

# Caltrans Program Review

## Final Report

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January 28, 2014



## EXECUTIVE SUMMARY

The California Department of Transportation (Caltrans) has the opportunity to embrace new reform efforts that stem from internal and external reviews. Change is necessary and we recognize that priorities, roles, and responsibilities evolve over time, and Caltrans must address this evolution of how we improve mobility. The Program Review is one part of larger, ongoing efforts to continuously improve transportation operations.

Year after year, Caltrans has demonstrated an outstanding record of meeting commitments and fulfilling its maintenance activities. We have successfully administered the American Recovery and Reinvestment Act and the California Proposition 1B Infrastructure Bond program over the last five years. Funding for new transportation projects has peaked, and we must recognize that transportation funding is facing a sharp decline. How Caltrans will address this future reality is a question we must answer. In addition, the roles of our local transportation partners are ever-changing, and demands and expectations for efficiency and accountability are at an all-time high. Caltrans must look to the future, reassess all our activities, and seek opportunities to better serve motorists and collaborate with our partners in California.

To maintain our state and national leadership role in transportation, Caltrans must also foster an internal culture that seeks positive change and demonstrates the utmost professionalism and ethics throughout our ranks. To better achieve our strategic goals, we must be open to restructuring, dedicated to managing change, and receptive to initiatives that focus on results. Caltrans must effectively and strategically use progressive project delivery tools. During the past 18 months, we focused on these areas in a systematic evaluation of our organization and processes, known as the Caltrans Program Review. The Program Review was conducted internally and in collaboration with our local partners. Ultimately, Caltrans must make good business decisions that reinforce our obligation to be good stewards of taxpayers' dollars.

In addition to this effort, and in conjunction with the California State Transportation Agency (CalSTA), the Department welcomed an external review conducted by the State Smart Transportation Initiative (SSTI). This review will provide another evaluation of Caltrans' practices and will complement the Program Review to improve the Department's effectiveness.

This report serves as an 18-month update of the Program Review effort. It captures the major actions taken in response to the recommendations from the 2012 Program Review, and related efforts, in three major categories:

1

### Assessing and Reducing Environmental Impacts

- Preparing a Director's Policy on stewardship and sustainability
- Providing guidance to local agencies to address climate change adaptation in regional transportation plans
- Estimating greenhouse gas emissions and developing strategies for reducing emissions
- Developing a roadmap to comply with, and exceed, the requirements of Executive Orders for green buildings and zero-emission vehicles



*Caltrans' efforts to reduce environmental impacts protect natural resources like California's Central Coast*

2

### Collaborating with Our Partners to Improve Project Delivery

- Established a joint task force with the Self-Help County Coalition (SHCC) to address specific project delivery activities/funding (ongoing effort)
- Streamlined oversight of local project delivery (ongoing effort)

- Increased delegated authority to districts to streamline decision-making
- Increasing design efficiencies through process updates
- Streamlining right of way processes
- Implement innovative project delivery processes
- Improving communication with partners in developing the State Highway Operation and Protection Program (SHOPP)
- Improving cross-functional communication

### 3

#### Increasing Caltrans' Efficiency, Improving Department Processes

- Improving workforce management
- Clarifying Department and local agency roles in transportation planning (ongoing effort)
- Creating an Office of Enterprise Risk Management to make risk-conscious decisions regarding program and personnel activities
- Evaluating and reorganizing Caltrans divisions and their business practices
- Actively participating in zero-base budget reviews conducted by the Department of Finance (DOF) (ongoing effort)
- Committing to fully implement a Transportation Asset Management Plan
- Developing the Caltrans Performance Report to improve communication and transparency on departmental performance in achieving key metrics
- Participating on the California Transportation Infrastructure Priorities (CTIP) workgroup

Caltrans is committed to continuous process improvement and innovation in all areas. This requires healthy internal and external partnerships, and the establishment of a business culture that exemplifies the highest ethical and professional standards throughout our entire workforce. Our actions will be aligned with a clear mission, vision, and goals and our values should

not be compromised. The new and improved business processes that result from the Program Review and other efforts will provide a basis for the next Strategic Management Plan and continuous improvement efforts going forward.

Together we will build a better Caltrans for a better tomorrow.

