

Plan for Improved Agency Partnering

Caltrans & California Coastal Commission



Prepared by the Integrated Planning Team

December 21, 2016

First Edition

Table of Contents

Executive Summary	3
Partnership Agreement.....	7
Preamble.....	7
Purpose and Objective.....	7
Commitments	7
Integrated Planning Framework for Caltrans and the California Coastal Commission	9
State Planning	10
System Planning.....	11
Project Initiation and Transportation Programming	14
Project Development	17
Regional and Local Planning Efforts.....	18
Focus Area: Sea Level Rise.....	21
Overview and Goals	21
Addressing Sea Level Rise in Caltrans Planning Phases	31
Laboratories / Lessons Learned	36
Key Challenges and Considerations	39
Next Steps	39
Focus Area: Collaborating on the California Coastal Trail.....	40
The California Coastal Trail: Vision and Concept	40
Action Items: Next Steps to Advance Completion of the CCT	43
Legislation and Policy in Support of the CCT	46
Coastal Commission & Caltrans: Working Together to Build the CCT	54
Business Practices and Workflow	57
Communication Strategies: Conflict Prevention & Resolution	58

Appendix 1. Directors Meeting Summaries 61

 May 2015 Directors Meeting 61

 October 2016 Directors Meeting 66

Appendix 2. Portfolio of Special Initiatives for Improved Interagency Partnering 74

 Initiative 1. Improve Understanding and Implementation of Maintenance and Repair Exclusions..... 76

 Initiative 2. Address Acoustic Impacts to Fish and Other Aquatic and Sensitive Species (Hydroacoustic Trauma)..... 78

 Initiative 3: Engage in Beneficial Sediment Disposal/Management Interagency Efforts 81

 Initiative 4. Continue to Develop Bridge Rails/Roadside Safety Barriers for the Coastal Zone 83

 Initiative 5. Promote Implementation of Fish Passage Improvements 85

 Initiative 6. Consider Structural Designs to Address Impacts to Avian and Other Sensitive Species 87

 Subtopic 6a. Bird Strikes 88

 Subtopic 6b. Lighting..... 90

 Initiative 7. Confer on Appropriate Bridge Shoulder Widths..... 92

 Initiative 8. Explore Improved Methodologies for Aesthetic Evaluations 94

 Initiative 9. Provide for Native Species and Invasives Control in Landscaping Plans 96

Appendix 3. Common Goals: Caltrans and Coastal Commission Strategic Plans 97

 Agency Strategic Plan Goals..... 97

 Crosswalk of Common Goals 98

Appendix 4. Repair, Maintenance, and Utility Hook-Up Exclusions from Permit Requirements 107

Executive Summary

This package contains recommendations to increase and improve coordination and communication between two sister agencies, the California Department of Transportation (Caltrans) and the California Coastal Commission (Commission). The steps proposed in this package are designed to:

- Serve the missions of both agencies.
- Ensure effective interagency collaborations in the delivery of public services to the people of California.

This document reflects a good faith effort by the Integrated Planning Team (IPT) to move forward, improve understanding, and address important issues of mutual benefit and value. It must be noted that nothing in this document changes or supersedes official policy, guidance, or regulations of either agency. At the same time, successful implementation of this framework may result in updated policies and guidance to better reflect desired outcomes for improved partnering.

Caltrans' mission is to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. The mission of the Commission is to protect and enhance California's coast and ocean for present and future generations. Caltrans and the Commission have a long history of working together effectively to protect natural resources and to provide safe roadway networks and access to California's coastline. The Interagency Agreement, updated in 2015, describes a specific and structured relationship for coordination between the two agencies. In addition, a Caltrans representative currently serves as an ex officio member of the Commission, providing another unique opportunity for direct communication between the two agencies.

In 2014 both agencies agreed that it would be worthwhile to invest in an effort to improve coordination and communication. Caltrans hired the Center for Collaborative Policy (CCP) to conduct a situation assessment in all coastal Districts and the headquarters of both agencies; CCP reported out a variety of challenges, goals, and opportunities for improved coordination and communication. These findings motivated the convening of the IPT, comprising members of both agencies with expertise in coastal zone transportation planning and resource protection. The IPT has worked since late 2015 to develop this work product to frame out opportunities and proposed actions for improved communication and coordination.

The situation assessment identified requests by Commission staff to make changes to major transportation projects late in the development process (which can negatively impact project timelines and budgets) as a key Caltrans interest. Conversely, Commission staff expressed concerns that their early input into project design and environmental reviews were not always reflected in final project proposals. The differences in the processes of the two agencies' programs, as well as missed opportunities for strategic communication, account for some of this tension. Acting in a regulatory

capacity, particularly in implementing the Coastal Act, Commission staff closely review transportation projects and plans and may request changes as necessary details become available through the project development process; sometimes the development of this information occurs relatively late in Caltrans processes. One of the biggest themes from the assessment and the IPT's discussions is that earlier coordination, particularly in planning phases, could better guide project development consistent with coastal policies and thereby serve the goals of both agencies. Therefore, the centerpiece of this IPT work product is an Integrated Planning Framework, a tool to connect the various planning processes of both agencies as well as those local bodies with coastal management jurisdiction and transportation planning responsibilities.

In addition, the IPT has worked to identify ways that improved planning coordination around particular issues could alleviate common challenges to permitting Caltrans projects in the Coastal Zone. This report sets out recommendations for developing such coordination for two focus areas: sea level rise (SLR) and the California Coastal Trail (CCT). The IPT believes that investing time now in these focus areas will pay off in the long term through more common understandings, streamlined coordination, and more effective project delivery.

First, and among the most challenging, is how Caltrans should analyze and plan for SLR impacts to its projects and infrastructure in the coastal zone. Already both agencies have guidelines to include climate change and SLR in their planning processes. However, clearer direction is desired for planners, engineers, and coastal program staff to implement those guidelines. Additionally, resources may be insufficient to conduct appropriate analyses early in the process, impeding a more proactive planning approach to address SLR. Therefore, this package includes recommendations for near term efforts to screen Caltrans projects that are under development, particularly those identified as within vulnerable areas, for potential impacts from SLR. It also includes recommendations for how, in the longer term, Caltrans can build upon the results of ongoing Vulnerability Assessments and existing guidance and planning processes to develop more robust responses to address SLR in project and system planning.

A second focus area addresses development of the CCT. Completion of the CCT is in the interest of both agencies. For the Commission, the CCT is a key opportunity to advance its coastal access mission. Caltrans is committed to multi-modal transportation, including through the Complete Streets program and other directives. Transportation projects in the coastal zone sometimes provide key opportunities for concurrent planning or construction of CCT segments that fall within the State Highway System. Other times, transportation projects need to conform to public access policy requirements in order to be approvable under Local Coastal Programs and the Coastal Act. However, several challenges in these situations underscore the need for a broader framework and coordinated approach. First, there are different views between the agencies about when Caltrans is the appropriate entity for construction and maintenance of CCT sections. Second, if public access requirements, including the CCT, are not identified early during planning and project development, meeting those requirements later in the process can

severely stress project budgets and schedules. This can be especially difficult for SHOPP-funded¹ transportation projects. Therefore Caltrans seeks both greater predictability around requirements for CCT development and identification of partnership opportunities that bring more diverse resources to CCT projects. These challenges underscore the need for a well-developed statewide plan for the CCT that Caltrans, Commission staff, and their local and regional partners can integrate in developing Regional Transportation Plans, Local Coastal Programs, and other planning documents. While it will take many agencies to advance the CCT, including the State Coastal Conservancy, California State Parks, and local jurisdictions, Caltrans and the Commission are uniquely poised and motivated to foster development of statewide and regional plans for the CCT.

Appendix 2 makes recommendations for a number of additional special initiatives where investment in programmatic approaches or planning would improve efficiency by providing clarity and predictability for requirements. These areas include: acoustic impacts to aquatic and other sensitive species, structural design considerations for addressing potential avian and other species impacts, fish passage, updating see-through railing designs to conform to new federal standards, and others. These initiatives are in various stages. For example, some are underway through the Interagency Agreement between the two agencies. Some are ideas for additional exploration. The IPT and the Directors agreed to continue to review these special initiatives going forward.

The IPT identified additional ways to improve coordination and communication between the agencies, including:

- An additional way to improve working relationships is to ensure that a clear Elevation Process is in place for when disagreements between the agencies prove difficult to resolve. Generally the two agencies are able to come to agreement on projects and plans. A core principle is to strive for staff-to-staff problem solving and minimize the number of conflicts requiring elevation. However, when elevation to higher levels is necessary to resolve a problem, the Elevation Process provides a clear progressive process that identifies who should be involved at each step.
- In addition to the work of the IPT, staff and managers in two coastal Caltrans Districts have begun discussion of how to improve and refine workload coordination meetings and systems of communication between the two agencies. That work is ongoing.
- Throughout IPT discussions, the value of mutual education arose time and time again. This report identifies some opportunities for using Caltrans academies and modules for mutual education by inviting in Commission staff, and for creating specific trainings for Caltrans staff regarding the Coastal Act and its requirements for different Caltrans divisions. Mutual education merits further discussion and planning.

¹ SHOPP refers to the Ten-Year State Highway Operations Protection Program.

- The IPT identified the sharing of GIS layers as a valuable potential tool for improving staff-level coordination and communication regarding project plans.

The IPT asks that Directors of Caltrans and the Commission consider the recommendations in this report, elevate priority actions, continue to meet to monitor progress on these items, and set the tone for positive and constructive communication throughout all levels of both agencies. The Partnership Agreement in this document proposes a plan to solidify the commitments of both agencies to further improving our relationships as we move forward in carrying out our important statewide mandates.

Partnership Agreement

Between

THE CALIFORNIA DEPARTMENT OF TRANSPORTATION

And

THE CALIFORNIA COASTAL COMMISSION

December 2016

Preamble

We, the undersigned, support the ongoing Partnership between the California Department of Transportation (Caltrans) and the California Coastal Commission (Commission), hereinafter “Agency Partners,” on environmental and transportation issues and commit to furthering the process as outlined by the Integrated Planning Framework and implemented in part by the services and funding provided via Interagency Agreement.

Purpose and Objective

The purpose of this Partnership Agreement (Agreement) is to express leadership support for concerted, cooperative, effective, and collaborative work between the Agency Partners as they carry out their respective missions. Recognizing the correlation between healthy, accessible coastal resources/ecosystems and enhancing California’s economy and livability, the Agency Partners commit to planning and investment for long term sustainability.

Key objectives include achieving a higher level understanding of each agency's statutory mandates and responsibilities and a better alignment of planning activities and decision making. This is intended to produce a more effective approach to satisfying Coastal Act requirements in the development of a safe, integrated and efficient multimodal transportation system. This Agreement also supports implementation of each agency’s strategic plan.

Commitments

In the spirit of cooperation, and with the mutual understanding that this is a flexible working agreement between our respective agencies, we hereby commit to the following:

Partnership Agreement

1. Accept the Integrated Planning Framework as a working guide for collaboration.
2. Promote the integration of transportation, coastal, and environmental planning through participation in related activities (e.g. Regional Transportation Plans, Local Coastal Plans, Transportation Concept Reports, etc.).
3. Provide clear leadership and guidance for continuation of the Integrated Planning Framework by:
 - Agreeing to convene our executive management on an annual basis to share updates on progress under the Integrated Planning Framework, provide direction on next steps for the special initiatives, and offer suggestions regarding opportunities for future collaboration on issues of mutual concern.
 - Convening an Integrated Planning Team (IPT) of appropriate staff to implement the Integrated Planning Framework, within available time and funding resources, including conducting one or more pilot projects to further develop and test planning tools.
 - Informing and involving all functional unit staff within each agency of the work and commitments.
4. Assign a lead person, within their respective agencies, who will ensure that the framework is appropriately integrated into the Caltrans and the Commission's Interagency Agreement and be available for overall support and implementation of the *Plan for Improved Agency Partnering*.
5. Coordinate and collaborate on internal and external training and outreach to their respective stakeholders to support the purpose and objective of this partnership.
6. Consider new opportunities to improve business practices, such as Lean 6-Sigma or Every Day Counts initiatives, to address process-based issues to enhance internal implementation of the coastal and transportation programs.

IN WITNESS THEREOF, the parties hereto have executed this Partnership Agreement as of (DATE)

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By: Director

 3/13/2017



CALIFORNIA COASTAL COMMISSION

By: Executive Director

 12/28/2016



Integrated Planning Framework for Caltrans and the California Coastal Commission

Planning the transportation system is a collaborative activity between many local, regional, and state partners. This is a guide for Caltrans and the Commission to better understand how coastal resource issues can be addressed through Caltrans planning and programming processes. This guide can also be used by other types of local or regional partners.

The plans and processes discussed here are Caltrans products, but they must strive to be consistent with local and regional plans including Regional Transportation Plans (RTPs) and Local Coastal Plans. It is important to note that this process, and these documents, are the most useful when there is active engagement and input between local, regional, and state partners. Involvement throughout the planning and programming processes is recommended to ensure decision-makers have the needed information to identify and implement appropriate improvements.

Planning-related coordination with important coastal issues should occur throughout this process, with special attention to requirements in the California Coastal Act (California Public Resources Code Sections 30000 – 30900) and those related to development of the California Coastal Trail (CCT) (California Public Resources Code Section 31408). ***The results of general participation (not specific to coastal issues) are italicized and bolded.***

Each section of this chapter identifies several ‘inputs’ of information related to Coastal Act issues, and ‘outputs’ or results from these inputs that address these issues. These are provided as examples of the type of analysis and planning that can occur when coordinating at the individual planning stages. These are not exhaustive lists, nor guaranteed results, just samples of potential results, depending on the type of inputs provided. Refer also to the flowchart at the end of this chapter for a graphical illustration of planning coordination.

Further detail regarding Caltrans processes related to constructing highway improvements can be found in the [How Caltrans Builds Projects](#) booklet.² This booklet gives a concise overview of the Caltrans project delivery process for projects that will improve or maintain the State Highway System including the Interstate System. The booklet also provides a list of resources for further reference.

² url: http://www.dot.ca.gov/hq/oppd/proj_book/HCBP_2011a-9-13-11.pdf

State Planning

The *California Transportation Plan (CTP)* provides a common framework for guiding transportation decisions and investments by all levels of government and the private sector within California. The plan includes analysis and policy recommendations regarding current transportation issues and future trends. In addition to the CTP, Caltrans is also responsible for the following six statewide transportation plans that are based on transportation mode – *Interregional Transportation Strategic Plan*, *California Freight Mobility Plan*, *California State Rail Plan*, *California Aviation System Plan*, *Statewide Transit Strategic Plan*, and *California Bicycle and Pedestrian Plan*.

These statewide policy planning documents are generally not project specific, but they set the stage for and influence investment decisions. The modal plans provide an important foundation for future funding from state and federal sources. Partners could provide input on issues to shape the general policy direction of the CTP and the individual modal plans. The modal plans and the CTP are updated every five years.³

CTP Inputs – Review and provide input on coastal requirements and regulations as identified in the Coastal Act and other legislation, plans, or documents. Provide input on the CCT and future development plans.

CTP Outputs – The goals, policies, and recommendations of the CTP can include elements that protect and enhance coastal resources; some of the CTP goals and recommendations could support and promote consistency with Coastal Act requirements.

Modal Plans Inputs – Review and provide input on coastal requirements and regulations as identified in the Coastal Act and other legislation, plans, or documents. Tailor the input to address the individual modes, with particular emphasis on public access, energy minimization, and other related Coastal Act policies. Provide input on the existing and planned CCT.

Modal Plans Outputs – The policies and recommendations of the Modal Plans may include elements that protect and enhance coastal resources; the implementation strategies may support consistency with Coastal Act requirements. The CCT should be incorporated into the California Bicycle and Pedestrian Plan and the Interregional Transportation Strategic Plan and further support general coastal resource enhancements statewide.

³ Note that during the development of this partnering strategy, the Commission participated in the CTP 2040 effort and was able to ensure that Coastal Act considerations were incorporated into the document.

System Planning

System Planning is the long-range Transportation Planning process for Caltrans. System Planning provides the basis for identifying current and future deficiencies on the State Highway System and identifies strategies and projects to address deficiencies and make improvements to meet Caltrans goals. System Planning documents identify and aid in the identification of funding priorities. These documents include traditional System Planning documents such as Caltrans District System Management Plans (DSMPs), Transportation Concept Reports (TCRs), and Corridor System Management Plans (CSMPs), along with other planning documents such as the Ten-Year State Highway Operations Protection Program Plan (SHOPP) that addresses fix-it-first⁴ projects. RTPs, the long-range planning documents created by local Regional Transportation Planning Agencies (RTPAs) and Metropolitan Planning Organizations, are also major planning documents that are vital for long-range system planning.

