



California State Transportation Agency

California
Transportation
Infrastructure Priorities
Whitepaper:

State Transportation
Improvement Program –
Performance Investment
and Transparency

Recommendations to the Secretary of
Transportation

September 12, 2014

State Transportation Improvement Program – Performance Investment and Transparency

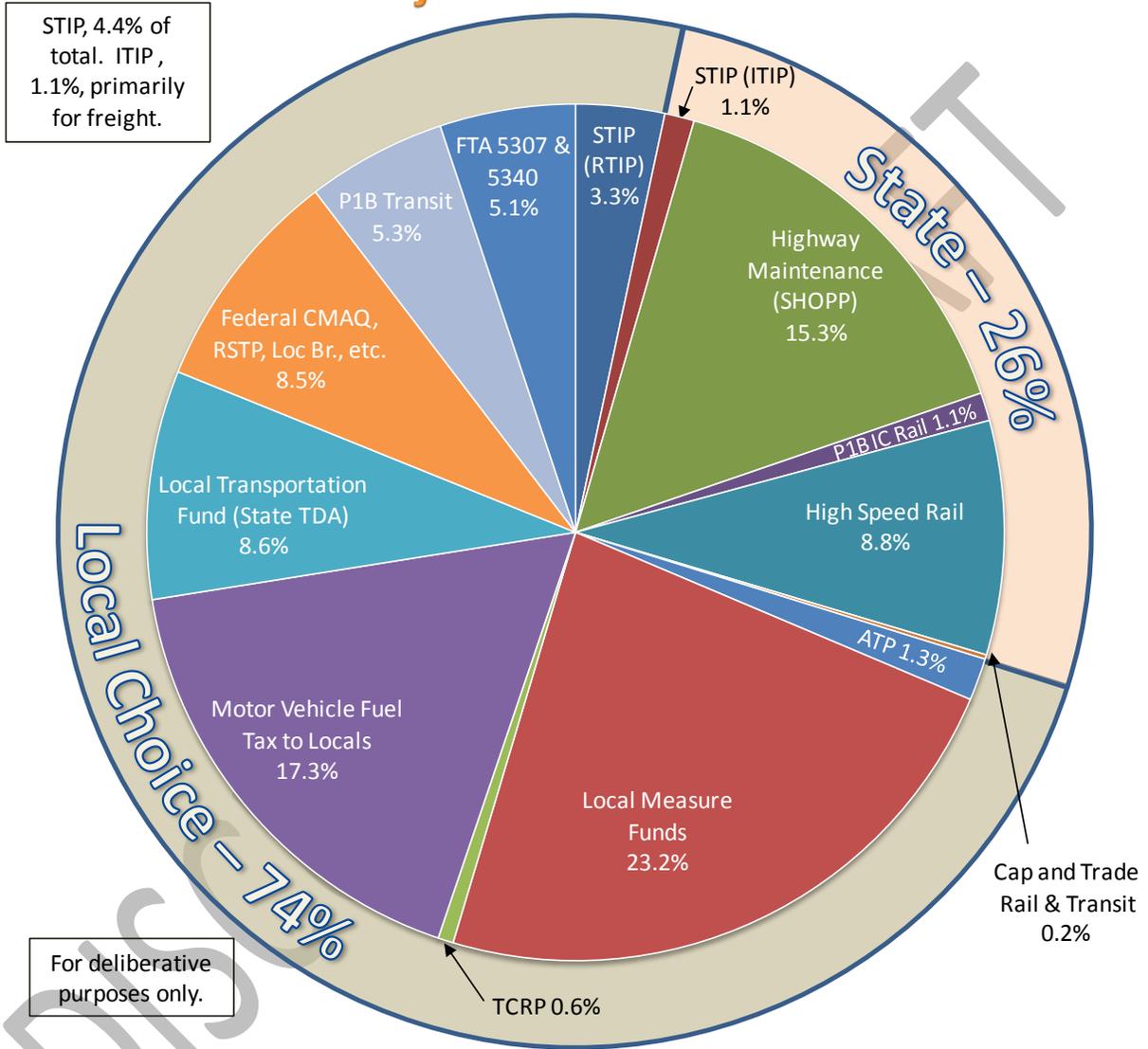
This whitepaper provides background and recommendations from the California Transportation Investment Priorities (CTIP) Workgroup on the State Transportation Improvement Program (STIP). The California State Transportation Agency (CalSTA) established the CTIP workgroup in April 2013 to examine the current status of the state’s transportation system and discuss the challenges that lie ahead. The workgroup includes a diverse group of transportation stakeholders. An Interim Recommendation Report was issued in February 2014 and posted on the CalSTA website centered around the concepts of: preservation, innovation, integration, reform, and funding. The CTIP workgroup continues to meet on specific topics in 2014 – including this review of the STIP. The intention of this effort is to ensure STIP alignment with the priorities identified in the February Report and with current state and federal laws, policies, and priorities.