#### Significant Legislation Impacting Caltrans in Recent Years

##### 2005

**Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users** and **AB 1039 (Chapter 32)**

##### 2006

**Propositions 1A and 1B**

**AB 32 (Chapter 488) California Global Warming Solutions Act**

**AB 1467 (Chapter 32) Public Private Partnerships**

##### 2008

**SB 375 (Chapter 728)**

Enhanced California's ability to reach its AB 32 goals by promoting good planning with the goal of more sustainable communities

##### 2009

**American Recovery and Reinvestment Act**

Provided federal funding for mobility

**SB 391 (Chapter 585) California Transportation Plan**

Updated requirement to address greenhouse gas emissions

**SBX-2-4 (Chapter 2)**

Initiated the use of a design-build process for contracting on transportation projects

##### 2012

**Moving Ahead for Progress in the 21st Century Act**

##### 2013

**AB 401 (Chapter 586)**

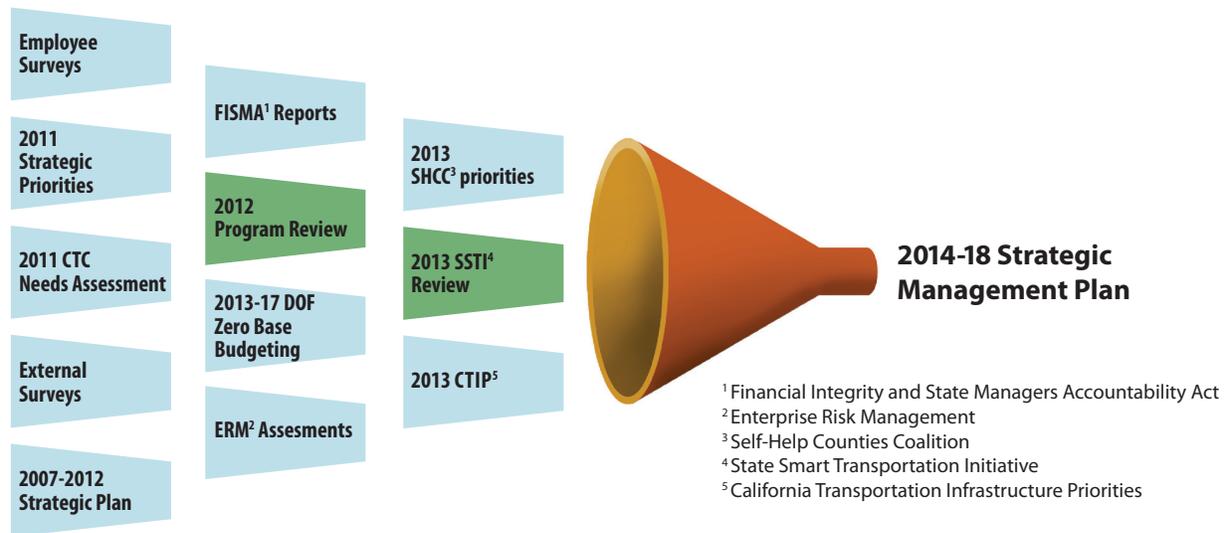
Extended use of design-build process

## STRATEGIC MANAGEMENT PLAN

The Department's 2014-18 Strategic Management Plan will include goals that address safety, stewardship, system performance, delivery, and professional workforce, which align with CalSTA's goals of safety, mobility, and sustainability. The accompanying strategies will be finalized in 2014 and integrated with the SSTI Report recommendations, expected in January 2014, the CTIP recommendations, and DOF zero-base budget recommendations, as they are finalized.

Ongoing Program Review activities will either be included in the Strategic Management Plan, be addressed as part of discussions with local partners, become part of ongoing Department operations, or be modified or eliminated as appropriate. These efforts will enable the Department to more effectively accomplish our mission while being efficient, providing a professional workforce to the people of California, and working collaboratively with all stakeholders.

The 2014-18 Strategic Management Plan is the output of many activities and demonstrates Caltrans' commitment to a continuous improvement process



## INTRODUCTION

In late 2011, Director Malcolm Dougherty proposed an internal review of the California Department of Transportation that became known as the Program Review. The Program Review was a top-to-bottom assessment of the Department’s role in transportation. It assessed the Department’s functional areas and organizational structure to identify opportunities to eliminate redundancies and inconsequential activities in order to increase the delivery of projects, products, and services and decrease the cost of doing business. The purpose of the Program Review was to identify opportunities to improve the efficiency and effectiveness of Department operations and also to identify opportunities to improve the Department’s relationships with local agencies. Ultimately, the result of the Program Review was to move the organization to be more effective in accomplishing our mission, improve partnerships, become better stewards of state transportation resources, and establish a professional, continuous improvement culture.



