements.

It should be noted that the programming of the STIP is further complicated by another type of fragmentation, the division of project programming into 4 separate components: (1) environmental and permits, (2) plans, specifications, and estimates, (3) right-of-way, and (4) construction. For Caltrans projects, the latter two components must be further subdivided between support costs and capital outlay. While this type of fragmentation adds complexity to the process, it does not act as a constraint on the full programming and use of STIP funds. It may, in fact, help promote the full use of funds by assuring that funds are not prematurely programmed for components that cannot be delivered within the STIP period.

### **Sources of Fragmentation**

The current fragmentation of the STIP is a byproduct of the STIP reforms enacted in SB 45 (1997). SB 45 provided greater flexibility in funding by consolidating half a dozen categorical projects into just two: The STIP and the SHOPP; the STIP was transformed into just 2 program elements: The Regional Program made up of 58 individual county shares and a Statewide\_Interegional component. Prior to SB 45, the STIP structure severely restricted Caltrans and the Commission from pursuing a program to meet interregional transportation needs, especially in northern California. Under the old law, each county was guaranteed a minimum share of funding, provided that eligible projects were identified, but there were no fixed county shares. Within the constraints of the north/south split, the Commission determined the extent to which programming would exceed individual county minimums.

While SB 45 dedicated 25% of STIP funds to a much more flexible interregional program, the other 75% was dedicated to a regional program with 59 separate fixed county shares (one for each of the 58 counties, plus one for the Tahoe region). Under SB 45, this formula has provided about \$1 billion per year for the STIP regional program.

The fragmentation of the federal RSTP and CMAQ programs (which fall outside the STIP) came about through SB 1435 (1992), which was first enacted to implement two new Federal programs created under the Intermodal Surface Transportation and Efficiency Act of 1991 (ISTEA). Together, the two programs now channel about \$600 million in Federal funds each year to regions for programming outside the STIP.

The funds in the RSTP program come to the state with some Federal geographic restrictions. Those restrictions, however, are quite broad. The Federal law divides the funds into 12 parts by population, one part for each of the California's 11 major urbanized areas and one part for all of the remainder of the state. SB 1435 fragmented these funds much further, dividing them into 53 separate apportionments by population.

The funds in the CMAQ program come to the state with no geographic restrictions, except that the funds must be used on projects within qualifying air quality non-attainment or maintenance areas (areas covering 95% of the state's population). The Federal law does use a formula to distribute CMAQ funds among the states, a formula based on weighted population of non-attainment and maintenance areas, with weighting factors based on the severity of air pollution in each area. SB 1435 took this formula and applied it to divide the CMAQ program into 26 separate apportionments, one for each regional agency within each qualifying air quality area.

It is hardly incidental that the programs of SB 1435 replaced, and were partly modeled after, the older and smaller Federal Aid Urban (FAU) and Federal Aid Secondary (FAS) programs. Earlier State law had made these pre-ISTEA programs even more fragmented, passing through about \$100 million per year to individual cities and counties. FAU distribution was based on urban population, while FAS distribution was based in equal shares on population, land area, and the mileage of rural delivery and intercity mail routes. Because many cities and counties had come to rely on FAU and FAS funding for

local road development and rehabilitation, SB 1435 included a requirement that each region guarantee to each city and county a share of its RSTP at least equal to the amount the city or county received in FAU and FAS funds in 1991. For several rural counties, the amount of this guarantee was greater than the county's population share under the new RSTP program. SB 1435 made up the difference with State funds.

All of this fragmentation in State law is compounded by further fragmentation that takes place at the local level. Many regions have agreed to further subdivide their STIP county shares and RSTP/CMAQ apportionments among cities and counties by local formula.

### **Effects of Fragmentation**

Prior to the enactment of SB 45, the California Transportation Commission fully programmed all available resources for each STIP. Since SB 45, the Commission has not been able to do so. At the end of December 1999, a total of \$615 million in STIP county shares remained unprogrammed. Against this, the Commission had programmed advances of \$50 million to county shares and \$59 million to the interregional program, leaving a net unprogrammed STIP balance of \$506 million.

Under the RSTP and CMAQ programs, the state has set aside Federal apportionments and obligational authority (OA) for regional programming and obligation. All Federal transportation funds come to the state through program apportionments that are available to obligate to projects for four fiscal years (three years beyond the year of apportionment). The apportionments are program specific (e.g., STP, CMAQ, National Highway System, Interstate Maintenance, etc.). Then, each year, the Federal Government assigns the state a specific level of OA, which is not program specific and is available to draw down any available Federal program apportionments. The level of OA has generally been about 90-95% of total annual apportionments. Any OA that a state does not obligate within the fiscal year is lost and redistributed to other states.

At the end of the 1998-99 Federal fiscal year, September 30, 1999, the RSTP and CMAQ programs had a total unobligated balance of over \$800 million, which is roughly a year and a half of apportionments. Over the last two fiscal years, regional and local agencies have obligated only about 40% of the \$600 million per year in OA made available to them. Each year so far, California has avoided losing OA only because Caltrans has been able to come in before the end of the Federal fiscal year and reassign OA to Caltrans STIP and SHOPP projects. To date, this action has been treated as a "borrowing" of OA, with regions receiving full "repayment" in the following year. By replacing State funds with Federal funds, this action has also contributed to the growth in the State Highway Account balance.

At the end of Federal fiscal year 1998-99, Caltrans was nearly forced also to "borrow" apportionment in the CMAQ program in order to avoid a lapsing of funds.

## **Remedies**

To a limited extent, the Commission can alleviate the constraints of STIP fragmentation by making advances of county and interregional shares, in effect borrowing shares from counties that are not using theirs and loaning them to other counties or to the interregional program. In the 6-year 1998 STIP, the Commission was somewhat constrained in making advances by its pledge to the regions to keep unprogrammed balances available for programming in the 4-year 2000 STIP. Even so, when the Commission approved the 1998 STIP Augmentation in March 1999, it approved advances of \$52 million to county shares and \$98 million to the interregional program.

In the 2000 STIP, the Commission could be more aggressive in approving advances, since there will not be the same need to reserve unprogrammed capacity, with the 2002 STIP and new program capacity only two years away. The Commission will still be constrained, however, by the current law's limits on advances. The 18 counties in regions over 1 million population (counties which represent about 80% of the state's population) are not eligible for county share advances at all. For the 40 eligible counties, county share advances are limited to the amount needed to advance a single project.

The new State Highway Account loan program enacted by AB 1012 (Torlakson, 1999) will provide a useful new tool for investing State Highway Account balances. The AB 1012 loan program mandates that available balances be identified and loaned to qualified local government applicants for transportation projects on a first-come first-served basis. However, the loan program does not address the program fragmentation that causes STIP funds to go unused in the first place.

AB 1012 also adds a timely use of funds mandate, for the first time, to the RSTP and CMAQ programs. County-level apportionments will now be available for three years only, one year less than the period the Federal apportionments are available to the state. If a region fails to obligate an apportionment within three fiscal years, it will lose the apportionment and the Commission will be authorized to redirect the Federal funds to other purposes, presumably to the funding of STIP or SHOPP projects. While the new timely use of funds requirement should have a modest effect in holding down the accumulation of apportionment balances, a three-year window is still a large one. This new measure will assure that apportionment is not lost, but it does not address the problem of using annual OA. Fragmentation and the problems of unused balances remain.

Further remedies to the problem of fragmentation and the accumulation of fund balances will require Legislative action. The following are among possible measures that deserve consideration:

- **In the STIP, remove or modify the limits on county share advances.** Current law imposes three limits: (1) The Commission may not approve any advance to a county in a region over 1 million population. This precludes advances in counties with 80% of the state's population. (2) An advance is restricted to the amount necessary to fund a single project. In most cases, this severely limits the amount of advance in any county. (3) An advance may not exceed 200% of a county's current county share. In practice, this limit has been superseded by the restriction to a single project; the 200% limit far exceeds any advance ever proposed. To allow the Commission to

program all funds, the law could be modified to permit advances to all counties, or at least to more counties, not just those with populations under 1 million. It could also be modified to remove the limitation to a single project, permitting advances up to a percentage of the current county share.

- **In the STIP, enlarge the Interregional Program.** Current law establishes an interregional program with 25% of STIP funds. Unlike the 75% Regional Program, this portion is not subject to county shares. Under current law, the Commission has advanced additional funding to the Interregional Program with balances left unused by the Regional Program. While this is effective in the short run, legislation increasing the percentage permanently assigned to the Interregional Program could provide greater long range stability while assuring that funds are put to use more effectively.
- **In the Local Assistance programs, permit advances of regional apportionments.** This could work like advances of county shares in the STIP. One risk in this option is that the Federal programs could be eliminated or changed before advancements are repaid. Still, such advancements could be made consistent with Federal law and provide more timely use of funds. The risks could be minimized by limiting their size or by combining this option with a tightened timely use of funds rule.
- **In the Local Assistance programs, tighten the “timely use of funds” rule.** The new 3-year rule in AB 1012 should eliminate the danger of losing Federal apportionments. However, it is probably not tight enough to have much effect on increasing annual use of OA and reducing unused balances—at least not in the short-run. Tightening the time limit to two years, particularly for the CMAQ program, would be much more likely to assure fuller and more timely use of these funds.
- **In the RSTP program, remove the FAU/FAS minimum guarantee.** As noted above, this is a carryover from Federal programs that ceased to exist in 1991. Because of the long-standing reliance of cities and counties on this guarantee for local road work and because of the pressing need for local road rehabilitation funding in the state, this option should be implemented only in conjunction with increased funding made available for local streets and road work through local subventions or a new funding source.
- **In the STIP, modify the county share formula to better match program needs.** When SB 45 created county shares in 1997, it continued the old distribution formula for county minimums that dates back several decades. The formula first distributes 60% to the 13 counties in the south group and 40% to the 45 counties in the north group. Then, within each group, funds are distributed between the counties, 75% on the basis of population and 25% on the basis of State highway mileage. Originally, the formula applied to all projects in the STIP, which originally included only State highway projects and included bridge and roadway rehabilitation projects. Since that time, there have been major changes in the types of projects that are subject to the formula. All State highway rehabilitation work is now funded from the SHOPP, which is not subject to county shares. Improvements to meet interregional travel needs may now be funded from the interregional program, which also is not subject to county shares. The STIP has been opened up to local road and transit projects, but needs for these projects are not reflected by the old formula.

The simplest modification would be to remove the north/south split from the STIP county share distribution. The population/mileage formula provides a means of redistribution from urban to rural

areas, and the Commission would not propose to change that. However, the north/south split means that there are actually two separate and unequal redistributions. In all the North counties, there are 139 people to support every mile of State highway, while in the South, there are 2,668 people for every mile. An example of the resulting inequity is the relative treatment of Mono and Siskiyou counties. Siskiyou County has more State highway mileage than Mono (350 versus 315) and well over 4 times the population (43,531 versus 9,956). Yet Mono County receives a 30% larger county share than Siskiyou, solely because it is located in the South. Applying the county share formula without the north/south split would mean that all urban counties would support all rural counties equally, presumably resulting in a closer match to program needs and a more effective use of STIP funds.

Consideration of change in the basic population/mileage formula may also be in order. With the restructuring of the STIP over the past decade, using State highway mileage in the STIP formula may no longer be the most appropriate and effective means of providing the needed redistribution of transportation funding from urban to rural areas. Today, a large share of STIP funding in rural counties is being dedicated to local road rehabilitation work. Because of the special needs of rural areas, including areas experiencing increasing urbanization, any change in the basic STIP population/mileage formula should be considered in conjunction with a re-examination of the structures, funding levels, and distribution mechanisms of other state transportation programs, including state subventions and programs from new funding sources.



## I. 2000 ISSUES

### A. Funding Constraints on Transportation Investment

#### 3. Innovative Financing

Before 1991, transportation funding in California was quite conservative and inflexible. Federal highway funds, the majority of funds available for capital improvements, were assigned to projects and reimbursed, after the fact, against state or local outlays for construction, with the entire federal sum obligated (reserved) up front when a project was started. Opportunities for innovative funding techniques were very limited and in some cases precluded for advancements, loans, bonding, incurring debt costs, toll financing and private sector partnering.

By contrast, the 1991 federal surface transportation program, ISTEA, actually encouraged innovative funding techniques, including revolving account loans, infrastructure banks, eligibility to use federal funds for debt service costs, and federal grant anticipation notes. Passage of the 1998 federal surface transportation reauthorization, TEA-21, built upon the innovative financing initiatives begun under ISTEA to allow even greater leveraging of federal resources as a complement to traditional federal-aid grants.

State legislation approved in 1999 further expanded the financing programs available to the Commission and Caltrans:

1. **SB 928 (Burton, Chapter 862, Statutes of 1999)** authorizes the Commission and Caltrans to take advantage of the federal grant anticipation notes (GARVEE Bond) provision in TEA-21.
2. **AB 1012 (Torlakson, Chapter 783, Statutes of 1999)** authorizes a program for short-term loans of cash in the State Highway Account (SHA) to transportation projects ready for construction.

The following transportation financing mechanisms are now available for projects in California:

1. Federal Transportation Infrastructure Financing and Innovation Act (TIFIA).
2. California Transportation Finance Bank;
3. Short term loans from the State Highway Account cash balance authorized by AB 1012;
4. Federal highway grant anticipation notes authorized by SB 928;
5. Advancements against future STIP county shares.

The decision making process for TIFIA is federal; however, the Commission can play a supportive role for California projects in this program. The Commission has a central role in defining the processes for implementing the last three programs listed above. The immediate challenge is to establish procedures

and program guidelines, which together, define a coordinated process for implementing this set of complementary financing tools.

**Transportation Infrastructure Finance and Innovation Act (TIFIA)**

Through the Transportation Infrastructure Finance and Innovation Act (TIFIA), the U.S. Department of Transportation (USDOT) can provide credit assistance on flexible terms directly to public-private sponsors of major surface transportation projects to assist them in gaining access to capital markets. TIFIA provides a total of \$530 million of contract authority through FY2003, to fund up to \$10.6 billion in direct loans, loan guarantees, and lines of credit to support up to 33 percent of project costs. Eligible projects include highway and capital transit projects, international bridges and tunnels, intercity passenger bus and rail projects (including Amtrak and MAGLEV systems) and publicly-owned intermodal freight transfer facilities on or adjacent to the National Highway System (NHS). Projects must exceed \$100 million or 50 percent of a State’s annual apportionment and be supported by user charges or other dedicated revenue streams. Projects are selected by the USDOT Secretary based on national significance, credit-worthiness, and private participation.

In the first cycle of TIFIA financing in 1999, USDOT received 14 letters of interest nationwide, 7 of which were invited to submit formal applications. USDOT awarded financial assistance to 5 of the 7 applicants, including one project in California. California Transportation Ventures (CTV) received \$127 million in credit enhancements for the State Route 125 Toll Road project in San Diego County. The 10-mile \$411 million project is being funded entirely with private sector capital. Applications for the next cycle of TIFIA financing are due by April 1, 2000. The 5 projects receiving financial assistance in the 1999 TIFIA cycle are:

<u>Project (Total Cost)</u>	<u>Applicant</u>	<u>Award</u>
California State Route 125 Toll Road (\$411 million)	California Transportation Ventures	\$ 90 million loan guarantee \$ 37 million line of credit
Miami Intermodal Center (\$1,350 million)	Florida Department of Transportation	\$436 million direct loans
New York City Farley Building/New Penn Station (\$749 million)	Pennsylvania Station Redevelopment Corporation	\$140 million direct loan \$ 20 million line of credit
Washington, D.C. Metro Capital Improvements (\$2,324 million)	Washington Metropolitan Area Transit Authority	\$600 million loan guarantee
San Juan, Puerto Rico Tren Urbano Transit Project (\$1,653 million)	Puerto Rico Highway and Transportation Authority	\$300 million direct loan

### **California Transportation Finance Bank (TFB)**

During 1996, the federal Department of Transportation designated ten States to participate in a State Transportation Infrastructure Bank Pilot Program. California was selected to participate in this program in 1996 and the federal budget act for FY 1996-97, appropriated \$150 million to help capitalize State Infrastructure Banks, of which California has been allocated \$3 million.

The Commission, Caltrans and the California Economic Development Financing Authority (CEDFA) in the Trade and Commerce Agency have executed a Memorandum of Agreement (MOA) establishing the framework for the Transportation Finance Bank (TFB). TFB Guidelines, which provide prospective applicants with an overview of the TFB structure and operations, project application information, services offered, and fees charged were adopted by the Commission in July 8, 1997. The TFB was designed to leverage private sector investments in transportation infrastructure projects to augment public transportation funding, particularly for projects with significant economic development impacts.

The State has not capitalized the TFB beyond the \$3 million of federal funds provided in 1997. Caltrans will present a report on the status of the TFB and the options for using the \$3 million at the March 2000 Commission meeting.

### **Loans from the State Highway Account Cash Balance Authorized by AB 1012**

AB 1012 (Torlakson, Chapter 783, Statutes of 1999) states that it is the intent of the Legislature to expedite the use of the excessively large cash balance in the State Highway Account (SHA) and to put taxpayer funds to work at the earliest possible time on needed transportation improvements. In order to put cash in the SHA to work while waiting for programmed projects to be readied for construction, AB 1012 authorized the Commission to advance unallocated funds in the SHA, in the form of loans, to agencies with projects ready for construction.

As 1999 was drawing to a close, the cash balance in the SHA approached \$2 billion. That very high cash balance provides the capacity to lend money to projects outside the STIP without the risk of imposing funding delays on STIP projects. This is a short-term loan program in which loans must be repaid within four years from the date the loan is made. AB 1012 defines the following criteria for project eligibility:

1. **CEQA Compliance** - Projects shall comply with environmental assessment certification requirements of the California Environmental Quality Act, and have prepared an appropriate environmental assessment document pursuant to that act.
2. **Minimum Cost of Project** - Total project costs shall be greater than \$10 million. In counties with populations under 500,000, the Commission may waive this requirement if 50 percent of a county's share for the current county share period is equal to or greater than the amount to be loaned.
3. **Credit-Worthiness** - A fiscal assessment of the applicant's ability to repay a loan must be made by an independent fiscal consultant selected by the applicant from a pre-qualified list of

fiscal consultants approved jointly by Caltrans and the Commission. Caltrans shall make a recommendation to the Commission based on the analysis conducted by the independent fiscal consultant regarding each specific loan. Costs incurred for this assessment shall be paid by the applicant.

4. **Maximum Amount of Loan** - The maximum amount of funds that may be loaned to any single county in any single loan for one or more projects shall be not more than 50 percent of a county's share for the current county share period in an amount of not more than \$100 million.
5. **Source of Loan Repayment** - Loan repayments shall be made in cash from non-state sources.
6. **Repayment in Case of Default** - If a default occurs, 100 percent repayment of the principal and interest, plus a penalty charge of 5 percent of the outstanding principal, shall be required in the form of a reduction in the county's next allocation of county share funding, and if necessary, from subsequent allocations until the outstanding amount is paid in full. Additionally, the defaulting county shall be ineligible for regional choice fund programming until the outstanding amount is paid in full.
7. **Interest Rate of Loan** - Interest rates on loans shall be set at the rate paid on money in the Pooled Money Investment Account during the period of time that the money is loaned.
8. **Timely Action on Loan Applications** - The Commission shall approve or disapprove all loan applications not more than 30 days after the application is submitted.
9. **Timely Loan Transfer** - When approved by the Commission, the money for the loan shall be transmitted by Caltrans directly to the applicant not later than 30 days after approval.
10. **Cumulative Maximum of Outstanding Loans** - The total amount of outstanding loans approved under this program may not exceed \$500 million at any one time.
11. **Repayments to State Highway Account** - All payments on the principal of any loan plus interest or penalties paid shall be deposited in the State Highway Account.
12. **Timely Construction Following Loan Transfer** - Caltrans shall require in writing that projects funded under this section be under construction not later than six months after the date the loan funds are transmitted. If the project is not under construction on or before the date set by Caltrans, the loan shall be paid back, with interest, not later than 10 days after Caltrans notifies the recipient that repayment is due.
13. **Commencement of the Loan Program** - The loan program created under AB 1012 shall automatically commence on a first-come, first-served basis whenever the State Highway Account cash balance exceeds \$400 million and shall be suspended whenever the Commission determines that moneys in the State Highway Account will reach a cash balance of less than \$400 million. The Commission may terminate the program any time it deems termination to be the most prudent course of action.
14. **Report on Availability of Funds for Loans** - For purposes of informing potential loan applicants of the availability of funds to be loaned, the Commission shall adopt, on January 15 and July 15 of each year, projections regarding the availability of funds to be loaned and the

period of time during which funds will be available. Caltrans shall report to the Commission prior to each projection regarding the cash-flow needs of the STIP for the following six months.

15. **Certification of no Arbitrage** - Prior to loan approval, local agencies shall certify that other resources are not available to fund the project for which the loan is requested and that the agency does not intend to create an indirect arbitrage situation.
16. **Draft Guidelines and Procedures** - Not later than 120 days from the effective date of the act (**January 27, 2000**), the Commission, in consultation with the department and interested parties, shall propose guidelines and procedures to implement and expedite the loan program established under this section.
17. **Adoption of Guidelines and Procedures** - Not later than 180 days from the effective date of the act (**March 31, 2000**), the Commission, after a public hearing, shall adopt a uniform loan agreement package, including guidelines and implementation procedures, and shall begin operation of the loan program. The uniform loan agreement package shall describe loan repayment options, and all other terms and conditions necessary to protect the public interest as well as expedite the availability of funds for needed transportation improvements in the state. The Commission shall make available to all interested parties the loan agreement associated with every specific loan made under this section for a period of 30 days prior to approval of those loans by the Commission.
18. **Report to Governor and Legislature** - The Commission shall recommend to the Governor and the Legislature any suggested changes in the dollar limits and any proposed solutions to any other issues relating to the program's impact on expediting delivery of transportation projects.

### **Federal Highway Grant Anticipation Note Financing Program**

SB 928 (Burton, Chapter 862, Statutes of 1999) authorizes the Commission, in cooperation with the State Treasurer, Caltrans and regional transportation planning agencies, to issue federal highway grant anticipation notes (GARVEE bonds) to accelerate funding for eligible transportation projects, and to establish guidelines for project eligibility and the implementation of GARVEE bond financing allocations. This program allows a region or Caltrans to access future federal funds to finance a transportation project with a cost well beyond funds currently available in one or two STIP cycles. Another benefit of GARVEE bonds is the ability to indirectly finance projects without being subject to the federal project approval process, which can delay a project by one to four years.

The statutory requirements of the program include:

1. **Project Selection and Eligibility** - The Commission may select and designate eligible projects to be funded from the proceeds of notes, if financing of the project from the proceeds of notes has been approved by the Federal Highway Administration and the regional transportation planning agency, and the project has completed environmental clearance and project design.

2. **Annual Determination of Bonding Capacity** - On or before April 1 of each year, the Commission, in conjunction with the Treasurer's Office, shall prepare an annual analysis of the bonding capacity of federal transportation funds deposited in the State Highway Account.
3. **Eligibility Guidelines** - The Commission, in cooperation with Caltrans and regional transportation planning agencies, shall establish guidelines for eligibility for funding allocations under this program. The guidelines shall be nondiscriminatory and shall be designed to allow as many counties as possible to establish eligibility for funding allocations under this program, regardless of population or geographic location.
4. **Limitation on Note Issuance** - The Treasurer may not authorize the issuance of notes if the annual repayment obligations of all outstanding notes in any fiscal year would exceed 30 percent of the total amount of federal transportation funds deposited in the State Highway Account for any consecutive 12-month period within the preceding 24 months, approximately \$600 million.
5. **Charges Against County Shares** - All funds allocated to a project under this program, including cost overruns and financing costs, shall be counted against the STIP county share for the county in which the project is located.
6. **Pledging Future Federal Funds** - In order to provide security for repayment of the notes, the Commission shall adopt a resolution dedicating and pledging any future receipts of federal transportation funds received by the state to the payment of principal of, and interest and premium on the notes, for as long as any notes remain outstanding.
7. **Assessing Notes vs. Other Mechanisms** - Before notes are issued, the Commission, in cooperation with Caltrans, shall consider and determine the appropriateness of the mechanism authorized by this program in comparison to other funding mechanisms, including, but not limited to, pay-as-you-go, federal advance construction, federal incremental advance construction, or other funding methods authorized under federal law to achieve maximum efficiency from the state's federal allocation of transportation funds.
8. **Requesting Issuance of Notes** - Upon taking the actions authorized under this program, the Commission may request the Treasurer to issue notes to provide funds for the eligible projects.
9. **Annual Report** - On or before April 1 of each year, the Commission shall prepare and submit an annual report regarding the preceding calendar year to the Governor and the Legislature. Each report shall compile and detail the total amount of outstanding debt issued pursuant to this chapter and the projects funded by that outstanding debt.

### **State Transportation Improvement Program (STIP) County Share Advance**

STIP Advances are a way to increase current funding capacity in a given county without the interest costs of a loan; however, such advances are only available to regions with a population under one million. Therefore, the AB 1012 Loan Program is especially important to large regions. Counties that qualify for a STIP Advance may advance funds for one project costing up to 200% of the county's current STIP County Share. The advance would be repaid by counting against the county's future STIP County Share.

**Summary**

The provisions of the five transportation financing programs discussed above are summarized in the table below. Most importantly, an office for coordinating all of these transportation financing programs must be immediately established and professionally staffed within Caltrans or the Business, Transportation and Housing Agency.

**INNOVATIVE FINANCING PROGRAMS FOR TRANSPORTATION PROJECTS**

<b>PROGRAM</b>	<b>PURPOSE</b>	<b>FUNDING LEVEL</b>	<b>REPAYMENT</b>	<b>INTEREST</b>
<b>TRANSPORTATION FINANCE BANK</b>  (CTC Approval, Federal Funds)	Provide loans, credit enhancements, and loan guarantees to leverage private sector investment in revenue generating projects.	\$3 million of federal funds, and a state commitment to use future federal funds to pay debt service in case of default on a loan guarantee.	Repayment of expenditures by the TFB from a dedicated project revenue source identified in financing agreement.	Market rates or below.
<b>AB 1012 SHORT TERM LOANS</b>  (CTC Approval, State Cash)	Short term financing (4 years or less) of projects in regional transportation plans. Projects of \$10 million or more, or up to 50% of STIP County Share in counties under 500,000 population.	Up to \$500 million of outstanding loans at any one time. (Loans may not be made unless the cash balance in the SHA is above \$400 million.)	Loan repayments shall be made in cash from non-state revenue sources.	Pooled Money Investment Account (PMI) interest rate.
<b>GARVEE BONDS LONG TERM</b>  (CTC Approval, Federal Funds)	Advance project construction by accessing future federal funds.	\$597 million a year. (30% of federal OA, redistribution and minimum guaranty funds in 1999.)	Counted against future STIP County Share or STIP Interregional Share.	Market rate. Bonds issued by State Treasurer.
<b>TIFIA LONG TERM FINANCING</b>  (Federal approval, Federal Funds)	Federal loans, credit enhancements, and loan guarantees for large projects (over \$100 million for highway or rail projects, Intelligent Transportation System projects over \$30 million.)	Authorization level \$1.2 billion (1998) to \$2.3 billion (2003).	Project revenues or a revenue stream dedicated to the project.	Equal to or greater than US Treasury securities.
<b>STIP ADVANCE</b>  (CTC Approval)	Access to future STIP cycle County Share funds for one project.	Up to 200% of current STIP County Share only in a regions with a population under 1 million.	Counted against future STIP County Share.	None





## I. 2000 ISSUES

### A. Funding Constraints on Transportation Investment

#### 4. Public Transportation Account Insolvency

##### Overview

The Public Transportation Account (PTA Account) is the principal source of funding for the State Transit Assistance Program, intercity passenger rail operations, and various transportation planning and administrative activities of Caltrans, the California Transportation Commission, the Institute of Transportation Studies, the High Speed Rail Authority, and the Public Utilities Commission. Furthermore, PTA Account funds can be used for capital projects that are ineligible for State Highway Account funds, such as rail rolling stock. Yet, despite the pivotal importance of the PTA Account, it is facing a shortfall of some \$50 million over the next four years, for one classic reason: demands on the PTA Account are outstripping the revenue that flows into the account, and the shortfall between demand and revenue will only intensify, unless remedial actions are taken.

##### Background

In 1997, the PTA Account was established by SB 45 as successor to the old Transportation Planning and Development (TP&D) Account. Before then, in 1990, the TP&D Account had been established, by Proposition 116, as a trust fund for transportation planning and mass transportation purposes. Revenues going into the PTA Account are derived from sales taxes on gasoline and diesel fuels. Fifty percent of these revenues are appropriated annually to the State Controller for allocation to local transportation planning agencies, commissions, or boards under the State Transit Assistance (STA) Program to fund primarily local transit operations. The remaining funds are appropriated for the following administrative, capital and operating purposes:

- intercity passenger rail and feeder bus services,
- transit capital improvement projects,
- planning activities not payable from the State Highway Account (SHA),
- Caltrans' mass transportation administrative activities,
- regional transportation planning,
- University of California's Institute of Transportation Studies for training & research,
- California Transportation Commission's activities not payable from the SHA,
- California Public Utilities Commission's (PUC) passenger rail safety responsibilities, and
- California High Speed Rail Authority's annual budget.

## **Transit Capital Improvement Changes Resulting from Senate Bill 45**

**Pre-SB 45 TCI Process** - Prior to SB 45, Caltrans determined the fund level available for the annual Transit Capital Improvement (TCI) Program, funded with TP&D Account funds. Local agencies then offered TCI Program nominations through their regional agency. Caltrans reviewed the proposed TCI projects and submitted their recommended priority listing of projects to the Commission. The Commission typically held a public hearing on the TCI Program in March. Commission staff then prepared a revised priority list based both on Caltrans' recommendations and comments received at the public hearing. Typically, the final TCI listing was adopted in April, reflecting the proposed Budget Act, and was then transmitted to the Legislature. In July, or later, the list was revised one more time consistent with the adopted Budget Act.

**New TCI Process** – Starting in 1998, SB 45 eliminated a separate TCI Program. TCI-type projects were now to be nominated as part of the biennial STIP process, through the STIP's Interregional and Regional Program components. Unlike before, with a separate TCI Program, TCI-type projects must compete with all other projects for available STIP funding. However, as noted above, no new PTA Account funds were projected as available for new commitments in the 1998 STIP, the 1998 STIP Augmentation or the 2000 STIP.

### **Projected Shortfall for the PTA Account**

In January 1998, the Commission adopted a six-year Fund Estimate for the 1998 State Transportation Improvement Program (STIP) that projected a \$37 million shortfall in the PTA Account through FY 2003-04. In January 1999, the updated Fund Estimate for the 1998 STIP showed an increase in SHA funds, but a continuing shortfall in PTA Account funds of \$12 million, despite repayment of a \$91.5 million loan to the General Fund and a shift in funding for eligible TCI Program projects from PTA Account funds to SHA funds. In August 1999, the Fund Estimate for the 2000 STIP projected continuing deterioration in the PTA Account, with a projected \$50 million deficit for the four-year period ending in FY 2003-04. This deficit is projected to commence in FY 2001-02 on an annualized basis (\$5.5 million), mitigated by available cash balances that are depleted by FY 2003-04.

As a result of these continuing shortfall projections in the PTA Account, no new programming with PTA Account funds was possible in the 1998 STIP, the 1998 STIP Augmentation, or the up-coming 2000 STIP. The shortfalls are primarily due to the following:

- a change in formula for setting the annual funding level for the STA Program (now 50% of total PTA Account revenues rather than 50% of the net revenues remaining after deducting for intercity rail operations, planning and administration, and support costs);
- decreased revenue estimates by Department of Finance for sales tax on gas and diesel fuel, resulting in lower revenue estimates for the 2000 STIP Fund Estimate;
- increases in Intercity Passenger Rail operational costs;
- contribution of up to \$130 million in PTA Account funds to Toll Bridge Seismic Retrofit, with some \$40 million of that amount needed between FY 2000-01 and FY 2003-04.

Intercity rail operating costs have increased significantly over the recent past as a result of: 1) Amtrak increasing the costs charged to the States, and 2) increases in service levels. The State's share of intercity rail operations has more than doubled from \$29 million in FY1994-95 to \$63 million in FY 1999-00. This represents a 119 percent increase of five years or 24 percent per year. During this period, service levels doubled on the Capitols, an additional train was added on the San Joaquin and three trains were added on the San Diegans. Caltrans projects the costs for existing service to increase to \$70 million a year by FY 2003-04, increasing to \$271 million by FY 2008-09. Additional service increases are projected to cost \$33 million more to operate annually by FY 2003-04, with a combined annual operating cost for existing and expanded service of \$342 million by FY 2008-09.