Caltrans District System Management Plans (DSMPs) are policy planning documents describing how each Caltrans District envisions the overall transportation system will be maintained, managed, and developed over the next 20-25 years. The DSMPs include a list of planned projects identified in TCRs and CSMPs, along with projects identified by local and regional partners including MPOs, RTPAs transit providers, and others, generally through the RTP call for projects. **Partner input could include identifying local and regional related transportation issues that need to be integrated into the corridor analysis and potentially be identified as a District priority. DSMPs are updated every two-four years.**

DSMP Inputs – Identify and provide information to Caltrans Districts on:

- Applicable Coastal Act requirements.
- Applicable LCP policies and ordinances.
- Coastal resources within the planning area that could potentially be impacted by the transportation system.
- Sea level rise (SLR) vulnerability and other coastal hazards.
- Opportunities for coordination on planning studies, permitting, funding, developer improvements, and projects.
- Completed, on-going, or proposed regional planning studies.
- Existing and planned segments of the CCT within the respective District.
- Proposed projects that might affect the roadway or corridor CCT planning, location and GIS information, where available.

⁴ 'Fix-it-first' is a term used within Caltrans to describe projects that maintain and enhance roadways, including by adding bicycle and pedestrian amenities, without adding vehicle lanes.

DSMP Outputs – The following are some of the potential outputs of participating in the DSMP development process:

- Caltrans Districts' goals and policies will consider Coastal Act and LCP requirements and ensure Caltrans Districts' activities, corridor improvement and management strategies, and corridor analysis will support consistency with LCP policy objectives.
- The DSMP may identify methods to meet Coastal Act and LCP requirements to address SLR and climate change.
- The DSMP will consider the SLR vulnerabilities identified in Caltrans Vulnerability Plans, as well as in local and regional SLR vulnerability assessments.
- The DSMP should reference the CCT development strategy, as outlined in locally adopted LCPs and RTPs.
- The DSMP Project List may include coastal projects or coastal related elements, including CCT elements.
- Caltrans Districts could identify partnerships between Caltrans and local agencies in reviewing and approving permits to address highway and coastal concerns.

Transportation Concept Reports (TCR) are long-range (20-25 year) planning documents that evaluate current and projected conditions along a State highway, identify future needs, and communicate the Caltrans vision for each route on the State Highway System.

Local and regional transportation issues identified by partners could be integrated into the corridor analysis, and potentially be identified as a District system improvement need. Concepts developed in TCRs inform future project selection and prioritization during Project Initiation and Programming. TCRs are generally updated approximately every three to seven years.

Corridor System Management Plans (CSMPs) are complex, multijurisdictional planning documents that identify future needs within urban corridors experiencing or expected to experience high levels of congestion. These plans were required for recipients of Proposition 1B Bond funds.⁵ They address operational needs, such as metering lights, and include coordination with transit operators to help reduce congestion.

⁵ As approved by the voters in the November 2006 general elections, Proposition 1B enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 to authorize \$19.925 billion of state general obligation bonds for specified purposes, including high-priority transportation corridor improvements, State Route 99 corridor enhancements, trade infrastructure and port security projects, school bus retrofit and replacement purposes, state transportation improvement program augmentation, transit and passenger rail improvements, state-local partnership transportation projects, transit security projects, local bridge seismic retrofit projects, highway-railroad grade separation and crossing improvement projects, state highway safety and rehabilitation projects, and local street and road improvement, congestion relief, and traffic safety.

Local and regional transportation issues identified by partners could be integrated into the corridor analysis, and potentially be identified as a District system improvement need. Concepts developed in TCRs inform future project selection and prioritization during Project Initiation and Programming. There is no requirement to continue developing CSMPs, but some Districts may continue to develop them.

TCR/CSMP Inputs – Identify and provide information on:

- Applicable Coastal Act requirements.
- Applicable LCP policies and ordinances.
- Coastal resources within the planning area that could potentially be impacted by the transportation system.
- SLR vulnerability and other coastal hazards.
- CCT planning, location and GIS information, where available.
- Opportunities for coordination on planning studies, permitting, funding, developer improvements, and projects.
- Completed, on-going, or proposed regional planning studies.
- Proposed projects that might affect the roadway or corridor.

TCR/CSMP Outputs – The following are potentially some of the outputs of participating in the TCR and CSMP development process:

- Coastal Act and LCP requirements must be considered as part of the corridor description, system analysis, and proposed improvement projects.
- System management and improvement strategies for the transportation system should consider the goals and policies from LCPs and the Coastal Act.
- Coastal Act and LCP policies may influence how Caltrans reviews and comments on Local Development/Intergovernmental review decisions by providing Caltrans staff with a better understanding of coastal requirements and identified area needs.
- Consider opportunities to include the CCT, as appropriate. Ensures features to address SLR and climate change are appropriately considered and included in the document.
- Corridor concepts that reflect the CCT.
- TCR Project List may include coastal projects or other projects that can include coastal related elements.

Project Initiation and Transportation Programming

This is an important step in the development of system improvements, linking the long-range system planning to the project development process. In other words, at this stage conceptual ideas are turned into individual projects and are initiated. The Ten-Year SHOPP Plan includes a list of proposed projects that are necessary to ensure the existing transportation system continues to function at a high level. These proposed projects are analyzed during the development of project initiation documents, which refine a project's estimated scope, schedule, and cost, which ultimately leads to a project being funded by one of many funding sources. Once a project is funded, the next stage is the beginning of the project development process.

Ten-Year State Highway Operations Protection Program (SHOPP) Plan is the long-range document identifying the needs for the SHOPP, the funding program designed to maintain the existing transportation system at a safe and effective level (fix-it-first). This plan is a bridge between the System Planning functions and the project initiation through the Project Initiation Documents (PIDs).

Partner input could influence identification of projects expected to be developed in the future. The Ten-Year SHOPP Plan is updated every two years.

Project Initiation Documents (PID), which are required for most transportation projects, make an initial assessment of a project's scope, schedule, and cost. These are completed before a project is officially funded through the *State Transportation Improvement Program* and the *State Highway Operation Protection Program*. This is one of the most important steps in the process where communication between Commission and Caltrans staff can productively guide project scope and design. PIDs are prepared for projects identified in the previous System Planning documents.

Providing input to Caltrans project development teams (PDT) throughout the development of a PID can affect the project scope and project elements. Some projects may not have a PDT, but Caltrans and Commission staff should also coordinate early in the project development processes for those projects. It is important to note that the project scope and project elements are guided by an identified transportation need and are shaped and informed by the System Planning documents, Ten Year SHOPP Plan, RTPs, and other identified regional priorities. To have the greatest impact on project scope and project elements, participation in the development of the previously mentioned system planning documents is highly recommended.

PID Participation Inputs – Provide input to a Caltrans PDT or review products to:

- Provide input on coastal resources.
- Help explain Coastal Act and LCP requirements.
- Help explain SLR and climate change policies.
- Provide coastal data to use in the project analysis.

- Help propose project elements to achieve consistency with Coastal Act policies and address coastal impacts.
- Identify and encourage local partnership opportunities.
- Provide information on existing and planned California Coastal Trail elements to be considered with the project, as appropriate.

PID Participation Outputs – Input in PID development will help integrate project elements into the purpose and need statement that address Coastal Act and LCP requirements, which may help the permitting process go more smoothly. The Caltrans PDT must consider elements of the CCT as part of compliance with Complete Streets policies.

State Highway Operation Protection Plan (SHOPP) – Funding for transportation can be very generally separated into two categories – SHOPP and non-SHOPP. The SHOPP is the State’s “fix-it-first” program that funds the repair and preservation of the State Highway System, safety improvements, and some highway operational improvements. By continuously repairing and modernizing the State Highway System, the SHOPP protects the enormous investment that has been made over many decades to create and manage the approximately 50,000 lane-mile State Highway System. The State Highway System includes State owned roadways, highways and bridges (including associated bicycle and pedestrian infrastructure) and their supporting infrastructure such as culverts, Intelligent Transportation Systems (ITS), roadside safety rest areas, and maintenance stations. The SHOPP also funds mandated project categories such as retrofitting existing State Highway System facilities to comply with the Americans with Disabilities Act (ADA) and storm water control requirements. The SHOPP includes funding reservations for projects such as safety and emergency where specific project funding needs cannot be anticipated and for particular needs that have a set amount of annual funding. All projects funded by the SHOPP are limited to capital improvements that do not add capacity (no new highway lanes) to the State Highway System, though specified auxiliary lanes are eligible for SHOPP funding. Revenues for the SHOPP are generated by federal and state gas taxes and are fiscally constrained by the State Transportation Improvement Program Fund Estimate (Fund Estimate) that is produced by Caltrans based on established criteria and adopted by the California Transportation Commission (CTC or Commission).⁶

Non-SHOPP – Non-SHOPP is a very generic funding category with a variety of funding sources. The funds include the [State Transportation Improvement Program](#)⁷, [Congestion Management Air Quality](#)⁸, [Regional Surface Transportation Program](#)⁹, local sales tax measures, [Federal earmarks](#)¹⁰, and many others. These

⁶ See <http://www.dot.ca.gov/hq/transprog/shopp.htm> and <http://www.catc.ca.gov/programs/SHOPP/2016-shopp-adopted-by-CTC.pdf>.

⁷ url: <http://www.dot.ca.gov/hq/transprog/ocip.htm>

⁸ url: http://www.fhwa.dot.gov/environment/air_quality/cmaq/

⁹ url: http://www.dot.ca.gov/hq/transprog/federal/rstp/RSTP_Description.pdf

¹⁰ url: <http://www.dot.ca.gov/hq/LocalPrograms/earmark/index.htm>

are separate funding sources that are controlled by different agencies and have specific requirements and limitations.

Each funding source, SHOPP and non-SHOPP, has specific requirements and identified lead agencies. Early communication, understanding of applicable rules and requirements, and understanding of lead agency goals and policies are important for effective integration of coastal related elements in projects.

Project Development

The following are the general elements of the project development process: (1) *Project Approval and Environmental Document (PA&ED)* – Prepare Draft Project Report, Environmental Studies, Project Approval, and Approval, Agreements, and Permits; (2) Project Specifications and Estimates (PS&E) – Design the project; (3) *Right of Way* – Purchase Right-of-Way; and (4) *Project Construction* – Build the project.

Partner participation in Caltrans PDTs throughout the process and through direct coordination efforts can affect the project scope and project elements, providing an opportunity to advocate for including and retaining features in the final project. Participation throughout the project is recommended, especially at the project initiation stage.

Project Development Participation Inputs – Participate on Caltrans PDTs or provide review of project materials to:

- Advocate for inclusion of coastal issues such as SLR, climate change, and the CCT.
- Recommend coastal features for inclusion in the project.
- Ensure appropriate local partners are engaged in the process.
- Identify, support, and participate in collaborative efforts to address coastal access and highway needs.

Project Development Participation Outputs – Active participation throughout the process, and careful attention to Coastal Act and LCP policy requirements, will help ensure coastal issues are addressed through the Caltrans PDT and other early interagency coordination efforts. This work should foster timely consideration of important project elements to address coastal issues and the CCT where relevant.

Regional and Local Planning Efforts

Regional Transportation Plans (RTPs)/ Sustainable Community Strategies – RTPs are created by RTPAs and metropolitan planning organizations (MPOs) and describe how transportation revenues across the region will be spent over the next 20 years (at minimum). RTPs must account for all regional transportation revenues, including those from sources that have no control over such as local transportation sales taxes, transit agency revenues and federal spending on discretionary projects. Under Senate Bill 375, a state law passed in 2008, MPOs are required to integrate a Sustainable Communities Strategy (SCS) into the RTP. The SCS should explain how a region will integrate land use, housing and transportation planning to meet its greenhouse gas reduction targets set by the California Air Resources Board. Partner input could include participating in the development of RTPs to ensure relevant issues are incorporated into the long-range planning and investment strategy for the region. RTPs are created every four to five years.

General plans are developed by cities and counties as a guide to most planning decisions. Under state law, subdivisions, capital improvements, development agreements, and many other land use actions must be consistent with the adopted general plan. In counties and general law cities, zoning and specific plans are also required to conform to the general plan. In addition, preparing, adopting, implementing, and maintaining the general plan serves to:

- Identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to future growth and development.
- Provide a basis for local government decision-making, including decisions on development approvals and exactions.
- Provide citizens with opportunities to participate in the planning and decision-making processes of their communities.
- Inform citizens, developers, decision-makers, and other cities and counties of the ground rules that guide development within a particular community

Four policies recommended by the Office of Planning and Research in the [Draft General Plan Guidelines](#)¹¹ are climate change, economy, healthy communities, and equitable opportunities. Senate Bill 379, passed in 2015, requires cities and counties to include climate adaptation and resiliency strategies in the safety elements of their general plans upon the next revision of their housing elements beginning January 1, 2017. These recommendations address statewide issues that have important local impacts and affect coastal areas.

¹¹ url: https://www.opr.ca.gov/docs/DRAFT_General_Plan_Guidelines_for_public_comment_2015.pdf

State and local agencies should provide input during the development of general plans and RTPs to ensure state, regional, and local issues are considered and appropriately integrated. This is important because most of the land-use decisions are based upon policies in general plans and because priorities for funding transportation projects are established by the RTPs.

Local Coastal Programs (LCPs) – [LCPs](#)¹² are basic planning tools used by local governments to guide development in the coastal zone, in partnership with the Commission. LCPs contain the ground rules for future development and protection of coastal resources in the 76 coastal cities and counties. The LCPs specify appropriate location, type, and scale of new or changed uses of land and water. Each LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). Prepared by local government, these programs govern decisions that determine the short- and long-term conservation and use of coastal resources. While each LCP reflects unique characteristics of individual local coastal communities, regional and statewide interests and concerns must also be addressed in conformity with [Coastal Act](#)¹³ goals and policies. Following adoption by a city council or county board of supervisors, an LCP is submitted to the Commission for review for consistency with Coastal Act requirements.

After an LCP has been certified, the Commission's coastal permitting authority over most new development is transferred to the local government, which applies the requirements of the LCP in reviewing proposed new developments. The Commission retains permanent coastal permit jurisdiction over development proposed on tidelands, submerged lands, and public trust lands, and the Commission also acts on appeals from certain local government coastal permit decisions. The Commission reviews and approves any amendments to previously certified LCPs.

Coordination between local agencies and statewide partners, including the Commission and Caltrans, is necessary to develop LCPs that can address the various needs for managing important coastal resources while providing appropriate multi-modal transportation options for local, regional, and statewide system users.

¹² url: <http://www.coastal.ca.gov/lcps.html>

¹³ url: <http://www.coastal.ca.gov/ccatc.html>



California Coastal Commission – Caltrans Coordination



Review and provide input to Caltrans on coastal requirements and regulations as identified in the California Coastal Act and other legislation, plans, or documents.

Review and provide input on coastal requirements and regulations as identified in the California Coastal Act and other legislation, plans, or documents; tailor input to address the individual modes.

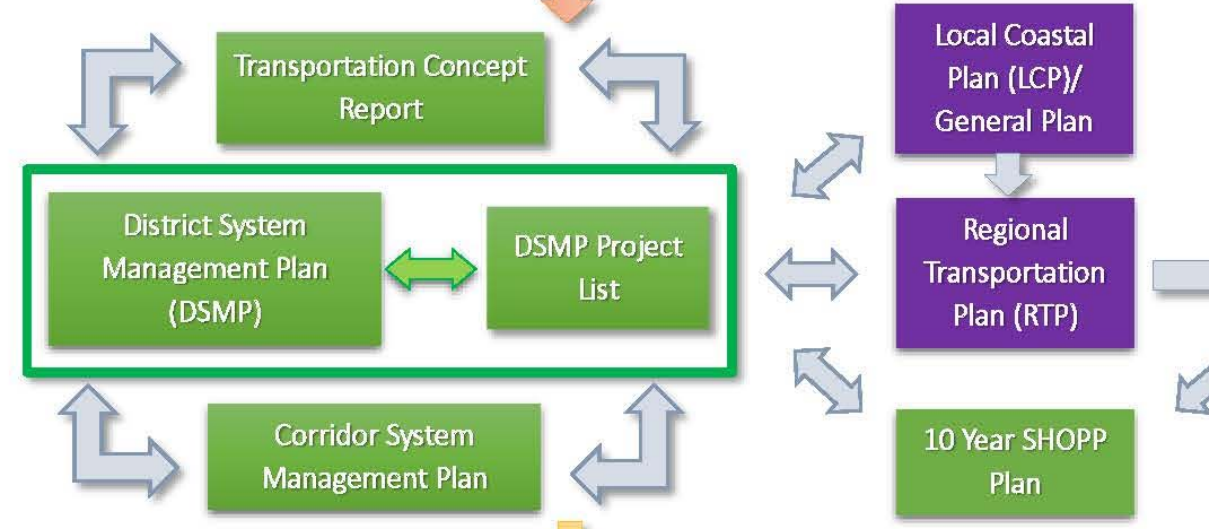
DSMP – Provide information to districts on: Applicable Coastal Act requirements & LCP policies and ordinances; Coastal resources within planning area that could be impacted by the transportation system; Sea level rise vulnerability and other coastal hazards; CA Coastal Trail planning, location and GIS information; Opportunities for coordination on planning studies, permitting, funding, developer improvements, and projects; Completed, on-going, or proposed regional planning studies; Proposed projects that might affect the roadway or corridor.