1 Introduction

The STIP is the State’s multimodal funding program – it provides funding for highways, local roads, rail and transit, and bicycling and pedestrian improvements. The STIP is the sole ongoing State program that provides funds for highway expansion, and historically, most STIP funds have been directed to highway projects. Non-highway modes of transportation have existing or new ongoing State funding programs that focus on individual modes, such as the: Active Transportation Program for bike and walk projects; Cap-and-Trade-funded Transit and Intercity Rail Capital Program and High-Speed Rail Program for intercity, commuter, and urban rail; State Transit Assistance Program and the Low Carbon Transit Operations Program for transit operators; and “Shared Revenue” apportionment of gasoline tax for local streets and roads. Highway maintenance and highway preservation, likewise have separate funding programs, within the Caltrans Maintenance Program and the State Highway Operations and Protection Program (SHOPP).

There are a number of other state and non state fund sources used for capital projects for transportation, as shown in the chart below. The chart represents programmed funds for the 2014-15 fiscal year and does not include some potential program fund sources such as toll and developer fees where data is not readily available. The amount of funds for given programs vary slightly by year but the overall relative percentage of each program will likely not vary substantially by year. The distinction between the State and Local projects below is a distinction between local versus state nominated projects. In some cases, such as a portion of Active Transportation Program funds, the locals nominate projects and the state chooses the projects through a competitive grant process. The funds sources listed in the chart below can be used for multiple types of investments as outlined in the table below.

Funds Available for Transportation Capital Projects in FY 14-15



Transportation Fund Source Uses

Fund Program	Mass Transportation Infrastructure	Automobile Infrastructure	Pedestrian and Bicycle Infrastructure
STIP (RTIP and ITIP)	X	X	X
Federal Transit	X		
Federal CMAQ, RSTP, Local bridge, Etc.	X	X	X
Prop 1B Transit and IC Rail	X		
Local Transportation Fund	X		
Local Motor Vehicle Fuel Tax	X	X	X
Local Measure	X	X	X
SHOPP		X	X
Active Transportation Program			X

STIP funds are often combined with local revenues to fund projects and in many counties, the local sales-tax measure funds exceed the STIP funds used for new infrastructure projects. The annual funding for STIP is about \$675 million, and local measure fund revenue sums to approximately \$4 billion per year. Local sales-tax measures typically support multi-modal investment and include transit, and active transportation projects, in addition to highway projects.

A recent review of Caltrans by the State Smart Transportation Initiative (SSTI) and some critics of the 2014 STIP have raised questions about the appropriateness of the STIP structure and projects, relative to statewide policy objectives for sustainability and the statutory priority for preservation of existing transportation infrastructure.

The SSTI review opines that the STIP, combined with local sales-tax measure funding, has resulted in a disproportionately high investment in new highway capacity:

Despite decades-long calls for a pivot toward system preservation, nearly all STIP funding, whether administered by state or local governments, goes to highway-capacity projects, even though state law allows for STIP-funded preservation projects as well. Coupled with self-help county funding and other sources, such as recent bonding, the STIP helps to generate substantial new highway capacity.

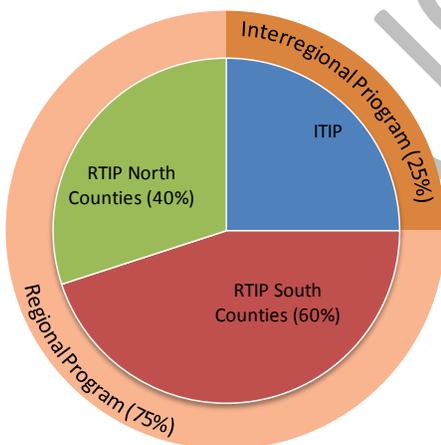
Some critics of the 2014 STIP pointed to the number of highway capacity expansion projects included in the Regional Transportation Improvement Programs and the Interregional Transportation Improvement Program and suggested the proportion directed to highways was too large, and that new highway

capacity would increase vehicle miles-traveled on the corridors negatively impacting greenhouse gas emissions.