At this level, intercity rail would approach the projected \$366 million for the local STA Program, literally squeezing out all other demands on PTA Account funding. Conversely, it may become increasingly difficult to justify new intercity rail service when weighed against other competing needs, such as programming new Caltrans and regional transit projects that are ineligible for State Highway Account funds (e.g., rolling stock).

### **Possible Means of Addressing the PTA ACCOUNT Shortfall**

In considering ways to reduce the four-year PTA Account shortfall, the Commission has already requested Caltrans to do the following:

- limit the use of PTA Account funds to projects and other costs ineligible for State Highway Account (SHA) funds;
- transfer \$28 million in SHA revenues to fund eligible transit projects;
- maximize the use of SHA funds for Caltrans' planning activities;
- continue to use savings from the State Local Transportation Partnership Program to offset the \$130 million transfer of PTA Account funds for toll bridge seismic retrofit; and
- implement other administrative options, where feasible, to reduce the draw on PTA Account funds.

Beyond these remedies, the Commission believes that other legislative and administrative remedies are necessary in order to conserve all PTA Account funds. These include some or all of the following:

- further tightening "use it or lose it" provisions, disallowing all waivers from timely use of funds requirements and allowing appropriations to lapse and revert to the PTA Account;
- delaying or canceling planned expansions of the State-supported intercity rail service;
- funding support costs for the Commission and other affected State agencies from the State Highway Account, as permitted, in accordance with statutes;

- funding High-Speed Rail Authority from the State Highway Account;
- reducing overall support costs;
- requiring local agencies that request intercity rail service to contribute local funds toward such service to ensure a revenue neutral impact on the overall cost of existing service;
- revising the legislative mechanisms for funding transit operations and capital improvements;
- increasing the sales tax on the state fuel tax on gasoline and diesel fuel;
- securing a greater portion of the sales tax on state and federal fuel taxes for transit; and
- using other State funds to pay for intercity rail operations.

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## I. 2000 ISSUES

### B. Delivery Constraints on Transportation Investment

#### 1. Planning and Programming

##### Planning & Programming Steps

The process through which a transportation problem is addressed and a project gets built typically starts with a transportation plan. From the plan, projects are programmed for funding, studied for environmental impact, engineered, allocated funds, and finally built. The following discussion will examine and make recommendations about the first phase of this process - the planning and programming phase - which can be broken down into eight steps:

1. **Transportation Plan:** The transportation plan considers the relationship among land development and use, need for transportation access and services, and expected funding available, in the long range (typically twenty years). State and federal law and Commission guidelines lay out various requirements for transportation plans at the state, regional, and local levels.
2. **Air Quality Conformity for the Plan:** The state and regional transportation plans must include actions to address air pollution emissions such that every region can attain national clean air standards, as required in the federal Clean Air Act. Federal law and regulations set up a process to examine plans and demonstrate that they meet this test.
3. **Congestion Management Plan:** Urban regions must consider the effects of new development on traffic on the existing road system. Federal law requires large urban areas (and makes it optional for smaller cities) to examine and consider these effects, and state law gives priority to investments that can help limit traffic congestion arising from new development.
4. **Project Study Reports (PSRs):** A project study report defines proposed scope, estimates cost, and lays out a schedule for building a project, so programs assign funding to realistic projects. State law and Commission guidelines specify requirements for project study reports.
5. **Transportation Improvement Programs (TIPs):** Projects that are to receive federal or state transportation funds must be proposed and considered via a transportation improvement program. State law (SB 45, Kopp, 1997) and Commission guidelines spell out the requirements for Regional Transportation Improvement Programs (RTIP), an Interregional Transportation Improvement Program (ITIP), and state highway rehabilitation program.
6. **State Transportation Improvement Program (STIP):** The Commission adopts a statewide transportation improvement program, called the STIP, combining the regional and interregional programs covering state and federal funds that come to the state, and oversees its

implementation. State law (SB 45, Kopp, 1997) and Commission guidelines spell out the requirements for the STIP.

7. **Air Quality Conformity for the STIP:** The STIP and RTIPs must fund projects that help keep every region on track to attain national clean air standards by federal deadlines. Federal law and regulations set up a process to examine programs and demonstrate that they meet this test.
8. **Federal Transportation Improvement Program (FTIP):** All projects at the state, regional, or local level that are to receive federal funds, either through the STIP or from direct federal local assistance, or that will require a federal project approval, must be incorporated into a Federal TIP. The Federal TIP is approved after all the other TIPs are approved and after the finding of air quality conformity. Federal law defines this final programming step (and state law ratifies the requirement).

Each of these eight steps is discussed in more detail later in this chapter.

Transportation plans ensure that transportation improvements are considered in a broad social, economic, and environmental context. The programming process ensures that the choice of projects in which to invest scarce transportation funds gets considered openly and put together into a realistic, affordable, and effective program. All the steps are intended to add value to the final decision, and protect the interest of the federal, state, or local government that provides the funding.

### **Time Lines**

The preparation of plans and approval of air quality conformity involves a lengthy process that takes at least a year, and may take two years or longer in the largest urban areas with the most complex transportation and air quality challenges. However, the effect of the timeline for planning on project delivery can be somewhat misleading (unless the plan doesn't cover a particular project), since transportation plans extend out 20 years and must be updated every three years, so most projects should have been identified in a plan for a decade or more before they come to the front of the line for programming. Project study reports, to get ready for programming, can usually be prepared in six months or less. The programming process itself takes about one year for a federal project in the STIP, somewhat less (six to eight months) for state-funded, local assistance, and state highway rehabilitation projects.

Federal involvement has a lot to do with time lines. A project that receives federal funds or needs federal agency approvals may take as much as twice as long as one that does not. The federal process brings so many extra requirements that some agencies, especially small cities and counties, are reluctant even to undertake federal projects. Nevertheless, about two-thirds of the funds available (and virtually all of the direct local assistance funds) for transportation improvements are federal funds, so agencies in California must get used to and comfortable with federal requirements. Much of the time added to federal project approval comes from the handling of paperwork by various federal agencies. While federal agencies do have valid issues and interests, the Commission

believes that for most projects - excepting perhaps large complex ones - most federal approvals are redundant with state approvals, and add little value to the project in the end.

### **Challenges, Issues and Recommendations**

Some of the planning and programming steps have shortcomings, and the process is not necessarily coordinated or streamlined as much as possible. Improvements to the planning and programming phase may not save much time during this phase, but could make things progress more smoothly and save time during later phases. The Commission can identify - and in some cases offer recommendations about - the following 13 broad issues relating to the planning and programming phase:

- **Many Regional Transportation Plans are not useful as a precursor to programming.** Too many regional plans lack specifics, fail to indicate priorities, demonstrate little linkage to land use and development plans, fail to describe the expected outcome of alternative investment strategies, or are simply out of date. *The Commission adopted new guidelines for the preparation of regional transportation plans in December 1999, which clarify the requirements for RTPs in the SB 45 era, and hopes these will yield better plans during the next couple of years.* Small rural regions have advised the Commission they don't get enough planning funds to prepare a new regional plan, given all the changes from SB 45 and the new guidelines. *The Commission has asked Caltrans to consider providing a higher amount of state planning funds for rural regions, at least during the next two years.*
- **The State Transportation Plan is not coordinated well enough with regional plans.** Caltrans prepares the state plan, with little Commission involvement and no guidelines. Regions need a long-range forecast of state and federal funding levels, and information about state investment priorities. The state plan provides no long-term estimate of funding, for either federal or state investment in regional programs, or the state's own investment programs. The state has been reluctant to make a 20-year funding estimate in the past, because it would either illuminate too clearly the long-term inadequacy of current investment levels or imply advocacy of a revenue increase. The current state plan is lacking in specific projects and investment priorities, but the Commission expects that situation to be rectified with the state plan update now in progress. Since RTPs typically specify improvements needed for the regional-scale system, the state starts with a disadvantage in arguing for a bigger share of funding if its plan can't identify its needs for funding. *The Commission recommends that, as Caltrans updates its State Transportation Plan, it seek to produce a state plan as definitive and broad as the best regional plans, for both funding and project investment needs.*
- **Transportation and air quality processes do not fit together easily.** Air quality agencies must develop clean air plans, containing emissions budgets for transportation, on lengthy cycles that do not match transportation planning or programming cycles. Transportation programs must conform with those emissions budgets, using the most current model available at the time, yet the emissions budgets often were developed long before using a now-outdated model. The two typically are not compatible, yielding much confusion and duplicative work. *The Commission*

*makes no recommendation about the disconnect between transportation and air quality processes, since it has not been able to examine fully the implications of changes from the non-transportation side.*

- **Congestion management plans consume time and resources disproportionate to their effect on controlling congestion.** Congestion management plans were primarily intended to strengthen the link between new development and traffic congestion, and to provide leverage to get development impact fees for investment at key congestion points on arterials away from the site of development. Toward these purposes, effectiveness of the plans has varied widely. The Commission's new regional transportation plan guidelines note the importance of linking transportation improvements to land development patterns. *The Commission recommends continuing work to strengthen the linkage from transportation plans back to land use and development plans, and forward to transportation programs, so that in the future transportation and congestion management planning could be streamlined or rolled together.*
- **The effect of all the transportation improvements in all the programs is too small to warrant the time and effort that goes into air quality conformity and congestion management plans.** The existing base transportation system is so big that all the transportation improvements in all the programs amount to only a one or two percent addition to the system, except in a few special or isolated cases. The marginal effect on congestion or emissions of four years of transportation investments at today's scale is indeed minimal. *The Commission recommends emphasis on streamlining the analysis of programs, focusing instead on analyzing the long-term performance of transportation plans (where the twenty year time scale becomes more meaningful), making the plans more definitive, and strengthening the linkage from plan to program.*
- **Agencies tend to use project study reports to justify the project they want to build.** The core issue here concerns whether the project study report is written principally for the agency that will build the project, or the agency that will fund and program it. The primary purpose of project study reports is to define scope, cost, and schedule for projects to be programmed. They could also be used to define clearly the purpose and need for the project, and identify alternatives for environmental studies. The best project study reports do this, and can help focus and expedite project delivery. *The Commission intends, through its guidelines, to ensure that project study reports are streamlined and focused to help both programming and project delivery.*
- **Regions and local agencies (and even Caltrans) want more flexibility in management of regional share funds, while the Commission wants to preserve its oversight role for the STIP. No one likes the STIP amendment process, which takes 60-90 days to change project programming.** SB 45 defines the STIP as a program of projects, with specific funding for each one, defined by the engineer's estimate of costs, with the intent of ensuring greater discipline and accountability. This represents the state's perspective. SB 45 also defines fixed regional funding shares within the STIP. Many regions, particularly smaller ones, see the STIP

more from the funding share viewpoint than as a defined program of projects, and seek more flexibility to manage project funding during project delivery, and to apply funds to projects not based on the engineer's final estimate but based on the contractor's bid for project construction. However, the Commission must retain management of programming if it is to ensure program purpose, oversee funding, and promote timely project delivery. *The Commission has already taken several steps to expedite STIP delivery for certain kinds of projects, and intends to reexamine and seek to streamline the STIP amendment process.*

- **Local road rehabilitation projects are a very high priority in most counties, insufficiently funded outside the STIP.** As a matter of present convenience, the Commission has allowed local road rehabilitation projects to be programmed in the STIP, even though this stretches the definition of STIP project eligibility. Local agencies assert that, given the need to federalize many STIP projects and the way they typically do pavement projects, quick delivery is hampered by the rules that govern the STIP. The Commission guaranteed state (not federal) funds for \$300 million worth of local road rehabilitation projects through the STIP, and has already taken some steps to expedite delivery for those projects in particular. *The Commission recommends that the Legislature increase local subvention funding to fund a required program of local road and transit rehabilitation, analogous to the state's State Highway Operations & Protection Program, so that these kinds of projects no longer need to be funded through the STIP.*
- **Caltrans' Interregional Transportation Improvement Program (TIP) has been poorly coordinated with regional programs.** During preparation for the 1998 STIP and its augmentation in 1999, Caltrans discussed joint funding of various interregional projects with regional agencies. However, Caltrans made no decision as to what proposals it intended to fund itself until three months or more after regional agencies had to commit their funding shares for the STIP. Regions were left to hope or guess what to do, and the Commission had to sort out the problems where funding proposals did not match. *The Commission recommends that Caltrans release its final draft Interregional TIP at least a month before regional programs are due to the Commission, so it can receive the same public review that Regional TIPs do and agreement on joint funding proposals can be reached in advance.*
- **The Commission requirement for two public hearings before adopting the STIP may be outdated.** The requirement for southern and northern STIP hearings predates SB 45, and made sense when the STIP was a competitive program statewide. In fact, the public hearings historically consisted mostly of a parade of project advocacy, providing little value to the Commission. Now, however, public hearing is needed only for three limited matters: satisfaction of Regional TIP requirements, potential rejection of Regional TIPs, or resolution of mismatched proposals for joint project funding. *The Commission suggests legislative consideration of consolidating the statutory requirement for two public hearings into a single hearing before adopting a STIP.*

- **Greater funding and financing flexibility could improve project delivery, particularly the ability to target federal funds to selected (large) projects, thus allowing other (especially smaller) projects to use state and local funds only and avoid federal requirements.** Some regions and counties do this customized programming to some degree, especially in the San Francisco Bay Area. Project delivery has been improved, particularly where local sales tax funds can be part of the mix. AB 1012 (Torlakson, 1999) provides new tools and flexibility in this area. However, the state must ensure that sufficient projects are federalized to use all available federal funds; lagging delivery of federal local assistance projects has left the state with the burden of delivering the balance of federalized projects, hamstringing the opportunity to do more non-federal projects in the STIP. *The Commission recommends further consideration of measures to allow the state more flexibility to transfer or broker the programming of various types of funds.*
- **Regions and Caltrans schedule large, complex, controversial projects too optimistically in the STIP, undermining the possibility of timely delivery.** This has certainly proven true over the 1980s and 1990s. The Commission has a hard time second-guessing schedules proposed by agencies that will have to do the work, and thus usually accepts proposed project schedules. Most of the significant delays have occurred during the environmental phase, in trying to get consensus on project scope, and could have been predicted from the start. These typically involve high value, highly visible projects, with high political interest and high potential for impacts and controversy; they are most commonly highway or rail projects on new alignment. SB 45 shortens the STIP to four years, and requires the environmental phase to be programmed specifically in isolation. *The Commission expects SB 45's reforms to cure the overly-optimistic programming problem over the next couple of STIPs, but regions and Caltrans should employ a risk assessment approach in scheduling these kinds of projects into the STIP.*
- **Preparation and approval of the Federal TIP and Federal TIP amendments take too long.** Several factors come into play here. Caltrans cannot load all regional programs into the Federal TIP electronically, and in any case must wait for the last regional program to be complete. Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) allow many small projects to be lumped together into line items in the Federal TIP, a streamlining practice few regions use. Many regions program local assistance projects year by year, which limits delivery and leads to more Federal TIP amendments. Regions typically wait until the Commission adopts the STIP before beginning air quality conformity analysis, and many Federal TIP amendments require a new conformity analysis. FHWA and FTA take a long time reviewing the Federal TIP and amendments, particularly FTA where the agency's mission historically focused on rationing funding among projects. Regardless, all federally-funded projects get held up waiting for Federal TIP approval. *The Commission recommends that regions make full use of line item programming, program local assistance funds three years in advance, and begin air quality conformity work as soon as the Commission signals that it intends to accept the Regional TIP, and that the state continue efforts to streamline federal agency handling of the Federal TIP process. Further, the Commission particularly recommends that Caltrans be given relief from State*

*Department of Information Technology delays and State Budget lead time so that it can modernize its program tracking and management systems expeditiously.*

Project delivery is an enormously complicated process that really begins at the end of the planning and programming phase. Once a project has been programmed into both STIP and Federal TIP (if it is to receive federal funds), the project is ready for environmental studies, followed by engineering and construction. In the planning and programming phase, and in later phases as well, the Commission can identify no “magic bullet” reform that by itself could expedite the process. As can be seen from the discussion above, a myriad of small reforms or changes in agency attitude or approach are called for, some more significant in effect or harder to achieve than others, each making a marginal improvement somewhere along the way. For those seeking more information to understand the planning and programming phase better, each of its eight steps is laid out in more detail on the following pages.

#### **Planning & Programming Step 1: Regional Transportation Plan/State Transportation Plan**

Federal law (Title 23 U.S. Code Section 134) requires Metropolitan Planning Organizations in all urban areas to prepare Regional Transportation Plans (RTPs) and update them at least every three years. State law (Government Code Section 65080) applies essentially the same requirement to all regions, thus in effect extending it to rural counties as well as urban ones. Federal statutes require urban RTPs to be fiscally constrained to expected revenues, be linked with local land use planning, consider seven factors listed in the law, and serve as a source of projects for the STIP. FHWA provides funding for urban planning. State statutes require all RTPs to contain a policy element, a financial element, and an action element. State guidelines adopted by the Commission (Government Code Section 14522) provide more detail. Caltrans provides a limited amount of funding to rural regions for transportation planning.

Federal law (Title 23 U.S. Code Section 135) requires each state to prepare a State Transportation Plan. State law (Government Code Sections 65070-65073) reiterates the federal requirement. Both call for an integrated state and regional planning process. Federal statutes require a fiscally constrained state plan, and identify seven factors (essentially the same as the seven factors for RTPs) that must be considered. FHWA provides federal funding for state planning; Caltrans carries out the work through its budget. In California, the state plan actually consists of a policy plan (the California Transportation Plan, 1996) linked to a family of more specific plans, particularly including an Interregional Transportation Strategic Plan and a 10-year Rail Passenger Plan (to become a rail passenger and freight plan per AB 74 (Strom-Martin, 1999). The state has enacted no guidelines requirement for its state plan. Both regions and the state are supposed to use programming to implement their plans in an orderly way.

The planning process, including the consideration of alternative investment strategies and the seven planning factors, computer modeling and analysis, public participation, and setting of priorities typically takes from one to two years. In areas that don't meet national air quality standards, the analysis for air quality conformity, followed by federal review and approval, adds to the time. Once a region has adopted a sound and comprehensive RTP, the process to update it should be quicker, unless the region significantly changes its basic assumptions or its policies and priorities.

Most RTPs and Caltrans' state transportation plan are currently being updated, to be ready by late 2001. Starting with the 2002 STIP, the Commission intends to examine RTPs and the state plan during its consideration of STIP programming.

**Step 2: Air Quality Conformity for the Plan**

The Clean Air Act Amendments of 1990 (Title 42 U.S. Code 7400) lay out the current federal requirements for air quality conformity for Regional Transportation Plans. FHWA must approve air quality conformity for RTPs, using a process and rules approved by U. S. Environmental Protection Agency (EPA). Although the act allowed an interim way (build/no-build comparison) to assess conformity during the 1990s, every region must shift to emissions budget conformity by its next RTP update. The emissions budget requirement basically involves three steps for the region:

1. calculate how much pollutant emissions an air basin can accept while still allowing national air quality standards to be achieved and maintained;
2. divide the allowable pollutant emissions between stationary (fixed facility) sources and mobile (transportation) sources; and
3. assess pollutants emitted from transportation sources and ensure that projects are planned and implemented in such a way that emissions do not exceed the budget.

At the state level, the regional air quality plans are rolled up into a State Implementation Plan (SIP) for clean air, compiled by the California Air Resources Board and sent to U.S. EPA for approval. The U.S. EPA uses each state's SIP as basis for setting regional emissions budgets. Once approved, a SIP need not be updated unless the state chooses to, or regions fail to attain clean air standards by statutory deadlines.

The Clean Air Act Amendments contain deadlines for each region to attain national clean air standards, which vary from 1997 to 2010 depending on how serious the air quality problem was to begin with. Demonstration of attainment and maintenance of the standards has been problematic in Southern California, Sacramento, and the San Joaquin Valley almost continuously: in fact, the San Joaquin Valley failed to meet its attainment deadline for ozone in 1997, based largely on mobile source emissions, and now faces an even more stringent test by 2005. Thus if the conformity finding for an RTP can barely show attainment, the region must give projects that can reduce or limit emissions a high priority as it implements the RTP through the Regional TIP, to stay on track and avoid having projects (or even the whole program) held up for air quality reasons.

Air quality conformity for RTPs presents large challenges for most of California, which include:

1. technical challenges in identifying all significant sources of pollution,
2. political challenges to find projects that reduce motor vehicle use, and thus emissions, in the face of public demand for driving,
3. meteorological challenges, which vary from one year to the next, and lower the bar for allowable emissions in years with many sunny, still days,
4. financial challenges, to implement enough projects of the right kind to attain and maintain the emissions budget, and
5. negotiating challenges, about basic assumptions, about regional demographics, travel behavior, vehicle emission patterns, and the models that connect them, between the region and the state and federal agencies that must approve the conformity finding.

Most urban regions in California have become quite sophisticated at air quality modeling and air quality conformity assessment. Beyond the challenges listed, the air quality conformity process is burdened by problems with timing. The cycles for RTPs, the STIP, and the SIP do not coordinate well. Some deadlines come too early in one part of the process, yielding slack time, and others come too late, compressing work to avoid holding up steps or missing deadlines in another part of the process.

**Step 3: Congestion Management Plans**

State statutes (Government Code Section 65088-65089) require congestion management plans, adopted by designated congestion management agencies, in all urban counties (counties may opt out of this requirement if a majority of cities and the county vote to do so). Congestion management plans, mandated in AB 471 (Katz, 1989) at a time of serious transportation funding shortfall, were intended to link land development and population and employment growth, congestion (particularly on arterials), and funding for projects to deal with the congestion, potentially from development fees. Federal statutes also require congestion management plans in urban areas greater than 200,000 population, to provide information about changing congestion levels to be used to guide programming.

Some counties chose to establish new congestion management agencies, in effect another layer of government; others chose to designate the added responsibilities to existing transportation agencies. The requirements have become institutionalized, and the agencies and review steps have been folded into the process. The serious transportation funding shortfall of the late 1980s and mid-1990s has been turned around from a statewide bond issue, program savings and higher federal funding levels from TEA-21. In some cases and in some counties, the congestion management programs have helped to bring development fees to bear for improvements to reduce congestion, mainly in places where those fees would have been enacted anyway. In most counties, congestion management program priorities have to some degree affected regional investment priorities.

The time required for congestion management programs varies from one region to the next. Some regions integrate it into the rest of the planning and programming process, so that it adds staff resources but not time. In other regions, particularly those with separate congestion management agencies, the time for review and consideration adds perhaps a couple of months to the overall timeline for the planning and programming phase.

#### **Step 4: Project Study Report**

State law (Government Code Sections 14529.4 and 65086.5) requires the completion of a project study report before any project can be proposed for the STIP. Thus a group of project study reports are needed every two years, for nomination of projects into the biennial STIP cycle defined in SB 45. The project study report provides a good estimate of project scope, cost, and schedule, so that projects added to the STIP are realistic. The project study report has minimized problems endemic in the STIP in the late 1980s: fuzzy project scopes with features such as environmental mitigation and federal standards omitted, low-balled project costs, and overly optimistic delivery schedules.

Caltrans prepares project study reports for most projects on state highways, both its own interregional projects and projects to be proposed in Regional TIPs. The statutes allow regional or local agencies to prepare project study reports when Caltrans is unable to do so in a timely manner. The Commission adopts guidelines for project study reports on state highways. In response to complaints by local agencies that Caltrans' project study report requirements were too arduous, the Commission approved less detailed requirements for local agency projects, and projects for which only environmental studies or project design was to be included in the STIP.

Caltrans typically takes about six months to prepare a project study report for a state highway project, although it can do one more quickly if the project is particularly simple or it can concentrate resources for a short period of time, and it may take longer for particularly complex projects or during times when the overall demand for project study reports is high. The Commission has tried to shorten the process for most local projects, and for projects with environmental studies or design engineering only, to less than three months. These efforts have considerably reduced agency complaints that project study report requirements were so detailed that the project had to be half designed in the project study report, before it was ever programmed.

**Step 5: Regional Transportation Improvement Program/Interregional Transportation Improvement Program**

State statutes specify preparation of a Regional Transportation Improvement Program (RTIP) (Government Code Sections 14527 and 65082) by regional agencies, and an Interregional Transportation Improvement Program (ITIP) (Government Code Section 14526) by Caltrans. In addition, Caltrans prepares a State Highway Operations & Protection Program (SHOPP) containing state highway rehabilitation projects. Regional Agencies program federal local assistance funds for highways, local roadways and transit. Both the RTIPs and the ITIP are submitted to the Commission for incorporation into the STIP. The Commission must accept an RTIP in its entirety, or can reject it outright (Government Code Sections 14529 and 14530) if it fails to satisfy certain specified requirements. The Commission chooses ITIP projects to program in the STIP, and has some ability to advance funding back and forth between RTIPs and the ITIP and program jointly funded projects.

The RTIP and ITIP process essentially takes eight months. The Commission adopts a fund estimate by August 15 of odd numbered years, which defines regional funding shares and Caltrans' state funding share. Regions use regional share amounts to fund proposed RTIP projects (and regions with population less than 1 million may ask for an advance of future funding); Caltrans uses the state share to fund proposed ITIP projects (and also may ask for an advance of future funding). Regions get four months to prepare and adopt their RTIPs, including public review, and must submit RTIPs to the Commission by December 15; Caltrans has the same deadline for its ITIP. The Commission must consider the RTIPs and ITIP and adopt the STIP by April 1.

Multi-county regions in Southern California, the San Francisco Bay area and greater Sacramento need all four months to prepare an RTIP. Their process has many layers: local agencies propose projects at the county level, which must review and approve a program; the congestion management agencies must review and approve projects; and the regional agency itself must assemble the regional program, allow for public review, and leave time for its board to adopt the RTIP. Single county regions, particularly in rural areas, may be able to go through the process in a much shorter time, perhaps as short as two months.

SB 45 laid out different, shorter deadlines for the 1998 STIP. The Commission then decided to augment the 1998 STIP, in March 1999, again on a somewhat compressed schedule. In both cases, the Commission had to be flexible and accept RTIPs that were submitted late; even so, in 1999 ten regions chose not to submit an RTIP until later in the year, citing insufficient time, and even Caltrans took until July to submit its ITIP. The process leading up to the 2000 STIP again will be compressed, because AB 1012 (Torlakson, 1999), enacted in October, brought new funds into play, requiring an amended fund estimate in November, and thus left insufficient time to consider, review, and approve RTIPs and the ITIP by December 15. The Commission's experience with a compressed schedule for development of RTIPs and the ITIP has not proven satisfactory.

Projects proposed for the STIP must be consistent with RTPs. Ideally, this means that an improvement or project should be specified in the plan, but a finding that a project is not inconsistent with the provisions of the plan will also suffice, particularly for small projects that would be too detailed to be identified individually in a broad regional plan.

**Step 6: STIP Adoption**

The Commission must consider RTIPs and the ITIP and then adopt the STIP, after meeting several intermediate statutory requirements (Government Code Section 14529, 14530, 14530.1 and 14531). The statutory date for Commission STIP adoption is April 1 of even numbered years. In the 3½ months between December 15 and April 1, the Commission must review and consider all of the RTIPs and the ITIP, provide at least 60 days notice if it intends to consider rejecting any RTIP, hold a public hearing in both southern and northern California, receive staff recommendations at least 20 days before STIP adoption, and then consider and adopt the STIP.

The Commission usually meets three times in a 3½ month period. The Commission needs at least three meetings to hold two public hearings and act on the STIP, with some additional time for staff to evaluate and assess the projects proposed for the STIP, including requests for advanced funding from smaller counties, joint funding proposals, and RTIP compliance with various requirements.

As noted above, the Commission had to follow a compressed time schedule for STIP adoption in 1998, and again for STIP augmentation in 1999, and expects to have a compressed schedule again for the 2000 STIP. Under such compressed schedules, some project proposals may not get thorough consideration. For example, one region delivered its RTIP the day before the public hearing, allowing the Commission no opportunity to review it and ask questions. Another RTIP was received about ten days before the Commission was scheduled to adopt the STIP, and the staff's recommendation had to be brought to the Commission on the day of STIP adoption. In 1999, ten regions brought in RTIPs after the STIP had been adopted, which required an excess number of STIP amendments. Again, the Commission's experience with a compressed schedule for STIP adoption has not proven satisfactory.

**Step 7: Air Quality Conformity for the Program**

The Clean Air Act Amendments of 1990 (Title 42 U.S. Code 7400) require air quality conformity analysis on each cycle's Federal TIP proposals, as well as on the 20-year Regional Transportation Plan, in all areas that have not yet attained national air quality standards. This second conformity assessment insures that the package of projects taken from the plan and funded in the Federal TIP every two years is a representative mix, containing an average number of projects that can help reduce emissions, rather than a disproportionate number of projects that might otherwise be politically favored. The recent environmental lawsuit in Atlanta was aimed in part at air quality conformity for the Federal TIP, alleging that the Atlanta region was implementing mostly freeway projects in early years, which would forestall attainment of national air quality standards, and leaving transit and other projects that could reduce mobile emissions to be implemented later – or perhaps not at all.

The air quality conformity process for the Federal TIP should be simpler than for the regional plan. The Federal TIP extends out only 3 years, instead of 20. Air quality conformity for the 20-year plan must consider several intermediate checkpoint years, requiring more complex computer model runs. In fact, if the TIP consists of projects from the plan, most of the information for air quality conformity should already be loaded into the model, and only need be selected and run.

Nevertheless, the time to assess and document air quality conformity for the Federal TIP, followed by the time for review and approval, typically consumes two to three months. In California, where air basins in Southern California, Sacramento, and the San Joaquin Valley can barely reach national air quality standards at best, the conformity assessment must be done attentively.

**Step 8: Federal Transportation Improvement Program**

Any project to receive federal funding - which includes about two-thirds of all projects in the STIP and SHOPP - plus all federal local assistance projects, plus rail transit projects receiving federal grants, must be amended into the Federal Transportation Improvement Program (Federal TIP). This step is mandated in federal law (Title 23 U.S. Code Section 135(f)) and state law (Government Code Section 65074). The Federal TIP is the list of projects authorized to receive federal transportation funding from FHWA and FTA. It serves as the STIP does at the state level.

Most regions package a number of projects and submit them together for a Federal TIP amendment. Regions try to minimize the number of Federal TIP amendments, since each one requires an assessment of air quality conformity. Some regions have reduced exposure to Federal TIP amendments by setting up lump sum amounts to be applied to categories of projects, such as roadway resurfacing, bridge replacement, or enhancements, that would only in rare cases have any detectable affect on mobile emissions; any project qualifying for one of these categories is assigned an amount of money against the lump sum, until the lump sum has been exhausted. The lump sum arrangement requires approval from FHWA, but can save time and effort later.



## I. 2000 ISSUES

### B. Delivery Constraints on Transportation Investment

#### 2. Environmental

Once a project has been taken from a long-range plan and added to the STIP, the SHOPP, or a regional or a local program, the first step in actual project delivery for construction consists of environmental studies and preliminary engineering. Two basic laws, both accompanied by extensive regulations, prescribe the requirements and process for environmental studies and documentation; several other federal environmental laws also apply. The intent of the two basic laws, to protect the natural and community environment, enjoys broad public support. Most large transportation projects must deal with both of them: any project receiving federal funds or requiring approval by a federal agency must comply with the National Environmental Policy Act (NEPA) of 1969, 42 U.S. Code 431, and all projects built in California must comply with the California Environmental Quality Act (CEQA) of 1970, Public Utilities Code Sections 21000—21177.

Both NEPA and CEQA require a good-faith effort to study, assess, and disclose any impacts a proposed project is expected to have on the environment. The two acts are on the surface very similar but fundamentally somewhat different. NEPA is grounded in consultation, requiring the agency proposing a project to consult with all interested federal agencies about proposed impacts and give each of those agencies an opportunity to suggest mitigation. Beyond the consultation, only those agencies that must grant a permit to build the project can turn a suggestion for mitigation into a requirement. On the other hand, CEQA is a mitigation-based law, requiring the agency building the project to mitigate all environmental impacts to an insignificant level if feasible. While consultation can help to accomplish this end, consultation is not mandatory if the project is not expected to yield significant impacts. Curiously, the same process and documents can be used to satisfy both NEPA and CEQA concurrently, the significant difference being the extended time needed for federal agency review and negotiation under NEPA toward achieving the mitigation that CEQA mandates from the start.