*Caltrans Director Malcolm Dougherty, far left*

The Program Review Team included representation of agency partners and solicited feedback via a statewide survey of 65 regional and local transportation agencies. Internal interviews with district directors and deputies were also conducted. The effort yielded many ideas that the Department has implemented through immediate actions or is pursuing through ongoing efforts to evaluate:

- Opportunities to enhance partnerships with transportation stakeholders to achieve our mission

- Reorganization opportunities in divisions and districts to ensure we are positioned for efficient decision making
- Process streamlining to ensure expeditious delivery of products and services, and facilitation of timely decision-making
- Opportunities for greater flexibility in resources and tools to manage program workload
- Maximization of delegation of authority and empowerment of employees to support timely decisions with the appropriate amount of risk

While the Program Review was underway, the SHCC simultaneously identified opportunities to work jointly with the Department to promote effective partnerships to successfully deliver timely transportation improvements. Many of their recommendations were consistent with Program Review findings. The Department is committed to partnering with all local partners on issues including Caltrans’ role in planning, streamlining processes, and developing appropriate levels of oversight in areas such as Office Engineer, Local Assistance, and Headquarters’ reviews.

The purpose of this report is to provide an update on what Caltrans has accomplished through the Program Review and to describe how we are moving forward. Some Program Review actions have been completed; some are being implemented; some are under review; some will be incorporated into the Department’s Strategic Management Plan, and others are just starting to be studied. Caltrans will continue to work internally and with our partners to move forward together on the issues identified in the Program Review.

## ACCOMPLISHMENTS

The first major Program Review action taken was the creation of an Executive Board. This was an overarching action that set the foundation for implementing all Program Review recommendations. The Executive Board makes decisions on departmental strategic direction, broad operational policy, and departmental structure. While the Director leads the organization and Deputy Directors have the delegated authority to set policies, the Executive Board structure emphasizes communication, collaboration, consensus and statewide consistency in decision making, policy setting, and execution.

The Executive Board brings together all 12 District Directors, the seven Deputy Directors, the Chief Deputy Director, and the Director to discuss major strategic and statewide policies and issues. The Executive Board ensures that decisions are vetted and approved by all Caltrans executive managers, thereby establishing ownership and creating a stronger management team, improving decision making, understanding, implementation, accountability, and organizational culture.



### CALTRANS DISTRICT MAP

*Caltrans divides the state into 12 regional districts and its Headquarters is located in Sacramento, within District 3.*

As a result of the Program Review, the Executive Board, Deputy Directors, and Division Chiefs have implemented a number of Program Review actions that address both internal and external issues. Some of the accomplishments over the first 18 months are as follows:

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## Assessing and Reducing Environmental Impacts

### Preparing a Director's Policy on Stewardship and Sustainability

Caltrans is updating a 1992 Director's Environmental Policy to encourage a culture of environmental stewardship and sustainability. The policy describes responsibilities of all employees involved in the planning, design, construction, maintenance, and operation of the state's transportation infrastructure and Caltrans internal operations.

### Providing Guidance to Local Agencies to Address Climate Change Adaptation in Regional Transportation Plans

In February 2013, Caltrans prepared and distributed a guide to help local transportation planning agencies assess relative risks to their transportation infrastructure and services of different climate stressors, conduct an inventory and vulnerability assessment of existing infrastructure, and incorporate climate change impact considerations into future long-range transportation planning and investment decisions.

### Estimating Greenhouse Gas Emissions and Developing Strategies for Reducing Emissions

In April 2013, we reported details of our efforts to adapt to the growing threat of climate change and mitigate its effects by reducing greenhouse gas emissions. The report describes planning activities, changes to concrete specifications, the use of alternative asphalt pavements, use of light-emitting diodes in traffic signals, operating approximately 3,000 alternative fuel vehicles, providing employees commute programs, and numerous other greenhouse gas reduction activities in districts.

### Developing a Roadmap to Comply With, and Exceed, the Requirements of Executive Orders for Green Buildings and Zero-emission Vehicles

Caltrans has completed its roadmap describing the steps being taken to comply with the Governor's Executive Orders of 2012 regarding reducing environmental impacts of state operations and



*Caltrans' District 7 Leadership in Energy & Environmental Design (LEED) Gold Certified Office Building in Los Angeles*

integration of zero-emission vehicles. In addition to describing the steps being taken to achieve the targets established by the Department of General Services, the roadmap also notes that Caltrans has installed photovoltaic energy systems using Clean Renewable Energy Bonds, has upgraded lighting systems to light-emitting diode based technologies at maintenance facilities, and has purchased 36 zero-emission fleet vehicles. We are also purchasing 33 dual-charging stations to support the zero-emission fleet vehicles.