While the STIP is a small fraction of all federal, state, and local transportation spending in California – less than 5 percent– it is the responsibility of the State and its partners to ensure these public dollars are well-spent and consistent with state policy. Further, the CTIP February interim report identified preservation, innovation, integration, reform, and funding as top priorities for infrastructure investment. This whitepaper provides STIP background, provides related information, and makes recommendations for better alignment.

2 Background on the STIP

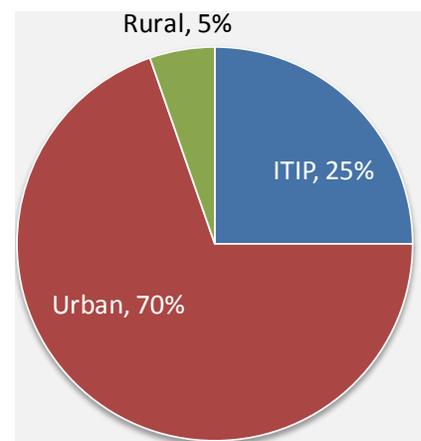
The basic structure of today’s STIP goes back to Senate Bill 45 of 1997. The STIP is a five-year program of projects that is updated every two years. The most recent STIP – the 2014 STIP – was adopted by the California Transportation Commission in March 2014. State statute directs: 75 percent of STIP dollars to the Regional Transportation Improvement Program (RTIP), which is subdivided by formula into county shares, with projects to be nominated by each regional agency; and 25 percent to the Interregional Transportation Improvement Program (ITIP), which are projects nominated by Caltrans. The purpose of the Interregional Transportation Improvement Program (ITIP) is to fund projects that improve interregional mobility for people and goods across the State of California on highway and rail corridors of strategic importance. State law further requires that a minimum of 60 percent of the ITIP be directed to highway projects that are outside the boundaries of an urbanized area with a population of more than 50,000 and intercity rail projects, with a minimum of 15 percent of that 60 percent directed to the intercity rail projects.



The chart to the left illustrates how the statutory distribution of funding between the interregional and regional programs functions. Within the regional program, funding is further split between the north and south county groups, 40 percent and 60 percent respectively. Lastly funding is then distributed with each county group to each county on a formula basis that weighs population and centerline mileage.

The chart to the right illustrates the regional funding split between the largely urbanized areas and non-urbanized areas of the state.

The process of adopting the STIP is a multi-step effort. Caltrans updates the Interregional Transportation Strategic Plan and each region updates its regional transportation plan. The regional



transportation plans also include the sustainable community strategies for the 18 metropolitan planning organizations. The CTC adopts STIP guidelines that describe the policy, standards, criteria and procedures for the development, adoption and management of the STIP. The CTC guidelines are updated as needed during each STIP adoption cycle. Not later than August 15 of each odd-numbered year, the CTC adopts an estimate of available revenues for the STIP. Nominations from regions and Caltrans are due by December 15 of each odd-numbered year. The CTC must adopt the STIP by April 1 of each even-numbered year.

CTC guidelines for the 2014 STIP included performance measures of safety, operational efficiency, travel time and reliability, greenhouse gas benefits, rail ridership, and vehicle miles traveled. Additionally, each region with an adopted sustainable communities strategy was required for the first time to include a discussion of how the program of projects relates to that strategy. Historically the submitted performance measures have not been aggregated across the entire Program nor reported by the Commission.

Eligible uses of the STIP are dependent on fund source. Most STIP funds today are from the State Highway Account (SHA), which is restricted in expenditure by Article XIX of the State Constitution. The Constitution permits the use of SHA revenue for State highways, local roads, active transportation facilities, environmental mitigation, and exclusive public mass transit guideways. SHA funds in the STIP can be used for highway or road expansion and preservation, but not for highway or road maintenance. Additionally, the SHA in the STIP can be used for rail track and grade separations, but not for purchasing rail cars or buses. Some types of federal funds in the STIP are more flexible and can be used for expenditures such as bus or rail car purchase. The availability of Public Transportation Account (PTA) funding in the STIP has diminished in recent years due to tax law changes and the fact that more of the existing funds are being allocated directly to transit operators by formula rather than through the STIP. While the PTA was a bigger share of the STIP in past years, and directed to transit investments, some transit investments can still be made from SHA.