**Transportation agencies** must balance the purpose and need for a transportation project against the natural and community environmental impacts that it will yield, under both NEPA and CEQA. On the other side, most **environmental agencies** operate under separate laws that mandate only various aspects of environmental protection, which tend to undermine the NEPA and CEQA requirements to balance considerations; thus their role is to protect the environment, not to protect the environment in balance with economic development. In fact, for impacts to parks or wetlands, federal law requires that transportation projects must avoid impacts unless there is no reasonable alternative, and historic or archaeological resources are deemed significant unless proven otherwise. The following environmental agencies are commonly involved in transportation projects, and under separate statutory authority must give permits for project construction and mitigation of environmental impacts:

1. **U.S. Environmental Protection Agency (EPA)/California Air Resources Board**—air quality conformity,
2. **U.S. Fish & Wildlife Service/California Department of Fish & Game**—endangered species (two separate lists) and habitat,
3. **Advisory Council on Historic Preservation/State Historic Preservation Office**—historic and archaeological resources,
4. **U.S. Army Corps of Engineers**—wetlands, flood plains, and storm water runoff,
5. **California Coastal Commission**—coastal resources,
6. **Bay Conservation & Development Commission**—impacts to San Francisco Bay, and
7. **U.S. Coast Guard**—navigable waterways.

Environmental agencies can discount economic benefits compared to environmental ones, or regard the no-project alternative as satisfying the purpose and need for the project. At its heart, this situation results from inflexible statutes, enacted under past conditions when infrastructure development had been running roughshod over the natural and community environment. The inflexibility bogs down project delivery, and can add to project cost or diminish project effectiveness.

Environmental law and regulations specify two kinds of roles for agencies involved with transportation projects. Agencies that build, own, and operate transportation projects are designated as **lead agencies**. Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) typically carry this role under NEPA, and Caltrans, counties, cities and transit districts typically assume this role for CEQA, and become responsible for environmental studies, documents, agency consultation, and public comments. Other agencies that must make a decision that affects the ability to complete the project are designated as **responsible agencies** under CEQA, and **consulting agencies** under NEPA. The Commission, regional agencies, and environmental permit agencies fall into this group. These agencies must consider information and findings from the environmental studies and documents when making their supporting decisions and certify that they have done so.

A project may go through the environmental phase in one of three ways:

1. **Exempt (Categorical Exemption/Categorical Exclusion)**: — certain projects of a simple nature that rarely would have a significant environmental impact, such as roadway resurfacing or an increase in train service on existing tracks, are exempt or excluded from NEPA and CEQA. The list of projects exempt at the federal level and excluded at the state level is defined in the statutes and is slightly different. For projects that qualify, an agency may satisfy environmental law by filing a certification that the project is exempt or excluded.
2. **No Impact (Finding of No Significant Impact/Negative Declaration)**: — many projects turn out not to have a significant effect on the environment, particularly after mitigation measures are included in the project. The agency responsible for the project must still carry out environmental studies, and include mitigation where appropriate; in practice, the inclusion of mitigation is often the reason why a project ends up with no significant impact. For these projects, the responsible agency must document the conclusions that a

project would yield no significant environmental impacts, including reference to any environmental studies that may have been done; the agency also may hold a public hearing on the project, but is not required to do so.

3. **Full EIR (Environmental Impact Statement/Environmental Impact Report):** — a relatively small number of projects will yield significant impacts to the natural or community environment that cannot be mitigated to a level of insignificance, or face significant controversy. For these projects, the environmental process is more prescriptive, with more steps. The responsible agency must give notice of its intent to do a project and environmental studies, consult with environmental agencies, carry out the environmental studies, prepare and circulate a Draft EIS/EIR, hold hearings and take public comments, make findings that the project will yield benefits that outweigh the impacts, and then prepare and circulate a Final EIS/EIR and file a formal notice explaining the project and its impacts. In between some of these steps, the lead agency or a responsible agency makes decisions about the project that may ripple through the process further on.

As noted below, the time line varies greatly depending on whether a project is exempt, would have no impact, or faces a full EIR.

The environmental phase can be broken down into seven steps, familiar to anyone involved in public policy:

1. **Notice of Preparation:** The lead agency must provide public notice of its proposed project and environmental studies, soliciting alternatives and types of impacts to be studied.
2. **Agency Consultation and Decision about Alternatives:** The lead agency consults with responsible agencies, and perhaps other interested parties, to explore concerns and seek agreement about significance and mitigation, and then decides which alternatives to consider and which to drop as it goes through environmental studies.
3. **Environmental Studies and Preliminary Engineering:** The lead agency must carry out detailed environmental studies to assess potential impacts and ways to reduce, eliminate, or compensate for those impacts, and concurrently undertake preliminary engineering work to assess feasibility and consequences of the various project alternatives.
4. **Draft Environmental Document:** The lead agency must write and make available a document summarizing the results of environmental studies and explaining the project alternatives and potential environmental impacts of each.
5. **Agency and Public Review:** The lead agency must solicit and consider comments from responsible agencies, other interested parties and the general public.
6. **Final Environmental Document/Project Approval Report:** The lead agency must respond to all relevant comments received, consider changes in the project or measures to mitigate

impacts, and prepare a document explaining its final decision on the scope of project and mitigation measures.

7. **Notice of Determination/Opportunity for Lawsuit:** The lead agency must file public notice (federal Record of Decision/state Notice of Determination) of its decision on the project. The filing opens a window of 30-45 days during which a lawsuit to challenge the project or environmental findings on the merits or on procedural grounds may be filed in federal or state court. After this period, the lead agency may proceed to design and build the project without jeopardy.

Any lead agency with a project needing a full EIR must go through all these steps under CEQA, and under NEPA too if federal funds or approvals are involved. A project with no impact may or may not require environmental studies and formal public review; it depends whether potential impacts and mitigation measures are involved. Only historic and archaeological resources must be studied for an exempt project, and a certification document (Cat. Ex.) must be filed.

The broad problems that arise from the environmental process come not from its policy or objectives, but from its execution. Federal involvement has a lot to do with time, effort, and cost of the environmental phase. The federal steps add consultation and review time, bring more agencies to the table, and bring other federal environmental laws beyond NEPA to bear. Federal agencies, both transportation and environmental, have not become famous for expeditious review. Nevertheless, two-thirds of the capital funds available in California today are federal funds, and most large projects face at least one federal environmental permit, so NEPA comes into play. The discussion of environmental issues and challenges that follows identifies mainly problems at the federal level, with requirements or conditions that will be difficult to change. Thus streamlining of process steps becomes all the more important, and delegation of the federal role to parallel state agencies offers the most promise.

The discussion at the end of this chapter will examine each of the seven steps in this process in more detail.

### **Time Line**

The time line for the environmental phase can vary greatly, from a few days to ten years or more. The lead agency doesn't control the time line, although it can influence it to some degree by being open-minded. The time line is substantially determined by the path a project must follow – whether it is exempt, has no impact, or needs a full EIR – by whether it must involve federal agencies, and by the amount of public consensus or controversy the project encounters.

A project's path through the environmental phase makes a huge difference in time, effort, and cost. A full EIR will take at least two years, more typically three to five years, and sometimes ten years or more for complex and controversial projects. A project with no impact can sometimes complete the environmental phase in a few months, but more typically needs six months to a year or two, including

time for studies. The environmental phase for an exempt project takes a few weeks, unless extensive historic or archaeological studies must be done. If a project faces both NEPA and CEQA, the time line extends significantly, since the time to involve additional federal agencies in the review can as much as double the processing time.

All of the steps, attendant effort, and time required are magnified on controversial projects. Of the thousands of transportation projects built in California each year, only a handful turn out to be controversial, but these also tend to be highly visible and important projects. These projects typically need a longer time line than originally expected, sometimes much longer, with only limited opportunity to compress them. These projects cause most of the anguish and focus of attention on the environmental process. Ironically, reform of the process could do little for these controversial projects, but might help significantly for the many others on which considerable effort must be expended for little added value, which in turn would free up resources to concentrate more on the difficult ones.

### **Challenges, Issues and Recommendations**

As noted above, most of the issues and challenges related to the environmental phase focus on NEPA and federal involvement. This makes these issues somewhat inaccessible, requiring action by Congress or at least the federal administration. Nevertheless, the greatest delay in project delivery typically occurs during the environmental phase, for reasons beyond the control of the transportation agency, so reform or streamlining here offers the greatest promise overall. It seems there should be some opportunity here too. TEA-21 broadly requires streamlining of federal transportation procedures, so FHWA now allows Caltrans to make the bulk of engineering and financial decisions on its behalf (although FTA does not do this with transit agencies), but curiously neither FHWA nor FTA entrust state agencies even to consult independently about environmental matters.

The Commission can identify and make recommendations about the following 13 broad issues relating to the environmental phase of project delivery:

- **CEQA is at least partly redundant with NEPA, and probably even more effective in the primary objective of protecting the environment.** CEQA requires all feasible mitigation measures, whereas NEPA requires extensive consultation but allows the transportation agency to make findings that it will accept significant impacts in return for the benefits of its project. Agencies in California regard the federal NEPA process as adding considerable time, effort, and cost to projects with little benefit, given that California law requires mitigation anyway. Involvement of federal agencies exposes projects to redundant reviews, arbitrariness, and delays associated with a second layer of government process. Admittedly, federal interests may need to be expressed for some projects, those with large controversy or major impacts that cannot be mitigated, but these represent perhaps 5% of all projects. *The Commission recommends working with the California delegation to seek Congressional direction for a trial or pilot master agreement to delegate federal agency responsibilities under NEPA and other federal environmental laws to corresponding state agencies under CEQA.*

- **To some extent, neither federal nor state environmental agencies have much interest in streamlining the environmental process to expedite transportation projects.** Public works agencies seek change and improvements for the built environment, whereas environmental agencies and interests try to prevent change to the natural environment, or even seek to roll back to earlier conditions. The differences intensify with urban sprawl and consumption of open space, but can be diminished with creation of natural preserves and mitigation land banks. Inflexible environmental laws have hardened this agency culture. The recent development of mitigation banks, habitat preserves, and enhancement programs have softened it somewhat, but public works agencies remain burdened by old reputations. *The Commission recommends the Administration consider undertaking a joint transportation-environmental planning effort, to try to develop a consensus on joint investment in projects and mitigation programs that can expedite achievement of overall goals for both timely infrastructure development and preservation of critical environmental lands and resources.*
- **Program and political pressures often force underestimation of the time really needed for environmental consideration of the most controversial projects, resulting in projects programmed on an unrealistic schedule and ultimately “failure to deliver.”** This has happened time and again through the 1980s and 1990s. Most of these projects can readily be identified from the start, and specifically include most projects to be built on new alignments. When delivery time stretches out, the funds programmed to these projects sit idle. The Commission believes that the provision in SB 45 that programs environmental studies separately, in a four-year program, will substantially cure this problem over time, because later project phases can be held out of the program until the end of the environmental phase is in sight. *The Commission could identify certain high-risk projects at the time of initial programming, and specifically track progress through the environmental phase, with the intent to consider contingent substitute programming should those projects show signs of falling far behind schedule.*
- **Transportation agencies sometimes unwisely reject project alternatives too early.** Transportation agencies may decide in advance what project alternative they intend to build and jettison the study and consideration of others, usually to cut down on the cost of environmental studies or to slide an undesirable alternative threatening to the project they want to build out of the running. While this becomes a problem of the agency’s own making, it can lead to excessive controversy and considerable delay while rejected alternatives must be reopened; sometimes public mistrust exacerbates the problems and delays even more. *For the few projects known to be highly controversial, the Commission encourages regional agencies and Caltrans to examine, from the project study report, the proposed project scope and time line for project programming against the challenges expected during the environmental phase, including degree of local consensus, alternatives to be examined and reviews needed, to lay out a realistic project scope and schedule.*

- **Some environmental agencies refuse to engage in environmental negotiations early, and then weigh in late and disrupt the process.** Some environmental agencies decline to begin negotiations about project alternatives and mitigation measures at the earliest possible time, typically citing a lack of staff to sustain involvement throughout many meetings during progress on a project. This behavior has the same effect as early rejection of alternatives but comes from the other side. Caltrans has begun funding staff positions in environmental agencies, both state and federal, to give priority to environmental review of its transportation projects. This has helped Caltrans, but done little for regional and local agencies facing the same problem. CEQA particularly provides for early involvement, but intentions do not always overcome shortages of staff, and the problem lies more with federal agencies. *The Commission recommends that the Governor and the President, by executive order, require state and federal agencies to become involved early in environmental negotiations, seek to reach early agreement on mitigation measures and permits, and end the practice of seeking mitigation measures at the tail end of project development after engineering work has essentially been finished. If that cannot be achieved, the Commission suggests that the Legislature consider strengthening the early involvement provisions of CEQA, by adding penalties; the Commission would further recommend working with the California delegation to add early involvement provisions to NEPA, similar to those in CEQA.*
- **Past decisions made after full environmental consideration, for example route locations, may not be respected and must be restudied and reopened before a project can be built.** Some transportation projects are built in stages, sometimes with several years in between. In an era of urban sprawl, protection of rights of way, sometimes years ahead of need for a highway or rail line, makes eminent sense while land is still vacant and affordable. Caltrans used to buy corridor lands in the 1960s (and in fact still owns some), but that was done before environmental laws. When a decision is made to choose a transportation corridor - today based on a proper environmental process - to be followed much later by a decision on what kind of project to build in the corridor, the transportation agency should be able to expect that its original decision about the corridor does not have to be reopened when the project is considered, unless surrounding circumstances have become significantly different. But it doesn't work this way, especially under NEPA if federal funds are to be used to build the eventual project. Local agencies, while willing to require large developers to reserve corridors for transportation, shy away from going through environmental studies to buy smaller properties and keep a corridor open. This situation illustrates another way in which NEPA and CEQA do not work well together. *The Commission recommends working with the California delegation to amend NEPA to allow prior CEQA decisions to be used to narrow down alternatives to be studied under NEPA as long as federal interests such as federally-listed endangered species were considered.*
- **Certain federal environmental laws that predate NEPA, in particular for historic preservation and parkland protection, are too constricting and should be reformed.** In particular, two federal environmental laws, Section 106 of the National Historic Preservation Act concerning historic preservation and Section 4(f) of the Transportation Act of 1965 concerning

avoidance of parkland, hamper transportation project decisions and delivery. Section 106 presumes any historic or archaeological resource to be significant until proven otherwise, leading to excessive study and excavation often with minimal benefit; Section 4(f) requires avoidance of parkland, even in tiny slivers or preplanned corridors, unless there is no feasible alternative. Section 106 applies to every federal project, even those categorically excluded from NEPA studies; Section 4(f) can be evaded by using a non-transportation agency as the federal lead agency and eschewing federal transportation funds, even if some other federal approvals are necessary. Both laws predate NEPA, and neither fosters the balance between environmental and development considerations inherent in the spirit of NEPA. *The Commission recommends working with the California delegation to amend these two laws in the spirit of NEPA, to foster flexibility and judgment while still preserving the environmental protection intent.*

- **Federal agency review involves sequentially passing consultation requests and environmental documents from one agency to another, and could be streamlined if Caltrans and federal environmental agencies could consult directly and all agencies could do concurrent reviews.** Both FHwA and FTA insist on handling and reviewing requests for consultation, proposals during consultation, and draft and final NEPA documents sequentially going both ways between the state or local agency and the federal environmental agencies that must be involved. Presumably, FHwA and FTA are trying to ensure they keep informed about matters under discussion, protect their discretion over their lead-agency role, and head off undesirable precedents before other agencies latch onto them. However, the current sequential handling and review adds considerably to the timeline, particularly when negotiations go back and forth, especially given the already-slow handling and review by some agencies on one end or the other. *The Commission recommends Caltrans continue to seek to work out protocols with both FHwA and FTA to allow direct consultation about project environmental issues and parallel review of NEPA documents in as many cases as possible, perhaps excepting only selected projects with significant controversy, extraordinary mitigation, or precedent-setting policy matters, with the Administration working with Washington D.C. offices as necessary.*
- **For many projects with consensus support by the draft environmental document step, design and right of way activities could be commenced well before the final environmental document with little or no risk.** Both FHwA and FTA have been reluctant to allow any substantial reimbursable project development work to proceed before final NEPA approval. Nevertheless, except for complex and controversial projects, right of way appraisals, utility relocation agreements, and most engineering design work can proceed with little risk or jeopardy. *The Commission recommends Caltrans continue to seek approval to begin preliminary right of way and design work “at risk,” before final NEPA approval, on those projects backed by local consensus and without controversy, as a matter of practice, with the Administration working with Washington D.C. offices as necessary. If Caltrans fails to make headway here, the Commission and Caltrans should consider redefining the boundary between preliminary engineering and design, and shifting funding to do more work earlier in the environmental/preliminary engineering phase.*

- **The standard of environmental significance may vary from agency to agency, place to place and project to project.** It should seem obvious that all stands of oak woodland or historic bridges are not equally significant, although clearly a particular example or a particular context may be more significant than another. There are no common standards or understandings of what is significant and what is not, among elected officials, the public, various interest groups and even within agencies. Caltrans, as a statewide agency, faces different definitions in different regions of the state, driven by different district offices of the same environmental agency, and must spend a lot of time trying to find common ground. What is worse, over time the mitigation required tends to creep toward the greatest common denominator. *The Commission recommends that Caltrans and state environmental agencies try to find and define common standards of significance and mitigation, for use now on CEQA projects and as leverage when negotiating with federal environmental agencies, and in the long run in preparation for the day when (many) NEPA approvals may be delegated to state agencies acting under CEQA.*
- **Local or regional agencies can often aid project delivery by getting involved early to help reach local consensus about controversial projects.** For most controversial projects, there at least exists local consensus that some project or improvement is desired; the controversy arises over the intent, scope, or location of the project, or mitigation measures for project impact. Yet prolonged controversy dooms project delivery. Transportation agencies can fuel the controversy by pursuing a favored alternative hard and long. In fact, most alternatives yield some transportation improvement, yet may vary more widely in environmental effect. In today's world, transportation agencies should pursue dual objectives for projects, seeking to improve both transportation and the surrounding community or natural environment, with the choice of project alternative deferred to local community preference tempered by cost/benefit considerations. Ideally, the controversy over project intent, scope and location plays out very early during the transportation planning phase, so when the project is finally moved from the plan into the program the only issues left relate to details and mitigation, but it often doesn't work out this way because neither funding nor time is available for extensive environmental studies during the planning phase. The key step involves allowing time for full and open local community airing of concerns and exploration of alternatives, for as long as it takes. Local officials, who are closer to the source(s) of community controversy than state agencies ever can be, can be critically helpful during this step. Transportation agencies need to cooperate by offering open and realistic assessment of project purpose and alternative proposals. *The Commission, Administration and Legislature should consider how to fund environmental studies early, during transportation planning, for controversial projects, and use local officials to bring community balance to project decisions instead of relying principally on transportation agencies.*
- **Environmental agency approval of a final environmental document and project decision should constitute permit approval for the project.** Project scope and mitigation measures are settled at the time the final environmental document gets approved, under both NEPA and CEQA. Some environmental agencies must subsequently issue permits before construction can

begin, for example for water quality, floodplain encroachment, species and habitat protection, and historic resource clearance. Environmental agency approval of the final environmental document should de facto constitute intent to approve a permit subsequently, without delay. However, sometimes agencies do not issue permits expeditiously, delaying the project; federal agencies are at fault here more often, but state agencies have been known to do this too. Even worse, permits can be used to extort unreasonable levels of mitigation late in the process, after design has been done and paid for and expectations for imminent construction are high. If the cost and threat of project delay leads a transportation agency to accept, under duress, mitigation measures that may be considered excessive, a precedent may be set that raises the bar for future transportation projects. The Commission in fact already sets a good example in this area: as a matter of practice it approves an intent to consider future funding approval when presented with a final EIR, as a responsible agency under CEQA. *The Commission recommends that all state and state-chartered agencies be directed to treat CEQA approval as intent to issue any subsequent permits expeditiously, except under extraordinary circumstances. The Commission further recommends working with the California delegation to impose the same requirement on all federal agencies under NEPA.*

- **Caltrans' project tracking system is particularly weak in assessing delivery progress during the environmental phase.** This perhaps is to be expected, because many activities and milestones during the environmental phase involve, and are controlled by, non-transportation agencies. Nevertheless, historically most project delay time has occurred during the environmental phase, especially on large complex projects. Large projects present the most challenges for speedy delivery later, during project development, so early warning that allows time to re-deploy resources is most important during the environmental phase. *The Commission calls for closer periodic monitoring of the relatively few most-controversial STIP projects during the environmental phase, as a way to help focus progress reporting and bring public attention to the difficulties, time, cost, and agency responsibilities that now are encountered in the environmental process.*

After the environmental phase has been completed, the project moves onward to design. For most projects, the critical decisions that take the most time are made during the environmental phase, sometimes for engineering reasons, sometimes for environmental reasons, often for both. Thus, for the greatest impact, streamlining efforts should focus on the environmental phase. Unfortunately, most of the streamlining potential must involve federal changes and environmental interests, and will be difficult to achieve. For those seeking more information to understand the environmental phase better, each of its seven steps is laid out in more detail on the following pages.

#### **Environmental Phase Step 1: Notice of Preparation**

Both NEPA and CEQA require a transportation lead agency to issue notice whenever it starts environmental studies for a project that will or may lead to an EIS/EIR. This Notice of Preparation (Public Utilities Code Section 21080.4) must be sent by mail to all responsible agencies and permitting agencies, published in a general circulation newspaper, and additionally should be mailed to known interested parties. The Notice of Preparation should describe the scope of the project, including alternatives being considered, and the scope of potential environmental impacts to be

examined. The Notice of Preparation asks those who receive it to suggest additional project alternatives for consideration or additional potential environmental impacts for examination. The law allows 30 days to respond. The agency may hold public meetings for information purposes.

The Notice of Preparation is intended to engage all interested parties early in the process. If the lead agency is open-minded about the range of alternatives for the project, and if interested parties respond early, the Notice of Preparation can save considerable time later in the environmental process by avoiding the need to start over with new, unexpected alternatives, and by preventing the lead agency from overlooking issues. Practically, the Notice of Preparation adds at least 40 days onto the beginning of the environmental process.

The major problem encountered at the Notice of Preparation step comes from permitting agencies and interested parties that hold back and chose not to participate at this early stage. These agencies and interested parties then enter the environmental process later on, resulting in the lead agency having to go back and begin again. At present, an agency or interested party faces no penalty for failing to respond, if it receives a notice of preparation.

### **Step 2: Agency Consultation and Decision about Alternatives**

Caltrans begins environmental studies by consulting with the environmental agencies it knows it will have to deal with later in the process, especially those that may have to issue a permit before construction. Early involvement can help the process go more smoothly later, and, for projects facing NEPA, can minimize review times later on if federal agencies can agree on mitigation measures that will be necessary to satisfy CEQA anyway. When the agency consultation process has become well established, it particularly can save time for non-controversial projects with minimal need for mitigation. The time spent on agency consultation is indeterminate, however long the lead agency thinks it needs to lay the groundwork for detailed studies that follow.

The lead agency makes a critical decision at this point in the process, following the Notice of Preparation and any agency consultations. The decision comprises which project alternatives are to be studied and kept under consideration, and which are to be rejected up front. This decision point is not specifically spelled out in NEPA or CEQA, but it flows from the basic description of the role of alternatives in the environmental process (Public Utilities Code Section Code 21002). The decision, nevertheless, can doom a project delivery schedule, if feasible alternatives with outside constituencies get dropped and have to be restudied and reconsidered later.

The decision on alternatives to be considered represents a tradeoff. The study of alternatives, especially the time required to examine endangered species and survey historic or archaeological resources and the cost of the studies become a factor, but it is faster and cheaper to do thorough studies up front than to have to go back and reopen studies if new alternatives emerge later in the process. A long history of experience has shown the risk of rejecting alternatives early, especially on controversial projects, unless the impacts or costs can be shown to be obviously unreasonable. The transportation agency typically makes its decision about alternatives based on the purpose and need for the project. If the purpose and need are defined too broadly, or too narrowly, good alternatives may be overlooked or rejected. On projects with substantial local controversy, this can have a significant effect later on when tradeoffs may have to be made to balance transportation improvement and economic development needs against social quality of life and environmental protection. Depending on the size of the agency, this decision can be made within a few days or for large agencies with many decision-making layers, may take as long as 30 days.

### **Step 3: Environmental Studies and Preliminary Engineering**

Both NEPA and CEQA require environmental studies as a basis for informed decisions (Public Utilities Code Sections 21080(c) and 21081). CEQA requires that a “public agency shall base its findings on substantial evidence in the record” (Public Utilities Code Section 21081.5). The transportation agency typically must also do some preliminary engineering on the project as part of the environmental studies, so it can determine where ground must be cleared, excavated or buried, where concrete must be poured, where water will drain to and what other pertinent features may have to be included in the project. The preliminary engineering also can help determine the effect of one alternative compared to another and of potential mitigation measures on the cost of the project.

Environmental studies can be lengthy and arduous. The most challenging studies involve endangered plants, which typically must be examined during a short flowering season in spring, historic or archaeological resources, which may have to be excavated and then considered in detail by appropriate agencies, and socioeconomic impacts of new routes that cut through existing communities. Environmental studies may need a few months, a year or two, or in some cases even longer.

Two issues can arise during environmental studies. First, a transportation agency may or may not have staff with the necessary expertise for environmental studies. For example, Caltrans has a limited number of hydrologists, historians, archeologists and biologists on its staff, but environmental studies involving these specialties are cyclical and often highly seasonal in nature. Caltrans would not carry staff to the level that may be needed for peak demand, but the consequence may be that some projects cannot be done during a critical opening in the weather or biological cycle and, thus get delayed a year. Local agencies may not have such specialty staff at all and have to contract for consultants, a separate process that adds to the time line.

The second issue concerns the responsiveness of other agencies that receive the information from environmental studies toward granting construction permits. Some of these agencies may be understaffed or overwhelmed by several projects arriving all at once and, thus may have to hold up review, sometimes for an extended period of time, even six months or longer. In the past couple of years, Caltrans has begun providing state resources to these agencies (even federal ones), to hire staff to be ready to review environmental studies for transportation projects expeditiously; if transportation projects do not need work at any given time, the agency may use the staff for other purposes. This approach has met with mixed success.

### **Step 4: Draft Environmental Document**

Once environmental studies have been completed, the lead agency must prepare a draft environmental document disclosing the information it has learned from the studies in the context of its proposed project (Public Utilities Code Sections 21082.1—21083). The draft document may be a Finding of No Significant Impact (FONSI)/Negative Declaration or an EIS/EIR. The statutes suggest that the document should be concise, understandable to a lay reader, and focused on relevant and significant information; it must also be complete enough to support any judgments or findings concerning the project.

As anyone who has reviewed environmental documents for transportation projects knows, agencies do not always write their documents this way. The Commission receives several environmental documents every month, and few months pass when it does not receive at least one that is several inches thick. Again, the problem with the draft environmental document step is execution, not the basic requirement. While the statute and regulations encourage agencies to make reference to information and findings in environmental studies or reports in other published documents, many transportation agencies try to include the whole environmental record in the draft environmental document. The lead agency is trying to insure that, if a lawsuit should be filed later, the

environmental document can stand alone and be judged adequate in court, thus allowing the project to proceed. The writing of such a thick document, however, involves time and cost for both the agency preparing it and those reviewing it. In practice, some reviewing agencies have fostered the use of fat detailed environmental documents; these agencies may review only a narrow section of the document pertaining to their interest and complain if they must obtain and examine separate environmental studies.

For projects involving federal funds or a permit approved by federal agencies, the document must satisfy NEPA as well as CEQA. NEPA is centered on ensuring that all interested agencies have an opportunity to be involved. This has two effects on timing (and ultimately on cost). A federal agency must be the lead agency for NEPA, which for a transportation project typically (but not always) means FHWA or FTA. Since a FONSI or EIS must speak for all federal agencies, FHWA and FTA take great pains to insure completeness of the draft and final documents. Again, this takes time, since both agencies have limited staff for this purpose. Second, the timelines for other federal agencies to review environmental documents must be figured in, including the time for FHWA and FTA to pass documents back and forth between agencies. Any federal agency that must ultimately approve a permit to build a project must be given the time to consider the environmental record; otherwise, the permit may not be granted in a timely way. In practice, FHWA and FTA insist on handling and reviewing requests for consultation, proposals during consultation, and draft and final NEPA documents going both ways between state and local agencies and other federal agencies, which strings out what already may be a lengthy timeline.

Preparation of a draft environmental document can take less than a month for a relatively simple project and document, to a year or more for a complex project with significant controversy and a broad array of impacts. To some extent, a well-prepared draft environmental document can shorten the time needed to prepare the final environmental document, by honing comments to significant issues and by providing a good base from which response to comments can be made.

#### **Step 5: Agency and Public Review**

Once the lead agency has prepared a draft environmental document, it must notify all interested agencies and all permitting agencies, publish or post notice in a public newspaper or place, and mail the document directly to known interested parties, under both NEPA and CEQA. This requirement mirrors that of the Notice of Preparation, with the main difference being that the list of known interested parties has usually become quite a bit longer (Public Utilities Code Sections 21003.1, 21092-21092.5, 21104, and 21153).

Those receiving a draft environmental document typically have 30 days to respond. In many cases, the lead agency will hold a public hearing and it must do so if the document discloses significant environmental impacts.

The review of the draft environmental document is intended to provide a broad public benefit. It helps guide the project decision by bringing into play checks and balances that help the transportation agency find a project that can provide the greatest public good, for transportation as well as for the natural and community environment. It provides the democratic opportunity for all interested parties to have a voice. It also may bring out new information that the lead agency overlooked.

The time that must be allowed for public review is limited to 30 days but can be longer if the agency must schedule and hold a public hearing or if the lead agency decides that a longer review period would be appropriate given the complexity of the draft document, the project, the environmental impacts, or the degree of public controversy. In most circumstances, the lead agency will have enough information to deal with comments about specific environmental impacts. Sometimes it may need to do specific supplemental studies and sometimes it may decide to alter the project or entertain different mitigation measures, but these matters are usually relatively manageable.

The most difficult eventuality for the lead agency arises when new project alternatives get proposed, ones with enough merit to be seriously considered. The lead agency may then have to do a new round of environmental studies of all impacts, in effect going back to square one. In essence, this doubles the time required for the environmental phase of a project and in many cases will require a new draft environmental document and public hearings. This danger is greatest on projects that are known to be controversial in a local setting.

#### **Step 6: Final Environmental Document/Project Approval Report**

Both NEPA and CEQA require the lead agency to prepare a final environmental document responding to comments heard about the draft environmental document (Public Utilities Code Sections 21100-21105 and 21151-21151.5). The final environmental document must describe the actual project that is to be designed and built, including mitigation measures. After receiving comments on the draft environmental document, the lead agency must decide whether any additional alternatives need to be studied. If not, the lead agency must choose one alternative or devise a hybrid alternative from those under consideration. The lead agency then rewrites the draft environmental document, describing impacts as they relate to the alternative chosen as the project, specifically responding to any comments and substantiating all findings in the context of the chosen project.

Depending on the nature of the project, the style and contents of the draft environmental document, and the number, breadth and depth of comments received, the preparation of the final environmental document may take anywhere from a month or so to a year or longer. For projects involving federal funds or federal agency approvals, NEPA comes into play, and may add significant time to the final document step, time beyond the control of a state or local agency in California. The federal lead agency (typically FHWA or FTA) takes whatever time it needs to become comfortable that the final environmental document is adequate for the funding decision it must make and the permit decision(s) any partner federal agencies must make. It then passes the document on to the partner agencies for their own reviews. FHWA or FTA often can review a document in a month or two, but in some cases have taken five or six months and in cases of extremely controversial projects, well beyond a year. The review time for federal environmental agencies then follows sequentially. Thus the time for all the involved federal agencies to review a final environmental document essentially must be added onto the end, after the lead agency has finished its final environmental document.

The final environmental document certifies the project to be built. Caltrans prepares a project approval report to accompany it, defining the engineering and environmental parameters for design; local agencies have some version of the same report, sometimes a less formal one.

#### **Step 7: Notice of Determination/Opportunity for Lawsuit**

After completing the final environmental document, the lead agency files a Notice of Determination with the State Office of Planning & Research (Public Utilities Code Sections 21108 and 21152), documenting its choice of project alternative and completion of its consideration of environmental impacts. The lead agency must notify responsible and interested agencies within 10 days that it has filed a Notice of Determination. At the federal level, FHWA or FTA must also file a Record of Decision with U.S. Environmental Protection Agency, certifying its approval of the project.

The filing of a Notice of Determination opens a window of 30 days for parties to file lawsuits in state court alleging that the lead agency did not properly complete the environmental process or a window of 35 days to file lawsuits contesting the lead agency's determination that a project was categorically excluded or would yield no significant impacts (The law also allows a window of 180 days, wherein a lawsuit may be filed against a project where no environmental studies or

documentation were filed at all) (Public Utilities Code Section 21167). At the federal level, the filing of a Record of Decision opens a similar window for lawsuits in federal court.