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## Collaborating with Our Partners to Improve Project Delivery

### Established a Joint Task Force with the SHCC to Address Specific Project Delivery Activities/Funding

The Department has established an ongoing dialogue and joint task force with the SHCC to cooperatively address opportunities to jointly promote sustainable, functional, and safe transportation in California and

align agency roles, responsibilities, and decision-making with risks. This dialogue has helped achieve changes in project delivery, design, right of way, planning, and programming. This is an ongoing effort.

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## **Streamlining Oversight of Local Project Delivery**

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External partners have indicated that oversight activities are not consistent within or between districts, that oversight is more rigorous for externally developed projects, and that oversight issues are not prioritized. Efforts initiated to address these issues include: developing a Design Product Criteria Evaluation Handbook, which has been field tested in Districts 10 and 12 and will be rolled out to all districts when complete; developing a Quality Management System Handbook; and delivering a pilot training program to certify consultants. Implementation of a Quality Management System will establish performance-based outcome quality measures, and principles of developing and implementing quality management plans, and provide guidance, training and process reviews to ensure successful implementation at the district level. This is an ongoing effort.

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## **Increasing Delegated Authority to Districts to Streamline Decision-Making**

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The Executive Board has approved a proposal that provides districts full authority in the final processing of construction contracts. The transition to Authority to Advertise District Delegation (AADD) will be underway in most districts by July 2014, and will be complete in all districts by July 2016. This improvement will streamline the contract review process prior to advertisement and place authority and accountability with the districts performing the work.

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## **Increasing Design Efficiencies Through Process Updates**

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The Division of Design conducted a value analysis study of the benefits and risks of a process change to increase delegations of exceptions to select design standards and policies, along with clarifying roles and responsibilities of design coordinators and reviewers, eliminating duplicate reviews, and establishing a dispute resolution process. The division is continuing its efforts

to better facilitate project delivery through promoting grounded, yet flexible, design standards, policies, and procedures. A draft functional organization has been developed and shared with Headquarters Project Delivery management and the Design Management Board. Key objectives being implemented by the organizational change include:

- Reviewing the roles and responsibilities of the design coordinators and design reviewers
- Focusing on Headquarters responsibilities such as professional development and knowledgebase management, process reviews and lessons learned, quality and performance management, and innovation
- Consolidating line function support work into one office to enhance effectiveness and improve efficiency
- Implementing added delegation to the districts via a “stewardship agreement” process.

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## **Streamlining Right of Way Processes**

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External partners have made suggestions to reduce or streamline the Department’s right of way processes when local agencies were responsible, and to allow the Department greater flexibility on how and who does right of way work. Changes have been made in the Resolution of Necessity (RON) process when local cities and counties are empowered to adopt their own RONs. Expanding this to nonterritorial agencies is being examined, which may require a legislative effort. In addition, the Department’s Right of Way program reviewed existing delegations and, through that review, empowered the districts with additional delegations. Some of the suggested right of way process streamlining measures are not departmental policy but are mandated by federal and state laws. Therefore, some of the suggested streamlining can only be achieved through legislative changes.

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## **Implementing Innovative Project Delivery Processes**

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Legislation was passed providing the Department with construction manager/general contractor authority. Caltrans is currently proceeding with 10 pilot projects.

The original design-build legislation has been successfully utilized with all 10 projects completed or well underway. AB 401 (Chapter 586, Statutes of 2103) provides Caltrans 10 more projects and provides local agencies unlimited design-build authority on the State Highway System. Design-build processes are in place.

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## Improving Communication with Partners in Developing the SHOPP

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In response to requests by the Self Help Counties Coalition for greater communication during the development of the SHOPP, the Department has implemented a number of strategies to improve communication with our local partners. The coordination effort began in the summer of 2013. District Offices shared early iterations of the 2014 SHOPP, and discussed proposed projects with regional partners. This early and open communication provided local agencies the opportunity to synchronize regionally funded projects with projects included in the SHOPP. This synchronicity maximizes project benefits and minimizes impacts to the traveling public.