The funding level in the STIP is set by a combination of state law and the annual budget process. Currently, STIP funding is set at the level set by statute as a minimum – receiving 44 percent of the “priced-based excise tax” on gasoline, which is expected to generate about \$675 million annually. The budget process can increase or decrease this funding level. Street and Highway Code Section 167 defines preservation and rehabilitation as a higher priority than new capacity, and that is generally reflected in the state budget, with the SHOPP program expected to receive about \$2.3 billion annually, and the Maintenance Division at Caltrans funded at about \$1.4 billion annually. Between the 2012 STIP and the 2014 STIP, the STIP funding was largely unchanged, however, the SHOPP programming capacity grew \$1.1 billion over the four year period .

3 Typical Uses of STIP Dollars

The 2014 STIP added two new years of programming, 2017-18 and 2018-19, and also reflected the elimination of the federal Transportation Enhancement (TE) program, which had been previously programmed in the STIP. With the elimination of the TE and the establishment of the new federal

Transportation Alternatives Program (TAP), California decided to use TAP funds and State funds to create the Active Transportation Program as a separate program for funding bicycling and pedestrian projects. The net new programming capacity for the STIP five-year program was \$1.3 billion mostly in the two final years. The regions and Caltrans nominated new projects that were split 83 percent for road and highway, and 17 percent for rail and transit. As is typical, the requests for new programming in the early years of the STIP exceeded capacity and the CTC needed to determine which projects to program early and which to program late. Generally, the CTC favored rail, transit, bike and pedestrian projects in the earlier STIP years and highway and road projects were programmed in later years.

4 Impact of AB 32, SB 375, SB 391, and SB 743 on Project Selection

Through the passage of AB 32 (Nunez, 2006), SB 375 (Steinberg, 2008), and SB 391 (Liu, 2009), the State is leading the nation in aggressively reducing greenhouse gas emissions. These bills do not require any specific changes to the STIP, or to broader transportation funding, but in order to achieve the greenhouse gas reduction goals of that legislation, a greater focus on multi-modal investments and infill development is required. Assembly Bill 32 requires that the state reduce greenhouse gas emissions to 1990 levels by 2020 and maintain those reductions – the bill also authorizes the establishment of a market-based “Cap-and-Trade” auction program to reduce emissions. The Governor has set an additional greenhouse gas target by Executive Order (S-3-05) of a further 80 percent reduction by 2050. Senate Bill 375 requires the California Air Resources Board to set greenhouse-gas reduction targets for the state’s Metropolitan Planning Organizations (MPOs) and that the MPOs include Sustainable Community Strategies in their Regional Transportation Plans. Senate Bill 391 requires that the California Transportation Plan incorporate the regional Sustainable Community Strategies and identify the statewide integrated multimodal transportation system needed to achieve maximum feasible emissions reductions. The California Transportation Plan 2040, which is due in final form by December 2015, is the first statewide plan developed under the requirements of SB 391.

Most MPOs have released their first Sustainable Community Strategies, and these have generally been favorably received in terms of support for multimodalism and infill development. These plans include specific projects and all funding sources available to the regions – federal, state and local funds. As one illustration of the new plans, Plan Bay Area directs 87 percent of all funds to maintaining existing infrastructure, and 62 percent of all funds to transit investments. Where Plan Bay Area directs funds to highway capacity, it is focused primarily on completion of a high-occupancy toll network and traffic management systems. In conformance with these plans and in response to voter demographic shifts in mobility demand, new regional sales tax measures are shifting their emphasis toward multimodal investments and fix-it-first preservation. Recent sales tax measures proposed by Alameda and Los Angeles do reflect this shift with significantly reduced highway capacity investments compared to past measures. For example, the Alameda measure on the November 2014 ballot would direct 9 percent to highways, 8 percent to bicycle and pedestrian projects, 30 percent to local street and road repair, and most of the remainder to transit.