TCR & CSMP – Identify and provide information on: Specific coastal related deficiencies and planned improvements for the corridor that have been already identified in other plans; specific corridor data useful to analyze and plan for the corridor; CA Coastal Trail improvement needs; specific vulnerability risks; corridor land use strategies; conservation strategies; and corridor coastal resources.

RTP/LCP – Caltrans and the California Coastal Commission should participate in the development of RTPs and LCPs by providing input on agency policies, plans, goals, strategies, future projects, and studies along with information on State transportation facilities, sea level rise vulnerability and other coastal hazards, the California Coastal Trail, and other Coastal Act requirements.

Participate in the project development team or review products to provide input on coastal resources; conservation strategies; sea level rise and climate change policies; and coastal data. Propose project elements to address coastal deficiencies; identify local partnership opportunities.

Participation on PDTs and review project materials to ensure coastal interests such as sea-level rise, climate change, and the CA Coastal Trail are considered in the project analysis; recommend coastal features for inclusion in project; ensure appropriate local partners are engaged in the process; and identify collaboration opportunities.



The policies and recommendations of the CTP can include elements that address coastal zone issues; the CTP goals and recommendations may support CA Coastal Act requirements.

The policies and recommendations of the Modal Plans can include elements that address coastal zone issues; implementation strategies can support CA Coastal Act requirements, & support the CA Coastal Trail.

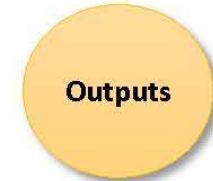
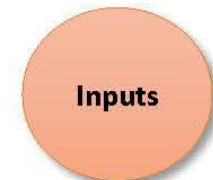
RTP/LCP – Collaboration between Caltrans, California Coastal Commission, and local/regional agencies during the development of RTPs and LCPs should lead to better coordinated goals and policies in the various planning documents, leading to better coordination and alignment of future activities.

DSMP – Districts should consider local coastal plans in the development of DSMP goals and policies. The DSMP should identify methods to meet Coastal Act and LCP requirements to address sea level and climate change & consider the SLR vulnerabilities identified in Caltrans' Vulnerability Plans and in local and regional SLR vulnerability assessments; The DSMP Project List should include coastal projects or other projects that can include coastal related elements.

TCRs & CSMPs – Land use policies and coastal conservation strategies should have been considered in the development of the corridor description, system analysis, and proposed improvement projects on facilities within the coastal zone. System management and improvement strategies for the transportation system should also consider incorporating goals and policies from local coastal plans. Coastal land use strategies may impact Local Development/Intergovernmental review decisions.

Input in PID development and/or participation in project development teams (PDT) for the PID, including discussion of local coastal plan strategies, will help ensure coastal issues are considered during the development of project elements and project purpose and need statement.

Active participation throughout the process will ensure coastal issues remain a consideration for the PDT and appropriate project elements to address coastal issues and the CA Coastal trail are included in the final project.



Focus Area: Sea Level Rise

Overview and Goals

The Commission and Caltrans have both assumed leadership roles in understanding and addressing the impacts of SLR on our state's resources. Under the Coastal Act, The Commission must protect public access and recreation along the coast, coastal habitats, and other sensitive resources, as well as provide for priority visitor-serving and coastal-dependent development, while simultaneously minimizing risks from coastal hazards including SLR. Caltrans is directly responsible for the statewide transportation network, which includes significant assets that are vulnerable to SLR. The statewide transportation network provides critical public access to the coast for vehicles, bicycles, and pedestrians.¹⁴

Interagency Coordination

Through the IPT process, Caltrans and the Commission have identified a series of goals for interagency coordination that will lead to more effective coordination on issues related to climate change and SLR. The goals are as follows:

- (a) Work together to develop tools to enable Caltrans to meet Coastal Act requirements, and related State Highway mandates, for development to minimize risks in areas of high geologic, flood, and fire hazard and to assure project stability and structural integrity over its lifetime.
- (b) Ensure transportation plans and projects take into account coastal hazards such as flooding, storm and wave impacts, erosion, geologic instability, and so on, including as these impacts worsen over time with future climate change and SLR.
- (c) Identify planned and/or programmed Caltrans projects located in areas that are vulnerable to climate change/SLR over their projected design lives, and use them as case studies to improve our collective ability to address climate change and SLR into the future.
- (d) Review the SLR-related studies and information that should be developed (during the course of transportation corridor evaluations; project purpose, need and scoping efforts; and project detailing throughout environmental evaluations/design engineering), particularly in anticipation of filing complete coastal development permit (CDP) applications; focus on [Chapter 6](#) of the Guidance [for general information, as well as a suggested filing checklist, (pg. 116) and [Appendix B](#) (for more detailed technical info)].

¹⁴ See next chapter: "Focus Area: Collaborating on the California Coastal Trail."

- (e) Share information on SLR models and viewing tools and promote common understanding of their utility for plans and projects in the coastal zone.
- (f) Identify strategies for working together to better align ongoing Federal, State, regional and local SLR vulnerability assessments and to improve integration of land use and transportation plans for dealing with the expected SLR (and other climate change) challenges, particularly with respect to Local Coastal Programs (LCPs), Transportation Concept Reports (TCRs), Corridor Management Plans (CMPs) and Regional Transportation Plans (RTPs).
- (g) Identify Caltrans transportation facilities/infrastructure (including highways, railways, bike and pedestrian pathways, and other corridors) “hot spots” that are currently, or most likely to be, affected by SLR in the nearer term, and develop interagency strategies with other stakeholders to address those areas.
- (h) Track and initiate planning efforts within Caltrans and its local MPO/RTPA partners to address the challenges posed by the most vulnerable SLR “hotspots;” reflect these in RTPs consistent with LCP and Coastal Act policies; identify productive avenues for integrating these with ongoing coastal program land use plans and activities; and develop strategies for securing federal, state and local funding resources necessary to address SLR challenges facing the State’s transportation system.
- (i) Focus on current efforts by local governments to update their LCPs, particularly those that implicate transportation considerations as they plan for improved treatment of SLR hazards and related responses, and work to ensure that important Statewide transportation initiatives are appropriately reflected in revised LCPs.

Impacts of Sea Level Rise

In the past century, global mean sea level has increased by 7 to 8 inches, and it is extremely likely (>95% probability) that human influence has been the dominant cause of observed atmospheric and oceanic warming. Given current trends in greenhouse gas emissions and increasing global temperatures, SLR is expected to accelerate in the coming decades, with scientists projecting as much as a 66-inch increase in sea level along segments of California's coast by the year 2100. While over the next few decades, the most damaging events are likely to be dominated by large El Niño - driven storm events in combination with high tides and large waves, impacts will generally become more frequent and more severe in the latter half of this century. Eventually, sea level will rise enough that even small storms will cause significant damage, and large events will have unprecedented consequences (Caldwell et al. 2013).

Many aspects of the coastal economy, as well as California’s broader economy, are at risk from SLR, including coastal-related tourism, beach and ocean recreational activities, transfer of goods and services through ports and transportation networks, coastal agriculture, and commercial fishing and aquaculture

facilities. The impacts of SLR in California will affect almost every facet of our natural and built environments. Natural flooding, erosion, and storm event patterns are likely to be exacerbated by SLR, leading to significant social, environmental, and economic impacts.

Addressing Sea Level Rise

SLR is typically addressed in two steps – the first step is to evaluate risks through a vulnerability assessment, and the second step is to develop an adaptation plan to respond to the risks that have been identified. Regarding vulnerability assessments, an important assumption is that events of the past are not a prologue to what may occur in the future, meaning that the locations where these impacts are currently observed are not the only indicators of future concerns, particularly for extreme weather events. Also, typical weather data derived from historic values might not be an appropriate basis for addressing future climatic conditions – the climate is changing and the methods employed to reflect that reality must be appropriate to define the environmental conditions that we will face in the future.

Proactive steps are needed to prepare adaptation plans for SLR and to protect the coastal economy, California livelihoods, and coastal resources and the ecosystem services they provide. The magnitude of the challenge is clear – not only might the impacts of SLR be severe, the costs and time associated with planning for them can be daunting. The Third National Climate Assessment, released in May 2014, notes that there is strong evidence to suggest that the costs of inaction are 4 to 10 times greater than the costs associated with proactive adaptation and hazard mitigation (Moser et al. 2014). It is critical for California to take proactive steps to address the impacts SLR may have on the state's economy, natural systems, built environment, human health, and ultimately, its way of life.

State Efforts to Address Sea Level Rise

In an effort to better understand potential amounts of SLR and associated impacts, Governor Arnold Schwarzenegger signed Executive Order S-13-08 in November 2008. EO S-13-08 directs State agencies planning construction projects in areas vulnerable to SLR to begin planning for potential impacts by considering a range of SLR scenarios for the years 2050 and 2100. Although EO S-13-08 allows for some exemptions for routine maintenance projects and for projects programmed for construction through 2013, the intent is to plan ahead to assess project vulnerability and reduce anticipated risks associated with SLR. EO S-13-08 also directed the Natural Resource Agency, in cooperation with Caltrans, the Commission, and other State agencies to commission the National Academy of Sciences through the Natural Resources Council to assemble a team of experts to produce a West Coast SLR assessment report for the states of California, Oregon, and Washington. That assessment report was released in 2012 and is referenced as the best available science on SLR in the Commission's SLR Policy Guidance (see below).

More recently, Governor Brown's April 2015 Executive Order B-30-15 addressed climate change and SLR adaptation, stating that state agencies shall take climate change into account in their planning and investment decisions. The order requires agencies to ensure that priority is given to actions that build climate preparedness and reduce greenhouse gas emissions, provide flexible and adaptive approaches, protect the states' most vulnerable populations, and promote natural infrastructure solutions.

Sea Level Rise Vulnerability Assessments

A number of SLR vulnerability assessments have been completed and are in progress for coastal California. Statewide assessments such as the 2001 USGS assessment, 2014 National Climate Assessment, and Pacific Institute 2009 report broadly indicate low-lying and potentially vulnerable areas to flooding and erosion. More detailed modeling that can indicate the effects of shoreline armoring, groundwater intrusion, wave dynamics, and other hydrodynamic factors has been beyond the scope of such national or statewide efforts. Local and regional efforts are beginning to fill these gaps for California, though the characteristics of each study vary according to the parameters modeled, future scenarios selected, and assumptions employed. The more general statewide tools can provide a starting point for communities and agencies addressing SLR without local studies, but the results will likely raise more questions before feasible adaptation options can be assessed.

Of the 76 local governments in California's coastal zone, 29 jurisdictions have received LCP grants from the Commission for SLR studies that will ultimately result in local vulnerability assessments. Meanwhile, some communities have initiated detailed studies using other funding sources (e.g., Huntington Beach, San Mateo County, San Francisco's Ocean Beach), and SLR planning tool development continues to expand its coverage and increases in sophistication (e.g., Coastal Storm Modeling System [CoSMoS] for Bodega Head to Half Moon Bay and Southern California from Point Conception to the Mexico Border).

Coastal planning and infrastructure planning both require a sophisticated level of vulnerability analysis so that SLR adaptation options can be developed to address the full extent and severity of flooding and erosion. For example, the City of Santa Barbara found that the extent of flooding shown by an initial vulnerability analysis was not accurate, and it will use a 2016 LCP grant to refine its local modeling and vulnerability assessment to include the operation of a tide gate. In other cases, LCP grants are being used to build on the available modeling in a local area. For example, Del Mar will advance the CoSMoS analysis by analyzing wetland habitat evolution using a 2016 Commission LCP grant.

Caltrans is also in the process of preparing vulnerability assessments to identify infrastructure at risk. Additional information related to these assessments can be found in the *Caltrans Efforts to Address Sea Level Rise* section of this chapter.

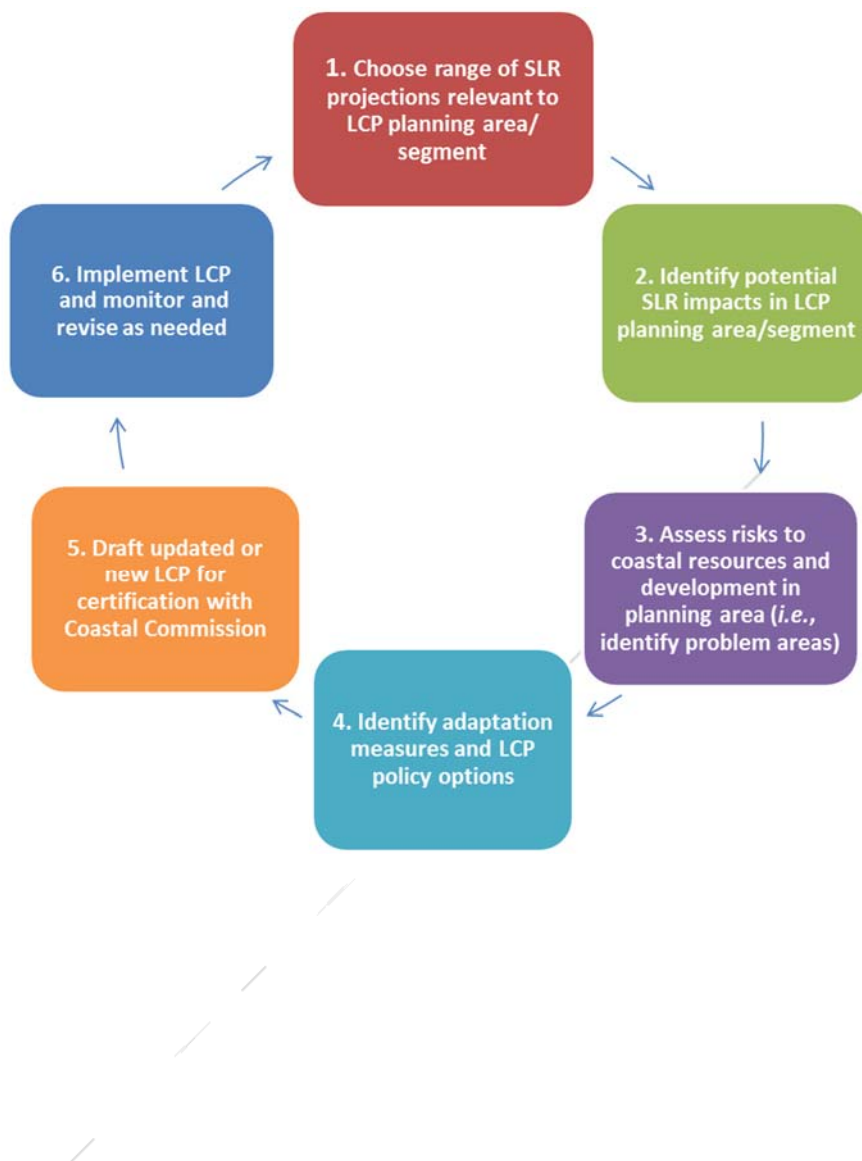
Coastal Commission Efforts to Address Sea Level Rise

The impacts of SLR fall directly within the Commission’s planning and regulatory responsibilities under the Coastal Act. SLR increases the risk of flooding, coastal erosion, and saltwater intrusion into freshwater supplies, all of which have the potential to threaten many of the resources that are integral to the California coast, including coastal development, coastal access and recreation, habitats (e.g., wetlands, coastal bluffs, dunes, and beaches), coastal agricultural lands, water quality and supply, cultural resources, community character, and scenic quality. In addition, many possible responses to SLR, such as construction of barriers or armoring, can have adverse impacts on coastal resources. For example, beaches, wetlands, and other habitat backed by fixed or permanent development will not be able to migrate inland as sea level rises, and will become permanently inundated over time, which in turn presents serious concerns for future public access and habitat protection.

The Coastal Act mandates the Commission to “protect, conserve, restore, and enhance” the state’s coastal resources. Policies on hazard avoidance and coastal resource protection provide the basis for the Commission to consider the impacts of SLR. The Commission has long considered SLR, erosion rates, and other effects of a dynamic climate in its analysis of permits and LCPs, staff recommendations, and Commission decisions. When Section 30006.5 was added to the Coastal Act in 1992, it directed the Commission to both develop its own expertise and interact with the scientific community on various technical issues, including coastal erosion and SLR, specifically.