The opportunity for a lawsuit, at either the state or federal level, provides impetus to proceed carefully through the environmental phase, moving through the process step-by-step with enough time between steps so that all interested parties can be heard. In the 30 years since NEPA and CEQA were enacted, the vast majority of environmental lawsuits have alleged improper completion of the process. It has proven very difficult to sue over the merits of findings, since for such lawsuits the judgment of the lead agency duels with the judgment of the suing party and courts are not well equipped to sort out judgments, either of which may be permissible within the law. Thus, the final step in the environmental process and in the environmental phase must allow a time of at least 30 days, during which the project could be challenged and stopped by a lawsuit.





## I. 2000 ISSUES

### B. Delivery Constraints on Transportation Investment

#### 3. Project Approval and Development

The project approval and development process in California is very complex, time-consuming and extremely difficult to track. The process starts with feasibility studies and ends with the allocation of funds. The process is tightly bound to state and federal environmental laws, California public contract laws, engineering requirements, and when federal funds are involved to complex mandatory federal rules and regulations. By statute, Caltrans is the responsible agency for performing engineering design work for projects on the state highway system. For transportation projects off the state highways (also known as local assistance projects) regional, county, city or other local entities either do their own or contract out the engineering design work. For local assistance projects that utilize federal funds, Caltrans acts as the fiduciary agent for the Federal Government and is responsible for monitoring compliance with federal laws and regulations.

Caltrans and its predecessors (e.g., Division of Highways) have over 100 years of experience in developing transportation projects. Caltrans manuals are big, hefty and full of detailed information. The Local Assistance Program Guidelines and the Local Assistance Procedures Manual together weigh in at over 16 pounds and encompass 1,500 pages. The information is of immense value to engineers and designers in the “trenches,” but is very difficult if not impossible for public works directors and other officials to study and digest.

In order to track and share project development information (i.e., cost, scope, schedule, milestones, programming, obligation, funding, expenditures, etc.) necessary for timely delivery of projects and for compliance with the "use it or lose it" provisions of SB 45 and AB 1012, real time or at least current data is essential. Caltrans has vast pools of data, but only limited tools to coordinate and organize the data into meaningful and timely management reports for the state's transportation stakeholders. Caltrans also lacks state-of-the-art project management control tools for its own state highway system projects. The establishment of effective project tracking and information tools throughout the project development process - including earned value analysis - has long been the goal of not just the Commission, but of those who have studied Caltrans (SRI International's 1993 management audit of Caltrans), and Caltrans itself.

**Project approval** refers to the approval by Caltrans, and where required by the Federal Highway Administration (FHWA) of projects on the state highway system. An engineering report called a Project Report (PR) documents Caltrans' approval for most types of state highway projects. A project receives Caltrans' approval when a Caltrans District Director signs the PR. All projects for which an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is prepared require the development and evaluation of project alternatives. Most projects for which a Negative Declaration (ND) is prepared also carry more than one alternative throughout the public hearing phase (subject also reviewed in Volume I-Section-B-2 of this Annual Report). The PR documents the detailed engineering reasons for selecting a preferred alternative. A Final Environmental Document (FED) documents the environmental reasons for selecting a preferred

alternative. When the FHWA is involved, it takes action to approve project design features before the project is approved by Caltrans. The Commission takes project approval action, if involved, after the Caltrans' District Director has approved the project.

Once the **environmental phase** is completed and **project approval** is secured, detailed project engineering design also known as Plans, Specifications and Estimate (PS&E) is initiated. A significant portion of the engineering design effort (about 30%) is often completed prior to the initiation of the detailed project design. The 30% effort, often referred to as **preliminary engineering**, is required during the environmental phase for the development of cost estimates and design alternatives. Even though preliminary engineering makes up about 30% of the total engineering design effort, the resources expended to reach the 30% effort can be much greater, because of the many alternatives studied and the sidetracking that occurs during the environmental process. Good project development process tracking tools and earned value analysis would help to quantify the effort expended versus the product accomplished at this stage of project design. The main activities in producing a preliminary set of plans are the completion of geometric base maps, the accumulation of structural site data and the production of right-of-way maps.

During the **detailed engineering design phase**, project information is reviewed and updated, purpose and scope is refined, design surveys and photogrammetric mapping are obtained, right-of-way requirements are determined, and geotechnical, structure and project designs are completed. The detailed project engineering design effort can be generally grouped into the following seven steps that are addressed in greater detail at the end of this section for those seeking more information to understand the process:

1. **Maps & Site Plans**: This step is done to establish the existing physical features that will form the basis for the actual project design. Physical controls and constraints are identified and established for use during the detailed engineering design process.
2. **Project Design/Structures Design/Right-of-Way Engineering (utilities location)**: This step involves the actual engineering design work; project layout, typical cross sections, profile sheets, construction details, drainage sheets, engineering calculations, quantity calculations, etc. Also the work involved in locating existing utilities and engineering relocation plans if necessary.
3. **Right-of-Way Appraisals & Acquisitions**: During this step the project's real property needs are determined, the needed property's fair market value is established and purchase of the needed property is attempted. If negotiations with a property owner are unsuccessful a condemnation process invoking the power of eminent domain may be initiated.
4. **Project Cost Estimates**: Project cost estimates establish a base line against which the fairness and reasonableness of construction bids can be gauged. This step is integral to the other steps. During the design process cost estimates are updated continuously. The biggest value in having cost estimates as a distinct and separate step is to easily identify and prevent scope creep.

5. **Right-of Way-Certification:** This is a certification that right-of-way necessary for a project has been acquired. This step is an end product whose biggest value in being identified separately is that projects cannot proceed to construction without this step being accomplished.
6. **Permits/Local Agreements/Route Adoptions/Hazardous Materials:** Entities other than the project sponsor have vested interests in transportation projects, which they protect by requiring mitigation of project effects, or by requiring various approvals, permits or agreements. When acquiring properties the presence of hazardous waste needs to be fully considered and if possible avoided.
7. **Final PS&E/Ready to List:** During this step final project development procedures are initiated to verify that all aspects of the Plans, Specifications, & Estimate (PS&E) are complete before preparing the project for fund allocation and advertisement to construction companies.

### **Time Line**

The time line for project approval and development can vary greatly, from six to twelve months for small projects to eighteen to forty-eight months or more for large projects. The agency responsible for project development can influence the time line to a great degree, although it is not in total control. Utility owners can be slow in responding to utility relocation requests. Property owners can contest the necessity, the location and the public good of projects, thereby requiring long and arduous eminent domain court proceedings. Permitting agencies can engage in delaying tactics to shoot down a project or to extract added mitigations or enhancements. Hazardous materials can be encountered and play havoc with schedules and costs.

All of the steps, attendant effort and time required can be magnified on controversial projects. Local elected leaders can change and demand that project decisions done before their tenure be reevaluated, changed and redesigned. Such a turn of events can be devastating to project schedules.

### **Challenges and Recommendations**

- **Seek state-of-the-art project management and control tools.** Support Caltrans in its efforts to secure funds for modern information technology tools. Caltrans is experiencing difficulties in processing its information technology tools, Feasibility Study Report (FSR), through the Department of Finance and the Department of Information Technology. Caltrans and California's transportation stakeholders desperately need a modern and efficient project development delivery tracking system that includes concise reports and earned value analysis capabilities. Improving transportation project delivery through information sharing is of the utmost importance to the state. Loss of federal transportation funds is possible if the project management information tool solutions defined in the Caltrans FSR request are not implemented quickly.

- **Seek user-friendly documentation of federal process and procedures.** Encourage Caltrans to develop a user-friendly version of its Local Assistance Procedures Manual. Public works directors and other officials need a simple and concise document that outlines the federal process and identifies the pitfalls, but does not go into the fine minute details of the process.
- **Seek up-to-date right-of-way information.** Recommend right-of-way acquisitions be carefully monitored so one or two difficult property purchases do not hold up projects where many parcels are being acquired.
- **Seek timely and good-faith participation by permitting and environmental agencies.** Recommend that state regulatory and environmental agencies provide timely project reviews and not hold projects hostage while demanding last minute enhancements.

### **Overview of Project Approval and Development Procedures**

The project approval and development effort can be generally grouped into seven steps that are addressed in greater detail below for those seeking more information to understand the process.

#### **Step 1: Maps & Site Plans**

Engineering design begins with the identification of physical features to establish physical controls and constraints. Physical features include terrain (flat, hilly, mountainous), material (dirt, sand, rock), improvements (buildings, drainage structures, utilities), environmental concerns (flora, fauna, wetlands), etc. Once physical controls are defined, project features are scoped. Adequate mapping is necessary as a basis for accurate engineering design. Geometric base maps are circulated to identify problems that are easier to correct at early stages of design and to establish a foundation for skeleton layouts. Coordination should be initiated with any affected agencies that issue permits, such as the State Lands Commission, U.S. Coast Guard, State and local Reclamation Boards, California Department of Fish and Game, Regional Water Quality Control Boards, U.S. Army Corps of Engineers, Department of Parks and Recreation, etc. To facilitate the permit process these agencies are encouraged to perform an early review of the geometric base maps. Unfortunately, many permitting agencies do not respond because they are understaffed or as a practice do not comment until presented with a complete set of design plans and then make their wishes known requiring a partial or total redesign of the project. This lack of cooperation can have a devastating effect on project delivery schedules.

Depending on the size of the project, this step can take from two to four weeks for a small project to three to six months for a large project. An example of a small project is an intersection signalization at \$0.5 million; an example of a large project is a \$25 million interchange upgrade or replacement.

#### **Step 2: Project Design/Structures Design/Right-of-Way Engineering (utilities location)**

Skeleton layouts are utilized to prepare final plans. Quantity calculations, contract specifications and other elements of detailed design are completed. As final plans near completion, it should be confirmed that special considerations for the project are being resolved. These considerations may include:

- hazardous waste cleanup;
- railroad agreements;
- approval of material disposal sites;
- water well abandonment procedures;
- aesthetics review;
- transportation management plan;
- environmental mitigation commitments.

The project engineer prepares the majority of the project plans. These usually include the layout sheets, typical cross sections, profile sheets, construction details, drainage sheets, quantity summary sheets, etc.

Foundation studies are conducted and the information is used to develop structure designs and detail sheets. At times Caltrans has experienced shortages of geotechnical staff to conduct timely foundation studies and proceeded with extensive structural risk design work that needed to be redone once the foundation studies were received. This practice on more than one occasion has led to major structural design changes, cost increases and long project schedule delays.

Work involved in the identification, positive location (pot-holing), protection, removal and/or relocation of utility facilities is necessary to clear and certify right-of-way. Project design engineers must work closely with affected utility owners. It is important that utility owners be consulted during project design and agree to any alternative selection that involves their utilities. At times utility owners have been slow in responding to utility relocation plans or slow in expending their resources to move utilities that they are responsible for. This at times has required project engineers to work around the utilities or delayed right-of-way certification and project schedules.

Depending on the size of the project, this step can take from one to two months for a small project to nine to eighteen months for a large project. Again an example of a small project is an intersection signalization at \$0.5 million; an example of a large project is a \$25 million interchange upgrade or replacement.

### **Step 3: Right-of-Way Appraisals & Acquisitions**

Right-of-way requirements are determined and the geometric base maps are used to order title reports and prepare appraisal maps. The appraisal maps indicate the size of property takes and remainders, and show engineering details that may affect property values. After appraisal maps are certified the appraisal process is initiated and fair market value of required parcels is established. Offers to parcel owners are made on the bases of the established fair market values. Caltrans strives to acquire property by purchase rather than by condemnation. If negotiations with a property owner are unsuccessful a condemnation process invoking the power of eminent domain may be initiated. Condemnation of property is initiated through a "Resolution of Necessity" which is requested from an "expert" body that has an open process for the property owner to contest the need for his property. The "expert" body makes findings about the need for the property and the findings are then taken to court for an order to possess title. Usually the Commission acts as the "expert" body for projects on the state highway system and county boards of supervisors for non-state projects. Eminent domain power should be used only as a last resort.

Under eminent domain law, a property owner whose property is considered for condemnation has the right to appear before the "expert" body to contest three and only three issues:

1. Whether public interest and necessity require the proposed project.
2. Whether the project is planned and located in a manner which will be most compatible with the greatest public good and the least private injury.
3. Whether the property sought to be condemned is for the proposed project.

The "expert" body neither determines the amount of compensation for the property rights to be acquired, nor deals with any other issues than the three just enumerated.

Each year a number of property owners appear before the Commission to challenge condemnations that would authorize acquisition of their property. It usually presents a problem when property owners address issues or alternatives that Caltrans did not adequately consider during the project

development process. Such omissions usually cast doubt on the need for the property acquisition and projects may be unnecessarily delayed.

Caltrans has established a review process that at most times is very successful at resolving issues with property owners. Most Resolutions of Necessity come before the Commission as uncontested and are used by property owners as a springboard to adjudicate compensation in a court setting.

Projects usually require many parcel acquisitions from many different owners. Frequently all but one or two of the necessary parcels are purchased. With the result that one or two individuals can delay projects many months. These situations also illustrate the need for state-of-the-art project management control tools; the earlier such “challenges” are identified the sooner they can be dealt with. Also it might be worthwhile to examine condemnation proceedings in light of reasonableness.

Depending on the size of the project, this step can take from two to three months for a small project to six to twelve months for a large project if no property owners request an appearance to challenge the necessity of the project. If appearances are requested the time required for this step can easily double. An example of a small project is an intersection signalization at \$0.5 million; an example of a large project is a \$25 million interchange upgrade or replacement.

#### **Step 4: Project Cost Estimates**

The reliability of project cost estimates at every stage of the project development process is necessary for responsible fiscal management. Therefore, project cost estimates should be continuously updated throughout the project's development. As more information becomes available, specific contract items of work are identified. The quantities of these items are calculated and tabulated. Project cost estimates should represent the fair and reasonable prices the state should expect to pay for each item of work to be performed. Determining appropriate unit prices for individual contract items requires an analysis of recent bid prices for similar projects or an analysis of current labor, equipment, and materials costs. Cost estimating is not an exact science. However, project sponsors must strive for reliable project cost estimates, so projects can be delivered within budget. Cost estimators need to research, compare and above all use their professional judgment to prepare quality cost estimates.

Project cost estimates should never be artificially reduced to stay within programming limits, nor should they be reduced to make more programming capacity available for additional projects. Likewise, project cost estimates should not be artificially raised beyond the contingency percentages to provide additional cushion or project embellishments for project designers.

Project scope creep can affect cost estimates. As projects are refined, designers and project sponsors have a tendency to add “good” or “desirable” features to the project that exceed the original intended scope. Although, at times it is desirable to add features to a project, this should be kept to a minimum because of the spillover effect on to other parts of the project development effort. Right-of-way maps might need to be redone, structural plans might need to be redone, quantities recalculated, project cost estimates increased, etc. Good planning from the start is essential; changes, additions and scope creep leads to cost overruns and schedule delays.

This step is integral to the other steps and is done concurrently. This step does not have a unique identifiable time element itself, but is an end product whose biggest value in being identified separately is that scope creep can be identified easily at this stage.

## **5. Right-of-Way Certification**

Before a Caltrans project can be advertised, the Right-of-Way Program must certify that the right-of-way has been acquired. All Caltrans projects require certification, even if no new right-of-way is involved because of possible utility conflicts. There are three types of right-of-way certifications:

- No. 1 Certification indicates all property has been acquired;
- No. 2 Certification indicates all property has been acquired or Orders of Possession have been obtained;
- No. 3 Certification indicates that the right-of-way process is in order, but acquisition or Orders of Possession will not be completed until a certain date.

A project under Caltrans rules can be voted and advertised with a Certification No. 3, but must be upgraded to a No. 1 or No. 2 at least three weeks prior to bid opening.

Right-of-way certifications can be held up by incomplete utility relocation agreements, or unfinished property condemnation proceedings. This step does not have a unique identifiable time element in and of itself, but is an end product whose biggest value in being identified separately is that projects cannot proceed to construction without this step being accomplished.

## **6. Permits/Local Agreements/Route Adoption/Hazardous Materials**

Entities other than the project sponsor have vested interests in transportation projects, which they protect by requiring mitigation of project effects, or by requiring various approvals, permits or agreements. Negotiations with other agencies to allow a project to proceed to construction take place during engineering and environmental studies (see Volume I-Section-B-2 of this Annual Report), the project approval process, and project design. Negotiations should usually reach closure with an approval, agreement or permit at the same time as project approval or shortly thereafter. At times in cases of controversial projects, negotiations have extended well into final project design and even beyond necessitating design changes and project delays when final agreements are reached. On extremely controversial projects, agreements are never reached and the projects linger on for years before being deleted from the STIP.

At times, permitting agencies (especially state regulatory and environmental agencies) have exhibited a lack of timely or good-faith participation in the project delivery effort because they are either advocates against the project or are attempting to extract added mitigation or enhancements. Case in point is the California Coastal Commission and the Noyo River bridge replacement project in Fort Bragg. All kinds of last minute mitigation demands based on constantly changing cost factors were being made. Even after finally giving a permit once Caltrans acquiesced to \$1,000,000 in mitigation the Coastal Commission suspended the permit for a month, while they reconsidered reopening the mitigation issue.

In addition to permits and approvals that may be required by state and local agencies, various federal agencies may also require permits and approvals. Federal agencies have approval or permit authority over activities on federal lands over resources like air and water quality, wildlife, navigable waters, etc. Early public involvement may be required on projects that involve federal action (funding, permits, etc.) and potentially effect historic properties or involve wetlands.

The following table of federal permitting agencies, while not inclusive, is typical for transportation projects:

Resource, Geographic Area, or Activity	Federal Agency	Federal Regulation
Air	U.S. Environmental Protection Agency	Clean Air Act
Fish & Wildlife Habitat	U.S. Fish & Wildlife Service U.S. Forest Service National Park Service National Marine Fisheries Service	Endangered Species Act
Water	U.S. Army Corps of Engineers U.S. Environmental Protection Agency U.S. Bureau of Reclamation U.S. Fish & Wildlife Service National Marine Fisheries Service	Clean Water Act
Navigable Waters	U.S. Army Corps of Engineers U.S. Coast Guard	Rivers & Harbor Act
Historic Properties	Advisory Council on Historic Preservation	National Historic Preservation Act
Wetlands	U.S. Army Corps of Engineers U.S. Environmental Protection Agency	Executive Order 11990 (Protection of Wetlands)
Floodplains	Federal Emergency Management Agency	Executive Order 11198 (Floodplains Management)
Farmland	U.S. Soil Conservation Service	Farmland Protection Policy Act

On some projects Caltrans and other local or state agencies or private entities provide joint financing. A local or state entity responsible for water delivery or flood control or storm water drainage may desire to include some of that work with a related highway project, over and above what is needed for the project; or provide additional landscaping on a state highway; or install a traffic signal which involves legs that are local streets. A local agency may also propose to totally or partially fund a state highway improvement. A developer may desire to make some improvements to accommodate a development adjacent to a state highway. Caltrans must enter into agreements that provide for such cooperation on a project, such agreements are known as “Cooperative Agreements” in Caltrans parlance.

Cooperative Agreements are used with local agencies to outline the responsibilities and obligations of parties to the agreement, such as funding and staffing responsibility, liability, ownership, right-of-way, utilities, maintenance, etc. In the absence of a formal executed agreement, Caltrans has no legal authority or obligation to incur expenses on any cooperative work beyond that which it is Caltrans’ obligation to provide. Execution of a formal agreement is required prior to Caltrans incurring any costs or committing any personnel resources.

Before a project at a new route location can proceed the Commission must adopt the new route location. This Commission action is known as a “Route Adoption.” Commission route adoptions are needed to:

- establish the location of an unconstructed route;
- change the location of an existing route to a new alignment;
- designate an existing local road as a traversable highway;
- convert a conventional highway to a freeway or an expressway.

A route adoption is normally a routine action if there is community support; but if there is considerable controversy, the Commission may schedule and hold a separate public hearing prior to taking any action. Route adoption of a freeway or expressway requires a subsequent Freeway or Controlled Access Highway Agreement with the affected local agency.

When acquiring properties hazardous waste presence need to be fully considered and if possible avoided. No acquisition should take place until hazardous waste/material investigations have been completed and appraisals reflect the findings. If a contaminated site is encountered and avoidance is not practical every effort should be undertaken to have the owner or responsible party investigate and clean up the contamination prior to acquisition. Regardless of who is responsible for performing cleanup of a contaminated project site, such cleanup should be completed prior to final project design. Lack of hazardous waste awareness can have a devastating effect on project delivery schedules and costs; case in point is the Oyster Point project in South San Francisco where the Commission was requested by Caltrans to make many high value supplemental funding votes.

Depending on the size of the project, this step can take from two to three month for a small project to nine to eighteen months for a large project if no insurmountable permitting or hazardous waste problems crop up. If permitting or hazardous waste problems surface time requirements for this step can easily double and in some extreme case take years or just never happen. An example of a small project is an intersection signalization at \$0.5 million; an example of a large project is an interchange upgrade or replacement for \$25 million.

#### **7. Final PS&E/Ready to List**

Final project development procedures require verification that all aspects of the Plans, Specifications, & Estimate (PS&E) are complete before preparing the project for advertising. All permits must be current, right-of-way must be certified, Freeway and Cooperative Agreements must be executed, and the necessary funds secured. The final product is assembled and legal language specific to a particular type of project is added. A final estimate known as a "PS&E Estimate" or engineer's estimate is locked down. All contract documents are then reproduced for distribution to prospective bidders. This is the final step before project funding allocation and advertisement. At times if plans are not up to best practice they are sent back for correction.

Depending on the size of the project, this step can take from two to four weeks for a small project to four to six weeks for a large project if plans are not sent back for correction. An example of a small project is an intersection signalization at \$0.5 million; an example of a large project is a \$25 million interchange upgrade or replacement.





## I. 2000 ISSUES

### B. Delivery Constraints on Transportation Investment

#### 4. Fund Allocation and Construction

**Fund allocation** and **project construction** are the final phase before a much awaited transportation improvement is delivered to the public for its use and enjoyment and to address the intended transportation problem. After what is typically many years of planning, environmental review and assessment, and enormous struggles to put financing together, the project secures an allocation of real dollars and is on its way to dirt moving, concrete pouring and/or rail laying.

The Commission is not involved in the actual construction process. Streamlining or overcoming any construction process shortcomings is left to the attention of the construction industry and the appropriate technical, professional and code writing organizations. However, the Commission does play an important role in allocating funds to construction projects. After a project is designed, project sponsors seek funding allocations as fast as possible. More flexibility in the allocation procedures or shortened time frames to actually bring allocation requests to the Commission for action are long standing goals shared by the Commission and project sponsors.

The Commission has been responsive by delegating some of its allocation authority to Caltrans and by allocating funds in lump sum for Caltrans' State Highway Operation and Protection Program (SHOPP) Reengineering effort. The status of the allocation delegations is reviewed in Volume II Section-I of this Annual Report. As for Caltrans' SHOPP Reengineering effort, there appears to be constraints in the state's contracting laws and procedures that make it difficult for Caltrans, during the design phase of a highway rehabilitation project, to "partner" and seek input from private construction companies because of the competitive contract bid phase of the project.

This past year, the Legislature passed and the Governor signed AB 405 (Knox, 1999). AB 405 authorizes Caltrans to designate six design-sequence projects, to determine if there is potential for faster performance and cost savings by allowing construction to start before plans and specifications are complete.

The **fund allocation** and **construction** effort can be generally grouped into the following four steps that are addressed in greater detail at the end of this section for those seeking more information to understand the process:

1. **Project Allocation**: This step allocates construction funds for individual projects when each project is ready to proceed to construction and a final engineer's estimate of project construction costs, based on a full and complete set of engineering design plans and specifications, is completed.
2. **Advertisement/Bids/Bid Opening**: This step establishes that taxpayers receive the best value for their tax dollar and insures that no collusion exists to fix or rig the award of construction projects, most commonly through awarding contracts to the low bidder.

3. **Construction Engineering/Change Orders**: This step ensures conformance with the contract plans and specifications. It provides for accurate contract payments to the contractor for quality construction. It also provides flexibility to allow for any necessary changes during project construction.
4. **Claims/Contract Acceptance/Closeout**: During this step any demands for additional compensation by the construction contractor arising out of errors or omissions in the design plans and specifications or from change orders are resolved. Final inspections, project acceptance, expenditure reports and as built plans are done.

### **Time Line**

The time line from fund allocation through project construction to project acceptance and closeout can vary greatly, from six to twelve months for small projects to eighteen to twenty-four months for large projects. Occasionally, very large corridor projects or complex freeway-to-freeway interchange projects might even require a much longer construction time line one that takes two to three or more years longer. Because the agency responsible for project delivery is not in control during the actual construction process (the step with the largest proportion of time) it can influence the time line to only a small degree. Major controlling events are construction windows constrained by the weather, endangered species, traffic commute patterns, and material shortages, labor shortages or strife, or other such events. All of these events are not under the control of the delivery agency and in the majority of cases not even under the control of the contractor.

### **Challenges and Recommendations**

- **Seek flexibility for construction contractor participation in the design effort.** The Commission recommends that Caltrans seek changes in the State Contracting Law that would enable participation by construction contractors in the design phase of projects. This might entail changes to long established competitive bidding processes.
- **Use AB 405 as a springboard to involve construction contractor participation in the design effort.** The Commission recommends that Caltrans proceed with the implementation of AB 405 and seek authority to do more than just six design-sequence projects.
- **Seek additional flexibility for rural county project allocations.** The Commission recommends that an examination be undertaken to see if more flexibility can be extended to rural county State Transportation Improvement Program (STIP) projects where bids come in high and project scope cannot be easily reduced. Possibly a process allowing for some limited cost adjustments similar in nature to authority extended to Caltrans, known as “G-12 authority”, could be implemented.

## **Overview of Fund Allocation and Construction Procedures**

The fund allocation and construction effort can be generally grouped into four steps that are addressed in greater detail below for those seeking more information to understand the process.

### **Step 1: Project Allocation**

The construction costs programmed in the programming documents are not based on a full study of all aspects or a complete set of engineering plans and specifications for a project. Recognizing this, the Commission allocates (i.e., votes) construction funds for individual projects when each project is ready to proceed to construction and a final engineer's estimate of project construction costs, based on a full and complete set of engineering design plans and specifications, is completed. This final engineer's estimate is done at the Plans, Specifications, and Estimate (PS&E) stage of the project and hence is referred to as the PS&E Estimate.

After the PS&E Estimate is prepared, all STIP project construction allocation requests are placed on the Commission's agenda for approval. Per statute, it is the final engineering estimate (i.e., the PS&E Estimate) at the time of the Commission's allocation vote that counts against the STIP's geographic formula requirements known as "county shares".

Commission policy requires all construction allocations greater than 120% of the amount programmed in the STIP (or the SHOPP, for that matter) to be specifically examined and closely scrutinized. It is the Commission's intent that Regional Transportation Planning Agencies (RTPAs) have an opportunity to review and consider the effects that a greater-than-120% allocation vote would have on a county's share balances and consider ways to reduce project scope to keep construction costs as close to the original programmed estimate as possible. The Commission will consider making a construction allocation vote that exceeds the amount programmed if: a county or the interregional program has an adequate unprogrammed share balance or if the Commission finds it can approve an advance to the county share or the interregional share. When considering a share advance at construction allocation vote, the Commission is not bound by the "not more than one million county population limit" statute imposed on share advances during original STIP project programming.

The length of time this step takes is not dependent on the size of the project, but on the time it takes to secure a final engineer's estimate and then to schedule and process items onto the Commission's agenda. The subject of project cost estimates is reviewed in Volume I Section-B-3 of this Annual Report. Since the Commission typically meets every five weeks and agenda items need to be noticed ten days in advance of the meeting, this step can take anywhere from ten days to five weeks. In order not to delay projects, the Commission in certain instances has delegated to Caltrans the authority to allocate funds and only report to the Commission on project allocations so done. The following Commission allocation delegations are in place:

- State Highway Emergency Allocations (including seismic retrofitting)
- State Highway Pavement Rehabilitation Allocations
- Local Roadway Storm Damage Repair & Pavement Rehabilitation Allocations
- Local Project Development Allocations
- Local Rideshare Allocations
- Matching Allocations for RSTP/CMQA Funds
- Local and Regional Planning, Programming & Monitoring Allocations

In addition, the Commission at the beginning of each state fiscal year acts upon an annual Local Assistance Allocation to Caltrans so non-STIP Local Assistance projects can be processed by Caltrans without individually appearing on the Commission's agenda.

With a Commission project construction allocation vote or a Caltrans delegated allocation in hand, the project sponsor can proceed to advertise the project for construction.

**Step 2: Advertisement/Bids/Bid Opening**

The advertisement duration time is based on the cost and complexity of the project. The advertisement period begins with publication of a "Notice to Contractors" in a newspaper receiving wide local circulation. A contract bid opening is a public forum where bids are read aloud. No new bids can be submitted after bid opening has started. A bid analysis is conducted to justify the award or rejection of the bids. Written justification is required when contracts are not awarded to the lowest bidder, including evaluation of good faith efforts for inclusion of Disadvantaged Business Enterprises.

Bid openings for projects on the state highway system are handled in Sacramento by Caltrans. Recognizing the likelihood that construction bids may not exactly mirror the construction allocation vote, the Commission delegated to Caltrans the authority to increase individual project construction allocations, within limits<sup>1</sup>, to allow award and completion of construction contracts, to reduce the volume of financial transactions submitted for Commission action and to increase the efficiency of processing changes. This Commission delegation was established under Resolution #G-98-12, commonly referred to as the "G-12 delegation".

The G-12 delegation to Caltrans has no bearing on county share balances. Per the Commission's adopted STIP Guidelines<sup>2</sup>, no county share balance adjustment will be made for supplemental construction allocations made by Caltrans under the G-12 delegation. The Commission must allocate any construction funding adjustment that exceeds the delegated G-12 limit. All subsequent increases to the construction allocation must be presented to the Commission for approval and are referred to as supplemental votes.

When project bids come in high the Commission's G-12 delegation gives Caltrans flexibility to add funds to projects because Caltrans does not have any additional funding source at its disposal outside of the State Highway Account. Large local agencies have flexibility to deal with high bids because they have many varied funding sources at their disposal to tap into. Small local agencies, especially from rural counties, go into shock when their STIP project bids come in high and they can't or aren't allowed to jettison part of the project's scope. The small agencies have very little flexibility and usually no other sources of funds. A high bid situation can delay or kill a project in rural counties.

Construction contracts are awarded to the lowest qualified bidder, provided that all procedures and legal requirements have been fulfilled, and the contractor is notified of contract approval. Depending on the size of the project, this step can take from three to four weeks for a small project to two to three months for a large project. An example of a small project is an intersection signalization at \$0.5 million; an example of a large project is a \$25 million interchange upgrade or replacement.

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<sup>1</sup> For STIP projects Caltrans may adjust the project construction funds allocated by the Commission by no more than the following:

- a. \$200,000 for projects with a Commission allocation of less than \$1,000,000.
- b. \$200,000 plus 10 percent for projects with a Commission allocation of \$1,000,000 or more.
- c. When a project is awarded for less than the Commission allocation, the G-12 delegation is to be based on the contract award allotment, rather than the Commission's allocation amount.

Any adjustments that exceed the above limits must be allocated by the Commission and do not establish a new G-12 capacity for the project. The Commission must allocate all subsequent allocation increases.

<sup>2</sup> Section 49 of Resolution G-99-24 adopted August 18, 1999.

### **Step 3: Construction Engineering/Change Orders**

For state highway projects, Caltrans' construction personnel are responsible for field control, ensuring conformance with the contract specifications, accurate control payments to the contractor, and quality construction. A qualified engineer, known as a "resident engineer," is placed in charge and empowered to have administrative control of the project. The construction work must be inspected to assure compliance with the contract. Deviations must be promptly brought to the contractor's attention. Material samples must be taken and tests performed. Daily reports to record and document work in progress are kept. Occupational safety and health standards are enforced; the resident engineer is required to see that the contractor properly provides for the safety of the workers and the traveling public. Labor compliance requirements are monitored.

Any change of the approved plans or specifications or work required must be covered by a contract change order. Changes on planned design/environmental/mitigation features may need to be reevaluated before proceeding with a change. The administering agency is responsible for determining eligibility of all change orders. Examples of work requiring change orders include:

- revisions to geometric design;
- revisions of structural section;
- revisions involving addition, deletion, or relocation of major structures;
- changes in planned access provisions;
- changes which alter the scope of the contract;
- changes in type or quality of materials;
- changes in specifications or specified method of processing;
- changes that result in a significant increase or decrease of contract item.