Legislation adopted with the 2014 State Budget, Senate Bill 862, established an expenditure program for Cap-and-Trade auction proceeds. A large portion of the 2014-15 spending plan – over \$600 million – is directed to Transportation and Sustainable Communities. In 2015-16 and thereafter, a minimum of 60 percent of annual auction proceeds are directed to these purposes, meaning that projects that reduce transportation emissions – through both cleaner vehicles and through mode shift away from auto trips to transit and active transportation – will enjoy new funding at a level equal to or possibly exceeding the baseline STIP program.

Caltrans is developing the first “SB 391” California Transportation Plan (The CTP2040) through an open public process. Through that process, a vision, goals and policies have been established with the active participation of a broad stakeholdership in the policy advisory committee that guides the effort. The vision of the plan is as follows:

California’s transportation system is safe, sustainable, and globally competitive. It provides reliable and efficient mobility and accessibility for people, goods, and services while meeting our greenhouse gas emission reduction goals and preserving community character. This integrated, connected, and resilient multimodal system supports a prosperous economy, human and environmental health, and social equity.

The CTP 2040 is intended to guide the project selection for projects in the Interregional Transportation Investment Plan and in the regional transportation plans.

Governor Brown signed Senate Bill SB 743 (Steinberg, 2013), which created a process to change the way that transportation impacts are analyzed under the California Environmental Quality Act (CEQA). Specifically, SB 743 requires amending the CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” This new analysis will likely reprioritize new solutions to mobility challenges as part of the environmental review process required for transportation projects.

5 Role for Highway Capacity Expansion

As indicated above, recent state law and funding programs have emphasized multi-modal investments, fix-it-first preservation, and operational improvements over adding lanes to address increasing transportation demand needs. These policies and programs have reduced the overall proportion of funding available for highway capacity, but not eliminated it. It is important to recognize that some highway expansion projects are good policy – for example capacity projects on key corridors for goods movement, HOT and HOV lanes, and safety projects may warrant inclusion in spending plans.

Highway expansion that adds new mixed-flow lanes to major urban commute corridors creates a risk of inducing more vehicle miles traveled and sprawl – perhaps improving mobility in the short term, but at a cost to greenhouse reduction goals. The SB 375 approach does allow regions to manage to a greenhouse reduction target and balance multiple objects – so priority highway expansion can be

consistent with SB 375 in urban areas if balanced with transit, active transportation and infill development sufficient to achieve greenhouse gas reduction targets. In rural areas, there are few or limited multimodal options and that is recognized as an important consideration in the rural transportation investment choices. The diversity of California's regions should be considered as part of acknowledging equity for all users. It should also be noted that with the Caltrans complete streets policy, most road projects include elements that benefit all system users.

Recent state and regional plans have increased the focus on trade corridors and various congestion management practices to prioritize highway investments that best grow the economy and reduce highway congestion in major corridors through pricing and traffic management systems. For example, a major focus of highway expansion in the Southern California Association of Government is moving freight from the ports of Los Angeles and Long Beach efficiently through the region. The Bay Area has a focus on completing a network of high-occupancy toll (HOT) lanes to improve travel-time reliability and more effectively manage congestion. Caltrans has in the past year increased its emphasis on maintaining and improving traffic management systems and is developing a pricing policy to implement additional HOT lanes where appropriate. Additionally, the state is seeking strategies to move more freight on rail and marine transport to help relieve pressure on highways.

6 CTIP workgroup STIP Alignment Recommendations

After much discussion with stakeholders in the Workgroup, the group is recommending the following to assure the STIP investments are aligned with state policy, perform well and are developed in a transparent manner. These recommendations are intended to inform the 2016 STIP process, and the Transportation Agency should stay engaged with stakeholders through the upcoming STIP cycle, with additional deliberations on further steps to take after the adoption of the 2016 STIP.

6.1 Focus on the Regional Transportation Plans and the Interregional Transportation Strategic Plan to direct project selection.

One of the recommendations of the State Smart Transportation Initiative (SSTI) review of Caltrans was that the State pursue legislation to allow the California Transportation Commission to reject individual projects in the STIP, if they are not aligned with state policy goals. The Workgroup recommends against this change in statute at this time, and instead recommends that the focus for state policy alignment should be on Regional Transportation Plans and the Interregional Transportation Strategic Plan. Focusing on plans addresses project selection at the earlier planning stage rather than in isolation when the project may already have pre-construction expenditures. Both the Regional and Interregional plans are developed in a transparent public process so that priorities are discussed and understood by all interested stakeholders.