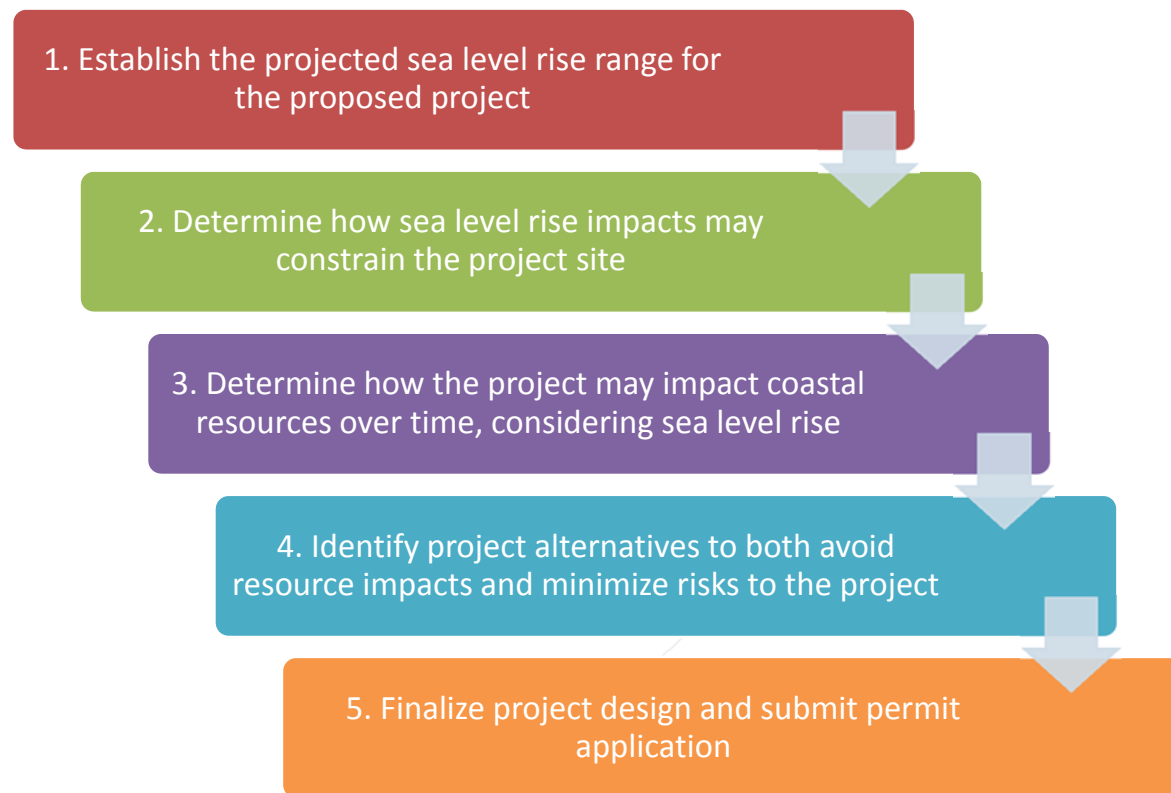
In August 2015, the Commission adopted Sea Level Rise Policy Guidance for addressing SLR in LCPs and coastal development permits (CDPs). The guidance is rooted in four key principles: (1) use the best available science to guide decisions; (2) minimize coastal hazards; (3) maximize the protection of public access, recreation, habitats and other coastal resources, and; (4) maximize agency coordination and public participation. Using these four principles, the guidance provides a framework for evaluating SLR impacts and addressing those impacts in planning and project development. For planning efforts, the guidance identifies a six-step process. The process is cyclical, and is meant to be repeated as necessary to address new scientific information and/or impacts from SLR. See Figure 1 (next page).

Figure 1. Sea level rise adaptation planning process for new and updated Local Coastal Programs.



The guidance also provides a framework for addressing SLR in CDPs. The CDP process is presented in five steps. See Figure 2, below.

Figure 2. Process for addressing sea level rise in Coastal Development Permits



Through its Sea Level Rise Policy Guidance and ancillary efforts, the Commission advances, supports, and helps to fund California's preparation for these critical challenges to ensure a resilient coast for present and future generations. Further, the Commission has prioritized supporting the update of LCPs to address climate change, as demonstrated by Goal 2 of the Commission's Strategic Plan, which is to "address climate change through LCP planning, coastal permitting, inter-agency collaboration and public education." This LCP work includes addressing SLR in planning for transportation and other infrastructure in the coastal zone.

The Commission has awarded \$4.5 million in grant funds to provide assistance to local governments to complete the certification of new and updated LCPs, with an emphasis on addressing impacts from SLR and climate change. An additional \$500,000 will be awarded in the next year. Of the 76 local governments in California's coastal zone, 29 jurisdictions have received LCP grants from the Commission for SLR planning work. The Commission is continuing an active program of public outreach on SLR, and

the local vulnerability and adaptation planning studies provide examples of the types of studies other communities might initiate. In addition to assisting other local jurisdictions with their SLR planning, the results of these recent local vulnerability assessments can provide insight and analysis for planners who are concerned with threats to specific locations or project sites within the extent of the more studied regions. Collaboration of the state with local and regional SLR planning efforts is important for efficiently and comprehensively addressing SLR hazards, including those that threaten the State's transportation network.

The Commission continues to work through its regulatory program to address SLR in LCP planning and permitting, and it participates in local and regional collaborative efforts to address SLR, such as Adapt LA, Adapt Monterey, etc.

The Commission has found that in many cases, especially those involving major infrastructure such as a highway segment or bridge, a phased approach may be necessary to protect infrastructure while planning and funding SLR adaptation. This approach was utilized in the Piedras Blancas Highway Realignment project. In that case, the Commission approved a temporary riprap revetment to preserve Highway 1, a critical public access resource connecting the Big Sur coast to northern San Luis Obispo County, with a condition that Caltrans pursue opportunities to realign the roadway outside the area vulnerable to SLR. After approximately 15 years of planning and significant coordination among all of the involved agencies and other stakeholders, the realignment project was approved. The new alignment is located outside of the 100-year erosion setback; it provides for significant public access trail improvements seaward of the new alignment on property that was transferred to California State Parks.

Similarly, a phased approach is being used for two Highway 1 segments subject to coastal erosion in San Mateo County: Surfers Beach and Pescadero Beach. In these cases, the Commission authorized temporary riprap revetment to protect the highway, as well as reconstruction of the trail that provides public access to and along Surfers Beach and construction of a new trail segment along the bluffs above Pescadero Beach. These permits provide for maintaining the riprap revetment while comprehensive planning efforts are undertaken by Caltrans, the Commission, local governments, and other key stakeholders to address long-term adaptation measures for these segments of Highway 1.

Given the complex nature of addressing SLR in highway planning, it is likely that this type of phased approach will be needed in many more cases along the California coast in the future.

Caltrans Efforts to Address Sea Level Rise

Rising waters have several implications for California's transportation system. First, SLR is likely to exacerbate the existing vulnerability of California's transportation network to flooding. As of 2009, approximately 1,900 miles of California's roadways were at risk of a 100-year flood event; projected SLR

of 55 inches would increase the roadway at risk to approximately 3,500 miles.¹⁵ SLR is also likely to amplify the impacts of storm surge on coastal infrastructure. Low-lying coastal areas are likely to experience more frequent and more intense flooding, as well as intensified erosion. On longer time horizons, low-lying areas are at risk of becoming permanently inundated. As sea level rises, habitats and the character of the land surface may change (e.g., wetlands may migrate). The shifts in the types of land cover that exist could have implications for the current transportation infrastructure, as the need to protect or preserve some of these migrating habitats could conflict with operation and maintenance of roadways and railways. Similarly, changes in the types of land cover could affect the planning of future infrastructure (e.g., wetland migration could require planners to protect areas that may be converted to wetlands as local sea level rises).

Caltrans SLR Guidance: Caltrans' existing "Guidance on Incorporating Sea Level Rise for use in the planning and development of Project Initiation Documents" provides a procedure for incorporating SLR in the programming phase of projects. Caltrans Headquarters' Climate Change Branch is also working with relevant divisions to further incorporate climate change into their long range plans and guidance documents, and will provide updates.

Vulnerability Assessments: Caltrans is currently conducting vulnerability assessments for most Caltrans Districts, including Caltrans Coastal Districts 1 (already completed), 4, and 11. A subsequent contract will handle vulnerability assessment work for Caltrans Districts 5, 7, and 12 when data becomes available to conduct the analysis. The vulnerability assessments will identify portions of the Caltrans facilities that are likely to be impacted by SLR under different scenarios for coastal Caltrans Districts. Maps will be produced showing the areas likely to be exposed in 2050, 2070, and 2100. Upon completion of their respective vulnerability assessments, most Caltrans Districts will have critical data available to evaluate and establish priorities for future projects and begin implementing adaptation strategies to minimize climate change risks and exposure.

In addition to vulnerability assessments, several coastal Caltrans Districts have identified state transportation assets susceptible to flooding hazards and SLR within that particular District. The results and conclusions of the vulnerability assessments, however, would need to be cross-referenced with at-risk locations identified by the Caltrans Districts. Model validation may be necessary to ensure consistency in the results of both the vulnerability assessments and individual Caltrans Districts' lists of at-risk assets.

¹⁵ Heberger, M., H. Cooley, P. Herrera, P.H. Gleick, and E. Moore (2009). "[The Impacts of Sea-Level Rise on the California Coast](http://www.energy.ca.gov/2009publications/CEC-500-2009-024/CEC-500-2009-024-F.PDF)." A Paper from the California Climate Change Center. August 2009. url: <http://www.energy.ca.gov/2009publications/CEC-500-2009-024/CEC-500-2009-024-F.PDF>.

Through the planning process, Caltrans Districts will have the ability to begin an adaptation strategy prioritization process, with the aim of seeking funding and programming to develop projects with the goal of addressing identified deficiencies.

To ensure SLR considerations are adequately and efficiently addressed in new projects, a number of Caltrans manuals and guidance documents will need to be updated and/or modified to provide adequate direction to Caltrans staff working in the planning, design, development, maintenance and operation of SLR resilient State facilities. The Highway Design Manual, the Project Development Procedures Manual, Standard Environmental Reference, and Construction Manual, among other documents and manuals, would need to reflect policies, principles, practices, and standards to successfully implement these facilities and supporting infrastructure.

FUNDING

One of the most significant challenges to successfully address the risks and effects of climate change and SLR is the significant costs associated with protecting, redesigning, and relocating state transportation facilities to guarantee their adequate operation in light of a changing climate. While the retrofit or modification of transportation facilities threatened by SLR can be addressed throughout the years based on the level of vulnerability and the relative importance of the facility, some Caltrans Districts are already experiencing significant disruptions of critical facilities which will require significant capital expenditures to maintain their proper operation. With the passage of time and considering predicted SLR scenarios, the need for additional funding to address a growing number of roadway segments subject to flooding hazards is likely to grow.

A program level approach to comprehensively address SLR statewide may require a similar model to that previously used to manage seismic deficiencies in the state's transportation infrastructure. In November 1996, California voters passed Proposition 192, which approved substantial funding levels for seismic retrofit of a large number of seismically deficient structures. Such a program will require legislative and voter support.

Addressing Sea Level Rise in Caltrans Planning Phases

Integrating SLR impacts, policies, analysis, and recommendations is important to ensure issues are addressed at the appropriate time.

Caltrans State Planning – CTP and Modal Plans

Caltrans State planning should address SLR on a broad scale. For example, relevant plans should identify general SLR issues and acknowledge the magnitude of the challenges presented to the State's transportation infrastructure. Accordingly, attention should be given to evaluating possible adaptation options to address these vulnerabilities, taking into account potential coastal resource impacts that might emanate from various adaptation options (e.g., loss of beach caused by shoreline protection, etc.), and helping frame implementation of prudent and environmentally sensitive adaptation strategies.

Caltrans System Planning – DSMPs, TCRs, and CSMPs

At the System Planning stage, Caltrans should review and consider available SLR vulnerability information, including threshold level tools, such as COSMOS, NOAA SLR Viewer, and Pacific Institute, as well as more detailed regional and local SLR vulnerability assessments. For areas that are vulnerable, the System Planning documents should identify preferred short-term adaptation options within the context of long term impacts from SLR (minimum 75 to 100 years). However, because the planning horizon is 20 years for System Planning documents, all projects identified do not necessarily need to fully address long-term SLR adaptation needs. For example, in the long term, a roadway might need to be realigned, but in the short-term, repair and temporary RSP might be acceptable. Caltrans System Planning documents should explain the 20-year needs within the context of the design life of new major infrastructure (typically 75 to 100 years or more).

Caltrans Project Initiation and Programming

At the Project Initiation and Transportation Programming stage, Caltrans uses the *Guidance on Incorporating Sea Level Rise (May 16, 2011)* to analyze project scope, schedule, and cost relative to SLR. Further detail and guidance on SLR vulnerability is necessary. The IPT recommends, at a minimum, updating the guidance document. The following are example methods of assessing potential impacts:

1. At the 'Decision to Prepare Project Initiation Document' stage, Caltrans should perform SLR screening¹⁶ using the best available mapping tool (i.e., CoSMoS 3.0 for southern CA, The Nature Conservancy Coastal Resilience mapping tool for the Monterey Bay region, OCOF/CoSMoS 2.0

¹⁶ More discussion may be needed regarding what screening is appropriate based on project type and life cycle.

for central CA, the Humboldt Bay SLR mapping work for Humboldt Bay, and the NOAA SLR Viewer and Pacific Institute maps for other portions of the state). Caltrans should also consult local and/or regional vulnerability assessments, if available, for more detailed information about SLR vulnerability in the project area. Caltrans should consult local and state stakeholders also to identify the existing and planned CCT along the applicable stretch of coast near the project area.

2. At the 'Prepare Project Initiation Document' stage, Caltrans should coordinate with Commission staff to identify any LCP and Coastal Act policy consistency issues that would be raised by the project, including SLR vulnerability issues related to minimizing hazards, maximizing public access, minimizing vehicle miles traveled and/or avoiding the need for future shoreline protection.
3. Caltrans should develop project alternatives and initial project design work with consideration for any identified SLR vulnerabilities and/or other Coastal Act issues.

Caltrans Project Development

At the Project Development stage, design level information about SLR vulnerability is necessary. The following are methods of incorporating SLR analysis into the project development process. Over time, guidance and direction related to SLR will be expanded, especially after Caltrans vulnerability studies are completed.

1. At the [Perform Environmental Studies](#) stage, Caltrans uses the Climate Change section of the Caltrans *Standard Environmental Reference* to identify and address the potential impacts of climate change and SLR in environmental documents. Caltrans should conduct either: (A) a detailed, project-specific SLR Vulnerability Assessment (SLR VA)/site-specific hazards study for the proposed project, as described below, or (B) a Sea Level Rise and Coastal Hazards Analysis for Minor Projects (see **Sea Level Rise and Coastal Hazards Analysis for Minor Projects section of this document**).
 - a. A project-specific SLR VA should be conducted for projects that involve new or realigned roads, road expansion, new bridges, or other major structures and construction projects (major projects). A project-specific SLR VA is not required for minor repair and maintenance, new lighting, paving, etc.
 - b. The project-specific SLR VA for major projects should include:
 - i. Proposed design life of the project and project alternatives (minimum 100 years).
 - ii. Best available SLR projections (currently NRC medium and high projections) for 30, 50 and 100 years into the future, or other relevant planning horizons.

- iii. Evaluation of potential flooding, erosion, and wave runup. This analysis should consider impacts from daily tidal inundation at 30, 50 and 100 years (or other relevant planning horizons) as well as a worst-case scenario (i.e., the combined impact of a high SLR projection, long-term shoreline change, a seasonally eroded beach, and a 100-year storm occurring during high tide). If possible and relevant, the analysis should also include an evaluation of other flooding/storm scenarios (e.g., 1- and 5-year storms) that could result in impacts that disrupt service at unacceptable levels of frequency.
- iv. In locations where the project is landward of existing shoreline protection, or vulnerable development, such as railroad tracks or beachfront residential development, include an evaluation of SLR vulnerability both with and without the seaward development.

If the SLR VA indicates that the selected proposed project would be vulnerable to SLR at some point during its design life, Caltrans should identify options for SLR adaptation, including future roadway realignment or elevation. The Coastal Act requires new development to avoid the need for future shoreline protection throughout the life of the development.

If solutions such as retreating from the coast or purchasing land become necessary, both agencies will also need the time, resources, and training to analyze the effects these solutions will have on businesses, residents, environmental justice communities, and natural resources.

2. At the [Plans Specifications & Estimates \(PS&E\) phase](#), Caltrans considers and incorporates information and analysis from previous planning and PA&ED phases relevant to SLR, as required, into the project design to develop a project that is resilient and adaptable to the threats of coastal flooding. In addition to engineering considerations and design features appropriate to safeguard transportation assets in light of SLR, project design also includes measures to protect coastal resources that could potentially be threatened by rising waters, including beach area, wetlands, and other habitats. Project specifications must contain clear, unambiguous information to allow construction to be carried out successfully and avoid costly changes during the project implementation. Thus, it is critical, that flooding scenarios information be developed timely and accurately to allow for the successful design and construction of a project.

In addition to the project plans and specifications, permits for a project must also be obtained before the project is ready to list. Scope changes during this phase may lead to recirculation of the environmental document and amending permits. Therefore, any design solutions for SLR should be considered and incorporated into the project during the PA&ED phase.