Depending on the size of the project, construction can take from three to six months for a small project to as much as six to eighteen months for a larger project. An example of a small project is an intersection signalization at \$0.5 million; an example of a larger project is a \$25 million interchange upgrade or replacement. Occasionally, large corridor projects or complex freeway-to-freeway interchange projects might require two to more than three years of construction time.

### **Step 4: Claims/Contract Acceptance/Closeout**

Claims are defined as demands for additional compensation. Many claims can be avoided if reviews of the contract documents are thorough, both in preparation of the project and in bidding the project. Problems often occur when incomplete plans are rushed to bid. Also plans that were developed and then shelved for some time are especially dispute prone because traffic patterns and other field conditions may have changed. Contractors can contribute to claims through ineffective project management, scheduling and substandard work. Some methods that can be included in contract provisions to help reduce contract claims include:

- alternative dispute resolution techniques,
- negotiation,
- mediation,
- use of a dispute review board,
- arbitration.

The Commission has strongly urged that claim resolutions be diligently pursued to satisfactory conclusion and within a reasonable period of time. Before contract acceptance, a final inspection is performed and any corrective actions to be undertaken by the contractor are identified. Upon successful completion of all corrective actions undertaken by the contractor, final payment can be authorized to the contractor and the project accepted. The resident engineer prepares a set of original plans with "As Built" corrections and a "Report of Expenditures" this initiates timely final payment and project closure.



# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **C. Outlook for 2000 STIP**



## I. 2000 ISSUES

### C. Outlook for 2000 STIP

The development and adoption of the 2000 State Transportation Improvement Program (STIP) marks another step in the transition from the 7-year STIPs of the past to 4-year STIPs under SB 45. The 2000 STIP will be the first 4-year STIP, revisiting the last 4 years of the 6-year 1998 STIP, FY 2000-01 through FY 2003-04. The 2002 STIP will be the first 4-year STIP to add new programming years, FY 2004-05 and FY 2005-06.

The outlook for the 2000 STIP was modified this year both by the adoption of the 1998 STIP Augmentation and by the enactment of AB 1012 (Torlakson), which added a new advance project development element to the STIP, beginning with the 2000 STIP. As a result of AB 1012, programming in the 2000 STIP will consist of two distinct parts, the basic STIP and the advance project development element. Under AB 1012, the fund estimate is to identify programming capacity, above and beyond regular STIP capacity, that may be used only for project development work on projects that are otherwise eligible for the STIP and are not yet programmed for right-of-way or construction. All advance project development work is subject to the STIP's county and interregional shares. In effect, advance project development element funding is treated as an advance against future STIP shares.

#### The Basic STIP

The Commission's 2000 STIP Fund Estimate, adopted in August 1999, identified no new funding capacity for the basic STIP. That does not mean, however, that there will be no new project programming.

When the Commission adopted the original 1998 STIP, over \$270 million was reserved in county shares for the 2000 STIP. With the 1998 STIP Augmentation and \$1.6 billion in added programming capacity, the unprogrammed balance of county shares grew to \$790 million. The current balance is down to about \$618 million, including STIP amendments through December 1999 and including balances that were formerly identified as short-term reserves. Of the \$618 million, the Commission has already advanced \$110 million to other counties and to the interregional program, leaving a net unprogrammed balance of \$508 million.

The \$618 million is reserved for 51 of the 59 counties (including the Tahoe region, which has its own county share). However, about 85% of that amount is reserved by just 17 counties:

- Half that amount, \$306 million, is reserved for 5 counties: San Diego (\$73 m), Santa Clara (\$71 m), Orange (\$59 m), Los Angeles (\$58 m), and Tulare (\$44 m).
- One third of that amount, \$218 million, is reserved for another 12 counties: Riverside (\$28m), Stanislaus (\$25m), San Mateo (\$23m), San Joaquin (\$22m), San Francisco (\$21m), Humboldt

(\$17m), Butte (\$17m), Sacramento (\$14m), Sonoma (\$14m), Imperial (\$13m), Alameda (\$12m), San Bernardino (\$12m).

See the Fund Estimate chart at the end of this chapter for a summary of the reserves and advances for all counties.

In the 2000 STIP, the first call for unprogrammed balances will go to the counties for which the balances are reserved. To the extent that counties leave balances unprogrammed in their 2000 regional transportation improvement programs (RTIPs), they will free up capacity for the Commission to program advances to other counties and to the interregional program. Given current balances and the programming history of the counties holding balances, it seems likely that about \$50-100 million will be available for additional advances in the 2000 STIP.

A major issue for the Commission in programming the basic STIP may be whether there are enough projects to qualify for advances with the funds that are freed up. State law permits county share advances only in counties in regions with less than 1 million population. Thus counties with populations representing 80% of the state are ineligible for any county share advance. For eligible counties, the law limits advances to the amount needed to fund a single project. The law also limits advances to 200% of a county's current county share, though that amount far exceeds any advance yet proposed.

In the 1998 STIP Augmentation, the Commission advanced nearly \$100 million from unused county shares to the interregional program, a figure since reduced to under \$60 million by savings and by the deletion of a major project on Route 91 in Orange and Riverside counties. The Commission will probably be able to make further advances to the interregional program in the 2000 STIP, even after meeting requests for county share advances. At issue is whether Caltrans will be able to identify enough additional interregional projects that can be delivered within the STIP period.

### **AB 1012 Advance Project Development Element**

In November, after the enactment of AB 1012, the Commission amended the 2000 STIP Fund Estimate to identify a capacity of \$375 million for the new advance project development element. In accordance with AB 1012, this was 25% of the amount estimated to be available for STIP programming in the first two years beyond the 4-year STIP period. The \$375 million does not represent new funding, but represents the capacity to advance future STIP shares for project development purposes. The Fund Estimate chart at the end of this chapter includes the breakdown of the \$375 million into county and interregional shares.

The advance project development element should be a valuable tool in meeting its stated intent, which is "to facilitate project development work on needed transportation projects to produce a steady flow of construction work." That construction work could include work ultimately to be funded from other funding sources as well as from the STIP.

In the aggregate, however, the amount programmed for advance project development in the 2000 STIP

will probably be far less than \$375 million, though a few counties may approach their allotted share. There are several reasons for this:

- The \$375 million is a large amount, perhaps more than enough to fund all project development work for all prospective projects for the 2002 STIP.
- The 1998 STIP already includes project development work for many projects not yet scheduled for right-of-way or construction.
- Project development work was already eligible for regular STIP funding, and many counties are holding balances in reserve. The advance project development element provides a means of advancing future STIP share, not new funding.
- Many agencies have chosen to apply STIP funding to local road rehabilitation and other small projects that require relatively little project development work.
- Local agencies with access to sales taxes or other non-STIP funds have often chosen to fund project development work with non-STIP funds.
- The short time frame since passage of AB 1012 allows little time to develop proposals before adoption of the 2000 STIP. Advance project development shares not programmed by that time will remain available for STIP amendments until the 2002 STIP. The Commission may expect to receive new advance project development proposals well after the initial 2000 STIP adoption.

**2000 STIP Development Schedule**

The 2000 STIP is being developed according to the following schedule:

Caltrans presented Draft Fund Estimate.	July 14-15, 1999 Commission meeting.
CTC adopted Fund Estimate and STIP Guidelines.	August 18-19, 1999 Commission meeting.
Caltrans presented Draft Fund Estimate Amendment for Advance Project Development Element (AB 1012).	September 29-30, 1999 Commission meeting.
CTC adopted Fund Estimate Amendment and Guidelines for Advance Project Development Element.	November 3-4, 1999 Commission meeting.
Regions submit RTIPs with STIP proposals.	December 15, 1999.
Caltrans submits ITIP interregional program.	December 15, 1999.
CTC STIP hearing, North (Sacramento).	January 19-20, 2000 Commission meeting.
CTC STIP hearing, South (Los Angeles).	February 22-23, 2000 Commission meeting.
CTC publishes staff STIP recommendation.	March 9, 2000.
CTC adopts 2000 STIP.	March 29-30, 2000 Commission meeting.

**2000 FUND ESTIMATE SUMMARY**  
**Includes STIP Amendments and Allocations Through December 1999**  
(\$1,000's)

County	Share	Progr'd	Balance Unprogr'd	Balance Advanced	Proj Devel (AB1012)
Alameda	211,535	199,325	12,210	0	10,379
Alpine/Amador/Calaveras	23,472	19,764	3,708	0	1,702
Butte	27,237	10,257	16,980	0	2,001
Colusa	7,374	6,441	933	0	513
Contra Costa	119,602	111,982	7,620	0	6,466
Del Norte	6,556	5,579	977	0	490
El Dorado LTC	15,845	11,577	4,268	0	1,185
Fresno	91,290	121,665	0	30,375	6,827
Glenn	10,917	11,920	0	1,003	562
Humboldt	38,742	21,665	17,077	0	2,047
Imperial	46,306	33,364	12,942	0	3,180
Inyo	45,624	41,586	4,038	0	2,692
Kern	151,680	152,779	0	1,099	8,951
Kings	24,882	23,039	1,843	0	1,300
Lake	14,497	6,540	7,957	0	844
Lassen	24,004	22,687	1,317	0	1,235
Los Angeles	1,055,858	997,498	58,360	0	65,745
Madera	14,921	14,474	447	0	1,116
Marin	38,609	38,609	0	0	2,139
Mariposa	5,559	5,528	31	0	416
Mendocino	25,518	24,344	1,174	0	1,908
Merced	29,680	29,329	351	0	2,217
Modoc	13,169	10,071	3,098	0	678
Mono	39,147	39,047	100	0	1,973
Monterey	84,947	95,012	0	10,065	3,672
Napa	19,591	16,861	2,730	0	1,218
Nevada	13,849	13,247	602	0	1,036
Orange	279,740	220,486	59,254	0	17,886
Placer TPA	32,192	40,058	0	7,866	1,677
Plumas	13,473	10,117	3,356	0	769
Riverside	200,241	172,663	27,578	0	12,255
Sacramento	125,451	111,279	14,172	0	8,648
San Benito	9,675	8,976	699	0	613
San Bernardino	314,436	302,311	12,125	0	16,961
San Diego	377,200	303,549	73,651	0	20,624
San Francisco	74,742	53,848	20,894	0	5,588
San Joaquin	84,201	62,305	21,896	0	4,532
San Luis Obispo	74,862	71,430	3,432	0	3,688
San Mateo	86,306	63,425	22,881	0	5,649
Santa Barbara	77,606	77,414	192	0	4,345
Santa Clara	163,174	92,040	71,134	0	12,200
Santa Cruz	34,780	32,738	2,042	0	2,159
Shasta	42,304	35,182	7,122	0	2,176
Sierra	6,936	2,712	4,224	0	357
Siskiyou	26,802	26,802	0	0	1,518
Solano	41,624	41,624	0	0	3,112
Sonoma	69,680	56,160	13,520	0	3,761
Stanislaus	56,520	31,164	25,356	0	3,420
Sutter	11,639	8,471	3,168	0	771
Tahoe RPA	8,937	4,409	4,528	0	514
Tehama	17,537	9,637	7,900	0	1,077
Trinity	20,077	18,038	2,039	0	783
Tulare	80,186	36,455	43,731	0	4,248
Tuolumne	11,899	7,551	4,348	0	890
Ventura	107,536	102,391	5,145	0	6,202
Yolo	24,545	22,611	1,934	0	1,675
Yuba	8,824	5,918	2,906	0	660
<b>Statewide Regional</b>	<b>4,683,536</b>	<b>4,115,954</b>	<b>617,990</b>	<b>50,408</b>	<b>281,250</b>
<b>Interregional</b>	<b>1,478,436</b>	<b>1,537,664</b>	<b>0</b>	<b>59,228</b>	<b>93,750</b>
<b>Statewide Total</b>	<b>6,161,972</b>	<b>5,653,618</b>	<b>617,990</b>	<b>109,636</b>	<b>375,000</b>

# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **D. June 2000 Deadline for Proposition 116 Program**

## I. 2000 ISSUES

### D. June 2000 Deadline for Proposition 116 Program

#### Overview

In June 1990, voters approved Proposition 116, the Clean Air and Transportation Improvement Act (CATIA), authorizing \$1.99 billion in general obligation bonds for rail, transit, waterborne ferry and bicycle development throughout California. In the nine years since Proposition 116 was authorized, about \$1.78 billion for some 451 project applications, has been approved by the California Transportation Commission, including: \$1.65 billion for 108 rail projects; \$73 million for 248 non-urban county transit projects; \$30 million for 20 waterborne ferry projects; and \$20 million for 76 competitive bicycle program projects. Of the remaining \$200 million in Proposition 116 funds awaiting application, \$193 million is available for rail projects, \$5 million is available for a rail technology museum, and \$2 million is available for State administrative costs.

#### 2000 Deadline

Proposition 116 requires that the Commission establish guidelines and execute the Proposition 116 grant program to assure that use of funds will lead to rail/transit service prior to July 1, 2000 (PUC Sec. 99684). The State has an interest in insuring the best use of available CATIA bond funds toward meeting public transportation needs and acknowledges that the public's interest may be best met by reallocating idle funds to those projects that are ready for implementation.

At the start of 2000, only six months remain for designated applicants to receive approval for obligating their Proposition 116 funds without jeopardy of the Legislature redirecting those funds for other passenger rail purposes in the same jurisdictions. Approximately \$194 million in funds remain for rail projects. Seven agencies have yet to apply for those funds:

- |  |                 |
|--|-----------------|
| • Caltrans   | – \$ 17,073,000 |
| • City of Irvine                                   | – \$120,600,000 |
| • Marin County                                     | – \$ 11,000,000 |
| • Transportation Agency for Monterey County (TAMC) | – \$ 16,550,000 |
| • Sacramento Regional Transit District             | – \$ 380,440    |
| • Santa Cruz County Transportation Commission      | – \$ 11,000,000 |
| • Sonoma County                                    | – \$ 17,000,000 |

In addition, there are eight agencies that have successfully applied for funds but have yet to seek allocations of part or all of these funds. Approximately \$105 million in approved Rail Program funds remain unallocated:

• Caltrans – Alameda Corridor	–\$18,000,000
• Caltrans – Various	–\$ 3,400,000
• Peninsula Corridor JPB – Track Rehab.	–\$ 1,559,457
• Sacramento RTD – Light Rail Extensions	–\$10,000,000
• Sacramento RTD – Mather & Dwtm. Vehicle Purchase	–\$ 4,644,000
• North San Diego County TDB – Oceanside-San Diego Service	–\$ 1,339,500
• City of South Lake Tahoe – Park Avenue Intermodal Station	–\$ 6,650,000

If the above agencies fail to apply for and/or request allocation of these funds, alternate projects could be accomplished through the following series of actions:

- **Agency Alternate Project Proposals** - In the fall of 1999, as called for in its adopted guidelines, the Commission surveyed those agencies, asking if they intended to substitute projects to replace their original project(s) designated in CATIA, if the funds remain unused or their project(s) proves infeasible by the June 30, 2000 deadline. None of the agencies surveyed suggested substitute projects. Three agencies – Marin County, Monterey County, and Sonoma County – indicated that they still intend to use the funding for the purposes described in Proposition 116 after the June 30, 2000 deadline. To date these agencies still consider their projects to be viable.
- **Commission Recommendation to the Legislature** - The Commission may decide in early 2000, prior to the June 30, 2000 deadline, if it considers the agencies' intended projects to be viable. If the Commission concludes those projects are not viable, the Commission may recommend to the Legislature alternate uses of the available Proposition 116 funds; any such recommendations will be developed in association with the affected agencies.
- **Legislative Action** - The Legislature may, by a two-thirds vote in each house, pass a statute to reallocate unencumbered or unexpended funds to another project (typically a rail project) within that agency's geographic jurisdiction. (If the Legislature does not act to make any changes, any designated uses of CATIA funds as set forth in Proposition 116 will remain in effect for up to another ten years (June 30, 2010).

### **Program Implications and Outlook**

- **Rail Program** – As noted above, the rail program has about \$193 million available for application and another \$45.7 million in approved funds that remain unallocated. The City of Irvine represents \$120.6 million or more than half of the remaining rail program funds that are available for application. Exhibits 1 and 2 show, based on an August 1999 survey of designated applicants, that \$161.6 million of the \$193 million will be applied for and that the remaining \$32.0 million will be sought after FY 2000-01.

**EXHIBIT 1**  
**AUGUST 1999 SURVEY**  
**OF ANTICIPATED RAIL PROGRAM APPLICATION SUBMITTALS**  
**FROM AGENCIES THAT HAVE PREVIOUSLY APPLIED FOR A PORTION OF THEIR**  
**DESIGNATED PROPOSITION 116 FUNDS**

Agency	Remaining Available Funds	Amount To Be Requested by 1/1/00	Amount To Be Requested by 7/1/00	Amount To Be Requested in FY 2000/01	Amount To Be Requested after FY 2000/01
<i>Caltrans - San Joaquin and Capitol Corridor</i>	\$17,073,000	\$8,808,090	\$7,264,910		\$1,000,000*
<b>City Of Irvine</b>	\$120,600,000		\$120,600,000		
<b>Monterey</b>	\$16,550,000		\$13,550,000		\$3,000,000
<b>Sacramento Regional Transit District</b>	\$380,440		\$380,440		
<b>TOTAL</b>	<b>\$154,603,440</b>	<b>\$8,808,090</b>	<b>\$141,795,350</b>	<b>\$0</b>	<b>\$4,000,000</b>

\*\$1 million no longer needed for rail right-of-way inventory designated in Proposition 116.

Marin, Sonoma and Santa Cruz have yet to submit any applications for the use of funds designated in CATIA. The applicants have less than six months to complete applications to address project scope, state and/or federal environmental clearances, matching funding sources, operating revenues, agreements and many other complex issues. Exhibit 2 portrays the agencies and the proposed schedule by which they plan to obtain funding for their projects.

**EXHIBIT 2**  
**AUGUST 1999 SURVEY**  
**OF ANTICIPATED RAIL PROGRAM APPLICATION SUBMITTALS**  
**FROM AGENCIES THAT HAVE NOT APPLIED FOR ANY PROPOSITION 116 FUNDS**

Agency	Available Funds	Amount To Be Requested by 1/1/00	Amount To Be Requested by 7/1/00	Amount To Be Requested in FY 2000/01	Amount To Be Requested after FY 2000/01
<b>Sonoma County</b>	\$17,000,000				\$17,000,000
<b>Marin County</b>	\$11,000,000				\$11,000,000
<b>Santa Cruz County</b>	\$11,000,000		\$11,000,000		
<b>TOTAL</b>	<b>\$39,000,000</b>		<b>\$11,000,000</b>	<b>\$0</b>	<b>\$28,000,000</b>

Exhibit 3, below, portrays the agencies that have successfully applied for funding but have not yet sought allocations for part or all of the funds and the proposed schedule by which they plan to request an allocation for their projects.

**EXHIBIT 3  
AUGUST 1999 SURVEY  
OF ANTICIPATED RAIL PROGRAM ALLOCATION SUBMITTALS  
FROM AGENCIES THAT HAVE APPROVED FUNDS**

Agency	Available Funds	Amount To Be Requested by 1/1/00	Amount To Be Requested by 7/1/00	Amount To Be Requested in FY 2000/01	Amount To Be Requested after FY 2000/01
<b>Caltrans – Alameda Corridor</b>	\$18,000,000	\$11,900,000	\$0	\$0	\$6,100,000
<b>Caltrans - Various</b>	\$3,400,000	\$3,400,000	\$0	\$0	\$0
<b>Peninsula Corridor JPB – Track Rehab.</b>	\$1,559,457	\$1,559,457	\$0	\$0	\$0
<b>Sacramento RTD – Light Rail Extensions</b>	\$10,000,000	\$0	\$0	\$10,000,000	\$0
<b>Sacramento RTD – Mather &amp; Dwtm. Vehicle Purchase</b>	\$4,644,000	\$0	\$4,644,000	\$0	\$0
<b>North San Diego TDB – Oceanside-San Diego</b>	\$1,339,500	\$0	\$0	\$1,339,500	\$0
<b>City of South Lake Tahoe – Park Ave., Intermodal</b>	\$6,650,000	\$0	\$1,650,000	\$5,000,000	\$0
<b>TOTAL</b>	<b>\$45,592,957</b>	<b>\$16,859,457</b>	<b>\$6,294,000</b>	<b>\$16,339,500</b>	<b>\$6,100,000</b>

- Competitive Bicycle Program** – Of the total \$20 million for the Competitive Bicycle Program, a balance of only \$0.2 million in unallocated funds remain, all attributable to one project in the City of Orinda. Another \$0.5 million in savings from other bicycle projects also remains and will be reprogrammed by the Commission to other eligible Transportation Enhancement Activities (TEA) bicycle projects. In 1998, the Commission decided to use Proposition 116 funds on TEA bicycle projects that also met the Proposition 116 eligibility requirements. The Commission concluded that having another statewide competitive cycle for the small amounts of Proposition 116 funds becoming available due to cost savings and project deletion/failure was not cost effective. Further, the original Proposition 116 competitive bicycle priority stand-by list was no longer current and the top-ranked projects on the list were already funded through Proposition 116 or other sources.
- Non-Urban County Transit Program** - The Non-Urban Transit Program has a total of \$73 million authorized under CATIA. The Commission has allocated \$66.9 million or about 92% of the total. The remaining \$6.0 million should be allocated prior to the deadline; otherwise, the funding could be redirected in the same manner as the Rail Program (see Exhibit 4).

**EXHIBIT 4**  
**NOVEMBER 1999 SURVEY**  
**OF ANTICIPATED NON-URBAN COUNTY TRANSIT PROGRAMS**  
**ALLOCATION SUBMITALS**

County	Programmed Amount	Programming Date	Project Type of Remaining Funds	Remaining Balance	Expected Allocation Date
<b>Alpine</b>	\$51,886	2/24/93	Transit	\$51,886	<b>Unknown</b>
<b>Butte</b>	\$8,417,131	3/27/96	Transit	\$20,000	March 2000
<b>Inyo</b>	\$852,129	8/5/93	Transit	\$177,807	Spring 2000
<b>Modoc</b>	\$451,119	3/30/95	Transit	\$55,320	March 2000
<b>Napa</b>	\$5,163,071	4/2/97	Transit	\$146,787	December 2000
<b>Nevada</b>	\$3,659,574	12/15/93, 3/27/96 & 12/10/97	Bicycle Transit/	\$634,638	June 2000 March 2000
<b>San Benito</b>	\$1,710,552	5/1/97	Transit	\$75,711	<b>Unknown</b>
<b>San Luis Obispo</b>	\$10,122,538	1/29/97	Bicycle	\$20,000	Spring 2000
<b>Siskiyou</b>	\$2,029,103	7/15/99	Transit	\$415,994	Spring 2000
<b>Sutter</b>	\$3,002,566	7/9/93	Bicycle	\$66,000	March 2000
<b>Tehama</b>	\$2,313,162	6/3/93 7/9/93	Transit	\$783,428	February 2000
<b>Trinity</b>	\$608,903	11/16/93	Transit	\$51,218	February 2000
<b>Tuolumne</b>	\$2,258,672	3/27/96	Transit	\$1,318,672	March 2000
<b>TOTAL</b>	<b>\$40,640,406</b>			<b>\$3,817,461</b>	

- **Waterborne Ferry Program** - CATIA allocates \$20 million for a competitive ferry program and another \$10 million to the City of Vallejo for ferry vessels and terminal improvements. Through December 1999, the Commission has allocated \$19.3 million, or 96% of the \$20 million of approved projects in the competitive ferry program funds and \$10.0 million, or 100% to the City of Vallejo. The Town of Tiburon intends to request an allocation of the remaining \$0.7 million in competitive ferry program funds by July 1, 2000.
- **Rail Museum** - Proposition 116 includes \$5 million for the California Department of Parks and Recreation (DPR) for construction of the California State Museum of Railroad Technology, and specifies that the CATIA funds will be provided to DPR when sufficient funding for the entire project is available. According to DPR, the Museum of Railroad Technology will cost between \$21 and \$25 million. Project funding will come from CATIA (\$5.0 million), potential Park Bond financing (through the March 2000 Proposition 12 – a \$2.1 billion Safe Neighborhood, Parks, Clean Water, Clean Air, and Coastal Protection Bond Act), lease-revenue bonds issued by the State Public Works Board, potential Transportation Enhancement Activities funds (TEA), and the balance of funds raised privately by the California State Railroad Museum Foundation. DPR’s current plan calls for a Proposition 116 application to be submitted by 2001.



# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **E. Pursuing TEA-21 Implementation**

- 1. Timely Use of Federal Funds**
- 2. Federal Discretionary Programs from TEA-21**
- 3. High Priority/Demonstration Projects**



## I. 2000 ISSUES

### E. Pursuing TEA-21 Implementation

#### 1. Timely Use of Federal Funds

For the first time since 1982, the Commission has reason to be concerned that California may not be able to use all the federal funds assigned to the state in TEA-21 and all the spending authority available annually through the federal budget. Back in 1982, the problem was a shortfall of state funds to provide the required 11.5% match for federal funds. The Legislature solved that problem by increasing the state gasoline tax by 2 cents per gallon (SB 215, Foran, 1982). Now the reasons for concern are different:

- fragmentation of funding among 49 regional agencies and 535 counties and cities, making it hard to manage and track timely expenditure, and
- lack of project delivery, particularly at the local level, ironically largely because of federal red tape.

These causes are not so amenable to legislative action. In fact, they derive to some extent from the legislative climate that produced SB 1435 (Kopp, 1992) and led to the STIP reforms in SB 45 (Kopp, 1997).

This annual report addresses the generic problems of fragmentation of funds and project delivery in much greater detail in the first two chapters, Sections I-A and I-B. The current chapter provides perspective and recommendations in the context of TEA-21 and management of federal funds.

#### Recommendations

The Commission makes four recommendations to try to head off the potential loss of federal funds and spending authority:

- Caltrans and regional agencies must improve the process for tracking programming, project delivery, and expenditure of federal local assistance funds statewide, to make problems visible early;
- Caltrans should continue streamlining the process for administering federal local assistance projects, to simplify the requirements facing local agencies and provide help for small agencies unfamiliar with the steps or unable to devote the staff effort necessary;
- regional agencies should attend to the use-it-or-lose-it provisions applying to federal local assistance funds, newly enacted in AB 1012 (Torlakson, 1999), to encourage more expeditious project delivery by local agencies or substitute projects that can be delivered expeditiously for ones that cannot; and

- the Legislature should consider increasing the state's flexibility to move federal funds around as necessary or expedient to ensure no federal funds expire.

### **The Federal Funding Puzzle**

The workings of federal funding, and the reasons for slow expenditure, are difficult to explain. Congress makes federal funds available to states via a two-step process:

1. Congress first apportions federal funds among the states. TEA-21 defines the apportionments, extending over six years from 1998 through 2003. The apportionments are akin to deposits in a series of bank accounts for California, each one containing a specific type of federal funds, such as Interstate highway, Surface Transportation Program (STP), or Congestion Mitigation & Air Quality (CMAQ). All types of apportioned funds expire after four years.
2. Congress then provides annual spending authority, known as Obligational Authority, commonly called OA. The annual federal budget specifies the OA available to transportation programs. OA is akin to withdrawal slips for the apportionment bank accounts. OA may be used to withdraw any types of funds for which there is a balance available; thus OA can be used to spend one type of funds completely, and another type not at all. Each year's OA is good for that year only, and expires at the end of the federal budget year (September 30).

Thus the state must attempt to spend apportionments of all kinds within four years and also use all available OA every year. As of 1999, California has never forfeited any apportionments or OA.

Federal highway funds come to the state, to be administered and managed by Caltrans and the Commission. State law (SB 1435, Kopp 1992) further directs some of these funds to regional agencies, counties, and cities, distributed through the state budget. Thus, state law fragments federal funds more than federal law does.

Congress traditionally sets OA lower than apportionments year by year. Even with the current booming economy, TEA-21 (and ISTEA before it) set apportionments more ambitious than the annual expenditure levels a balanced federal budget act could sustain. In fact, TEA-21 contained the expectation that OA might only average 91.5% of apportionments over the six years 1998 through 2003. Thus, Congress builds up a backlog of federal apportionments, which the state has no OA to use, and which grows year by year. Once in a while, typically during recessions, Congress will set OA higher than apportionments, and spend down some of the backlog to prime the economy; the last times this happened were in 1996 and 1992.

California currently expects about \$2.1 billion in OA each year, against apportionments that total more than \$2.3 billion. About two-thirds of OA should go to the state, and about one-third to local assistance, based on the amounts of various apportionments and the way state law divides those amounts. So, if both the state and local agencies are using the funds available to them at a parallel rate, about one-third of the backlog apportionments should be assigned to local assistance.

However, the present situation looks very different. Currently, California’s apportionment backlog, as of the end of FFY 1999 (September 30, 1999), amounts to:

<b>Fund Type</b>	<b>Backlog Funds to the State</b>	<b>Backlog Funds to Local Assistance</b>	<b>Total Backlog Apportionments</b>
Interstate Highways	\$19,800,000	\$0	\$19,800,000
National Hwy. System	\$76,300,000	\$0	\$76,300,000
Bridge	\$166,100,000	\$247,400,000	\$413,500,000
CMAQ		\$483,600,000	\$483,600,000
Surface Transp. Pgm.	- \$195,100,000	\$356,500,000	\$160,600,000
Safety	- \$10,500,000	\$16,100,000	\$5,600,000
Enhancements	\$75,700,000	\$72,600,000	\$148,300,000
Other	\$2,900,000	\$0	\$2,900,000
<b>TOTAL</b>	<b>\$134,400,000</b>	<b>\$1,176,200,000</b>	<b>\$1,310,600,000</b>

[Negative numbers indicate the state has used funds assigned to local assistance for state projects.]

In fact, 90% of the backlog in apportionments belongs to local assistance. At this point, the complex problem starts to come into focus, both for OA and for certain kinds of apportionments.

Local agencies get about \$750 million in local assistance apportionments each year, with OA to match, but have delivered at best no more than \$400 million in local assistance projects in any given year. Since OA expires at the end of the fiscal year, Caltrans has been delivering additional state projects qualified for federal funds, to use up the OA that local agencies do not use. This has at least five effects:

- a strain on Caltrans, which must absorb the extra federal red tape on more of its projects, and thus can do fewer of the easier, state-only funded projects;
- a growing balance in the State Highway Account, because the state spends federal funds on projects that were intended to be built with state-only funds when originally programmed, leaving the state funds unspent;
- a ballooning backlog of unachieved local projects, programmed but not delivered, now so large that some local agencies can hardly contemplate being able ever to deliver that many federal projects with all the associated red tape;
- the likelihood that many local agencies will in fact cede federal funds back to the state at the end of FFY 2000, perhaps several hundred million dollars worth, leaving local transportation needs unfunded and further in arrears; and
- a growing risk that Caltrans does not have the resources to continue delivering extra federalized projects year after year, at \$350 million per year, to use the remaining OA and apportionments before they expire.

Now some details deserve mention. Contained within the apportionment backlog are relatively high balances of certain types of funds, as can be seen from the chart above.

While CMAQ funds show the largest balance, California receives about \$300 million of CMAQ funds per year, so the balance represents only about a year and a half of apportionments with no imminent risk of loss. However, both enhancements and the local share of bridge funds represent more than three years worth of apportionments. Thus, in both of these categories some federal funds will expire on September 30, 2000 unless used this year. Caltrans may be able to deliver additional bridge projects if local agencies do not, but federal law requires that a certain proportion of a state's bridge funds go to bridges on local roads. Caltrans typically delivers neither extra enhancement projects nor local bridge projects. The exposure to forfeiting enhancements funds is significant; California agencies, state or local, must deliver at least \$44 million of enhancements projects ready for construction by September 30, 2000, which represents 50% more enhancements projects than ever have been delivered in one year before. The Commission is closely tracking delivery of enhancements projects and trying to ensure that substitute projects are available if some of the ones programmed and due for delivery fail to come through.

The Commission and Caltrans have been trying to improve the accuracy and timeliness of tracking of federal apportionments and OA usage during this past year, to provide early warning, enlist the cooperation of regional agencies, and minimize the risk that any funds or OA might slide through to September 30 and expire. In fact, far more federal apportionments would be at risk to expire — or already have been lost in years prior — if Caltrans lacked the considerable flexibility it now has to manage federal funds; Caltrans can substitute one kind of federal funds for another as various projects are delivered, to use up those types of funds closest to expiration, a practice which forestalls loss of funds but adds to the challenge of keeping track of programming and fund balances. Additional flexibility to exchange or shift local assistance funds might be useful for Caltrans and beleaguered local agencies. The Commission continues to pursue actively measures to streamline federal requirements, to ease the project delivery challenges for local agencies with federal projects. The Commission also is working to define how various provisions from AB 1012 will be implemented, including the use-it-or-lose-it provision.