In November 2013, the proposed final portfolio of 2014 SHOPP projects was shared with Regional Transportation Planning Agencies (RTPA) for an opportunity to review and comment. The higher level of communication and coordination has been an acknowledged success, and the Department received just one comment on the 2014 SHOPP from local agencies. Future SHOPP cycles will continue to feature greater communication with stakeholders early in the process.

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## Improving Cross-functional Communication

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The divisions of Design and Project Management are working together to improve cross-functional communication, expertise, accountability, and decision making. One action underway on a trial basis is to combine the roles and responsibilities of the design coordinator and project management coordinator into a project delivery coordinator. This not only minimizes the number of coordinator positions, but also positions those coordinators to be more fully informed on all project issues when providing advice and direction to the districts.

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## Increasing Caltrans' Efficiency, Improving Department Processes

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### Improving Workforce Management

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The Administration Program has provided the Executive Board detailed information to bring clarity to major decisions including succession and workforce planning, performance reporting, and discipline services. An Executive Board subcommittee provided review and guidance to the Administration Program as they recommended management-to-staff ratios and provided a hiring review tool to determine the need for a position and the appropriate classification before backfilling a position. Understanding that the expertise of supervisors and managers is critical to our success, we have provided additional supervising training and brought back the Leadership Training Program and the Management Training Program.

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### Clarifying Department and Local Agency Roles in Transportation Planning

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To better coordinate state and local transportation, a working group has been established to assess roles and responsibilities and enhance the evolution of a multi-modal transportation system. The working group, made up of representatives from Caltrans and local agencies is reviewing the unique products produced, such as the State Transportation Plan State Highway System Route Concept Reports and Corridor Studies, and Regional Transportation Plan Guidelines. These representatives will examine the roles of the Department's functional planning categories, including:

- Essential activities and activities open for discussion or redefinition
- The Department's role with respect to leadership, interregional planning, and serving as owner-operator of the system
- Ensuring compliance with state and federal mandates (ongoing effort)

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## Creating an Office of Enterprise Risk Management in Order to Make Risk-conscious Decisions Regarding Program and Personnel Activities

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The Office of Enterprise Risk Management was created in the wake of the national corporate financial disasters and breach of ethics that began in 2001, the investigations into the falsification of foundation test data in 2010, and other employee misconduct that affected the integrity of the Department. The office supports the achievement of the Department's objectives by addressing the full spectrum of risks, and managing the combined impact of those risks as an interrelated risk portfolio. California is one of just a handful of states that has recognized the value of an enterprise risk management program.

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## Evaluating and Reorganizing Caltrans Divisions and Their Business Practices

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### Division of Information Technology (IT)

Based on issues raised during the Program Review, such as reviewing process improvements, document management, desktop and network support, and purchasing, and with input from the Executive Board, IT reorganized with a customer focus and implemented an IT Governance Committee.



The committee includes several Executive Board members and will focus the limited IT staff and Department resources toward the most critical Department IT issues and solutions.

### Equipment Program

A statewide team comprised of District Directors, Deputy District Directors of Maintenance, and Division Chiefs from the Division of Equipment (DOE), Maintenance, and Project Delivery, assessed restructuring DOE's field operations. This collaborative effort, which began in 2011, is addressing more than 100 issues, many of which are related to customer service, communication, prioritization of work in DOE's shops, and processes. The team's



efforts have resulted in Maintenance Program policy directives addressing preoperational inspections of emergency equipment; steps for reporting, utilizing and reassigning equipment; implementing global positioning system (GPS) technology to manage more than 5,700 light-duty vehicles; and creating an overall Fleet Asset Management Plan.

### Other Strategic Reorganization Efforts

The Division of Traffic Operations, and the Office of Business and Economic Opportunity have undertaken similar review and reorganization efforts to improve operating efficiency, and make better use of assets, partnerships, technology, and information. The Division of Research and Innovation and the Division of Transportation System Information have merged to align the management of transportation system information and knowledge with research and innovation activities to better support the decision-making needs of Caltrans. The merger of the Division of Mass Transportation and the Division of Rail is underway to manage programs more effectively and efficiently.

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## **Actively Participating in Zero-Base Budget Reviews Conducted by the DOF**

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Executive Order B-13-11, issued on December 8, 2011, directed the Department of Finance (DOF) to lead an effort to improve the budget process through zero-base budgeting and other methods that increase budgetary transparency, and emphasizes efficiency. Caltrans was selected as one of the first departments to undergo a complete bottoms-up review. The review is a long-term collaboration between Caltrans and the DOF, and includes detailed analyses of each program to evaluate workload and the appropriate level of resources. Zero-base reviews also include a hard look at activities performed, and implements best practices to increase program efficiency.