Coastal projects require a CDP from the Commission or from a local jurisdiction with an approved LCP. Recent adoption of the SLR Guidance by the Commission, has resulted in additional SLR analysis requirements for the filing a CDPs. Key requirements include:

- Detailed project description.
 - Site map.
 - Anticipated project life and relevant SLR projections.
 - Analysis of coastal hazards and SLR (including Erosion Risk Analysis and Flood Risk Analysis).
 - Description of how project will avoid and minimize identified hazards over its design life.
 - Analysis of impacts to coastal resources.
 - Project alternatives identification.
3. **Right of way phase.** While potential acquisitions and the public's rights pertinent to these acquisitions are disclosed by Caltrans during the PA&ED phase, the actual negotiations and acquisition of right of way is performed during the RW phase. As SLR increases, additional right of way acquisitions may be necessary to protect transportation infrastructure from flooding. Furthermore, as less land becomes available due to expanding oceans, it may be harder to relocate homes and businesses. This situation can be compounded in highly developed areas, many of which occur in coastal zones given the more limited land supply. Similarly, as ecosystems migrate inland in response to SLR, protection options and mitigation opportunities of these important natural buffers will be more limited and costly.
 4. **Construction Phase.** It is expected that flooding risks for construction areas will be identified, analyzed and addressed in the PA&ED and PS&E phases of Caltrans projects. However, with higher water levels, dewatering may become more difficult and Best Management Practices for water quality could become more extensive. At the same time, it may also become harder to find on-site areas to replant or install water quality treatments such as bioswales. Often times, off-site construction staging areas are only identified during the construction phase. Thus, it may become more difficult to find staging areas that do not flood.
 5. **Maintenance and Operations.** Caltrans Maintenance units are already experiencing increased challenges to respond to flooding events. As first responders for the protection and repair of transportation infrastructure from storm surges, Caltrans Maintenance units are better prepared to address discrete events than long-term or repetitive occurrences. SLR will increase scour and erosion and make it more difficult to keep culverts and drainage facilities clear. Much of the work to repair these facilities will require additional environmental analysis, documents and permits. The extensive state transportation assets and limited resources for the upkeep of this vast network make proper maintenance of these assets a tremendous challenge. Thus, as

new facilities are designed and constructed, special consideration should be given to resilient and adaptable facilities with the goal of a more sustainable and self-reliant facilities.

Sea Level Rise and Coastal Hazards Analysis for Minor Projects

When Caltrans is proposing a minor development, such as culvert replacement, re-paving and asphalt concrete overlays, or rumble strips, the coastal permit application information set is usually more limited than what is required for major projects. As explained in the Commission's Sea Level Rise Policy Guidance, the Commission "*understands that different types of analyses and actions will be appropriate depending on the type of project or planning effort*" (pg. 100). This section provides information on relevant topics for SLR analyses for minor projects. The agencies should work together to further refine and clarify the SLR analysis requirements for minor projects.

Factors such as the scale and intention of a development project, the anticipated lifetime of the development, potential consequences to both the development and coastal resources from hazard impacts, and the level of risk tolerance for potential negative impacts all may influence the level of detail necessary for a SLR and coastal hazards analysis. Thus, it is likely that analyses for minor projects such as temporary or ancillary development, interim and/or emergency projects, or minor project components will be quite different from analyses from large-scale development like a new bridge or the realignment of a highway. However, in all cases it is important to identify the potential risks associated with coastal hazards and SLR so as to understand how the project, however minor, could be impacted, as well as to understand the potential for negative impacts to other coastal resources.

The following discussion provides information on the topics that should be addressed in a SLR analysis for minor projects. Caltrans should provide a quantitative analysis of anticipated impacts where feasible, or a qualitative discussion of potential vulnerabilities where not feasible, based on the best available science. Note that site conditions, potential consequences to the development or coastal resources, or other factors may necessitate the need for additional detailed information, and Caltrans should coordinate with Commission staff throughout the application process. Additional information, tools, and resources for analyzing and addressing SLR can be found in the Commission's Sea Level Rise Policy Guidance.

Sea Level Rise and Coastal Hazards Analysis:

- **Define anticipated project life and relevant SLR projections:** Define the anticipated life of the project and identify the amount of SLR that is anticipated over that amount of time. At a minimum, the analysis should assess impacts from a worst-case scenario SLR projection.
- **Identify SLR and coastal hazards impacts:** Identify and describe the physical effects from coastal hazards and SLR that may constrain the project site and/or impact the proposed development.

At a minimum, describe the potential impacts to the site and proposed development from flooding, erosion, and storms, as influenced by SLR.

A variety of SLR mapping and modelling tools are available to help understand and describe SLR effects. Tools such as the Humboldt Bay Inundation Mapping, Our Coast Our Future/CoSMoS 2.0, TNC Coastal Resilience, and CoSMoS 3.0 provide region-specific SLR inundation mapping, and, in some cases, provide depictions of storm flooding as well. In regions not covered by a specialized tool, statewide and national tools such as the NOAA SLR Viewer and Surging Seas Risk Zone Map provide similar information. The Pacific Institute hazards maps and CoSMoS 3.0 provide information on long-term erosion. Maps from these tools could be used to support a narrative description of the potential impacts to the project site/development. Additionally, note that a variety of local and regional SLR vulnerability assessments have been completed throughout the state that could provide additional detailed information about these hazards.

- **Describe potential consequences:** Provide a description of how the potential SLR hazards identified above could impact the proposed development and explain how the project will avoid or minimize impacts from hazards. Describe the severity of the consequences that could arise from hazards impacts, including not only the consequences for the development itself, but also potential impacts to coastal resources that could result from the development. For example explain whether increased inundation or an increase in storm impacts (and so on) would prevent the development from functioning, would require significant and/or costly repair work, or could have significant detrimental impacts to nearby habitats or other coastal resources. Note that the greater the severity of potential consequences, the more likely it is that additional detailed analysis will be required.
- **Describe adaptation options and/or long-term planning efforts:** If applicable, and to the extent feasible, provide information on possible strategies that may be utilized if the project becomes impacted by SLR hazards beyond an acceptable amount. If applicable, describe how the project will address the Coastal Act's prohibition on shoreline protection for new development (including the proposed project). If the proposed project is a specific component or interim measure of a larger project, explain how it fits into the larger project goal, particularly as it relates to long-term SLR adaptation.

Laboratories / Lessons Learned

Gleason Beach Sea Level Rise Analysis

A comprehensive planning effort is underway for realignment of Highway 1 at Gleason Beach in Sonoma County. Caltrans provided Commission staff with several technical reports to provide information on potential impacts associated with the project. These include a Draft EIR/EA (July 2015), a Draft Coastal

Erosion Analysis (November 2011), a Final Coastal Erosion Analysis (February 2014), and a Floodplain Evaluation Report (April 2015).

These reports included an analysis of potential impacts to the project site and proposed project associated with coastal hazards and SLR. In line with the recommendations of the Commission's Sea Level Rise Policy Guidance, this analysis included consideration of a worst-case scenario of a high SLR projection (based on best available science at the time of the analysis, though this has since been updated, see below) combined with the potential impacts of storms and extreme events over the 75-year anticipated life of the project. The analysis identified the potential impacts associated with bluff erosion, assuming an increase in the erosion rate associated with SLR in the future, and used the FEMA approach for analyzing wave runup. Additionally, the analysis included consideration of multiple different project alternatives.

Although the analysis addressed some of the recommendations of the Commission's Sea Level Rise Policy Guidance, several topics should be added and/or described in greater detail in future efforts to provide a more thorough analysis of SLR for proposed projects. These include the following:

- Geotechnical reports and related analyses should use the best available science related to projections of SLR at the time of the application. Currently, in line with recommendations from the Ocean Protection Council, the Commission recognizes the National Research Council's 2012 report – *Sea Level Rise for the Coasts of California, Oregon, and Washington* – as the best available science. This report includes a high projection of 66 inches of SLR by 2100 for areas south of Cape Mendocino. Thus, the slightly less than five feet used in the analysis for the Gleason Beach study was not in accordance with the most up to date science at this time, but that is largely a result of the timing of the initial studies for the project (prior to the release of the NRC report).

Relatedly, analyzing and discussing a range of scenarios (including multiple SLR projections and storm and non-storm scenarios) would help to provide a more thorough understanding of the possible range of impacts and when such impacts might occur. For Caltrans projects in particular, this additional scenario-based analysis may be important for describing the need for phased project planning as well as for providing supporting information for projects or project components that are not designed for a worst-case scenario due to case-specific factors.

- Caltrans should ensure that project analyses and reports consider the migration of coastal resources/habitats over time in response to SLR and how such migration of coastal resources would relate to the project. This would mean analysis of not only how the migration of such resources would impact the project, but also how the presence of the development could impact the dynamics of coastal resources as they change over time in response to SLR.

For example, the Gleason Beach analyses would have benefitted from additional analysis and discussion of the movement of wetlands and sandy beach – specifically, how the proposed project would impact their natural migration. Essentially, future analyses should evaluate and describe the extent to which proposed projects could prevent wetland, beach, or other habitat migration, thereby preventing the continued existence of such habitats that would be able to persist in the absence of any development. Commission staff recognizes that such considerations could impact future mitigation actions, and will continue to work with Caltrans and other partners on this area of evolving policy.

- Analyses should better describe the potential secondary impacts from various project components or phases, both in the immediate or short term, as well as over the longer term in response to SLR and other changing conditions.

In the case of the Gleason Beach project, additional information is needed on the impacts to water levels (and therefore the response of the nearby wetland complex) from the removal of the box culverts. Additionally, the analyses didn't consider or discuss the possibility of a pulse of rapid erosion due to "latent retreat" after armoring is removed, and what this could mean for both the project itself and for coastal resources. In cases where possible secondary impacts are not well understood, Caltrans could consider including monitoring programs as part of the initial project description.

- Somewhat related to the analysis of secondary impacts is the analysis of impacts to adjacent areas as a result of the project. Here, Commission staff noted that there needed to be better identification and assessment of when the adjacent driveway and farmhouse would be vulnerable, particularly as these rely on linkages from Highway 1 for access, and the various project alternatives would have addressed the linkages in different ways.

Key Challenges and Considerations

Although significant progress has been made to acknowledge the consequences of a changing environment and begin planning for and developing a more resilient state transportation infrastructure, many difficulties still abound to achieve these goals. While Caltrans policies have established clear direction regarding the need and importance to identify vulnerable transportation locations and begin planning for SLR risk avoidance and coastal protection, a number of procedures and mechanisms still need to be institutionalized to implement the vision of a transportation system adaptable to the realities of climate change and SLR.

To date, some of these challenges include:

- The absence of a comprehensive program to guide all aspects (planning, development, construction, operation and maintenance) of the of a transportation system designed to withstand SLR risks.
- Insufficient funds to develop and retrofit state transportation infrastructure adaptable to different SLR risks scenarios.
- Incomplete information to identify the extent and risk of the state's assets subject to climate change and SLR.
- The development of appropriate guidance documents to guide Caltrans staff to plan and design resilient transportation facilities.
- Fully training staff at both agencies to develop expertise and skills in planning, design, development, and review of resilient transportation projects.
- Establishing logical termini when considering climate change components.
- Clear guidelines and communication about SLR analysis requirements for minor projects.

Next Steps

The information contained in this special initiative is a general outline of the principles and main elements necessary to integrate Caltrans and Commission policies and practices with respect to SLR. Additional coordination and discussion will be required to develop specific parameters to implement the general strategy laid out in this document. IPT members will develop a specific series of steps for full implementation of this special initiative.

Focus Area: Collaborating on the California Coastal Trail

Statewide Efforts and Integrated Planning and Project Opportunities for the California Coastal Commission and Caltrans

The California Coastal Trail: Vision and Concept

The vision for the California Coastal Trail (CCT) is a continuous interconnected public trail system along the California coastline from Oregon to Mexico. The Commission and its sister agency, the Coastal Conservancy, have long supported the trail to foster appreciation and stewardship of the scenic and natural resources of the coast as well as to implement Coastal Act policies promoting non-motorized transportation. The trail system is located on a variety of terrains, including the beach, bluff edge, hillsides providing scenic vantage points, and within the highway right-of-way. It can take many forms, including informal footpaths, paved sidewalks, and separated bicycle paths. When no other alternative exists, it sometimes connects along the shoulder of the road. While primarily for pedestrians, the trail network also accommodates a variety of user groups including bicyclists, wheelchair users, equestrians, and others as opportunities allow.

As articulated in the Coastal Conservancy's 2003 report to the Legislature, "Completing the California Coastal Trail," the CCT system is to be designed and implemented to achieve the following goals and objectives:

- Provide a continuous walking and hiking trail as close to the ocean as possible.
- Provide maximum access for a variety of non-motorized uses by utilizing parallel trail segments where feasible.
- Maximize connections to existing and proposed local trail systems.
- Ensure that the trail has connections to trailheads, parking areas, transit stops, inland trail segments, etc. at reasonable intervals.
- Maximize ocean views and scenic coastal vistas.
- Provide an educational experience where feasible through interpretive programs, kiosks, and other facilities.

Various Entities Plan, Support, Build, and Maintain the CCT

As envisioned in its entirety, the CCT network would span approximately 1250 miles in 15 counties, crossing a patchwork of lands owned by various governmental and private entities. Because of this patchwork, many different entities have responsibilities for trail development and maintenance.

The State Coastal Conservancy, Commission, Parks and Recreation, and Caltrans share various responsibilities for planning and completing the CCT in partnership with a number of regional and local agencies and non-governmental organizations. Legislation in 2007 specifically directed the Coastal Conservancy to coordinate development of the CCT in consultation with the Commission, Parks and Recreation, and Caltrans and also required Regional Transportation Planning Agencies (RTPAs) with jurisdiction over portions of the CCT to include provisions for it in their RTPs. In addition, inclusion of the CCT within Local Coastal Plans has long been a strategy for meeting Coastal Act requirements to maximize public access to the coast. Historically, the Coastal Conservancy has provided grants for both CCT projects and, to a more limited degree, planning. Recent funding streams to the Coastal Conservancy have focused less on the CCT and more on water and watersheds. Nonetheless, CCT projects have remained a high priority for the agency. Inclusion of the CCT in RTPs usually requires active roles by the RTPAs in the planning process. Some have developed trail master plans often through grant-funded efforts. For example, RTPAs in Santa Cruz and Monterey counties received federal grants to develop Master Plans for the Monterey Bay Sanctuary Scenic Trail. In the San Francisco Bay Area, the Association of Bay Area Governments developed the Bay Trail Plan. In southern California, the San Diego Association of Governments has multiple trails planned as part of an overall network. When these Master Plans include environmental compliance, the result supports an alignment decision or route adoption. This provides clear direction for the future trail and facilitates partnership opportunities for implementation.

The Commission has both regulatory and planning authority. It reviews permits and Local Coastal Programs to ensure that public access mandates are met and, as appropriate, requires that the CCT is incorporated into projects or plans within the coastal zone. For Parks and Recreation, whose lands cover about one-fourth of the California coast, providing recreational trail systems is a major task. One of the benefits of the planning program of the Coastal Act is that LCPs can weave together various lead agencies, including ensuring that Parks and Recreation trails and local government trails connect with adjacent trail systems under others' purviews. As the owner of the State Highway System, Caltrans holds responsibility not just for safely moving automobiles along the coast, but also for providing and expanding multi-modal alternative means of transportation. Caltrans does this both through adhering to state laws, including the Coastal Act, in its planning and project processes and through partnerships with numerous entities involved in the planning, construction and/or maintenance of the statewide CCT system.

Coastwalk California, a non-governmental organization, is a statewide leader among advocacy groups that support or promote the CCT. With grant funding from the Coastal Conservancy, Coastwalk California has created a local government network called the CCT Association. The Association's primary purpose is to raise awareness of the existing trail, identify opportunities to fill the gaps, and network among coastal governments to showcase the importance of the CCT and its local benefits including as a

recreational opportunity, an alternative to automobile use, a tourism catalyst, and a factor for increasing land value.

The Commission and Caltrans recognize their leadership roles in promoting the CCT in concert with the Coastal Conservancy and Parks and Recreation. Clearly, planning, implementation and maintenance of the trail require a commitment of vision, time, and resources. A variety of funding options for the CCT are available and multiple sources are often needed to fully fund and operate a trail segment. Broad multi-agency commitment and partnerships are especially important in pursuit of discretionary funding opportunities (grants).

California Coastal Trail Concept

The trail is planned to be along the shoreline as close as is physically and aesthetically feasible. Opportunities to incorporate existing oceanfront trails and paths and support facilities of public shoreline parks and beaches into the CCT network are pursued as much as possible. The CCT takes a variety of forms designed to fit the surrounding environment, level of use, and available land rights over time. Whenever possible, the trail is designed to be ADA accessible and accommodate hiking, biking, and equestrian use. To achieve this, in many areas the trail consists of a braided network of various trail segments. Where it is not feasible to locate the trail along the shoreline due to natural landforms, seasonal impediments (e.g. rivers, nesting shorebirds, etc.), property ownership, concerns about sea level rise, or legally authorized development that prevents passage at all times, nearby inland bypass trail segments are located as close to the shoreline as possible. Where gaps are identified, interim segment alignments are necessary to ensure continuity of the CCT. Interim segments should be noted as such, with provisions that the trail will be realigned as close as possible to its optimum location as opportunities arise. Every effort should be made for interim trail segments to meet as many of the CCT objectives and standards as possible.