## I. 2000 ISSUES

### E. Pursuing TEA-21 Implementation

#### 2. Federal Discretionary Programs from TEA-21

TEA-21 contained authorizations for \$21.65 billion spread across 21 federal discretionary programs. For each, Congress intended that applications for discretionary funds would be sent to and approved by the U.S. Secretary of Transportation. The 21 discretionary programs, reviewed below, include ones for highways, transit, ferry boats, railroads, safety and research. The discretionary programs cover areas where Congress intended to fund a specific interest or focus that did not fit comfortably into the rest of the highway or transit program structure.

These various programs seem to call for a variety of approaches to secure funding:

1. Some programs offer funding to which California has guaranteed access, some should be presumed wide open, while others would have to be judged "long shots" which Congress designed for situations in other states.
2. Some programs are obviously aimed at projects at the state level, while others are aimed at projects at the regional or local level, and others may be eagerly sought for projects at all levels.
3. Some of the programs represent an easy opportunity with few takers, while others can be expected to be extremely competitive and selective.
4. Still other programs, in effect, have been altered by Congress by earmarking most or all discretionary funding to specific projects through the federal budget, leaving little if any discretion for the U.S. Transportation Secretary and the intended application process. Those programs most impacted include: New Rail Starts, Bus Replacement, Clean Fuel Vehicles, and Transportation & Community Preservation Pilot programs.

Congressional involvement in discretionary programs poses a particular problem for California, because this state has not pursued projects this way, and the U.S. Senate is a tough arena for California in any case. In fact, Senator Shelby (Alabama) convinced the U.S. Senate to propose a cap on transit funding for each state through the FFY 2000 transportation budget. That cap would have trimmed funding only in the two largest transit states: California and New York; in California's case, transit operators would have lost \$117 million per year from normal program formulas. Fortunately, California and New York were able to remove Senator Shelby's proposal at the very end, in conference committee. Nevertheless, the experience indicates the climate in the U.S. Senate where smaller states, with equal voting power, seek to grab more federal funds, especially for transit, to augment low funding amounts from formulas.

Heading into the third year of TEA-21, California has achieved mixed success in the 21 discretionary programs: quite successful in some, quite disappointing in several others. The greatest disappointments have come in the most highly competitive programs, and in three of the programs where Congress has diverted most of the funding to earmarked projects. California’s share is particularly disappointing in five programs where its needs far outstrip what it has received: National Corridors & Border Infrastructure; Transportation & Community Preservation Pilot; Bus Replacement; Clean Fuel Vehicles; and Access to Jobs/Reverse Commute programs.

California should seek—and should expect—to receive at least a proportional share from all the discretionary programs collectively. That proportional share would come to 9.2% measured by California’s share of highway programs, or perhaps 11% measured by its share of nationwide population. Expectations would be much higher in some programs, and perhaps as low as zero in others. The following chart shows the results for the 21 discretionary programs through the first two years of TEA-21, FFYs 1998 and 1999:

Program	Total \$ TEA-21	\$ Available FFY98+99	CA \$ Requests	CA Amt. Funded	CA % of \$ FFY98+99	\$ Left FFY00-03
Border Infrastructure	\$700	\$123.6	\$50.5	\$7.7	6.2%	\$576
Interstate Discretionary	\$550	\$63.4	\$41.5	\$30.0	47.3%	\$487
Discretionary Bridge	\$525	\$109.0	\$50.0	\$30.0	27.5%	\$416
Covered Bridges	\$50	\$10.0	\$0.0	\$0.0	0.0%	\$40
Scenic Byways	\$148	\$23.5	\$1.7	\$0.8	3.4%	\$125
Community Preservation	\$120	\$11.5	\$57.1	\$0.5	4.3%	\$109
Value Pricing	\$99	\$2.0	\$0.5	\$0.5	25.0%	\$97
Interstate Toll Conversion	\$0	\$0.0	\$0.0	\$0.0	0.0%	\$0
Infrastructure Bank(TIFIA)	\$530	\$1,623.0	\$127.0	\$127.0	7.8%	\$0
ITS Deployment	\$679	\$92.7	\$5.8	\$5.8	6.3%	\$586
MagLev Deployment	\$2,050	\$7.0	\$2.0	\$0.6	8.6%	\$2,043
Low Density Freight Rail	\$105	\$35.0	\$0.0	\$0.0	0.0%	\$70
Ferry Boats & Terminals	\$220	\$32.3	\$9.7	\$3.8	11.8%	\$188
Seat Belt Usage Reward	\$500	\$19.8	\$1.9	\$1.9	9.6%	\$480
Drunk Driving Enf. Reward	\$500	\$106.4	\$32.0	\$32.0	30.1%	\$394
University Hwy. Research	\$159	\$35.7	\$9.0	\$6.0	16.8%	\$123
New Rail Starts	\$9,180	\$1,770.4	\$622.2	\$308.0	17.4%	\$7,410
Bus Replacement	\$3,300	\$937.0	\$125.0	\$74.7	8.0%	\$2,363
Clean Fuel Vehicles	\$1,000	\$0.0	\$0.0	\$0.0	0.0%	\$900
Welfare-to-Work	\$750	\$75.0	\$9.0	\$3.5	4.7%	\$675
Transit Research	\$480	\$101.6	=====	=====	=====	\$378
<b>TOTAL</b>	<b>\$21,645</b>	<b>\$5,179</b>	<b>\$1,145</b>	<b>\$633</b>	<b>12.2%</b>	<b>\$17,459</b>

A qualitative status report on the various programs is presented at the end of this section.

**Recommendations**

First, the Commission recommends that the Administration and Legislature aggressively seek, through the California Congressional delegation and the Clinton Administration, to **convince Congress to end, or at least significantly cut back, its recent practice of earmarking**

**discretionary funds to specified projects through the annual federal budget**, and let the programs truly be competitive and discretionary as intended in TEA-21.

Second, the Commission encourages interested parties from the state, regional, and local levels to get together to **examine the federal discretionary programs with the objective of choosing the most effective approach for each one**, based on knowing how and why the program in question got into TEA-21. Some other states, particularly smaller ones, have clearly been able to orchestrate a unified approach, using key Congressional representatives and coordinated efforts from within each state, to obtain discretionary projects successfully. In several key programs, California's approach to date has yielded disappointment.

Third, the Commission recommends that a representative group of interests explore a process to **evaluate, ration, and package discretionary program applications from California agencies for those discretionary programs plagued most by Congressional earmarking**, with the package ready as backup to give to the California delegation for inclusion as an earmark, **if** that becomes necessary or advisable. While earmarks are not the desirable way to run discretionary programs, if that practice is eclipsing California's access to discretionary funds, then that may have to be the way to go.

Even for some of the programs that remain discretionary, the ones that have been highly competitive, the best approach may entail selecting one or two key projects with broad consensus and statewide backing, and promoting them. Crafting an orchestrated approach for anything among the many state, regional, and local agencies in California is a daunting task. No agency is universally viewed as being capable or willing to act with the greater good in mind. Broad partnership efforts have been notably successful, at times, but they can take time to gel. Nevertheless, the opportunity for California to package groups of projects, well targeted to program objectives, with strong sponsors, in a targeted approach aimed at securing 10-15% of nationwide discretionary program funding, is certainly there.

For the remaining programs, such as the research programs, the best approach may still be to bring forward all of the eligible state and local projects that can be found, a mass assault approach, hoping that some will be competitive and receive funding. In any case, California agencies must push forward with project delivery, to get strong and attractive projects ready for construction, since it is apparent that the U.S. Secretary of Transportation--and Congress--favor funding projects ready for construction over those needing preliminary work.

## **Status Report on TEA-21 Discretionary Programs Through FFY 1999**

**National Corridors & Border Infrastructure** (TEA-21 Sections 1118 & 1119): This program provides funds to plan, design, and build projects on specified major trade corridors, and on access routes to Canadian and Mexican border crossings. California expects to get funding from this program for Route 905 in San Diego, and might get funding for border access highways in Imperial County or for any of three national corridors: Route 5, San Gabriel Valley Rail, and Southwest Passage (Interstate Routes 8 and 10). The \$8 million/6% share received so far is not adequate. Project delivery is a major problem here, since most funds will go for construction projects. Route 905 was programmed in the STIP for delivery in FFY 2000, but it has been rescheduled to FFY 2003, at the very end of the program when there may not be as much funding remaining as California expects and needs.

**Interstate Discretionary** (TEA-21 Section 1107(c)): This program provides additional funds to help complete high-cost, unfinished interstate highway links. California received \$30 million to complete its last interstate project, the Route 15/30 interchange in San Bernardino County, a grant that was welcome but not really expected given other states' needs. California, like most other states, has no more projects eligible for this program; most of the remaining funding will likely go to Massachusetts.

**Discretionary High-Cost Bridge** (TEA-21 Section 1109(b)): This program funds reconstruction or rehabilitation of high cost bridges (including \$150 million for seismic retrofit). California has received \$30 million to retrofit the Golden Gate Bridge, and expects more in coming years. Beyond that, most of the very large, high-cost, aging bridges intended for this program are on the East Coast or Midwest.

**Covered Bridge Preservation** (In TEA-21 clean-up bill): This program is intended to restore and keep covered bridges in service. Since California's remaining covered bridges no longer carry roadway traffic, California is unlikely to receive any funding from this program.

**Scenic Byways** (TEA-21 Section 1219): This program funds traffic improvements and measures to maintain scenic quality on designated routes. California had three eligible byways as of 1998 -- Route 1 Monterey Coast, Route 120 Tioga Pass, and Route 90 Death Valley -- and received a small grant for Coast Route 1. California has applied for scenic byway designation on several other routes, and may receive further funding from this program, but other states with long-established scenic byways probably have an edge in this small program.

**Transportation & Community Preservation Pilot** (TEA-21 Section 1221): This program funds projects or studies to improve transportation and foster community preservation. It has proven to be extremely popular and competitive nationwide, since it provides funding for "livable communities" initiatives. Regional and local agencies in California applied for about 60 projects in the first two years, and received a disappointing total of \$500,000 (4% of funding nationwide) for just three of them. The current "catch as catch can" approach is not working. California, in this popular and important program more than others, should take a hard look at what projects are successful and why, toward developing a new approach.

**Value-Pricing Pilot** (TEA-21 Section 1216(a)): This program sets up road user fee pilot projects (congestion pricing), up to 15 grants total. U.S. Department of Transportation has been seeking takers

for pilot projects since 1987, but serious congestion pricing projects have been scarce. Interest has been sparked somewhat by the success of the toll road projects in Southern California, and, in fact both the State Route 91 and Orange County toll roads are seeking grants in FFY 2000.

**Interstate Rehabilitation Toll Conversion Pilot** (TEA-21 Section 1216(b)): This program allows states to convert up to three interstate highways to toll roads to pay for rehabilitation. This program was included in TEA-21 primarily for northeastern states, and includes authority to convert interstate highways to toll roads but no funding. California might apply, but likely will not.

**Infrastructure, Finance & Innovation (TIFIA)** (TEA-21 Sections 1503 & 1511): This program sets up a credit bank for loan guarantees for large joint projects (>\$100 million, >\$30 million if ITS) for up to 33% of project costs. TEA-21 made four states eligible: California, Florida, Missouri, and Rhode Island; later legislation opened it up to all states. The program allows federal funding for existing state infrastructure banks, useful mostly for public-private, toll, or transit projects with means of loan repayment. Seven large projects (totaling \$7 billion) including San Diego's Route 125 toll road applied for \$1.7 billion in loans and loan guarantees, well above the amount for which TIFIA was capitalized for. Five requests have been approved, including the one from San Diego; it remains to be seen how funding will flow through the budget.

**ITS (Innovative Transportation System) Deployment** (TEA-21 Section 5209): This program makes grants and funds partnerships to advance and deploy innovative technologies in transportation. California has been aggressive in ITS development, and has received the entire \$5.8 million it has sought so far, which represents only 6% of the national total. California should expect to do more.

**MagLev Deployment** (TEA-21 Section 1218): This program provides funds to plan, design, and build one major MagLev project (high speed or low speed), with the grant able to fund up to 67% of project cost. Congress has funded planning studies only so far, since no project appears ready for implementation. In California, the High-Speed Rail Authority and Southern California Association of Governments (SCAG) are co-recipients of a \$1.5 million planning grant for a 60-mile corridor between Los Angeles International Airport and March Air Force Base (now closed) in Riverside. The Authority may eventually seek funding for a MagLev project, and SCAG has plans to do so. Progress in several other states, including Florida, Texas, Ohio, and Illinois, is uncertain, and they form the main competition.

**Light Density (Freight) Rail Line Pilot** (TEA-21 Section 7202): This program provides funds to improve or rehabilitate low-use rail freight lines, public or private; it requires a state freight rail plan and cannot be used for operations. California presently has no such plan but intends to develop one in 2000, after which several strong candidates should be available, including North Coast Railroad, San Diego & Arizona Eastern, and several short lines.

**Ferry Boats & Terminals** (TEA-21 Section 1207): This program builds approaches and facilities for public ferry systems, and buys or reconditions ferry boats. Congress included this program primarily for major ferry systems in Alaska and Washington, which serve as extensions of the Interstate Highway System. California ferry operators have done surprisingly well in this program so far, receiving \$3.8 million (12% of the nationwide total) for ferry services in San Francisco Bay and Long Beach.

**Seat Belt Usage Reward Grants:** (TEA-21 Section 2003): This program gives safety grants to states where seat belt use exceeds the national average. California has the highest seat belt usage nationwide. Congress so far has budgeted only 25% of the funds intended for this program in TEA-21, and California received a 10% share. California should continue to draw at least this level of funding, so the main challenge appears to be convincing Congress to release more of the program's funding.

**Drunk Driving Enforcement Reward Grants** (TEA-21 Section 2004): This program gives enforcement grants to states with .08 (8%) driver blood alcohol limits. California has drawn a healthy 30% of nationwide funding so far, with funds going to the California Highway Patrol.

**University Transportation Research** (TEA-21 Sections 5110 & 5116): This program funds highway research grants through universities and sets up ten university research centers. Three California universities, USC, San Jose State and Long Beach State, are named as eligible research centers. California has received various grants through this program, but the Commission has been unable to obtain specific data about which grants have been funded.

**New Rail Starts** (TEA-21 Sections 3009, 3029, & 3030): This program, by far the most important and lucrative of the discretionary programs, provides grants to build or extend urban rail systems, for any of a long list of eligible projects specified in TEA-21. California has three major rail construction projects well underway -- Los Angeles Red Line, BART to San Francisco Airport, and Santa Clara Tasman -- all drawing funding. The Sacramento Regional Transit South Line has just broken ground, and the San Diego Mission Valley Line will likely get started in 2000. With some two dozen major rail lines under construction or about to start around the country and in Puerto Rico, demand for new rail starts funding far outstrips the amount available each year. California has been and continues to be a large player in this program, getting about 14% of nationwide funding through the 1990s. Congressional earmarks have been a particular problem in this program; Congress has rationed funding year by year for most projects, so as to spread funding broadly across more projects. In some cases, Congress has appropriated funds for projects lacking full funding agreements with FTA, so some past year funds languish unspent. Although projects eventually can expect to receive the full amount of federal funds indicated in their full funding grant agreements, grants may be stretched out over longer periods than expected, sometimes beyond the finish of construction, forcing transit agencies to finance ongoing construction cash flow in the meantime; for example, Los Angeles MTA and BART each received about \$50 million less than requested for 1999, forcing them to carry \$100 million in financing and leaving a \$100 million backlog for Congress to fund in future years (while \$540 million assigned to other projects in other states remains unspent as of October 1999).

**Bus Replacement** (TEA-21 Sections 3009, 3029, & 3031): This program buys new or replacement bus equipment or builds bus facilities. California should expect at least a proportional share of funding in this program, given the scale of its urban areas and bus systems (especially considering the huge bus replacement needs in Los Angeles as a result of the Court Consent Decree), but in fact has received neither a reasonable nor adequate amount. This particular program has been plagued with Congressional earmarking the past two years, mainly from the U.S. Senate, fragmenting much of the money to small system bus replacements in smaller states and cities. California needs to consider a new approach to this program.

**Access to Jobs/Reverse Commute** (TEA-21 Section 3037): This program funds grants to serve welfare to work transport needs; the grants can be used for capital, operating, vouchers, or flex time

projects, and can cover up to 50% of project costs. This new program has been quite competitive nationwide, and Congress has begun engaging in earmarking. California has received only 5% of nationwide funding so far, a disappointing amount, given the degree of urbanization, aggressive welfare reform program, and number of potential clients needing transportation in this state. California should examine more closely the criteria used to award grants in this program, and consider a different approach.

**Clean Fuel Vehicles** (TEA-21 Sections 3008 & 3036): This program buys or rehabilitates low-emission buses or builds support facilities, with emphasis on non-attainment areas for clean air. California should expect substantial funding from this program, given its air quality problems, urbanization, and scale of bus systems, particularly in Los Angeles. However, Congress did not fund the program in either of the first two years, instead transferring half the funds to traditional bus replacement, where California fared poorly under heavy Congressional earmarking that favored other states. California has not focused on developing a strong clean fuel bus program at the state level, to use as leverage with Congress, leaving an untapped opportunity here.

**Transit Research** (TEA-21 Sections 3015, 3016, & 3017): This program funds transit research grants through six programs, local and national, and sets up a national transit institute. California has been pursuing and receiving various grants through this program, but the Commission has been unable to obtain specific data about which grants have been funded.





## I. 2000 ISSUES

### E. Pursuing TEA-21 Implementation

#### 3. High Priority/Demonstration Projects

Congress in TEA-21 identified a long list of direct federal funding for specified projects. Nationwide, the list of high-priority projects totaled 1,850 projects for \$9.3 billion; 156 of the projects for \$877 million are in California. These projects were solicited directly from members of Congress, from their home areas. In California, some came from private interests, many from cities or counties, a few from regional agencies, but none came from the state. These Congressional designated projects are officially called “high priority” projects in TEA-21, and the specified funds are commonly known as demonstration (or demo) funds. A list of the 156 designated high-priority projects for California (showing funding already claimed by those delivered so far) is included below.

Most of these high priority projects bring their own challenges. On the one hand, the federal funding amount is guaranteed specifically and only to the project identified. Federal demo funds are segregated from other federal funds so the project sponsor faces no uncertainty about competing for its federal funding in any given year’s budget. State law has made federal demo funds exempt from the fund estimate, the STIP, and SB-45 requirements.

On the other hand, federal demo funds require 20% local or state match, whereas most other federal funds in California need only 11.5% match. Few high priority projects are fully funded from federal demo funds; in the typical case, federal demo funds provide about 20-30% of project costs, with no indication of where the rest of the money is to come from. The intended scope of high priority projects is often unclear, as is the identity of the agency responsible to carry out the project. Congress limited the release of demo funding year by year across TEA-21, with 11% available in 1998, 26% cumulatively available through 1999, 44% through 2000, 62% through 2001, 81% through 2002, and 100% available by 2003. Finally, Congress further limited access to demo funds by extending its annual budgetary limitation on release of authorized funds, which averages 90.5%, to the separate budget category for demo funds.

Congress’ year-by-year and project-by-project limitation on the availability of demo funds was intentional. Individual high priority projects are derived from individual members of Congress. Those members feared that (other members’) projects delivered early might use up all the funding available under the budget limits, so that their particular project, perhaps delivered a year or two later, might have to wait to get started. Four states were exempted from this limitation—Minnesota, West Virginia, Alaska, and Idaho.

Caltrans, in spring 1999, surveyed the agencies responsible for high priority projects, to find out when they might deliver the projects and be ready to use demo funds. About 75% of those surveyed responded, and Caltrans extrapolated the results across all of the projects designated in

TEA-21. The extrapolation probably represents an optimistic view of demand for demo funds, since the agencies that did not respond are likely to be those least ready to deliver. The survey discovered total cost of high priority projects to be \$6.1 billion, of which demo funds comprise \$877 million (15%), with \$300 million to come from other federal funds, \$1.1 billion from STIP funds, and \$3.1 billion from various local funding sources, leaving about \$800 million presently unfunded. Despite the fact that demo funds are only released incrementally year-by-year, delivery of high priority projects seems to be stretched out even further, with aggregate demand for demo funds lagging well behind even the incremental release rate, as shown in the following table:

<b>Federal Fiscal Years Through:</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
(\$ in millions)					
Available demo funds per TEA-21	\$228	\$386	\$544	\$711	\$877
Project delivery currently expected	\$33	\$120	\$260	\$390	\$540
% of available funds used	15%	31%	48%	55%	62%
Need for funds if \$ could be pooled	\$46	\$180	\$410	\$625	\$750
% of funds used if \$ pooled	20%	46%	75%	88%	86%

The bottom lines of this table show another interesting result from Caltrans' survey. Agencies responsible for high priority projects report that they would deliver projects at about a 50% greater rate if they did not have to finance the demo funds year by year. Directly to the point, California would benefit greatly from the same kind of fund-pooling arrangement now available to Minnesota, West Virginia, Alaska, and Idaho.

As of September 1999, 31 high priority projects in California have been delivered to use \$22.3 million of high-priority funds, a mere 10% of the total demo funds available through FFY 1999. Of these 31 projects, six are now financing \$26.4 million of future demo funds, awaiting the release of those funds through future federal budgets. These six projects have thus tied up \$26.4 million of state or local funds, while more than \$200 million of demo funds already released for California sit idle in the federal Highway Trust Fund in Washington D.C., available only for projects not yet ready to use them.

As noted above, the way Congress designated high priority projects and provided demo funds presented several challenges in California. The Commission wrestled with the situation for eight months, and in March 1999 adopted a policy concerning federal demo funds, to resolve several of those challenges and issues. This policy specifies:

- Demo funds designated for projects already programmed in the STIP should first be used for cost increases or further components, stages, or phases of a project not already fully funded, and otherwise inserted proportionally (or otherwise by mutual agreement among all agencies

contributing funding to a project) to supplant other state, regional or local funding shares already programmed;

- The agency responsible for a high priority project could presume 100% of the total six-year demo funding amount could be programmed to the project, regardless of federal budgetary limits, as long as the agency agreed to finance or backfill with funds it controlled, as necessary, until Congress released the full amount of federal demo funds;
- The Commission would finance any unreleased portion of demo funds for high priority projects on state highways, using funds from the State Highway Account, and for other projects expects regional or local agencies to finance unreleased demo funds;
- Regional or local agencies could turn to the STIP for additional funds needed to complete high priority projects, but the Commission would give no preference in the STIP to high priority projects over others, and
- California should seek Congressional approval to pool demonstration funds across projects and years, as Congress has allowed four other states to do; if successful, the Commission would guarantee to manage federal demo funds so that no high-priority project would be denied or have to wait for funding when delivered, even if demand for federal demo funds might temporarily exceed demo funds available statewide at that time.

The Commission has concluded that the ability to pool demo funds in California would be very beneficial for the program as a whole and for projects individually, with very minimal risk. Caltrans' survey indicates that at least one-third of the agencies responsible for delivery of high priority projects regard Congress' incremental withholding of demo funds to be a significant barrier, requiring financing that those agencies do not have or are unwilling to provide, to the point that they will hold back project delivery rather than seek financing. Even without this barrier, the earliest delivery schedules of high priority projects are cumulatively fairly slow; the Commission is confident that that aggregate delivery of high priority projects will never exceed cumulative release of demo funds at any time during the six years of TEA-21, even if every project could have access to its entire allotment of demo funds on demand. Consequently, the Commission has agreed to finance from the State Highway Account any project that may need funds if Congress allows California to pool its demo funds and the total funds available become fully subscribed, a promise it never expects to have to use.

**Recommendation:**

**The Commission recommends that the Administration and Legislature work together to seek federal legislation that would allow California to pool its demonstration funds across projects and across years during the remaining life of TEA-21, using the TEA-21 provision for Minnesota as a model, and seek a consensus among members of the California delegation to support such legislation during 2000.**

**TEA-21 HIGH PRIORITY PROJECTS PROGRAM AUTHORIZATIONS**  
**Numbers refer to Listing in Section 1602 of TEA-21**

	<b>No.</b>	<b>County</b>	<b>\$ Amount</b>	<b>Project Description</b>	<b>\$ Used</b>
					<b>FFY98+99</b>
N	232	*Butte/Yuba	6,250,000	Improve SR 70 from Marysville Bypass to Oroville Freeway	
N	427	*Sol-CC-Ala-SCI	2,250,000	Construct capital improvements along I-680 corridor	
N	176	Alameda	7,500,000	Upgrade I-880, Alameda	
N	236	Alameda	7,500,000	Upgrade I-680 Corridor, Alameda Co	
N	481	Alameda	375,000	Construct railroad at-grade crossings, San Leandro	<b>28,000</b>
N	558	Alameda	6,000,000	Construct Port of Oakland intermodal terminal	
N	575	Alameda	1,500,000	Upgrade Osgood Rd, Washington Blvd-Grimmer Blvd, Fremont	
N	816	Alameda	5,100,000	Upgrade Greenville Rd and construct railroad underpass, Livermore	<b>464,000</b>
N	918	Alameda	750,000	Undertake median improvements along E 14th St, San Leandro	
N	982	Alameda	525,000	Rehabilitate B Street, Foothill Blvd-Kelly St, Hayward	<b>137,000</b>
N	1080	Alameda	900,000	Upgrade D Street, Grand St-Second St, Hayward	<b>234,000</b>
N	1114	Alameda	9,900,000	Construct I-580 interchange	<b>2,574,000</b>
N	1119	Alameda	450,000	Upgrde Industrial Pkwy SW, Whipple Rd to improved segmnt of pkwy	
N	793	Contra Costa	7,500,000	Upgrade Route 4 West in Contra Costa Co	<b>1,300,000</b>
N	859	Contra Costa	8,500,000	Upgrade Route 4 East in Contra Costa Co	<b>650,000</b>
N	1444	Contra Costa	5,250,000	Construct I-680 HOV lanes, Martinez to Walnut Creek	
N	1282	Del Norte	650,000	Stabilize US-101 at Wilson Creek	
N	1411	Del Norte	275,000	Design & initiation of long term improvements on Hwy 199	
N	741	Fresno	6,000,000	Construct extension of SR 180, Rt 99-Hughes/West Diagonal	
N	331	Humboldt	275,000	Improve highway access to Humboldt Bay and Harbor Port	
N	998	Humboldt	650,000	Upgrade US-101 from Eureka to Arcata	
N	885	Lake	275,000	Widen SR 29 between Route 281 and Route 175	
N	1191	Madera	5,500,000	Extend Highway 41 in Madera County	<b>1,430,000</b>
N	135	Marin	750,000	Reconstruct Tennessee Valley Bridge, Marin Co	
N	357	Marin	750,000	Seismic retrofit of Golden Gate Bridge	<b>195,000</b>
N	1339	Marin	5,250,000	Modify HOV lanes, Marin County	
N	1843	Marin	26,000,000	Conduct Golden Gate Seismic Retrofit Project	<b>6,760,000</b>
N	161	Mendocino	275,000	Enhance Ft Bragg and Willits passenger stations	
N	299	Mendocino	650,000	Willits Bypass, Hwy 101 in Mendocino County	
N	484	Merced	11,000,000	Construct UC Campus Parkway Loop System in Merced	<b>1,200,000</b>
N	448	Monterey	2,100,000	Undertake safety enhancements along Mon Co Railroad hwy grade	<b>482,000</b>
N	566	Monterey	1,650,000	Construct Prunedale Bypass segment of US 101, Monterey Co	
N	1235	Monterey	6,000,000	Construct Airport Blvd interchange in Salinas	
N	1529	Napa	8,700,000	Replace Maxwell Bridge, Napa City	
N	320	Placer	2,700,000	Improve and widen Forest Hill Rd in Placer County	
N	894	Placer	4,275,000	Conduct Rt. 65 improvement and mitigation project [Lincoln Bypass]	
N	811	Sacramento	4,275,000	Improve Folsom Blvd - Hwy 50 in the city of Folsom	<b>1,408,000</b>
N	1052	Sacramento	1,500,000	Extend 7 <sup>th</sup> St, F St-N 7th St, Sacramento	
N	1109	Sacramento	7,500,000	Upgrade intersection of Folsom Blvd & Power Inn Rd, Sacramento	

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N	1322	Sacramento	3,000,000	Construct Sacramento Intermodal Station	
N	701	San Benito	2,250,000	Construct 4-lane highway facility (Hollister Bypass)	
N	78	San Francisco	9,375,000	Construct 3rd St South Bay Basin Bridge, SF	
N	354	San Francisco	9,375,000	Construct San Francisco Regional Intermodal Terminal	
N	1449	San Joaquin	6,000,000	Improve Route 99/120 interchange in Manteca	
N	373	San Mateo	2,100,000	Construct I-380 connector, Sneath Lane-San Bruno Av, San Bruno	
N	401	San Mateo	2,775,000	Upgrade SR 92/EI Camino interchange	
N	441	San Mateo	6,000,000	Construct tunnel with approaches, Devil's Slide project	
N	1165	San Mateo	1,125,000	Undertake San Pedro Bridge project at SR 1, Pacifica	
N	1457	Santa Clara	2,145,000	Install Silicon Valley Smart Corridor project along the I-880 Corridor	
N	11	Solano	750,000	Upgrade access road to Mare Island	
N	398	Solano	2,350,000	Construct I-80 reliever rt. project; Walters Rd/extension segments	
N	1528	Solano	12,100,000	Construct I-80 reliever route system, Solano Cty	<b>400,000</b>
N	806	Sonoma	1,100,000	Widen US-101 from Windsor to Arata Interchange	
N	1340	Sonoma	8,750,000	Widen US-101 from Petaluma Bridge to Novato	
N	263	Sutter	7,300,000	Upgrade Highway 99, Sutter County	
N	769	Tehama	2,200,000	Construct new I-5 interchange with Hwy 99W, Tehama County	<b>120,000</b>
N	234	Yolo	11,500,000	Const. Ramp at I-5 & SR-113; reconst. Rd 102 interchange, Woodland	
		NORTH	\$257,445,000		
S	545	Imperial	6,000,000	Extend SR 7 in Imperial County	
S	1273	Kern	15,750,000	Construct Centennial Transportation Corridor [Route 58]	
S	5	Los Angeles	2,205,000	Extend I-10 HOV lanes, Los Angeles	
S	65	Los Angeles	236,000	Improve streets & construct bicycle path, Westlake Village	
S	69	Los Angeles	750,000	Improve streets & construct bicycle path, Calabasas	
S	173	Los Angeles	10,425,000	Widen and improve I-5/SR 126 interchange, Valencia	
S	198	Los Angeles	9,562,500	Construct Alameda Corridor East project	
S	226	Los Angeles	375,000	Upgrade access to Sylmar/San Fernando Metrolink Station	<b>98,000</b>
S	410	Los Angeles	6,650,000	Construct Redondo Jct grade separation, Los Angeles	
S	413	Los Angeles	12,000,000	Upgrade SR 2 So.Frwy. terminus and improvements to Glendale Blvd	<b>400,000</b>
S	453	Los Angeles	6,000,000	Construct Palisades Bluff Stabilization project, Santa Monica	
S	465	Los Angeles	19,500,000	Construct Exposition Park Intermodal Urban Access Project	
S	491	Los Angeles	6,500,000	Construct Nogales St at Railroad St grade separation, LA Co	
S	552	Los Angeles	6,600,000	Construct Los Angeles County Gateway Cities NHS Access	
S	654	Los Angeles	2,437,500	Reconstruct and widen Mission Rd, Alhambra	
S	673	Los Angeles	3,000,000	Rehabilitate Artesia Blvd	
S	707	Los Angeles	650,000	Implement safety & congestion mitigation improvements, PCH, Malibu	
S	742	Los Angeles	15,000,000	Construct Ocean Blvd/Terminal Is Fwy interchange in Long Beach	
S	779	Los Angeles	6,000,000	Create recreational trails in Santa Monica Mtns Natl Rec Area	
S	802	Los Angeles	1,873,000	Construct bike path, Sepulveda Basin-Warner Center, Los Angeles	<b>200,000</b>
S	834	Los Angeles	2,500,000	Construct Phase 3 of Alameda Street project, Los Angeles	<b>650,000</b>
S	939	Los Angeles	650,000	Improve streets and construct bicycle paths, Agoura Hills	
S	940	Los Angeles	3,750,000	Implement City of Compton traffic signal systems improvements	
S	972	Los Angeles	750,000	Improve roadway access to Hansen Dam Rec Area, Los Angeles	
S	978	Los Angeles	6,500,000	Construct improvements to Harry Bridges Blvd, Los Angeles	
S	987	Los Angeles	4,575,000	Improve the Ave H overpass in Lancaster	
S	995	Los Angeles	1,000,000	Improve streets in Canoga Park and Reseda areas, Los Angeles	