The Department is in the second year of an initial four-year plan to systematically review all programs and operations. Caltrans and the DOF have dedicated resources on a near full-time basis to ensure success of the effort. Budget Change Proposals implementing the results of each review are submitted to the Legislature as part of the annual budget process. Programmatic and detailed reviews of each program will continue after the initial cycle, resulting in continuous improvement to budget development.

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## **Committing to Fully Implement a Transportation Asset Management Plan**

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The Program Review report concluded that “Caltrans must be open to restructuring, more dedicated to managing change and be receptive to improvement initiatives that focus on results.” One action identified to address this need is asset management, which uses risk

assessments, together with business and engineering processes, to make better investment decisions to manage the Department’s assets. The Executive Board has placed the leadership of asset management with the Chief Deputy Director and has designated an Executive Board Transportation Asset Management Committee to direct the development of a Transportation Asset Management Plan.

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## **Developing the Caltrans Performance Report to Improve Communication and Transparency of Departmental Performance in Achieving Key Metrics**

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A new performance report is being rolled out that is a natural extension of the reforms initiated through the Program Review. The Caltrans Performance Report delivers information that policymakers want in plain language and clear illustrations. The report will be the tool with which we communicate our performance results with the public, legislators, and the media.

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## **Participating on the CTIP Workgroup**

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The newly formed CalSTA convened the CTIP workgroup comprised of transportation stakeholders to address transportation issues, including transportation infrastructure funding. The Department is an active participant in this workgroup. The workgroup is outlining the steps needed to preserve California’s existing infrastructure, make state and local government more efficient and more responsive to the mobility needs of our citizens, set clear targets for achievement and measuring progress toward those goals, and provide the revenues and revenue tools needed to fund transportation infrastructure investments.



## NEXT STEPS

The Program Review identified opportunities for improving efficiency, effectiveness, and relationships with our partners. Some opportunities have been addressed quickly. Others will take more time as they are aligned within our strategic management planning process. The Program Review is one part of larger, ongoing efforts to continuously improve the Department's operations. These efforts include an external review by SSTI, the DOF's zero-base budget review, the CTIP recommendations for new revenue tools, and the development of a 2014-18 Strategic Management Plan.

CalSTA is providing focus and direction that will influence the Strategic Management Plan and is leading the CTIP effort. The CTIP workgroup, comprised of transportation stakeholders, is addressing transportation issues including infrastructure funding. The Department is an active participant in this workgroup. The workgroup is outlining the steps needed to preserve California's existing infrastructure, make state and local government more efficient and more responsive to the mobility needs of our citizens, set clear targets for achievement and measuring progress toward those goals, and provide the revenues and revenue tools needed to fund transportation infrastructure investments. These efforts will be part of the ongoing transportation funding discussion.

The next step is to complete the Strategic Management Plan. The planning process started with an analysis of the Department's strengths, weaknesses, opportunities, and threats, and a review of the values that reflect what is truly important to us as an organization.

The Executive Board reviewed the existing values and mission and drafted a new vision statement. That vision would be for a transportation system that is safe, sustainable, integrated, and drives economic vitality and an improved quality of life. This discussion will be finalized after being informed by the SSTI review and external perspective on our mission and vision.

The Department's 2014-18 Strategic Management Plan will include goals that address safety, stewardship, system performance, delivery, and professional workforce. The accompanying strategies will be finalized in 2014 and integrated with the SSTI review recommendations, expected in January 2014, the CTIP recommendations, and DOF zero-base budget recommendations. Program Review actions that have not been completed will either be included in the Strategic Management Plan, be addressed through internal working groups and as part of discussions with local partners, become part of ongoing Department operations, or modified or eliminated as appropriate.

All these strategies, objectives, and recommendations will have leads responsible for implementation. The Chief Deputy Director will conduct regular meetings with these leads to monitor implementation, and the Executive Board will use its regular monthly meetings to monitor progress in implementing remaining Program Review actions and to measure progress in meeting the performance measures in the 2014-18 Strategic Management Plan. Together, all of these activities constitute the Department's professional continuous improvement culture. Together we will build a better Caltrans for a better tomorrow.