Some segments require special attention to overcome obstacles or connect gaps by various means, including incorporating bicycle and pedestrian facilities into bridges or traversing areas of public right-of-way. Except for many bicycle strands, ideal alignment for the CCT is not along the roadway. In locations where it is not possible to avoid siting the trail along a roadway, attempts are made to locate the trail off of the pavement, within the public right-of-way, and separated from traffic by an above- or below-grade safe distance or by physical barriers that do not obstruct, or detract from, the scenic views and visual character of the surroundings. In some cases paved shoulders may be important to accommodate bicycle strands along a roadway. In locations where the trail must cross a roadway, safe under- or over-crossings or other alternative at-grade crossings are considered in connection with appropriate directional and traffic warning signage.

Action Items: Next Steps to Advance Completion of the CCT

The Integrated Planning Team has identified a number of next steps that would advance completion of the CCT. These steps can be grouped into four main categories of work:

1. *Multi-agency actions to further CCT planning.* With the guidance of an interagency Steering Committee consisting of representation from the Coastal Conservancy, Commission, Caltrans, and Parks and Recreation, identify resources to support the Coastal Conservancy to develop an updated plan for completing the CCT statewide.
2. *Actions to better integrate the CCT into Caltrans and Commission planning processes.*
 - A. Provide input to the update of the California RTP Guidelines to more explicitly detail expectations for incorporating CCT provisions into those plans. Include provisions of AB 441 which requires that RTPs ensure promotion of health and health equity, particularly when designing multi-use recreational trails, pedestrian/bike pathways, etc.
 - B. Encourage and support local and regional master planning efforts for the CCT consistent with the CCT Concept (described on page 37).
 - C. Ensure State and Local Transportation Plans, including RTPs, Transportation Concept Reports (TCRs) and District System Management Plans (DSMPs) and local Circulation Elements in the coastal zone, incorporate CCT planning.
 - D. Identify concurrent LCP updates and transportation planning updates to RTPs, TCRs, DSMPs and Sustainable Communities Strategies (SCSs), and promote integration of alternative modes of transportation (including the CCT) [as well as other considerations such as responding to SLR, promoting smart growth and smart mobility (including reductions in vehicle miles traveled and greenhouse gas emissions), and pursuing potential advanced mitigation strategies]
 - E. Ensure that CCT planning is incorporated into LCP updates and amendments. (Commission staff initiated this action item and welcomes supporting partnership efforts to provide guidance and encouragement to local governments).
 - F. Ensure that the pending Caltrans California Bike and Pedestrian Plan recognizes the CCT network and incorporates policies for completion of the CCT.
3. *Interagency actions to promote completion of the CCT.*
 - A. Support coastal counties' inclusion of the CCT as one element of the Complete Streets program.
 - B. Ensure consideration of the CCT in Caltrans Complete Streets compliance for projects in the coastal zone. Complete Streets considerations include the CCT within the coastal zone. Examples include:

- Bridge Replacement projects (at least 9 pending in District 1) – identify both on and off structure CCT connections.
 - Gleason Beach, Hwy 1 Realignment, Sonoma County.
 - Scott Creek Bridge replacement, Santa Cruz County.
 - Hwy 101 HOV project, Santa Barbara County between Carpinteria and Santa Barbara City.
 - Gaviota LCP update.
 - Implementation of the Linden/Casitas interchange and SB 101 HOV project in the City of Carpinteria.
- C. Identify partnerships and opportunities to develop the CCT.
1. Initiation of new highway projects will consider *planned* segments of the CCT near/within the project limits.
 2. Identify funding mechanisms such as sponsorship and partnership funding to support development and construction, and ensure long-term maintenance and management of the trail segments.
- D. Commission staff has initiated research and surveys of local governments' CCT efforts in order to better describe the status of CCT mapping, operation of existing trail segments, planning efforts to complete the gaps, and other related information. Specific data to be collected include any cost estimates for completed new trail planning and construction. Depending upon the results of this initial Commission staff work, further information investigations, in coordination with the Coastal Conservancy and the CCT Association, may be called for.
- E. Work with the Coastal Conservancy to review and update the Coastal Conservancy map data set which currently identifies the “walkable” CCT, and identify gaps and overlap with list of upcoming projects and plans to determine locations where priority CCT work is needed.
- F. Explore options for potential access mitigation in-lieu fee (for both permanent and temporary impacts) and/or banking programs as a means to expand the CCT.
- G. Coastal Commission staff has provided Caltrans staff a GIS data layer that identifies the approximate 1530 existing public access points, to inform pending and future projects regarding public access connections.
- H. Participate in the California State Parks Trails and Greenways Conference 2017, to further the goal of advancing the CCT.
4. *Actions to support the CCT through transportation projects and funding.* Identify strategies to increase funding opportunities, including:
- A. Commission local assistance grants for LCP planning (both updates and complete LCPs).
 - B. Development of new funding sources that prioritize CCT projects and planning.

- C. Active Transportation grants that prioritize CCT projects and planning.
- D. Use of greenhouse gas mitigation funds.

Legislation and Policy in Support of the CCT

Various state laws and agency policies either mandate or support CCT development.

A. Legislative Mandates Related to the CCT

The California Legislature has passed a number of laws that address the CCT.

California's Millennium Legacy Trail (1999)

The CCT was designated California's Millennium Legacy Trail in 1999 by Governor Davis.

Contemporaneously, the White House Millennium Trail Council encouraged federal agencies to assist in developing the system.

Senate Bill 908 (2001)

SB 908 (Chesboro) charged the Coastal Conservancy in 2001 to prepare a plan, in cooperation with the Commission and State Parks Department, describing how to complete the CCT. The Coastal Conservancy submitted this Plan, entitled "Completing the California Coastal Trail," to the Legislature in 2003. It sets forth the goals and objectives of the CCT and includes a blueprint for how to connect missing links. Senate Bill 908 also directed state entities with property interests or regulatory authority in coastal areas to cooperate with the Coastal Conservancy and partner agencies with respect to planning and making lands available for completion of the CCT.

Assembly Concurrent Resolution 20 (2001-2002)

The State Legislature declared the CCT to be an official state trail in Resolution 20 and found that completion of the Trail is an integral part of the State's responsibility to provide public coastal access for all in perpetuity. Recognizing public access to and along the coast of California to be protected under Article X of the California Constitution and the California Coastal Act, the Legislature urged the Commission and Coastal Conservancy to work collaboratively on the completion the trail.

Assembly Bill 1396 (2007)

AB 1396 (Laird) directed the Coastal Conservancy to coordinate development of the CCT in consultation specifically with the Commission, Parks and Recreation, and Caltrans (Public Resources Code 31408). The law states, in part:

(a) The conservancy shall, in consultation with the Department of Parks and Recreation, the California Coastal Commission, and the Department of Transportation, coordinate the development of the California Coastal Trail.

(b) To the extent feasible, and consistent with their individual mandates, each agency, board, department, or commission of the state with property interests or regulatory

authority in coastal areas shall cooperate with the conservancy with respect to planning and making lands available for completion of the trail, including constructing trail links, placing signs, and managing the trail.

The bill also requires each transportation planning agency whose jurisdiction includes a portion of the CCT, or property designated for the trail that is located within the coastal zone, to coordinate with the Coastal Conservancy, the Commission, and Caltrans regarding development of the CCT. To this end, each transportation planning agency is required to include provisions for the CCT in their RTPs (Government Code 65080.1). This mandate includes:

Each transportation planning agency designated under Section 29532 or 29532.1 whose jurisdiction includes a portion of the California Coastal Trail, or property designated for the trail, that is located within the coastal zone, as defined in Section 30103 of the Public Resources Code, shall coordinate with the Coastal Conservancy, the California Coastal Commission, and the Department of Transportation regarding development of the California Coastal Trail, and each transportation planning agency shall include provisions for the California Coastal Trail in its regional plan, under Section 65080.)

In addition, the bill requires Caltrans to provide a list of excess properties on a quarterly basis to specified agencies. One of the implied purposes for this notice is to provide for evaluation for potential use in the completion of the CCT. (Government Code 14012). In part, this directive includes:

(a) The director may sell or lease excess right-of-way parcels to municipalities or other local agencies for public purposes, and may accept as all or part of the consideration for such sale or lease any substantial benefits the state will derive from the municipality or other local agency's undertaking maintenance or landscaping costs that would otherwise be the obligation of the state.

(b) For the purposes of Section 9 of Article 19 of the California Constitution, the department shall notify, on a quarterly basis, the Coastal Conservancy, the Department of Parks and Recreation, the Wildlife Conservation Board, and the Department of Fish and Game of excess property.)

California Coastal Act (1976)

Development of the CCT plays an important role in implementing various policy mandates of the Coastal Act. One of the key Coastal Act policies is the mandate to maximize public access to and along the coast. (30001.5 and 30210). Completion of the CCT supports implementation of this mandate and provides a backbone for connections to inland trails and inland communities. The CCT also provides lower cost recreational opportunities (Coastal Act 30213).

Other key Coastal Act sections that apply to the CCT include Section 30253(4) which encourages minimization of energy consumption and vehicle miles traveled;¹⁷ 30609.5 which states that no state land that is located between the first public road and the sea, with an existing or potential public access way to or from the sea, or that the Commission has formally designated as part of the CCT, shall be transferred or sold by the state to any private entity unless the state retains a permanent property interest in the land adequate to provide public access to or along the sea; and 30402 which directs all state agencies to carry out their duties and responsibilities in conformity with the Coastal Act.

Local Coastal Programs – California Coastal Trail Component

The Coastal Act provides a framework for each local government located in the coastal zone to prepare an LCP to ensure that local government planning programs incorporate Coastal Act policies. An important part of each LCP is a Public Access Component, of which the CCT is a critical element. The Commission staff has prepared guidance to assist local governments in preparing this required plan. The Commission's LCP Update Guide (2013) details what should be included within an LCP to produce a CCT plan. Steps include:

- Include a comprehensive definition of the CCT and ensure that the CCT definition includes that the Trail is a system or network, not one single pathway.
- Identify and map existing segments.
- Identify and map interim trail segments until a more acceptable long-term segment can be constructed; include criteria as to how to accomplish attaining the long-term segment locations.
- In areas where the CCT is difficult to determine, such as locations where there is private property, challenging topography, bodies of water, etc., identify wide corridors to allow for site specific planning as opportunities provide.
- Include specific design standards for various multi-modal activities.
- Identify all trail partners and ensure each effected public agency is aware of the trail and is ready to cooperate in planning and completing the Trail.
- Include acquisition parameters so that future opportunities can be factored in.
- Provide for support facilities such as parking lots, trail head, restrooms, and interpretive signage.
- Coordinate with Caltrans to provide safe Highway crossing, both at grade and at over and under crossings.

While most LCPs have been approved by the Commission, many were prepared decades ago and do not contain the detailed CCT information listed above. One effort that the Commission has undertaken to address deficiencies in these older LCPs is a grant program to assist with LCP updates. Unfortunately

¹⁷ This policy applies to all Caltrans projects, whether or not related to the CCT.

these grant funds are not sufficient to provide comprehensive updates statewide and therefore other supplemental funding opportunities are needed.

B. Caltrans Policies, Programs, and Guidelines that Support CCT Development

Notably, the Caltrans Mission Statement directs the following: Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. In response to several related Legislative mandates to support and expand a multi-modal transportation system for the state, Caltrans has incorporated many laws and published several reports and plans that provide policy language and implementation guidelines for building non-motorized elements into California's overall transportation system. Completion of several CCT segments is just one of the ways that Caltrans has demonstrated its capacity to continue to provide multi-modal opportunities. Related programs, policies, and implementation directives include:

Complete Streets – Integrating the Transportation System (2014)

Deputy Directive DD-64-R2 (2014) establishes a policy within the State Highway System that provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products. This policy document defines the term "Complete Streets" as: a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians and others. The intent is to ensure travelers of all ages and abilities can move safely and efficiently along a network of complete streets, both within rural and urban contexts.

California Complete Streets Implementation Action Plan 2.0 (2014)

The intent of this Action Plan is to describe the current Caltrans Complete Streets policy framework and to provide an overview of Caltrans continued efforts to serve and connect all users of the transportation system. The update lays out the structure for overcoming barriers to further integrate Complete Streets into all Caltrans functions and processes. Action items include:

- Development of a comprehensive Strategic Highway Safety Plan update that incorporates all modes of transportation, including pedestrian and bicycle.
- Development of a Statewide Bicycle and Pedestrian Plan that is inspirational, visionary, goal and performance driven, realistic, and constitutes a strategic policy framework for bicycle and pedestrian transportation in California.

Highway Design Manual

Updated in 2014, the Highway Design Manual facilitates the design of Complete Streets, recognizing that the highway system needs to be multi-modal and that design flexibility may be necessary in order to accomplish the goals of safer and more visually appealing thoroughfares that welcome multiple modes of transportation. Flexible design concepts are to be applied in the full range of projects, from simple

upgrades to new facilities so that cyclists, transit riders, and pedestrians may feel comfortable and secure along all roadway systems.

Right of Way Manual

This document recognizes that, as coastal lands contain unique values, any disposal of these lands, and the receiving local entity of such disposal processes, must take into consideration:

- Provision of beach access.
- Potential for equestrian, pedestrian, and bicycle use.

California Transportation Plan (CTP) 2040

This statewide, long-range transportation plan aims to meet future mobility needs and reduce greenhouse gas emissions by supporting multi modal choices and integrating with land use development. It also recognizes the CCT in the overall framework of meeting these goals.

California Strategic Highway Safety Plan

Federal regulations require that this plan consider the safety for all users of public roads, including pedestrians and bicyclists. The Plan includes strategies to:

- Increase funding for pedestrian safety infrastructure projects.
- Increase pedestrian safety-focused coordination on transportation planning and land use efforts.
- Improve bikeway planning and connectivity so as to encourage more bicycle travel.
- Develop safe, direct and connected routes for bicycling.

Smart Mobility 2010: A Call to Action for the New Decade

This planning guide provides tools and techniques that improve transportation by using six smart mobility principles to achieve sustainable outcomes, including:

- Climate change
- Reduce vehicle miles traveled
- Safe transportation system
- Social equity and environmental justice
- Sustainable communities

Regional Transportation Guidelines (2010)

These guidelines require that all planning agencies whose jurisdictions include a portion of the CCT (or property designated for the CCT) coordinate with specified agencies regarding development of the CCT, and include provisions for the CCT in their Regional Transportation Plans (RTPs). Updates to these guidelines can further articulate needs for this trail system, including:

- Ensuring that RTPs include identification of existing and potential trail network segments and linkages as well as gaps and related coastal access trail needs;
- Identifying CCT accommodation needs for non-motorized modes, including critical linkages to parking, bicycle racks, bathrooms and other support facilities, as well as connections to CCT trailheads;
- Providing adequate separation between any necessary trail alignment near motorized traffic.

AB 441 (Monning) in 2012

This legislation recognized that transportation planning has important implications for the maintenance and promotion of the health of all Californians. Noting that cities, counties, and some metropolitan planning organizations (MPOs) and RTPAs have adopted transportation planning and development models that promote the health and well-being of all residents, this legislation added Section 14522.3 to the Government Code. This Section requires that the next revision of the RTP guidelines requires a summary of the policies, practices, or projects that have been employed by MPOs that promote health and health equity, including projects that implement any Safe Routes to Schools program, multiuse recreational trails, pedestrian and bicyclist pathways, and programs that serve transportation needs in rural communities.

Development of Non-motorized Transportation Facilities (2013): Streets and Highway Code

Section 2380 of the Streets and Highway Codes provides for the establishment of the Active Transportation Program for the purpose of encouraging increased use of active modes of transportation, such as biking and walking. Goals of the grant-funded program include:

- Increase safety and mobility for non-motorized users.
- Advance transportation efforts to reduce greenhouse gas emissions.
- Enhance public health by funding projects eligible for Safe Routes to School Program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

California Bike and Ped Plan (2016)

This first statewide bicycle and pedestrian plan's objective is to improve the quality of life by providing mobility choices and increase accessibility to all modes of transportation. Two notable targets of the overall effort are to triple bicycling and double walking opportunities in California by 2020.

C. California Coastal Trail – Commission and Caltrans Planning Connections

The following is an overview of how CCT should be integrated into the Commission – Caltrans Planning and Project Development Process Connections summarized earlier in this report.

The CCT is a network of public trails for walkers, bikers, equestrians, wheelchair riders and others along the 1200-mile California coastline. It is currently more than half complete. The development of the

entire CCT depends on the coordination of a variety of state, regional, local, and voluntary organizations. Completing and maintaining the CCT is tied to the Caltrans Complete Streets Policy. The following is a summary of that policy:

“The Department provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State Highway System.” - Deputy Directive-64-R2

A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs. [Deputy Directive 64-R2](#),¹⁸ first signed in October 2008, and renewed in October of 2014, directs Caltrans to implement complete streets.