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S	1017	Los Angeles	2,205,000	Construct Alameda Corridor East, San Gabriel Valley	
S	1138	Los Angeles	17,250,000	Upgrade/synchronize traffic lights, Alameda Corridor East, LA Co	
S	1173	Los Angeles	5,000,000	Upgrade Del Amo Blvd at I-405	
S	1208	Los Angeles	2,250,000	Reconstruct La Loma Bridge in Pasadena	
S	1275	Los Angeles	337,500	Reconstruct Palos Verdes Drive, Palos Verdes Estates	96,000
S	1307	Los Angeles	12,000,000	Reconstruct the I-710/Firestone Blvd interchange	
S	1454	Los Angeles	2,625,000	Construct Arbor Vitae St improvements, Inglewood	
S	1477	Los Angeles	2,662,500	Implement ITS technologies, El Segundo Employment Center area	
S	1531	Los Angeles	17,000,000	Construct Sta Monica Transit Pkwy	
S	1533	Los Angeles	100,000,000	Add grade sep/other improv, "Gateway America" proj, S.Gabriel Vllly	
S	280	Orange	15,090,000	Construct I-5 rail grade xings, I-605-SR 91, LA & Orange Counties	
S	433	Orange	1,000,000	Construct parking lot/ped bridge/related improvements, Yorba Linda	
S	738	Orange	5,250,000	Upgrade Bristol St, Santa Ana	
S	799	Orange	985,000	Improve SR 57 interchange at Lambert Rd in Brea	
S	869	Orange	2,250,000	Construct I-5/Avenida Vista Hermosa interchange in San Clemente	
S	942	Orange	1,500,000	Reconstruct Harbor Blvd/SR 22 interchange, City of Garden Grove	
S	1176	Orange	6,750,000	Construct Gene Autry Way/I-5 Access project, Anaheim	
S	1215	Orange	12,515,000	Const. Imperial Hwy grade sep/soundwall, Orangethorpe, YorbaLinda	960,000
S	1255	Orange	1,500,000	Construct Cabot-Camino Capistrano Bridge project, south Ora Co.	
S	24	Riverside	4,875,000	Improve SR 91/Green River Rd interchange [Corona]	
S	27	Riverside	4,500,000	Improve Cabo/Nason St interchange, Moreno Valley	
S	193	Riverside	4,500,000	Realign and improve SR 79 in Riverside County	
S	377	Riverside	2,250,000	Construct interchanges for I-10 in Coachella Valley, Riverside County	
S	1105	Riverside	13,000,000	Widen SR 71 from Riverside County to SR 91	
S	1188	Riverside	3,750,000	Construct Overland Drive overcrossing in Temecula	974,000
S	1198	Riverside	6,375,000	Construct I-15 Galinas interchange in Riverside County	
S	1530	Riverside	7,200,000	Construct March Inland Port ground access project, Riverside Cty	792,000
S	16	San Bernardino	7,500,000	Reconstruct SR 81 (Sierra Ave.) and I-10 Interchange in Fontana	
S	60	San Bernardino	10,500,000	Construct Ontario Intl Airport ground access program	
S	106	San Bernardino	500,000	Improve Mission Blvd in San Bernardino	
S	187	San Bernardino	2,625,000	Rehabilitate historic train depot in San Bernardino	
S	213	San Bernardino	1,125,000	Upgrade Ft Irwin Rd from I-15 to Ft Irwin	
S	254	San Bernardino	2,062,500	Reconst. I-215 & construct HOV lanes, 2nd-9th St, San Bernardino	
S	499	San Bernardino	6,600,000	Construct I-10/Pepper Ave interchange [Colton]	30,000
S	829	San Bernardino	18,000,000	Widen I-15 in San Bernardino County	
S	852	San Bernardino	750,000	Widen 5th St and replace 5th St bridge in Highland	
S	883	San Bernardino	7,500,000	Construct interchange, I-15 at Main St, Hesperia	
S	926	San Bernardino	3,000,000	Plan, design, and construct interchange, I-15/Santa Fe Rd, Barstow	
S	1001	San Bernardino	3,750,000	Construct I-10/Barton Rd West/Anderson St connection [Loma Linda]	
S	1004	San Bernardino	1,500,000	Implement enhanced traffic access, I-10/hospitals/so. Loma Linda	
S	1365	San Bernardino	693,750	Upgrade Riverside Ave/I-10 interchange, Rialto	
S	1366	San Bernardino	1,500,000	Construct I-10 Tippecanoe/Anderson interchange, Loma Linda	
S	1439	San Bernardino	6,000,000	Construct I-15/SR 18 interchange in Victorville/Apple Valley	
S	1453	San Bernardino	1,500,000	Conduct planning, prelim engr/design, Etiwanda Av/I-10 interchange	
S	35	San Diego	10,000,000	Construct SD & AE Intermodal Yard, San Ysidro	
S	296	San Diego	7,500,000	Construct SR 76 in Northern San Diego	

Volume I-E-3, Pursuing TEA-High Priority/Demonstration Projects

S	548	San Diego	3,750,000	Construct SR-78/Rancho Del Oro interchange in Oceanside	
S	568	San Diego	16,000,000	Construct SR 905, I-805-Otay Mesa Border Crossing	<b>320,000</b>
S	689	San Diego	2,250,000	Improve Rancho Santa Fe Rd in Carlsbad	
S	1007	San Diego	3,000,000	Const. SR 56 North/I-5 & North & South/I-15 connectors, San Diego	
S	1054	San Diego	2,250,000	Complete Citracado Parkway project in San Diego County	
S	1125	San Diego	5,000,000	Construct Olympic Training Center Access road, Chula Vista	
S	1321	San Diego	2,250,000	Extend SR 52 in San Diego	
S	1532	San Diego	38,500,000	Construct SR 905 between I-805 and Otay Mesa border crossing	
S	336	San Luis Obispo	375,000	Construct ped boardwalk, Pismo Creek-Grande Av, Pismo Beach	<b>98,000</b>
S	437	San Luis Obispo	375,000	Implement traffic management improvements, Grover Beach	<b>98,000</b>
S	470	San Luis Obispo	825,000	Upgrade Price Canyon Rd, incl bikeway, SLO-Pismo Beach	
S	480	San Luis Obispo	150,000	Construct pedestrian promenade, Pismo Beach	
S	550	San Luis Obispo	375,000	Reconstruct Grand Av, Elm St-Halcyon Rd, Arroyo Grande	<b>98,000</b>
S	1362	San Luis Obispo	6,000,000	Extend Route 46 expressway in San Luis Obispo County	
S	1464	San Luis Obispo	675,000	Upgrade South Higuera Street, San Luis Obispo	
S	29	Santa Barbara	384,000	Construct bikeways, Santa Maria	
S	271	Santa Barbara	1,125,000	Upgrade call boxes through Santa Barbara County	
S	536	Santa Barbara	1,125,000	Rehabilitate pavement throughout Santa Barbara County	
S	1070	Santa Barbara	375,000	Rehabilitate Highway 1 in Guadalupe	
S	1089	St.Barbara/SLO	216,000	Install call boxes along Hwy 166, Hwy 101-Hwy 33	<b>56,000</b>
S	1484	Tulare	6,750,000	Construct Tulare County roads in Tulare County	
S	221	Ventura	625,000	Construct bike paths, Thousand Oaks	
S	664	Ventura	16,800,000	Improve and modify the Port Hueneme Intermodal Corridor Phase II	
S	731	Ventura	1,250,000	Improve sts. and hwys and/or construct soundwalls, Thousand Oaks	
S	984	Ventura	466,000	Improve streets and related bicycle lane in Oak Park, Ventura	
S	1142	Ventura	10,500,000	Widen SR 23 between Moorpark and Thousand Oaks	
		SOUTH	\$619,856,250		
		STATEWIDE	\$877,301,250		<b>22,249,000</b>



# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **F. Trade and Commerce**

## I. 2000 ISSUES

### F. Trade and Commerce

In today's economy, competition for markets is intense and is being played out on an international stage. The prompt delivery of finished goods and receipt of raw materials and parts is essential to compete successfully for markets and to sustain production, as companies schedule the arrival of supplies just in time to meet their manufacturing needs. Because of the expanding global economy, more goods are moving longer distances with increasing reliance on quick and dependable transportation.

California is well positioned to play a key role in the expanding U.S. trade with Asia, Canada, and Mexico as a producer, consumer, and transshipment point. California's extensive highway and railroad networks are the backbone of the State's goods movement system. The state's mature transportation system of highways, rail lines, pipelines, airports and seaports serves a diverse range of needs for the movement of goods, moving over 800 million tons of freight worth almost \$640 billion out of, into, and within the state every year. However, approaching the ports of entry into California -- international border crossings, commercial airports, and seaports -- the concentration of passenger and freight traffic is straining the existing transportation infrastructure. A major constraint on the level of growth of California's international trade and domestic commerce is the capacity of the State's import/export transportation infrastructure. Specifically:

- Trucks are unduly delayed by highway congestion in the largest urban areas and by inadequate access to intermodal facilities.
- Freight railroads need corridors that are grade-separated at major road crossings.
- The State's largest ports are hampered by traffic congestion on their landward approaches, and some smaller ports lack adequate access to railroads for intermodal shipments.
- Airports built mainly for passenger traffic are having difficulty accommodating increased demands for cargo traffic as well as growing air passenger demand.

#### **Senate Resolution 8 - Airport Ground Access Improvement Needs**

Senate Resolution 8 (Burton, 1999) requested the California Transportation Commission, in consultation with the California Department of Transportation and the state's regional transportation planning agencies, to produce and submit to the Senate Transportation Committee and the Senate President pro Tempore, by May 10, 1999, a "10-year needs assessment of the state's transportation system", including, but not limited to, (a) unfunded rehabilitation and operations needs for state highways, local streets and roads, urban, commuter and intercity rail service, and transit systems, and (b) high-priority projects expected to reduce congestion and provide economic and environmental benefits to the state. A summary of the findings of the Commission's SR 8 Report is presented in

Volume II - Section-A of this Annual Report. A more detailed presentation of the information on the ground access needs over the next ten years for California’s freight rail corridors, truck facilities, ports, and airports in the Commission’s SR8 Report to the Legislature is included in the following sections.

**Truck Facilities** - The Alameda Corridor Project is a \$2.4 billion project currently under construction which consolidates port-related train traffic onto a 20-mile high-capacity transportation corridor linking the ports of Los Angeles and Long Beach with the national railroad system and interstate highway system near downtown Los Angeles. The project will speed shipment of cargo by consolidating four rail lines and improving the flow of rail and vehicle traffic through the elimination of more than 200 street-level railroad crossings. An unresolved issue related to The Alameda Corridor is improving truck access to the ports.

Caltrans, the Alameda Corridor Transportation Authority (ACTA), the Ports of Long Beach and Los Angeles, Los Angeles County Metropolitan Transportation Authority (LACMTA) and the Southern California Association of Governments (SCAG) need to continue to work toward addressing not only the projected growth of rail traffic through the Ports of Long Beach and Los Angeles, but also the expected tripling of port related truck traffic. Adequate freeway and highway improvements near the ports have not yet been programmed in the State Transportation Improvement Program (STIP). A \$3 million Major Investment Study has been proposed to identify specific transportation solutions along the I-710 (Long Beach Freeway) corridor from the ports to State Route (SR) 60, a distance of 18 miles.

SCAG has considered a system of regional truck-only facilities for inclusion in their Regional Transportation Plan. SCAG estimates that the region generates 600 million tons of goods movement annually of which almost 70% is hauled by truck. Current economies dictate that shippers move most freight by truck for distances under 800 miles. Goods movement traffic is forecast to grow by about 100% over the next 20 years becoming an even greater element of the region’s economic health as well as a greater impediment to passenger mobility on highways. The analysis examined the following eight possible truck lanes along existing freeways:

**PROPOSED TRUCK LANES IN SCAG REGION**

<b>ROUTE</b>	<b>COUNTY</b>	<b>LANES</b>	<b>MILES</b>	<b>CAPITAL COST</b>
<b>I-5, SR-14 to SR-146</b>	Los Angeles	1	8.0	\$108 million
<b>I-5, I-605 to SR-14</b>	Los Angeles	2	38.7	\$2,985 million
<b>I-710, Long Beach Port to SR-60</b>	Los Angeles	2	24.6	\$1,315 million
<b>SR-60, SR-710 to San Ber. Co.</b>	Los Angeles	1	27.2	\$2,000 million
<b>SR-60, San. Ber. Co. to I-15</b>	Riverside	2	0.5	\$28 million
<b>SR-60, LA Co. to Riverside Co.</b>	San Bernardino	1	10.0	\$583 million
<b>I-15, Riverside Co. to SR-395</b>	San Bernardino	2	32.0	\$1,588 million
<b>I-15, SR-60 to San Ber. Co.</b>	Riverside	2	<u>0.8</u>	<u>\$98 million</u>
<b>TOTAL</b>			141.8	\$8,705 million

The truck lane proposal is at a preliminary stage of conceptual design, thus cost estimates are based on a general cost per lane-mile for each segment. The sources of funding are also extremely preliminary. The projects would most likely be funded through a mix of federal, state and local public sector funding and private debt financed with distance-based tolls. The current proposal assumes that \$1.7 billion will be provided through public sector funding and \$7.0 billion through tolls.

**Alameda Corridor East** - The development and implementation of a regional strategy to improve rail freight movement from downtown Los Angeles eastward to San Bernardino requires the definition and prioritization of track improvements, grade separation projects, and consolidation of interstate freight rail traffic, modeled after the Alameda Corridor Project. Grade-separating rail and highway intersections along these freight rail corridors will produce safety benefits by limiting the possibility of collisions, air quality benefits by limiting automobile and truck delays and emissions at railroad crossings, and private sector economic benefits for the railroads by increasing the speed and reliability of goods movement through the region.

SCAG has developed a grade separation and crossing needs analysis for the three rail lines passing through the Counties of Los Angeles, Orange, Riverside, and San Bernardino. The estimated cost of grade separating all three lines is \$2.255 billion. The successful implementation of this program will require a cooperative regional approach to prioritize and coordinate programming and funding of these projects among the counties, Caltrans, SCAG, and private sector railroads. The costs identified in the SCAG analysis reflect programs to grade separate three separate rail corridors. The cost of the grade separation program could be significantly reduced by consolidating interstate freight rail traffic along a single corridor, as was done in the Alameda Corridor Project. None of the studies analyzed by SCAG propose rail consolidation. The specifics of the SCAG analysis are:

**Los Angeles County (San Gabriel Valley)**

Grade separation projects	\$821 million	
Road widening projects	\$ 68 million	
Safety and signaling projects	\$ 61 million	
	<b>Los Angeles County Subtotal</b>	<b>\$950 million</b>

**San Bernardino County (Union Pacific & BN/Santa Fe)**

75 total crossings at \$1.1 million each for safety & signaling	\$ 82.5 million	
27 grade separations at \$28.83 million each	\$778.4 million	
23 grade crossing widening projects at \$4 million each	\$ 92.0 million	
Colton Crossing - Grade separation of two freight rail lines	\$150.0 million	
	<b>San Bernardino County Subtotal</b>	<b>\$1,103 million</b>

**Orange County (Orangethorpe Corridor)**

6 grade separation projects at \$32.7 million each	\$196.2 million	
Low cost projects and operational improvements	\$ 6.0 million	
	<b>Orange County Subtotal</b>	<b>\$202 million</b>

**TOTAL COST \$2,255 million**

**The Alameda Corridor - East Construction Authority (ACE)**, formed in September 1998, has developed a plan to improve freight rail, truck and automobile movement and safety along the two Union Pacific rail lines in Los Angeles County between downtown Los Angeles and Pomona. The corridor contains 55 grade crossings which will be addressed through safety improvements, traffic control measures, roadway widening, grade separation, and grade crossing closures. The estimated cost of the full program within Los Angeles County alone, as of November 1999, was reported as \$912 million. Phase I, which includes safety and mobility improvements at existing grade crossings and the most critical grade separations, is estimated to cost \$418 million. Current funding commitments for Phase I total \$338 million, including \$39 million programmed in the 1998 STIP Augmentation as part of the Caltrans Interregional Program. ACE is seeking the additional funding from local, state and federal sources.

In adding the Interregional Transportation Improvement Program to the STIP, the Commission expressed its support of the concept of the Alameda Corridor East project, and programmed \$39 million contingent upon:

- ACE- conducting a workshop with the Commission and the Business, Transportation and Housing Agency to discuss fully the scope, benefits, full funding requirements, and implementation schedule for the proposed corridor improvements, and
- ACE- developing and executing a Memorandum of Understanding (MOU) with the Commission to detail how the STIP funds will be used within the context of the larger corridor project (Los Angeles to San Bernardino).

A workshop on the full Alameda Corridor East with presentations by ACE, SCAG, San Bernardino Association of Governments, Riverside County Transportation Commission and Orange County Transportation Authority, and presentation of the MOU between ACE and the Commission was held at the December 1999 Commission meeting. The presentations made it clear that full funding of the ACE program, as well as funding equally important grade separation needs in San Bernardino, Orange and Riverside Counties, exceeds the capacity of public funding sources. Therefore, the Commission concluded that completion of the needed grade separations in a reasonable time will require the participation of the private sector railroads and freight shipping industry which benefit from these improvements.

The Commission approved the MOU December 9, 1999. The motion adopting the MOU included an explicit statement of the Commission's view that no more state funding should be made available to the Alameda Corridor East and surrounding area projects in the absence of a full funding plan that includes a commitment by the railroads to participate to a significant extent.

**Seaports** - In 1997, California's deep water ports accounted for \$138 billion of waterborne imports, \$47.5 billion of waterborne exports, and supported 1.5 million California jobs. California must have an

efficient intermodal goods movement system, including improved highway and rail access to and from seaports, to improve its competitive position in the national and international economy.

The Commission surveyed the 11 commercial seaports in California to determine their unfunded ground access needs over the next 10 years. Seven seaports responded to the survey. They have identified \$1.1 billion in needed ground access improvements, including \$395 million in local road improvements, \$124 million of rail improvements, and \$547 million in State Highway routes serving the ports. The most expensive single project is improving I-710, the Long Beach Freeway, which is the primary ground access constraint to the ports of Los Angeles and Long Beach for approximately \$455 million.

**Commercial and General Aviation Airports** - Air passenger and air cargo traffic is expected to double or even triple of over the next 20 years. International airports throughout the State are well positioned to take advantage of the economic growth around the Pacific Rim. However, California's ability to capitalize on the growing demand in international business services and goods movement is being constrained by inadequate airport capacity and crippling ground access congestion at our major commercial airports. While large commercial airports are able to raise significant revenue to expand ground-side and air-side operating capacity of the airports, they are limited by the federal government in their ability to use airport revenues to address ground access needs beyond airport property.

The Commission's SR8 Report identified 41 airports with 103 unfunded ground access projects costing \$3.1 billion. The reported projects include 13 State Highway improvements for \$0.4 billion, 88 local road projects for \$2.0 billion, and 2 passenger rail projects for \$0.7 billion. Los Angeles International Airport (LAX), with the largest funding need, is in the process of updating its Master Plan to accommodate a projected increase in air passengers from 54 million annual passengers (MAP) in 1996 to 98 MAP in 2015, and an expected 140% increase in air cargo from 1.8 million metric tons per year in 1996 to 4.2 million metric tons per year in 2015. Ground access funding needs at LAX could be as high as \$2.4 billion. Another 8 commercial airports report ground access funding needs of \$0.6 billion. San Francisco International Airport (SFO) did not report any unfunded ground access needs over the next 10 years because they are currently implementing a fully funded \$2.5 billion expansion program. The SFO program includes another \$1.1 billion of state, federal, local and airport funds to extend the Bay Area Rapid Transit system into the airport.

To facilitate economic growth and to avoid gridlock around our major commercial airports, it is important to immediately define a funding source for airport ground access programming. The redirection of revenues from the existing sales tax on jet fuel from the General Fund to an airport access improvement program would be an appropriate use which is consistent with the current use of sales taxes from fuel taxes to support transit operations and improvements. These taxes are being paid by the airline industry, the revenues come primarily from the areas needing access improvements, and investment of the revenues would lead to significant increases in general fund revenues for cities and the State through economic growth in the near future. Sales taxes paid by airlines on jet fuel is approximately \$100 million per year and general aviation fuel taxes total about \$6 million annually. This

magnitude of revenue is not enough to fully fund all needed ground access improvements, but enough to leverage other local, State and federal funds toward these projects.

### **Need for Funded Goods Movement Program**

The Commission has long held the position that transportation investments are central to State and regional economic development. California must have an efficient intermodal goods movement system to improve its competitive position in the national and international economy, including improved access to and from international border crossings, seaports and airports. State and local government can have significant influence over international trade flows through proactively providing a superior import/export transportation infrastructure. The significance of port and airport access to California's trade-based economy requires that California expand the State's policy role in facilitating goods movement and increase the State priority and funding levels for projects which promote international trade. The state goods movement program should focus on developing airports, seaports, and border ports of entry and on improving highway and rail access to these ports. The state goods movement program should:

- encourage intermodalism;
- promote projects of statewide significance;
- remove obstacles to State funding of freight transportation projects;
- ensure regional cooperation and coordination in transportation investments; and
- mitigate the impact of goods movement on the urban areas around ports of entry.

# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **G. California Transportation Planning Directions Statement**



## I. 2000 ISSUES

### G. California Transportation Planning Directions Statement

Caltrans' budget, as set forth in the adopted FY1999-00 Budget Act, includes control language calling for the development of a **California Transportation Planning Directions Statement**. Specifically, the control language states:

**In order to promote greater consistency and coordination between regional and interregional transportation planning and programming, the Business, Transportation and Housing Agency, in cooperation with the California Transportation Commission, shall develop a *California Transportation Planning Direction Statement* that will provide strategic objectives and guidance for the development of regional transportation plans, regional transportation improvement programs and the Interregional Transportation Improvement program for development of the State Transportation Improvement Program for the year 2000.**

This directive grew from the concern that, despite recent reforms to the biennial STIP process, the potential runs high for fragmentation of effort between longer-range plans and shorter-term capital outlay programs, between regional and interregional plans and STIP components, and among the 43 individual regional plans and programs themselves.

As stated in the budget control language, the **Transportation Planning Directions Statement** is intended to provide a commonality of purpose, as well as consistency and coordination for regional transportation planning agencies, Caltrans and the Commission, through stated strategic objectives and guidance.

The **Directions Statement** becomes even more critical when considering California's transportation future and the need to play catch-up for several years of under-investment in our transportation systems, as discussed in the opening of Volume I - Section-A of this Annual Report. California expects to add more than 12 million new residents and 5 million new jobs during the next twenty years. Our future economic health depends on the state's continued attractiveness as a good place to live, work and do business. The challenges this growth poses for transportation, other public services and facilities and the quality of life for all Californians require clear vision, focused planning and effective investment of limited public resources from agencies working together at all levels of government. The **Directions Statement** must lay out a vision, a focus for planning and direction to link the vision and planning to transportation investment decisions by the state and regions.

In anticipation of the **Directions Statement**, the Commission incorporated reference to the Directions Statement in its Guidelines for the STIP and for Regional Transportation Plans. At this writing, the Statement is in preparation by the Business, Transportation and Housing Agency and the Commission. It is anticipated that it will be presented for review at the Commission's January or February 2000 meetings.



# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **H. Role of the State in Transit**



## I. 2000 ISSUES

### H. Role of the State in Transit

#### Overview

Without question, California's public transit systems will continue to play an increasingly important role as California responds to ever-worsening vehicular congestion and its side effects of economic inefficiencies, costly delay, air pollution, and energy consumption. The importance of our public transit systems will increase further as California contends with, and helps to facilitate societal shifts of an aging population, a growing "welfare to work" workforce, and the increased mainstreaming and self-dependency of California's disabled – all of which involve population sectors with higher transit dependency.

What is far less clear than the increasing and inescapable importance of public transit is the appropriate role for the State in furthering that enterprise:

- should the State simply provide capital funds to invest in the expansion and rehabilitation of transit systems?
- should the State provide increasing operating support?
- should the State instead focus on interregional and intercity transit?
- should the State demand interconnectivity between separate modes and separate systems?
- should the State oversee or, do more, such as set standards for levels of service, farebox return and/or operating subsidies of local transit system operations?
- should the State insist that local agencies realize the potential levels of service offered by these systems by way of coordinating local land use decisions with transit investments?

These and other related questions are at the center of the over-arching question of the appropriate role of the State in public transit. Shifting perspectives and priorities over the past three decades have allowed this question to go unanswered, if not unexamined.

#### The State's Evolving Role

The State's role in transit has evolved over the last generation. In 1971, under the Transportation Development Act, the State's transit role included: general support for local transportation agencies; technical assistance; and grant responsibility and oversight on those projects.

Then, in 1978, various state transportation-funding agencies were combined by the Legislature to form the California Transportation Commission to provide a holistic, multi-modal, statewide view of transportation. The Legislature also transformed the former Division of Highways into the multi-modal Department of Transportation (Caltrans). Throughout these reforms, the standing of regional agencies, responsible for long-range, multi-modal regional planning, was given increasing responsibilities in the prioritizing and selection of individual projects.

With passage of the State Transportation Blueprint for the 21<sup>st</sup> Century in 1989 and the federal Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, the State's role in programming transportation projects accelerated the shift to greater reliance on regional agencies for programming and projects. In 1998, with passage of the federal Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and SB 45 (Kopp), the decision-making authority of regional agencies further increased. However, transit-operating funds from the State Local Transportation Fund, derived from ¼% statewide sales tax, and the State Transit Assistance portion of the Public Transportation Account, remain as subvention programs for local agencies and transit operators.

### **Caltrans' "Study of the Role of the State in Mass Transportation"**

In 1997, prior to the passage of TEA-21 and SB 45, Caltrans was directed by the Business, Transportation and Housing Agency (BT&H) to review the role of the State in mass transportation and to consider options for that role. Although the study objective was to include all state-level transportation agencies, the study parameters were narrowly drawn, limiting both the scope and the value of the study. Nevertheless, the study raised some policy issues regarding programming and operational funding which the Administration and Legislature should consider.

The original study parameters were narrowly defined. **Caltrans' Mass Transportation Program initiated the study, under the direction of the BT&H Agency; from the outset, it excluded a review of State's role in high-speed rail, intercity rail, aviation, and land use, based on the premise that other state agencies were either examining those issues or that they were beyond the study's intended scope.** State subventions of operational funds to local transit districts were also excluded. The "State" was defined as every State agency that dealt with transportation, yet the recommendations tended to focus much more narrowly on Caltrans' Mass Transportation Program. Moreover, the study was undertaken within the parameters of STIP reform pursuant to SB 45 and the view that transportation investment decisions, particularly within metropolitan areas, should be devolved down to the local and regional levels, with little active responsibility remaining with the State, other than for interregional mobility and those of the owner-operator of the State's highway system.

The Study, which was developed with an advisory committee comprised of regional agencies, transit operators, interest groups, Caltrans, and Commission staff, identified three State roles:

- establish a statewide vision and development strategy for mass transportation;
- evaluate customer needs and gaps in mass transit service from a statewide perspective;
- implement short- and long-term state-level solutions to support a statewide vision and meet customer needs in terms of:
  - funding;
  - performance measures;
  - inter-regional coordination/connectivity;
  - inter-agency coordination
  - targeting specific market segments (e.g., welfare to work);
  - new technologies;
  - technical assistance; and
  - vehicle procurement.

## **Phase II Study -- Mobility And Accessibility (A Work in Progress)**

After the Final Study Report was released in January 1998, Caltrans focused on the Report's recommendation for interregional mobility/accessibility and specifically began to try to define a threshold for mobility/accessibility in terms of minimum levels of service and interregional connectivity. Caltrans has defined interregional service as: "the areas of transit service that extend beyond the defined boundaries on a metropolitan planning organization (MPO) or a regional transportation planning agency (RTPA)". This definition was chosen to reflect the increasing reliance on regional agencies inherent in SB 45. In doing so, the Phase II study excluded consideration of transit service within a MPO or RTPA, such as travel between the Inland Empire (Riverside or San Bernardino) and Los Angeles or Ventura, and long haul commuter urban systems such as BART and Metrolink.

Caltrans continues to work on the Phase II study, which is intended to establish minimum mobility and accessibility standards for interregional service. The Phase II study's goal is two-fold:

- **establishing a statewide baseline between interregional origins and destinations, so as to identify needs and gaps; and**
- **recommending quantifiable interregional mobility and accessibility goals.**

It is interesting to note that thus far, the Phase II study ignores aviation as a potential mode, in assessing how people make interregional trips, and focuses solely upon ground travel, despite the heavy reliance on air travel between the Bay Area and Southern California and between Sacramento and Southern California, and also despite the fact that privately operated bus service (e.g., Greyhound), is part of the study effort.

## **Upcoming Issues for 2000**

Caltrans' "Study of the Role of the State in Mass Transportation" and its yet-to-be completed Phase II study, raise many issues, in terms of recommendations and what remains unstudied, due to the parameters established at the start of the study process. Given the growing importance of public transit in California's transportation future, as discussed at the outset of this section, many important issues remain before the Administration and Legislature in the coming year, including:

- **the State's role in public transit capital improvements**  
--should that role be limited to that of funding partner and monitoring project delivery or should it be more?
- **the means by which the State make its transit investments**  
--should State funds for transit operations be subvented, or should more rigorous performance standards be established as a condition of state funding for operations? for capital improvements?  
--should linkages be drawn between capital investments and operating expenditures?  
--should connectivity between interregional and urban/commuter rail systems be more strongly encouraged?  
--should the definition of interregional projects be clarified?  
--should jobs/housing balance and/or densities around transit stations be prerequisites?

- **the coordination of regional and interregional planning and programming**  
--should the State be more proactive in project assessment and selection?
- **institutional roles and next steps for continued consideration of high-speed intercity rail**  
--the High-Speed Rail Authority is proposing to implement high-speed rail in California incrementally with an initial \$25 million for rights-of-way and environmental study; however, such funding would run ahead of a decision by the Legislature, the Administration and the public on the eventual \$25-35 billion project and its relative priority among other transportation investments;
- **the division of roles between BT&H Agency and the Commission for intercity rail funding**  
--at present, the Commission allocates intercity rail operating funds and capital funds for the *San Diegans* and the *San Joaquins*; but operating funds are allocated by the BT&H Agency to the Capitol Corridor Joint Powers Authority for the *Capitols*, whereas capital projects for the *Capitols* continue to be programmed and allocated by the Commission.

These and likely other issues are timely for consideration by the Legislature and the Administration as California turns to public transit in its response to increasing congestion and growing ranks of the transit dependent.

# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **I. High-Speed and Very High-Speed Intercity Passenger Rail**



## I. 2000 ISSUES

### I. High-Speed and Very-High-Speed Intercity Passenger Rail

#### Overview

California has been active in the high-speed rail arena since the mid- to late- 1980s, with failed attempts such as: a coastal high-speed rail system in Southern California; and a Southern California-to-Las Vegas high-speed rail system (AB 1839, 1987). Other high-speed and higher-speed rail efforts included:

- the Los Angeles-San Diego Rail Corridor Study Group (SB 1095, 1985);
- the Auburn-Sacramento-Oakland-San Jose Intercity Rail Corridor Upgrade Study (ACR 132, 1988);
- the Los Angeles-Fresno-Bay Area/Sacramento High-Speed Rail Corridor Study (AB 971-Costa, 1988);
- and a work plan and recommended funding level for a high-speed ground transportation system feasibility study (SB 1307-Garamendi, 1990).

Then, in 1993, SCR 6 (Kopp) authorized the formation of a High Speed Rail (HSR) Commission to consider the feasibility of a statewide high-speed rail passenger service between Los Angeles and San Francisco Bay Area, as well as to Sacramento and San Diego. The HSR Commission, which sunsetted December 1996, completed its work and concluded that a statewide HSR system was feasible.

The task of refining and overseeing the implementation of a statewide HSR system was then assigned to the High-Speed Rail Authority authorized by SB 1420 (Kopp, 1996). The Authority was charged with evaluating alternative rail proposals, securing funding by November 2000 for the proposed HSR system and, if the voters approve, overseeing the construction and then the operations of that HSR network.

The Authority faces two major decision points in 2000. It must:

- complete, early in 2000, its plans to construct and operate the proposed very high-speed rail system and submit them to the Administration and the Legislature for consideration;
- receive approval, no later than August 2000, from the Administration and the Legislature to place a proposition on the November 2000 ballot.