6.2 Strong performance measures and reporting are needed for the STIP, because the public should know their tax dollars are well-spent.

STIP performance measures should be based on state goals and priorities and provide transparency on program effectiveness. The California Transportation Commission will adopt performance measures as part of STIP guideline process. The CTIP Workgroup recommends the measures be:

- Focused and well-defined;
- Consistent with CTP 2040;
- Consistent with MAP-21 and SB 375 / SB 391;
- Developed with commonly-used data when possible;
- Communicated to the public and easily understood;
- Cognizant of the diversity of California’s regions as reflected in the regional plans; and
- Allow for qualitative and quantitative measures.

The reported performance measures should apply to individual projects and relate back to the applicable overarching plan benefit, subject to any thresholds set by the CTC guidelines.

Associated with this recommendation, the Regional Transportation Planning Agencies are developing a template for the submittal of the regional and interregional improvement programs. The intention of the template is as a communication tool concerning the STIP investments. The template is expected to include:

- How the STIP project funding fits into the meet the vision of both the Regional, Interregional, and California Transportation Plans and the Sustainable Community Strategies including a link to the pertinent plan;
- Regional and statewide project benefits for the projects and program;
- Reporting on benefits of previous STIP funded projects that are complete; and a
- A write-up of overall qualitative and quantitative performance measures as applicable;

For further transparency, it is recommended that the STIP funded regional programs and the STIP funded ITIP are made available electronically on the CTC website.

6.3 This effort is encouraged by the CTIP Workgroup to provide further input to the CTC as guidelines are developed. Pursue multi-modal investments in the STIP, while recognizing the STIP as the only State program for regional and interregional highway capacity improvements.

The STIP is defined as a multi-modal transportation program in current state statute. Given SB 375 and SB 391 direction, it is likely overall federal, state, and local transportation dollars will be spent in higher proportions on preservation, rail, transit, and active transportation, with a

decreased portion spent on highway expansion – both the 2014-15 State Budget and recent Regional Transportation Plans reflect this shift. The STIP will likely experience a similar shift, but will also continue to direct a portion to highway capacity focused on major trade corridors, safety, and traffic management systems improvements. As Sustainable Community Strategies and the California Transportation Plan 2040 define regional and statewide priorities and focus, the STIP should support, and be fully consistent with, those comprehensive plans and policy directions. The performance reporting above should help evaluate attainment of this goal.

6.4 While not having any preservation mandates, the STIP should be clearly eligible for fix-it-first preservation and operational improvements of existing multi-modal infrastructure.

The CTIP Workgroup notes that the SHOPP is the primary state funding program for highway preservation and operations improvements, but also points out the operations investments have decreased over time. Over the last year, Caltrans increased its focus on operations improvements in the SHOPP, such as traffic management systems rehabilitation and upgrades. The Workgroup recommends against any regional or interregional STIP preservation and operations mandates, but agrees preservation and operations uses are allowable and appropriate in some circumstances. With the limited SHOPP funding, in some areas of the state, preservation of existing multi-modal infrastructure and operations improvements may be the most cost-effective expenditure of STIP dollars, and where that is the case, such expenditures should be encouraged. Additionally, where regional share dollars are directed to such purposes, partnership funding in the SHOPP should be considered. Longer term, it is acknowledged that if additional pay-as-you go revenue is not identified for preservation of highways, that the STIP may need to be reduced and the SHOPP augmented.

6.5 Improve the transparency of the Interregional Transportation Improvement Program, starting with the 2016 plan, to demonstrate its alignment with state policies and expand the public participation process.

Ensure the updated Interregional Transportation Strategic Plan (ITSP) and related STIP investments align with the California Transportation Plan 2040 vision and goals, which reflect the state's priorities. Already Caltrans has designated the CTP 2040 Policy Advisory Committee to serve as the ITSP Advisory Committee. Further public participation should be accomplished by holding public workshops and seeking input through various advisory groups and committee such as California Freight Advisory Group, Active Transportation and Livable Communities group, RTPA meetings, Cal COG, Rural County Task Force meetings, Native American Advisory Committee meetings and the CTC meeting process. The ITSP should include the entire interregional system including high-speed rail, intercity rail along with active transportation. Recognize that ITIP projects that leverage regional funds also go through an extensive regional public involvement process.