State Planning – CTP and Modal Plans

Statewide plans such as the California Transportation Plan, the Interregional Transportation Strategic Plan, and the California Bicycle and Pedestrian Plan identify policies and goals related to the modes that utilize the CCT. These plans will not likely provide significant guidance on the trail, but the inclusion in these plans shows the trail has value to the transportation system and should be incorporated into more specific planning and project development efforts.

During the development of the CTP and the individual modal plans, it is important to provide input on the value of the entire CCT, along with detailed information on the existing trail and future development plans. General policies related to the bicycle and pedestrian activities should be included in the CTP, which the CCT should be specifically identified in the California Bicycle and Pedestrian Plan and the Interregional Transportation Strategic Plan.

System Planning – DSMPs, TCRs, and CSMPs

The System Planning stage is where a majority of the Complete Streets related elements are identified and linked to specific facilities. At this stage, Caltrans should include the CCT in the DSMPs in coastal Districts and in the TCRs and CSMPs where appropriate (e.g., trail crossings at or along the State Highway System). The CCT should be identified in the DSMPs of coastal Caltrans Districts to highlight its importance. TCRs should include a discussion on segments of the CCT that are within the individual highway corridor limits. Specific attention should be given to segments of the CCT that are or are planned to be within the State right of way.

¹⁸ url: <http://www.dot.ca.gov/transplanning/ocp/complete-streets.html>

During the development of system planning documents, the following information should be provided to or identified by the District:

- Existing and planned segments of the CCT within the respective District.
- Proposed projects that might affect the roadway or corridor CCT planning, location and GIS information, where available.
- CCT planning, location and GIS information, where available.

The District can coordinate with local partners to create a CCT development strategy and the District could identify partnerships between Caltrans and local agencies in reviewing and approving permits to address highway and coastal concerns. These partnerships identified during the planning process should make it easier to incorporate CCT features into appropriate improvement projects.

Project Initiation and Programming

At this stage, long-range plans are refined into specific projects with the goal of them being funded. It is important to consider all projects for Complete Streets related elements. All modes should be appropriately incorporated into all projects. During the development of a PID, the CCT should be considered in the analysis of the project area and included in the appropriate project scope of work. Representatives of the Commission or local partners advocating for the development of the CCT should request to participate on the project development teams for projects on highways that could impact the CCT. Information on existing and planned CCT segments, where appropriate, should be provided to the team to be considered for inclusion in the project's purpose and need statement.

Project Development

Active participation throughout the project development process will help ensure Complete Streets issues, specifically CCT related issues, are addressed by the project development team and important project elements that impact the CCT are included in the final project proposal.

Coastal Commission & Caltrans: Working Together to Build the CCT

Caltrans and Coastal Commission – Strategic Plans

Both Caltrans and the Commission have prepared Strategic Plans to identify goals and objectives for their agencies over the next five years. The Caltrans Strategic Management Plan identifies targets for improving the quality of life by providing mobility choices beyond automobiles; targets include doubling walking and tripling bicycling opportunities by 2020. The Coastal Commission Strategic Plan focuses on maximizing public access to and along the coast through such steps as completing the CCT. A review of these two plans makes it clear that the CCT represents an important opportunity for both the Commission and Caltrans to meet similar goals identified within their strategic plans.

These plans are compared and summarized in Table 1.

Example Projects

The two agencies have collaboratively achieved many important milestones in the goal to expand the CCT and to provide multi-modal opportunities. Just a few examples of ongoing and completed projects include:

Arcata – Eureka 101 Corridor Project: This project will help provide several miles of off-highway CCT connecting two cities in Humboldt County and will ensure safe multi-modal opportunities expected to reduce vehicle use along this busy corridor.

Devil's Slide Trail, Pacifica, San Mateo County: This highway re-alignment project resulted in the relinquishment of 1.3 miles of Highway One, now an extremely popular multi-modal trail serving the greater SF Bay Area. Pending trail connections to the north and south will significantly extend the reach of the CCT in this area.

Piedras Blancas, San Luis Obispo: This approved highway re-alignment project will re-use the former Highway for a multi-modal trail that serves an important new segment of San Simeon State Park.

Ventura 101 Bike/Ped Path: This HOV project includes over 3 miles of a separated bike and pedestrian path adjacent to the ocean and ensures a safe and scenic route for multi-modal users. The project was awarded the Pedestrian/Bicycle Project of the Year by the California Transportation Foundation in 2016.

North Coast Corridor, Hwy 5, San Diego County – Public Works Plan: The approved 27 mile long project includes major highway widening and HOV lanes along with significant trail extensions that will ensure safe connections both north-south parallel to the highway as well as east-west (inland community connections to the sea).

Table 1. Comparison of Caltrans and Coastal Commission Strategic Goals

Caltrans Strategic Management Plan, 2015-2020	Coastal Commission Strategic Plan, 2013-2018
<p>Goal 1: Safety and Health- Provide a safe transportation system for workers and users and promote health through active transportation and reduced pollution in communities</p>	<p>Goal 1: Maximize Public Access and Recreation –Focus support for the CCT and its implementation through inter-agency coordination, LCP planning and ongoing permit reviews where appropriate</p>
<p>Summary: Caltrans objective to promote community health through active transportation and reduced pollution and the Coastal Commission’s objective to expand the coastal trail system through enhance planning and implementation comport with each other and provide several opportunities to work together to reach respective goals within the coastal zone.</p> <ul style="list-style-type: none"> • Improve multimodal and public access opportunities in transportation projects. • Participate in various planning efforts, including: California Transportation Plan 2040, Regional Transportation Plans, Transportation Concept Reports, Corridor System Management Plans, and Local Coastal Programs (LCPs). 	
<p>Goal 3: Sustainability, Livability and Economy –Make long-lasting, smart mobility decisions that improve the environment, support a vibrant economy and build communities, not sprawl</p>	<p>Goal 1: Maximize Public Access and Recreation – Goal 4: Strengthen the LCP Planning Program (especially Objective 4.2- Work with Local Governments to Update LCPs where feasible)</p>
<p>Objective: People –Improve the quality of life for all Californian’s by providing mobility choice, increasing accessibility to all modes of transportation and creating transportation corridors – includes increased bike, pedestrian, and transit travel</p>	<p>Objective 1.4: - Expand the CCT system through enhanced planning and implementation</p>
<p>Summary: Caltrans, the Commission, and other stakeholders have opportunities to work together to improve mobility choices within transportation corridors that support/expand the CCT network and general improve access along the California coast. In addition, the Commission certifies, and local governments implement, LCPs that adhere to Coastal Act policies, many of which align with this and other Caltrans objectives. For example, LCPs have land use policies and zoning ordinances to establish multi-modal transportation capacities, which can lead to smart growth strategies. As the Commission works with local governments to update LCPs, Caltrans has an opportunity to assist in better integrating transportation plans and projects with local land use plans in a way that implement many of Caltrans Strategic Plan sustainability goals and objectives.</p>	

<p>Goal 4: System Performance – Utilize leadership, collaboration, and strategic partnerships to develop an integrated transportation system that provides reliable and accessible mobility</p>	<p>Goal 1: Maximize Public Access and Recreation</p>
<p>Objective: Increase the number of Complete Streets features on State highways that are also local streets in urban, suburban, and small town settings</p>	<p>Objective 1.4: Expand the CCT system through enhanced planning and implementation</p>
<p>Summary: Currently, Caltrans Regional Transportation Guidelines make the connection of the CCT to the Complete Streets program and require the inclusion of provisions for the CCT; responses to this guidance vary along the coast. Caltrans and the Commission could partner with other stakeholders to develop more detailed best practice strategies for including the CCT in RTPs, LCPs, and Complete Streets Programs. Moreover, carefully evaluating the relationship of Caltrans projects in the coastal zone to the CCT and Complete Streets program could substantially advance both Caltrans and the Commission’s goal for innovative, reliable and sustainable multi-modal access.</p>	

Business Practices and Workflow

The IPT identified additional opportunities to improve business practices and workflow. An Elevation Process is discussed below. Other items noted as potential areas for future or ongoing work are:

- Workload Coordination Meetings.
- Shared GIS Layers.
- Catalog of Mutual Training Opportunities.
- Consideration of new opportunities to improve business practices, such as Lean 6-Sigma or Every Day Counts initiatives, to address process-based issues and enhance internal implementation of the coastal and transportation programs

Communication Strategies: Conflict Prevention & Resolution

Objectives

Support collaborative work efforts to address issues consistent with State laws and resolve potential conflicts as early as possible. Minimize unproductive time, costs, and project delays associated with unresolved conflict.

1. Support problem solving at the lowest possible step and minimize the number of conflicts requiring elevation.
2. Identify a path for resolving policy-related conflicts in a timely manner to avoid lengthy disputes and seek positive direction to move forward.

Conflict Prevention

If issues arise amongst Caltrans and Commission staff working on plans and projects in the coastal zone, principles based on clear communication, respectful problem-solving, and commitment to resolution can help minimize conflict. Successful resolution can also speed processes and minimize exposure of both agencies to potential lawsuits.

Principles

The following principles should be applied in the resolution of disputes:

- The successful delivery of context-sensitive, multi-modal transportation plans and projects that ensure protection of resources and public access in the coastal zone are primary goals of both agencies.
- Staff and/or agencies will focus on their common goals rather than differences.
- Win/win solutions to conflicts that are consistent with legal requirements should be sought.
- Timely, open and honest communication is essential to avoid and resolve conflicts
- Decisions should be sought and conflicts should be resolved through staff-to-staff engagement (Step 1 in the elevation process) as much as possible.

Strategies

General strategies for addressing and resolving disputes with external partners include:

- Give appropriate and prompt attention to disputes as they arise to avoid unnecessary escalation of problems.
- Acknowledge the conflict in neutral and non-accusatory terms.
- Identify areas of common ground and shared goals.
- Share collected data/information related to the conflict between parties.

- Attempt to answer any factual questions about the issue from either party.
- Review the applicable regulatory and statutory requirements and standards of review that apply to the situation.
- Listen carefully to each party's concerns and the basis for their position.
- Explore and evaluate alternatives and solutions, including those that may warrant legal exceptions to standard practices.
- Discuss solutions that have been successful in past similar situations.
- Determine if an innovative solution for the present situation can meet the concerns of both parties.
- Consider, as appropriate, engagement of the Commission's Road's Edge Subcommittee for advice on applicable visual policies (see textbox on next page).

Resolution Process

This progressive process seeks resolution at the lowest possible level and aims to prevent conflicts from languishing. If necessary, this process allows for elevation through subsequent steps to achieve final resolution.

Step 1: Resolve staff to staff using the principles outlined for conflict prevention (see above)

Step 2: Caltrans Senior level staff: Commission Senior Planner

Step 3: Caltrans Office Chief : Commission Supervisor + Dispute Notification to Caltrans/DEA Coastal Program Manager and Commission Transportation Program Manager

Step 4: Caltrans Deputy District Director : Commission District Manager

Step 5: Caltrans District Director : Commission District Director

Step 6: Caltrans & Commission District Directors referral to Commission's Road's Edge Committee* for advice relative to visual policy interpretation + dispute notification to Caltrans Director and Commission Exec. Director and/or CalSTA Ex Officio as appropriate

Step 7: Caltrans Director : Commission Executive Director

Step 8: Commission Staff and Executive Director Recommendation to full Commission for hearing -- Caltrans Director/District Director, CalSTA Ex Officio : California Coastal Commission

*Road's Edge Subcommittee

Transportation structures in the coastal zone sometimes present a distinct set of challenges relative to scenic and aesthetic issues, largely because the visual protections established by the Coastal Act reach beyond the structural considerations that have traditionally driven Caltrans' design practices. To help address these challenges, the Commission has appointed a Road's Edge Subcommittee of two members over the years to work with Caltrans and Commission staff in providing visual protection policy input on selected transportation facility features prior to the submission of a coastal development permit application.

The Subcommittee's review normally occurs after the development of substantial information, primarily through the completion of environmental documents and related technical reports, and after Caltrans and Commission staffs have worked together to sort out more basic project considerations such as a full range of alternatives and an analysis of their impacts. Careful attention to Caltrans' Context Sensitive Design principles during this process often can be very valuable. Although the Roads Edge Subcommittee cannot bind any future decision of the Commission, the Commission carefully weighs the Subcommittee's input when projects reach the permit approval stage. The Subcommittee has functioned as a helpful resource for factoring in visual considerations during design review—facilitating collaboration, expanding venues for the sharing of information, and assisting resolution of potential conflict with Coastal Act policies at earlier phases of project development.

Appendix 1. Directors Meeting Summaries

May 2015 Directors Meeting

Meeting Summary:

Directors Meeting: CA Coastal Commission – Caltrans

May 12, 2015, 2:30-4:30 p.m.

Santa Barbara, CA

Identified Opportunities and Priorities for Enhanced Interagency Coordination

Aligning and Understanding respective Planning Processes, Timing and Coordination Prior to Project Development and Implementation

- Broad agreement that coordination is more effective, if initiated during planning phases (i.e., before project initiation), though this is often challenging to accomplish.
- Proposal to develop a small team or task force to identify ways to better integrate various land use and transportation planning processes along the coast.
 - o Suggestion to conduct a “mapping” of Caltrans, Commission, LCPs and regional/metropolitan transportation agency planning processes to identify points of intersection and opportunities for better alignment between plans.
 - o Explore improved programmatic approaches on small routine projects.

Coordinating on Local Coastal Plans (LCP) & Regional Transportation Plan (RTP) updates

- LCPs are amended from time to time due to changing local circumstances; several are currently undergoing comprehensive updates.
 - o The LCP is the primary coastal program planning tool; coordination between Caltrans, the Commission, and local governments is essential during the amendment/update processes and benefits Caltrans Project Delivery by having sustainable regional and state transportation plans represented in revised LCPs. In tandem with these efforts, updates to RTPs should aim to mirror the revised LCP policies.
 - o Priority areas identified for enhanced interagency coordination were the Coastal Trail and addressing sea level rise (SLR) through the LCP planning processes.
 - o The Working Group proposed to identify next steps for these topic areas.

- Completion of the Coastal Trail – Caltrans and the Commission have an obligation to work together to complete the Coastal Trail.
 - The Coastal Trail is more than a single alignment, it is envisioned to be a braided network of trails which support coastal access as well a recreation and mobility trail that runs the length of the California coast.
 - Might be advanced by more thorough planning on a region-by-region basis.
 - Will require coordination with local jurisdiction and other partner agencies and stakeholders, particularly State Parks, Conservancy, and regional transportation agencies.
 - Early coordination and more detailed information would be required to capitalize on a range of funding opportunities such as bond measures, grants, and cost sharing with local jurisdictions.
 - Important to work with local jurisdictions and regional transportation agencies to meet the requirements for including provisions for the Coastal Trail in RTPs.
 - Mapping and information for the Coastal Trail exists in different formats (e.g. Google Earth, ESRI products). There is a need to collate and combine datasets and plans. The Commission's GIS unit houses some of the most complete mapping information about the Coastal Trail. Also, several local jurisdictions, including northern San Diego County and the Monterey Bay area have some more detailed planning for the Coastal Trail in their jurisdictions.

Addressing Sea Level Rise

- Very difficult issue that requires many local, state and federal agencies to work together. Next steps can include building on vulnerability assessments to develop site-specific strategies. Will be important to coordinate Caltrans coastal vulnerability assessment plans with ongoing LCP vulnerability assessments. In addition, first priority should be given to those areas along the State Highway System that are chronically threatened by coastal erosion. Some existing CDP permit conditions already call for looking at long-range options for those areas.

Elevation Process for Conflict Prevention and Resolution

- Line level staff frequently work through difficult issues and impasses.
- Nonetheless, there is a need to develop more specific and formal systems to elevate issues of concern or incompatible strategies to prevent and resolve conflicts when necessary.

Examine Opportunities for Programmatic Analysis and Guidance

- Stewardship of resources and infrastructure.
- Maintenance, emergency repair and other ongoing efforts.
- Improve early coordination strategies for more routine projects.

Drought and Water Use

- Monitoring water use is increasingly important. Public scrutiny of water use is also increasing.
- Important to coordinate on strategies and messages such that water use reductions take place without sacrificing larger goals and missions of the agencies.

Additional Discussion Notes

Chief Deputy Director Ajise – opening comments

The following 5 Caltrans goals offer several opportunities and a framework for continued and expanded interagency coordination:

1. Safety
2. Stewardship
3. System performance
4. Sustainability
5. Organizational Excellence

Caltrans is evolving, and the strategic plans developed every 5 years reflect this evolution. The Caltrans mission statement references “mobility.” Over time this has evolved from a focus primarily on highways, to a multi-modal network of transportation infrastructure and opportunities, especially in light of the State’s goals for reducing greenhouse gases.

- The North Coast Corridor is an example of broader and more comprehensive mobility planning.
- ITSB strategic plan also reflects a broader scope of “mobility.”

Vulnerability Assessments are one example of effective and important coordination. The information gained from these efforts should be built upon for future work on SLR and transportation/access planning.