#### High Speed Rail Authority: Statutory Responsibilities

As noted, the California High-Speed Rail Authority is the successor agency to the California Intercity HSR Commission. The HSR Commission had found that an intercity high-speed 200+ mile-per-hour (mph) train network was technically, financially and environmentally feasible for California. In building upon the efforts of that Commission, the Legislature created the Authority, directing it to:

“Direct the development and implementation of intercity high-speed rail service that is fully integrated with the state’s existing intercity rail and bus network...(and) fully coordinated and connected with commuter rail lines and urban rail transit lines developed by local agencies...”

“Prepare a plan for the construction and operation of high-speed train network for the state. The plan, upon completion, shall be submitted to the Legislature and the Governor for approval...”

Along with the construction and operation plan, the Authority is developing a financial plan consistent with its legislative responsibilities. **According to statute, the Authority will sunset on June 30, 2001 unless its financial plan for the implementation of a high-speed train system is approved by the voters on the November 2000 General Election.**

**High Speed Rail Authority Strategy for Developing High-Speed and Very-High-Speed Rail Systems**

While the Authority began its work distinguishing between very high-speed, 200 mph, and high-speed, 100 mph, services, it ultimately adopted the position, through its business plan, that its proposed system would be considered high-speed rail and improvements to the existing passenger rail network would be considered conventional rail, even if those improvements significantly increased operating speeds to greater than 100 mph.

Recognizing that it has no funding or operating responsibility for conventional rail services in these corridors, the Authority determined that it could only recommend improvements that others would need to fund and implement. In reviewing the corridors, the Authority narrowed its recommended \$2.9 billion in capital investment opportunities to three corridors: Sacramento to Salinas; Oakland/Sacramento to Bakersfield; and San Luis Obispo to San Diego. The \$2.9 billion capital program for high speed rail is discussed later in this chapter.

**Estimated Cost for Very High-Speed Rail System (200 mph)** - The capital cost for the Authority’s proposed very high-speed train system is \$24.97 billion (using unescalated 1999 dollars), with capital costs for each segment as shown in Exhibit 1. (Using the more conventional cost basis for transportation planning and programming, the **escalated cost** for this system could approach **\$30-35 billion**.)

Exhibit 1  
Capital Costs by Segment  
(\$1999, millions – unescalated)

Segment	Length (miles)	Capital Cost (millions of \$)	Cost per Mile (millions of \$)
San Diego –Riverside	92	4,087	44.4
Riverside - Los Angeles	59	2,678	45.4
Los Angeles – Bakersfield	110	4,441	40.4
Bakersfield – Merced	160	2,304	14.4
Merced – Sacramento	110	3,003	27.3
Merced - San Jose	129	4,485	34.8
San Jose- San Francisco	43	2,494	58.0
<b>SUBTOTAL</b>		<b>\$23,492</b>	
Vehicles & Support Facilities		1,482	
<b>TOTAL</b>	<b>703</b>	<b>\$24,974</b>	<b>\$35.5</b>

Source: Parsons-Brinckerhoff

In 2020, approximately three years following the start of full-revenue service, the Authority estimates that the system will have 32 million passengers who will generate \$888 million in annual gross revenues. Based on its estimated operating and maintenance costs, the Authority expects the service would generate a surplus of more than \$300 million per year. As a result, the Authority is proceeding under the assumption that no operating subsidy would be required for the high-speed train system. However, the operating surplus is not sufficient to help fund the capital costs of building the 700-mile network.

**Estimated Cost for High Speed Rail (100 mph)** - As part of its system integration effort to determine how the very high-speed system would integrate with the existing transportation system, particularly intercity and commuter rail networks, the Authority studied several rail corridors capable of potentially running trains that would travel in excess of 100 miles per hour, viewing these as potential feeder systems.

The corridors that the Authority reviewed were:

- **Sacramento to Salinas** (the Capitol Corridor, operated by the Capitol Corridor Joint Powers Authority);
- **Oakland/Sacramento to Bakersfield** (the San Joaquin Corridor);
- **San Luis Obispo to San Diego**, (the San Diegan Corridor);
- **San Luis Obispo to Palm Springs**, (a combination of the San Diegan Corridor, Metrolink, and the Amtrak Desert Wind); and
- **Orange County-Riverside County** (a corridor which currently has Metrolink service on it).

The Authority’s review of the conventional rail system found the potential for \$2.93 billion (in 1999 unescalated dollars) in capital improvements (Exhibit 2) that could reduce travel times and increase frequency. The Authority did not estimate the operating costs associated with any increase in frequency, and its estimate of the capital costs was determined using Caltrans, Amtrak and existing commuter and freight railroad capital figures.

**Exhibit 2**  
**Recommended Capital Program for Conventional Rail Services**

	<b>Sacramento-Salinas</b>	<b>L. A. Union Station-San Luis Obispo</b>	<b>L. A. Union Station-San Diego</b>	<b>Interim San Joaquin Corridor</b>	<b>All Corridors</b>
Corridor Length	193 miles	222 miles	129 miles	322 miles	
Improvement Category	(million of unescalated dollars, 1999)				
Track & Signal	\$ 529	\$ 168	\$ 559	\$ 275	\$1,531
Grade Crossings	68	49	46	71	234
Grade Separations	160	100	160	100	520
Stations	--	--	147	20	167
Parking	34	12	15	16	77
Rolling Stock	30	30	75	15	150
Other	5	24	221		250
<b>TOTAL</b>	<b>\$826</b>	<b>\$ 383</b>	<b>\$1,223</b>	<b>\$ 497</b>	<b>\$ 2,929</b>

Source: Arthur Bauer & Assoc., Inc.

### **Potential Funding Mechanisms for Very High Speed Rail**

**State Funding** - The Authority adopted financial plan policies that limited the scope of funding options for the high-speed system to sources that could be reasonably assumed to be available. It reviewed several state funding options, including general obligation bonding, gas taxes, and sales taxes. The Authority rejected general obligation bonds because the State does not have sufficient general obligation bonding authority for the project. The Authority also rejected gas taxes because of their declining purchasing power over time, and the uncertainty of how much gas tax would be raised in 2010 and beyond (due to the requirement that a growing percentage of the state's automobile fleet must be powered by alternative fuels).

Thus, the Authority determined the sales tax to be the most appropriate funding vehicle. For its purposes, the Authority finds that an increase in the statewide sales tax of ¼ percent is the lowest amount of sales tax increase that would generate sufficient funds to build the system. The Authority's financial plan assumes the sales tax increase would take effect in 2000, remain in place for 19 years, and generate \$20 billion.

**Federal TEA-21 Funding** - TEA-21 does not contain any funding for high-speed rail, save for \$1.055 billion for a magnetic levitation (Maglev) demonstration project. The demonstration project funding is uncertain, since Congress has only appropriated \$20 million for the pre-construction phase. The remaining funds will need to be appropriated, and even then, the construction funds will only cover up to 30 percent of the total costs. However, TEA-21 does contain loan guarantee and credit provisions through Transportation Infrastructure Financing and Innovation Act (TIFIA) that could be applied to high-speed train projects. As a result, the Authority's financial plan does not contain any assumption of federal grant funding, but does assume the use of TIFIA credit enhancements.

The Southern California Association of Governments (SCAG) and the Authority are co-recipients of one of seven grants given nationwide for federal planning grant funds for the magnetic levitation demonstration project. SCAG and the Authority received \$1.5 million to initiate pre-construction engineering, environmental assessments and community outreach for its proposed 60-mile corridor linking Los Angeles International Airport (LAX) with March Air Force Base in Riverside County, via Los Angeles Union Station and Ontario Airport. SCAG and the Authority will turn the technical studies into an application to proceed with full engineering and environmental clearance. The application is due in 2000. FRA will narrow the field of seven applicants to at least three, and possibly one, to proceed to the next level. It is unclear when FRA will select the one project to proceed to construction.

### **Outlook for 2000**

**Authority Actions** - In 1998 and 1999, the Authority conducted technical studies that augmented those of its predecessor, the HSR Commission, in order to establish a current body of knowledge for the construction, operation and financing of a high-speed train system in California. These studies have formed the basis of the Authority's business plan. The Authority intends to present its business plan – which includes the construction, operations, financing, and system integration elements as legislatively mandated – to the Governor and Legislature in early

2000 for action. The Authority has no intention of directly placing any proposal on the ballot in November 2000. Rather, the Authority intends to leave any decisions regarding matters to come before the electorate to the Governor and the Legislature.

**Legislative and Administrative Actions Required Before November 2000** - For the high-speed train project to proceed under its current charter (SB 1420, 1996), the Governor and the Legislature would need to take some positive action on the Authority's business plan during 2000. The Governor and Legislature has three options and may decide to:

- seek full funding of the project, which likely would result in a proposal being placed on the November 2000 ballot. (The effective deadline for placing propositions on the November 2000 ballot is **August 2000**.) If voters reject the proposal, the Authority would sunset on June 30, 2001.
- pursue an incremental funding approach to the project and provide only those funds necessary to carry the project through preliminary engineering and program environmental clearance. In all likelihood, any decision to proceed, short of full funding, would require legislation extending the life of the Authority.
- reject the Authority's business plan, resulting in the Authority sunsetting June 30, 2001.

#### **A Fourth Option and a Word of Caution**

The Commission offers a fourth option. Should the Administration and the Legislature decide not to place a measure before the voters on the November 2000 ballot, the Commission would offer to the Administration and the Legislature to bring the high-speed rail program under its aegis along with that of the Business, Transportation and Housing Agency and Caltrans, particularly since these agencies bring a statewide, multimodal, holistic view to transportation. Continuation of the Authority after its sunset date of June 30, 2001 to handle high-speed rail would be a duplication of effort, since conventional high-speed rail (100 mph) is currently under Commission and Caltrans purview.

Such a continuation of the Authority, in the absence of a measure appearing on the November 2000 ballot, also runs the risk of continuing the fragmentation inherent in the continuation of a single purpose Authority for high-speed rail. While there may very well have been a compelling reason to do in the past, in order to closely examine this \$25-35 billion enterprise, continuing that fragmentation in the face of the unlikely short-term prospects for implementing this system would be questionable. Should the Administration and Legislature conclude that high-speed rail is infeasible, due to its high cost, it should consider the \$2.9 billion in improvements to the current intercity rail system (about 11% of the very-high-speed rail estimated cost), as recommended by the Authority, and do so under the existing authority and structure used for California's intercity rail passenger system.

In any event, the Legislature and Administration would be well advised against easing incrementally into a very high-speed rail system, such as through the early acquisition of rights of way without first deliberating upon and resolving to proceed with such a system in its entirety.



# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **J. Native American Tribal Transportation Issues**



## I. 2000 ISSUES

### J. Native American Tribal Transportation Issues

There are 309,000 Native Americans in California with a notable Native American population in every county. All counties, except Los Angeles and Orange, contain Tribal lands with resident populations totaling 60,200. The transportation needs of the Native American Tribes in California have not been adequately addressed by either federal or state transportation programs. It is in the best economic interest of the State, local governments and Tribal governments to better plan and fund the transportation improvements needed to improve the quality of life on Tribal lands and to provide for coordinated economic development of all regions of the state.

To date, transportation improvements for roads on Tribal lands have been funded almost exclusively through the federal Indian Reservation Roads (IRR) Program. The IRR Program currently provides less than 20% of the annual funding needed to provide basic road service on Tribal lands in California. Transportation investments to improve the connectivity of Tribal lands to surrounding communities and the state transportation system have not competed well in local and state transportation programs. Federal transportation funds programmed by state and local agencies may be used on Tribal lands, however, funds have not been programmed to meet Tribal needs because Tribal governments are not represented on transportation agency governing bodies or effectively included in the transportation planning process.

#### Commission Initiatives to Address Tribal Transportation Needs

The Commission held a workshop with Native American Tribal Governments, Caltrans, and Regional and Metropolitan Planning Organizations on September 15, 1999 at the Morongo Indian Reservation in Cabazon. The workshop was entitled "Strengthening State, Tribal and Regional Government Transportation Partnerships" and is discussed in detail in Volume II - Section -N of this Annual Report. Its purpose was to identify Native American transportation issues, and discuss ways of improving the Government-to-Government coordination of transportation planning and programming in order to better integrate the land use policies and transportation needs of the Tribal governments into the state and regional transportation planning process.

The Commission will continue to work with the Tribal leaders on a Government-to-Government level to identify Native American transportation issues, and to develop policies to resolve these issues at the State level. The Commission will conduct additional workshops in Northern and Central California similar to the September 15 workshop in Cabazon.

The Commission has also taken action to better integrate the land use policies and transportation needs of the Tribal Governments into the state and regional transportation planning process. The Regional Transportation Plan Guidelines adopted by the Commission in December 1999, emphasize the federal and state requirement to consult with and consider the interests of Indian Tribal Governments in the

development of transportation plans and programs. Further, the Commission will support and encourage funding of transportation projects accessing Tribal lands through state and local transportation programs.

The Commission has also communicated to the California Congressional delegation and the Bureau of Indian Affairs, its support for an increased share of federal Indian Reservation Roads (IRR) Program funding going to Tribes in California, specifically supporting (1) increasing the share of IRR funds allocated to California Tribes to 9.1962% of the program total (California's minimum guarantee percentage of federal highway funds), and (2) guaranteeing 100% obligational authority for the IRR Program.

### **Federal Funding – Indian Reservation Road Program**

There is a need to address both the level of funding for the federal IRR Program, and inequities in the formula controlling the distribution of these funds among the Native American Tribes. The Commission believes the present structure and funding level of the IRR program do not reflect the current needs of Tribal Governments nationwide, and is grossly inadequate in funding needed transportation improvements for the Tribes in California.

The State of California is committed to working with the leaders of the tribes in California at a Government-to-Government level to identify Native American transportation issues, and to develop policies to resolve these issues at the State level. Specifically, the Commission is working to better integrate the land use policies and transportation needs of the Tribal governments into the state and regional transportation planning and programming processes. However, the effective coordination of transportation improvements funded through the IRR program and funding of transportation projects accessing Tribal lands through state and local transportation programs is hampered by the inadequate IRR Program funding for tribes in California.

There is a notable Native American population in every county in California, and all counties except Los Angeles and Orange contain Tribal lands. California's population includes 309,000 Native Americans (15.9% of the national total), including 60,200 living on reservations (4.5% of the national total). Also, more than 100 federally recognized Tribes, 20% of the 550 federally recognized Tribes nationwide, are located in California. The total amount of Tribal lands in California is rather small, about half a million acres (1% of the national total) because there are many small rancherias and reservations located mostly in rural areas of the State. Due to the fragmentation of Tribal lands among many remote locations, the cost of maintaining and constructing roads on Tribal lands is much higher per mile in California than on large reservations in other states. Also, the cost of necessary transportation improvements for providing access to lifeline services in distant urban areas is beyond the resources of the small remote rancherias and reservations. The current formula for distributing IRR program funds does not address these higher cost factors for Tribes in California.

In May 1999, the Commission, as part of 10-year needs assessment of transportation rehabilitation, maintenance, and operations needs, identified \$275 million of needed road improvements on Tribal

lands in the state. The current level of funding from the IRR program for road improvements for Tribes in California is about \$5 million a year. The expected IRR program funding over the next 10 years will be just \$50 million, only 18% of the identified needs. At current funding levels, it would take 55 years to fund currently identified projects.

The federal IRR program is funded with federal fuel tax revenues and is included in the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). The amount of the IRR program apportionment is set by TEA-21, initially \$235 million and rising to \$275 million nationally. FHWA annually transfers the funds to the Bureau of Indian Affairs (BIA) to administer. After Congress sets the amount of Obligational Authority (OA) each year, FHWA gives BIA their share of OA. Any IRR program apportionment above the OA limitation is returned to FHWA to be added to apportionments for federal Surface Transportation Program funds in the states where the Tribes are located. This is called the “lop off provision” which is unique to the IRR program and is inherently inequitable to the Tribes because it assures that the IRR program cannot effectively compete for redistributed OA at the end of each federal fiscal year.

BIA allocates funds to the tribes in accordance with a “relative need” formula. Negotiated rule making is still underway among the Tribal governments and BIA for updating the IRR program procedures and relative need funding formula. In federal fiscal year 1999, \$275 million was authorized for the IRR program and OA was limited to \$238,557,000. **California received \$6,043,533:** \$5,361,000 in construction funds, and \$682,533 in maintenance funds, **only 2.5% of the national total.**

The basic philosophy behind the federal aid highway program is “return to source”. Given that California accounts for approximately 12% of the national gas tax receipts and receives back about 10%, it is fundamentally unfair to distribute IRR funds according to a different formula, one that yields only 2.5% of the national total. California and the Tribal Governments within California lose an estimated \$20 million each year through this inequity.

The Commission strongly supports:

- immediate revision of the formula for the distribution of IRR program funding to increase the share of IRR program funds allocated to California Tribes to 9.2% of the program total (California’s minimum guarantee percentage of federal highway funds),
- guaranteeing 100% obligational authority for the IRR Program nationwide,
- making all IRR program apportionments above the OA limitation in previous years of TEA-21 available for expenditure in FY 1999-00,
- counting any “underrun” in IRR funds back to the states in calculating minimum guarantee funds coming back to donor states,
- further consideration of a procedure in California allowing Tribal Governments to compete for redistributed OA, and Minimum Guarantee funds, at least to the extent that any “lopped off” IRR apportionments are redistributed back to the state.





# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **K. Solutions to Seismic Safety of San Francisco-Oakland Bay Bridge**



## I. 2000 ISSUES

### K. Solutions to Seismic Safety of the San Francisco—Oakland Bay Bridge

It has now been over ten years since the Loma Prieta earthquake occurred, on October 17, 1989, and the seismic deficiencies of the east spans of the San Francisco-Oakland Bay Bridge have still not been eliminated. Despite the fact that a recommendation to replace the east spans on an alignment to the north of the existing spans was adopted by the Metropolitan Transportation Commission with the support of the City and County of San Francisco, the City of Oakland and many others, there are still three varying points of view on how to resolve the problem:

- a replacement alternative to the north of the existing spans
- a replacement alternative to the south of the existing spans
- an alternative to retrofit the existing spans

The opinions of some of the many agencies involved have, from time to time, changed regarding a solution to the problem, although most still favor a northern alignment. That said, and without wishing to point fingers, public safety and potential public liability demand that the debate be concluded and the project completed. Given the lengthy and thorough design development process that was conducted by both Caltrans and the Metropolitan Transportation Commission, and the consistent support of a northern alignment by most of the public agencies involved, the prudent action would appear to be completion of the project on the northern alignment.

#### Current Public Agency Positions

**United States Navy**—The Navy appears to favor a replacement on a southern alignment, expressing concern with a northern alignment due to potential impacts on San Francisco's plan to redevelop Yerba Buena Island and perceived impacts to historic properties on Yerba Buena Island.

**United States Coast Guard**—The Coast Guard supports a replacement on a northern alignment due to the fact that a southern alignment impacts its existing facility on Yerba Buena Island. Services provided by the existing facility include a 24-hour search and rescue mission for the San Francisco Bay area.

**United States Department of the Interior**—The Department of the Interior originally stated concerns with a southern alignment due to impacts on a planned park in the vicinity of the east approach to the bridge. A southern alignment would bisect the planned park. The Department of the Interior is the federal sponsor for the East Bay Regional Park District and has submitted, as part of the Oakland Army Base closure, a land transfer request to the United States Army for property needed for the park.

**United States Environmental Protection Agency**—The Agency originally stated concerns regarding the impacts of dredge material disposal associated with all alternatives under

consideration. The Agency gave a poor rating to the Draft Environmental Impact Statement on the basis that its discussion of the impacts of dredge material disposal was inadequate. The Agency agreed to allow Caltrans to address these concerns by circulating a detailed Dredge Materials Management Plan for public review and comment. The Agency had favorable comments on the plan and expressed satisfaction with the Department's revised discussion of dredging.

**City and County of San Francisco**—The City and County support a replacement on a southern alignment (although there have been recent indications that this has changed again to support for a retrofit of the existing bridge). They oppose a northern alignment due to claimed impacts on plans to develop Yerba Buena Island.

**Port of Oakland**—The port supports a replacement on a northern alignment. It opposes a southern alignment due to potential impacts on its plan to expand its port facilities.

**City of Oakland**—The City Council, which under the City Charter sets policy for the city, supports a replacement on a northern alignment. It opposes a southern alignment due to impacts on the planned East Bay Regional Park District Park and potential impacts on planned expansion by the Port of Oakland. The City has stated that the park is vital to West Oakland, which is a minority community that is currently underserved with respect to parks.

**East Bay Regional Park District**—The District supports a replacement on a northern alignment. It opposes a southern alignment due to impacts on its plan to develop a new regional park as discussed above.

**East Bay Municipal Utility District**—The District has stated concerns with a southern alignment due to impacts on its major sanitary sewer outfall, which is located slightly to the south of the existing bridge east spans. The District has stated that a southern alignment may require relocation of its sewer outfall.

### **Background Summary**

Caltrans began working on how to fix the seismic vulnerabilities presented by the existing bridge in June 1990. The Department's initial focus was to retrofit the east spans. After six years of sophisticated analysis, Caltrans and the Seismic Advisory Board (an external peer review panel comprised of preeminent seismic experts) recommended replacement of the east spans of the bridge. At that time (December 1996) all of the major stakeholders including the Governor and the Secretary of Business, Transportation and Housing, the Navy, the Metropolitan Transportation Commission, the City and County of San Francisco, and the City of Oakland along with many others were notified of the replacement recommendation. In February 1997, the Metropolitan Transportation Commission established a process by which the region would develop design recommendations (bridge type, alignment, etc.) and created the Bay Bridge Design Task Force comprised of elected officials and representatives from the cities and counties in the San Francisco Bay area.

The Task Force then initiated a lengthy series of public meetings to develop its recommendations. In July 1997, with the support of the City and County of San Francisco,

the City of Oakland, and many others, the Task Force formally adopted initial recommendations for replacing the east spans on an alignment north of the existing spans. In the following few months, the Governor signed Senate Bill 60 which provided funding for the seismic retrofit of state-owned toll bridges and formally shifted responsibilities for Bay Area bridges from the California Transportation Commission to the Metropolitan Transportation Commission. The Governor also signed Assembly Bill 699 which established the framework for the redevelopment of Yerba Buena Island by San Francisco. Prior to the governor signing AB 699, San Francisco committed to transfer to Caltrans, at no cost, any property on Yerba Buena Island necessary for the retrofit or replacement of the east spans of the bridge.

In June 1998, the Metropolitan Transportation Commission adopted the final recommendations of its Task Force, a self-anchored suspension alternative on an alignment north of the existing east spans of the bridge. This decision was made despite newly expressed concerns by the City and County of San Francisco about the effect of the project on future development on Treasure and Yerba Buena islands. Due to the pressing public safety risk associated the existing bridge and at the request of the Metropolitan Transportation Commission, Caltrans then began design of the replacement alternative pending environmental review.

In September 1998, Caltrans released the Draft Environmental Impact Report for the project and held four public hearings throughout the Bay Area to receive public comment. At that time, Caltrans also requested permission from the Navy to conduct geotechnical drilling on Yerba Buena Island and in the bay (within Navy jurisdiction) for a northern alignment. This request included a completed environmental clearance for the drilling. After completion of some of the drilling, the Navy halted further work by declining to issue the required excavation permit. In November 1998, the City and County of San Francisco for the first time formally opposed the northern alignment. In December 1998 Caltrans, based on many factors, identified the preferred alternative as a replacement bridge on an alignment to the north of the existing spans.

In February 1999, Mayor Willie Brown and Mayor Jerry Brown wrote a joint letter to Governor Gray Davis endorsing a southern alignment, and asking to reopen the design process in an attempt to produce a “world-class” bridge, and to study long-term passenger rail options between Oakland and San Francisco, a bicycle/pedestrian path, and appropriate provisions for local hiring and contracting goals. The Governor subsequently rejected the idea of reopening the design process. That same month, Caltrans requested permission from the Navy to conduct geotechnical drilling on Yerba Buena Island for a southern alignment.

In June 1999, Oakland City Council President Ignacio De La Fuente wrote to Mary King, the Chair of the Metropolitan Transportation Commission’s Bay Bridge Design Task Force, indicating that the city council endorses a northern alignment, appropriate provisions for local hiring and contractor goals, a gateway park, a “world-class” aesthetic design for the new bridge, a study of long-term passenger rail options between Oakland and San Francisco, and a bicycle/pedestrian path.

In July 1999, Governor Gray Davis sent a letter to Secretary of the Navy Richard Danzig requesting that the Navy give permission to Caltrans to conduct geotechnical drilling on

Yerba Buena Island for either a northern or southern alignment. This letter was followed by a request in August by Caltrans to conduct geotechnical drilling on Yerba Buena Island for a southern alignment and detours for a southern alignment consistent with the Governor's letter of July 28, 1999. This request also included a completed environmental clearance covering this geotechnical drilling work.

In September 1999, the Navy signed a license to allow Caltrans to conduct geotechnical drilling on Yerba Buena Island for northern and southern alignments. However, the Navy has stated publicly that it will not relinquish the property necessary for Caltrans to construct the project. In October 1999, Caltrans began drilling on Yerba Buena Island. That same month, the Governor sent a letter to Rodney Slater, Secretary of the Federal Department of Transportation, requesting that the final Environmental Impact Statement be completed no later than January 2000.

# **1999 ANNUAL REPORT TO LEGISLATURE**

## ***Volume I – 2000 Issues***

### **L. Rural County Issues**



## I. 2000 ISSUES

### L. Rural County Issues

Except for daily congestion, rural counties face the same range of transportation issues as urban California: road maintenance, transit operating costs, highway safety, project delivery obstacles, truck traffic, access for economic development. In rural areas, the hurdles to solving these problems are magnified. Rural counties have many miles of road, and small populations and tax bases. Many rural counties are located in mountainous areas, with high rainfall and cold winter weather, all factors that exacerbate the cost of road maintenance. While most counties are squeezed for general fund revenues, the squeeze is tighter in rural counties, so general funds are just not available to help fund county road programs. Rural county economies cannot generate a reasonable amount of funding from a transportation sales tax, even if the electorate were of a mind to approve one, which in most cases it is not, and rural counties typically do not have access to development fees or assessment districts to the same extent as urban counties.

The Commission has reached out to understand the particular problems facing rural regions. Since 1987, it has sponsored a Rural Counties Task Force for advise about rural perspectives, problems and challenges. The Task Force's Annual Report is typically incorporated into the Commission's Annual Report to the Legislature; this year's report appears in Section II-R. Also this year, Commission staff traveled and met with Local Transportation Commissions in several rural counties, to discuss the special problems they face. In addition, the Commission's Chairman during 1999 comes from a rural county, and brings a particular appreciation for rural issues.

The Commission, working with Caltrans, has taken a number of steps in the past year to ease challenges particularly troublesome to small counties. While those efforts will continue, the Commission must look to the Legislature and the Administration to solve the statewide road maintenance funding problem--a problem that falls hardest on small counties--in a way that works for rural counties. Rural counties are quite varied, from Alpine County with a population of 1,000 and stagnant growth, to El Dorado County with growth booming beyond 100,000 population as a Sacramento suburb. Yet, the following issues are quite common and pervasive to most rural areas.

- **Rural roads have suffered from deferred maintenance for some two decades.** Today, many miles of rural roads are more patches than pavement. A few rural counties have returned deteriorated roads to gravel, because maintaining gravel roads is less costly. The Commission's 1999 survey of road needs, for Senate Resolution 8, found rural road maintenance needs to be disproportionately larger than urban county and city maintenance needs, because the rural tax base has been less adequate for a longer time, and state subventions are distributed mostly by population with only a minimal adjustment for road mileage. *The Commission recommends the Legislature, as part of any transportation investment package, provide a revenue stream for local street and road maintenance statewide, with particular attention to rural county needs when distributing any new funding.*

- **Some rural counties have suffered a real dollar decline in maintenance funding since 1990, even after the Transportation Blueprint's gasoline tax increases of the early 1990s, due to reduced federal timber receipts.** The U.S. Forest service pays royalties to counties for logging on federal lands with half of those funds going to county road programs. A decade ago, these federal funds covered 35% of some rural county road maintenance budgets. Logging on federal lands has declined by about 70%, and reduced federal timber revenues have cut into some counties' road maintenance budgets by as much as 20%. Total federal timber receipts statewide have decreased by \$5 million since the late 1980s, with the effects concentrated in only a few counties. *The Commission recommends the Legislature, in dealing with the funding shortfall for road maintenance statewide, consider the funding situation for rural road programs, giving rural counties a larger share in keeping with their maintained road mileage, higher unit costs, and lack of access to alternative funding.*
- **After years of deferred maintenance, many miles of rural roads now need rehabilitation; however the STIP is not a good fit for addressing this need.** In 1998, the Commission opened the STIP to local road rehabilitation projects, because of need, even though those projects do not fit well with the intent of the STIP. Some \$300 million in local rehabilitation projects have been added to the STIP, with many of these in rural counties. Even so, letting roads deteriorate and then reconstructing them with STIP funds is not the answer, compared with keeping roads in good condition, since the cost of reconstruction can exceed that of timely maintenance ten-fold. While rural counties are grateful that some road rehabilitation has been funded through the STIP, the STIP presents its challenges: 1) the Commission requires a defined scope and cost for each STIP project; and the process to get an allocation of funds requires up to 60 days lead time to access the Commission's agenda; 2) the STIP must provide 100% of each project's cost, because rural counties have no local funds for covering cost overruns; 3) road rehabilitation project costs are hard to estimate in remote areas due mainly to the need for portable asphalt hot mix plants; 4) the construction window in many cold-weather counties runs only from late spring to early fall, leaving little room for delays, missed deadlines, or unexpected hang-ups. In order to deal with these challenges, many rural counties carry unprogrammed STIP reserves for cost overruns. They are also willing to defer project segments if bids are too high. However, these practices are at odds with STIP practices: contingency reserves sitting unassigned in the STIP contribute to high cash balances and under-utilization of available funds, project scope typically must be defined as part of the discipline inherent in the STIP process. The Commission has bent STIP rules for local road rehabilitation projects, delegating to Caltrans the allocation of state funds for these projects to avoid the time needed for placement on Commission agendas; and considering "fixed dollar/flexible scope" projects for such projects. While these accommodations are justified, they show the strain between local rehabilitation projects and the STIP process. *The Commission recommends the Legislature provide funds for rural road rehabilitation (as well as maintenance) so the STIP's focus can return to road and transit improvements.*

- **Local agencies are reluctant to use federal local assistance funds because of the burden of extra federal requirements.** Nevertheless, nearly all local assistance funds are federal, so local agencies must become familiar and comfortable with federal projects. The problem is worse in rural than in urban areas because rural counties have less capability to deal with it; thus state law allows rural counties to exchange most federal funds with Caltrans for state funds. The broader challenges of federal funds and project delivery are discussed earlier in this Annual Report, in Section I-B. The Commission and Caltrans during the past year have begun work to streamline the federal process for local projects as much as possible, and Caltrans has increased its local assistance staff by 50% to help local agencies navigate through the federal requirements. *The efforts toward federal streamlining and state assistance must continue if California is to use all federal funds available and meet local road program needs.*
- **Rural counties also need investment in state highways, to provide basic connections to the rest of the state, but are dependent upon joint ventures with Caltrans.** State highway projects in rural areas are often far too expensive to fund just with rural counties' small shares of the STIP. Caltrans, with only 25% of the STIP available for interregional and urban state highway investment needs, cannot fund all the state highway improvements needed for all rural counties, especially the more remote ones. Thus, rural counties under SB 45 must seek joint funding with Caltrans to build state highway improvements. Although rural counties have regional transportation plans that identify state highway project priorities, Caltrans' interregional highway plan does not yet specify its project priorities to match. Further, Caltrans completed its interregional highway proposals for both the initial 1998 STIP and the 1999 augmentation to that STIP well after regional proposals were due to the Commission, leaving regional agencies to hope or guess if Caltrans would offer its share of funding for projects dependent on joint funding. *The Commission expects Caltrans to update its Interregional Strategic Plan by mid-2001 to show future priorities more clearly, and encourages Caltrans to present its Interregional TIP for public review before regional and Caltrans proposals for the 2002 STIP are due.*
- **Rural counties are in need of more planning funds.** All rural counties now face preparation of new Regional Transportation Plans (with required EIRs) by 2001, a raft of Project Study Reports for the 2002 STIP, and the need to track project status, all at once. SB 45 allows up to 2% of each STIP county share to be used for planning; but for small rural counties that is not enough. Caltrans provides \$2 million in planning funds from its annual budget to rural counties, but split 28 ways that also is not enough. *The Commission has asked Caltrans to seek increased rural planning funds and suggests the Legislature consider raising the STIP planning limit for small counties to 5% of each county share.*