Director Dr. Lester – opening comments

There is a long history of Caltrans and the Commission cooperating effectively.

- The Interagency agreement has been in place for 15 years.
- Examples of success and award winning projects include Piedras Blancas and the Ventura Hwy 101 expansion.

“Sustainability”

- Both agencies are committed to sustainability. This means different things in different contexts. There are likely several opportunities to gain clarity on sustainability in different contexts.
- Climate change and SLR will require substantial interagency coordination and problem solving.

- Highway 1 is an example of a focal point where both agencies have many shared goals for providing multi-modal access and protecting natural, scenic and cultural resources for residents and tourists alike.

Additional Key Items from Discussion

- Several results, benefits and existing activities under the Caltrans and Commission Interagency Agreement were reviewed and discussed for continuation and enhancement in the upcoming renewal of the Agreement.
- Training for Caltrans staff on Coastal Act and Commission processes are ongoing and have been well received. It is acknowledged there is a desire and need for Commission staff to gain greater understanding of Caltrans processes, funding streams, constraints, etc.
- District Coordination meetings can be refined to be more effective. More specific project information and problem solving, rather than general overviews is the goal. Key to improvements will be giving greater attention to sharing information in advance for productive discussions.
- High Speed Rail and other transit development in, and affecting, the coastal zone will require coordination between both agencies. Roadway infrastructure will likely not be sufficient to accommodate all population increase and travel demand in California's future.
- Both agencies are operating in an environment of increased public scrutiny, including through the use of social media. This raises the bar for interagency coordination and aligned processes, initiatives and messaging.
- Aside from coordination for the sake of planning and project delivery, there is a strong need for diversified funding and cost-sharing with partner agencies and jurisdictions.
- All Directors acknowledged the special status of "sister agencies", and that communication and planning does and should reflect shared public goals.
- Most Caltrans projects are "small budget" projects of less than \$5 million. This has bearing on how Caltrans and the Commission identify and coordinate priority initiatives. This likely points to the need for more programmatic approaches for shared goals such as the Coastal Trail.

In Attendance

Coastal Commission

Dr. Charles Lester, Executive Director
Jack Ainsworth, Senior Deputy Director
Sherilyn Sarb, San Diego and South Coast Director
Alison Dettmer, North Coast and Energy/Ocean Resources Director
Dan Carl, Central and North Central Coast Director
Steve Hudson, South Central Coast and South Coast District Director
Tami Grove, Statewide Development and Transportation Program Manager
Gabe Buhr, San Diego Coastal Program Manager

Caltrans

Kome Ajise, Chief Deputy Director
Charlie Fielder, District 1 Director
Bijan Sartipi, District 4 Director
Tim Gubbins, District 5 Director
Carrie Bowen, District 7 Director
Laurie Berman, District 11 Director
Ryan Chamberlain, District 12 Director
Katrina Pierce, DEA Division Chief
Dale Jones, DEA Office Chief & Ex-officio Member of the Coastal Commission
Scott Williams, DEA Coastal Program Manager

Center for Collaborative Policy

Caelan McGee, Senior Mediator

October 2016 Directors Meeting

Meeting Summary

Directors Meeting: Caltrans & California Coastal Commission

October 25, 2016, 1:00 – 4:30 p.m.

Caltrans Building, Parkview Room, 15th floor

111 Grand Avenue, Oakland

Timeline & Next Steps

Directors requested that the Integrated Planning Team (IPT) finalize the report (“Plan for Improved Agency Partnering”) before the end of 2016. Based on that request, the IPT puts forth the following timeline:

- 1) The IPT will address the Directors’ comments and circulate a new draft of the Plan by Thursday, November 10.
- 2) Vetting of the new draft by Friday December 2.
- 3) IPT will finalize the report by Thursday December 15.
- 4) Briefings to Commissions (Caltrans and CCC) by Directors in early 2017.
- 5) In-person Directors Meeting in early Spring 2017.

Meeting Goals

The IPT has been working since Fall 2015 on a plan (Plan for Improved Agency Partnering) to improve communication, coordination, and partnering between Caltrans and the California Coastal Commission. The goals of this meeting were to:

- Review and discuss the IPT’s progress, products, and recommendations.
- Determine next steps to finalize the work product and advance its recommendations.

Meeting Outcomes & Action Items

This section identifies the key conclusions and action items from the meeting. A Detailed Discussion Summary is provided below.

A. Integrated Planning Framework

Key Conclusions:

- The Integrated Planning Framework is much needed and will be a valuable tool.
- In the meantime there is a need to “walk and chew gum,” i.e., continue moving projects forward while improving the process in the long term.

Actions: **Scott Sauer** and **Madeline Cavalieri** will address Directors requested changes and continue to serve as champions for this chapter:

- Short-term changes:
 - Expand on the connection of local and regional planning efforts.
 - Include a graphic and checklists on RTP and LCP processes.
 - Reference connections to LRTPs.
 - Address the phases of project delivery. Attach or append “How CT Builds Projects.”
- Longer term:
 - Prioritize inputs/outputs to guide where to focus efforts for the best results.
 - Elaborate on the mechanics of how staff from the two agencies work together to use this framework.

B. Sea Level Rise

Key conclusions:

- IPT should continue to serve as the group to forward this issue, with appropriate representation of all Caltrans coastal Districts and expertise called in when needed.
- More discussion is needed on:
 - Where to provide more technical guidance on SLR to Caltrans staff.
 - Appropriate levels of consideration for project types in light of best available information and funding constraints.

Actions: **Madeline Cavalieri** and **Stefan Galvez** will make any needed refinements to and continue to serve as champions for this chapter.

C. California Coastal Trail (CCT)

Key conclusions:

- Directors expressed support for master planning and route adoption for the Trail.
- There is need for more discussion on funding including exploration of creative funding sources and partnerships.
 - Consider a sub-group to explore CCT funding opportunities.

Actions: **Linda Locklin** and **Aileen Loe** will make any needed refinements to and continue to serve as champions for this chapter.

D. Conflict Prevention and Resolution

Key conclusions:

- The Elevation Process is a one of the most important tools that the agencies need.

- Directors also expressed support for the Partnership Agreement.

Actions: **Tami Grove** and **Scott Williams** will address Directors requested changes and continue to serve as champions for this chapter.

- Add information and clarity about the Road's Edge Committee and its role.
- Add clearer guidance on timing in the conflict resolution process. How long does each step take? (Should be weeks, not months.)
- Consider asking the disputing parties to write a joint paper summarizing positions. (Reference to the USFWS-Caltrans agreement via the Udall Center.)
- For Caltrans, clarify involvement of Department Director or District Director ("DD").
- Describe applicability of the process (i.e., to all interagency activities or just permitting decisions.)

E. Special Initiatives

- **Center for Collaborative Policy** will schedule a call with Directors and the IPT about Special Initiatives status and priorities. Specifically, some Directors requested this meeting as an opportunity to prioritize scarce staff time to work on those special initiatives including under the Interagency Agreement.

Detailed Discussion Summary

Opening

Jack Ainsworth, interim Executive Director of the Commission, provided opening comments emphasizing the Commission's commitment to the partnership with Caltrans and supporting implementation of the IPT's recommendations and framework. He reiterated the importance of developing an integrated planning framework and improving coordination on sea level rise (SLR) and the California Coastal Trail (CCT). He acknowledged existing tensions and the commitment and engagement of staff in this effort.

Kome Ajise, Chief Deputy Director of Caltrans, provided opening comment emphasizing the agencies overlapping commitment to the public as stewards of resources. Caltrans has been considering its work in a broader context, of how its mission serves the economy and livability of California and how its work can enhance related resources. Coastal resources and access is part of that. At the same time, Caltrans wants to optimize its limited resources.

Caelan McGee, Senior Mediator with the Center for Collaborative Policy, provided an overview of the IPT genesis and focus over the past year. Based on the direction provided by the Directors in May 2015, the IPT has focused on:

- **Integrated Planning Framework:** A framework for improving coordination between the agencies in planning phases, by mapping the different planning processes and how to better align them.

- How to more effectively address SLR in Caltrans planning, including by focusing on both advance planning and project planning (and within project planning, creating different processes for minor and major projects).
- How to more effectively collaborate on the California Coastal Trail.
- A process for conflict prevention and resolution between the agencies.
- A portfolio of special initiatives that provide opportunities to improve and streamline coordination.
- A partnership agreement that would serve as an official adoption of the IPT's package of recommendations and commitment to act on it.

A. Integrated Planning Framework

IPT members Scott Sauer and Madeline Cavalieri provided a brief overview of the Integrated Planning Framework. They noted the huge value to both agencies in understanding one another's processes and opening the "black box" of Caltrans planning processes.

Directors offered the following thoughts and requests:

- The connection of local and regional planning efforts is also important (LCPs, RTPs, etc.).
 - Include a graphic and checklists on the RTP process and LCP processes.
 - Include a note about the connection to long range transportation plans (LRTPs) (which counties produce and that feed into the RTPs). Caltrans districts should share review drafts with the Commission. Also the framework should include a note about participation in, and the types of activities covered by, ballot measures to fund the LRTPs.
- The framework could better address the different phases within project delivery, particularly key decision intersections, perhaps in an attachment.
 - Include "How CT Builds Projects" as an attachment or appendix.
- Request to elaborate on the mechanics of how staff from the two agencies make these connections during planning efforts.
 - Biannual district coordination meetings is one mechanism, but there should be others.
 - Mutual training is an opportunity to build connections, including for new incoming staff.
- It will take significant staff time for Commission staff to participate meaningfully through these different layers of planning. Right now the Commission struggles with just reviewing projects.
- Request to prioritize the inputs/outputs and identify where we would get the most bang for the buck. There is limited ability to act on all of them.
- This is an ongoing process. We are building the integrated planning framework at the same time as dealing with current projects and working through issues on those. We must do both.
 - Participants stressed the importance of "walking and chewing gum:" moving forward existing projects while improving the process in the long term.

- Emergency Repair projects are a separate distinct category of projects that do not come out of any planning process and that Caltrans needs to act on very quickly.

B. Sea Level Rise (SLR)

IPT members Madeline Cavalieri and Stefan Galvez provided a brief overview of the IPT's SLR recommendations. Recommendations inform both planning and project levels, including how Caltrans should address SLR for major versus minor projects (e.g., a simple screen for minor projects). IPT members discussed the value of, and need for, vulnerability assessments. They noted the need to update Caltrans guidance documents with more specific information on addressing SLR.

- Directors acknowledged the need for updated guidance.
 - Updating existing manuals (such as the Highway Design Manual) is not necessarily the answer because Climate Change/SLR affects the transportation system at a much bigger scale.
 - Concern that formal guidance will lead to over-analysis and detailed reports beyond what is needed.
 - We can look at projects through the risk lens, i.e. a rumble strip poses no risk for sea level rise.
- The Commission can help serve as a bridge for data sharing and Caltrans involvement with many local and regional adaptation efforts, including those in San Diego and LA.
- Moving forward, Directors suggested:
 - The IPT is the right group to continue advancing this work. IPT can bring in additional expertise on the topic as needed.
 - We should use specific examples from our ongoing work as case studies to learn from.
 - Much of finding our way to meet climate change challenges comes down to trust.
- There are not enough resources to do everything. Both agencies acknowledge this.
 - Existing resources should focus on long range planning and major investment. Particularly for those, SLR must become part of how Caltrans does business.
 - For smaller projects: How to prioritize and come to understanding on projects where there are not resources to address SLR (especially small, short-lifetime projects, e.g. 10-20 years). More discussion is needed.
- Funding is the big challenge. This is an expensive problem and the decision-makers have not fully acknowledged what it will take.
- It would require significant new resources from the state to address the statewide risk to infrastructure, similar to resources provided for the seismic retrofit program of the 1990s. For SLR we currently lack awareness and resources. (Seismic retrofit program in the early 1990s was funded by large bond measure).

C. California Coastal Trail (CCT)

IPT members Linda Locklin and Aileen Loe provided a brief overview of the IPT’s recommendations regarding the CCT. They noted that the trail comprises multiple strands and a patchwork of jurisdictional responsibilities; partnerships are critical particularly in the context of declining funds for the State Coastal Conservancy as lead agency. Major challenges include funding, particularly in rural areas, and lack of a statewide plan (though many local jurisdictions have completed plans, and mapping efforts are underway for the whole state). They noted that Caltrans Complete Streets and multi-modal programs align well with CCT development.

Directors offered the following thoughts and requests:

- There was acknowledgement of the tension over this issue.
 - The agencies have sometimes conflicted over this issue, particularly when the CCT relationships to transportation projects were not addressed early in the process.
 - The CCT aligns with Caltrans mission of accessibility. The question is how to translate that into individual plans and projects and how to develop a basis for how the agencies interact with regard to the CCT.
 - Commission attendees reiterated the importance of the CCT to their mission.
- Planning and route adoption:
 - Commission attendees expressed support for the idea of Master Planning that could support a “route adoption” and the idea that Caltrans should look at the CCT (as part of a checkoff list) for every project.
 - There was discussion of the value of master planning, including local/regional scale plans by local partners that detail alignments and provide foundation for future coordination on individual trail segments when projects may align.
- SHOPP:
 - CCT consideration as part of Complete Streets compliance on the SHOPP may range from “incorporation” (built as part of a project) to “facilitation” (land or money to a trail sponsor to implement) to “not preclude” (project would not impede future trail implementation).
 - Due to lack of ability to absorb more costs into SHOPP, it is not realistic to fund the CCT through SHOPP.
- Funding: Chief Deputy Director Ajise suggested the group work on new funding given the limitations of SHOPP funding. A subgroup could explore and make recommendations on funding opportunities:
 - ATP program.
 - Local partners and grant programs.
 - Caltrans planning grants.
 - Local ballot initiatives, which often address bike and pedestrian improvements.
 - Funding through agencies/groups that support coastal/California tourism.

- Local champions (e.g. ABAG championed the Bay Trail).
- Partnerships:
 - LCP updates provide a key opportunity for partners to work together on the CCT.
 - Better maps can help identify low-hanging-fruit opportunities.
- Mindset and willingness make a difference moving forward: agencies can build the partnership and trust by doing the work together.

D. Conflict Prevention and Resolution

IPT members Scott Williams and Tami Grove provided an overview of the IPT's recommendations for principles and a process for conflict prevention and resolution. The goal is to prevent conflicts through clear communication and respectful problem-solving and to resolve conflicts at the lowest possible step. The purpose of the Partnership Agreement is provide a pathway for the IPT's recommendations to be acted on by the agencies and supported by leadership.

Directors offered the following thoughts and requests:

- Directors identified the Elevation Process as one of the most important tools the agencies need.
 - This is a key need to overcome wheel-spinning and loss of staff time and resources.
- Working together:
 - The more we can team up together, early on, the better. Where possible, speak as one voice to the Commission.
 - Working together better will result in less litigation of our projects.
- The Road's Edge Committee is a good resource for staff, not just when issues are elevated.
- Requested improvements to the IPT recommendations:
 - Add information and clarity about the Road's Edge Committee and its role.
 - Clearer guidance on timing in the conflict resolution process. How long does each step take? We should not be at Step 1 for two years. Suggestion of two-four weeks; it is important to resolve issues and move forward quickly.
 - Consider whether it would be worthwhile to require the disputing parties to write a joint paper summarizing the positions. This can enable resolution and serves as documentation as the issue moves through the steps. (Reference to the USFWS-Caltrans agreement via the Udall Center.)
 - Clarify who "DD" is. District Director? Department Director? It may depend on the issue and whether decision authority rests with the District or Department.
 - Is there a different process for plans versus projects?
- Many expressed support for the Partnership Agreement and continued work of the IPT.
- Agreement with the idea of showcasing this effort to the Commissions to show both agencies' commitment and interaction to resolve the challenges.

E. Special Initiatives

- Generally the Directors are supportive that the IPT continue to seek out programmatic and other opportunities to improve and streamline the agencies' work together.
- There is generally support of the items on this list and desire for more development, but not necessarily before completion of the document before the end of 2016.
- Therefore Directors requested that special initiatives be moved to an Appendix so that the IPT can complete the document on schedule without finalization of the special initiatives.
- During the meeting it was acknowledged that several of these initiatives are underway under the Interagency Agreement. Several Directors indicated that they would like for a subgroup to be called whereby the IPT can update interested Directors and staff on the progress of ongoing initiatives and Directors can prioritize and direct staff work. CCP will schedule this call.
- The IPT and Directors have yet to identify a specific mechanism for prioritizing and moving these initiatives forward; this can be addressed by the IPT going forward as it was determined that the IPT should continue to meet, with direction and guidance from Directors.

F. Discussion of Next Steps

- Goal: finalize report by the end of the year.
 - IPT should take two weeks to incorporate changes discussed today into new draft.
 - Directors and their deputies should then review for 2-3 weeks.
 - Focus on what's missing, what needs refinement?
 - IPT incorporate changes and finalize by end of year.
- The goal is not a perfect product; IPT work will continue.

Appendix 2. Portfolio of Special Initiatives for Improved Interagency Partnering

A number of issues and challenges often arise during planning and permitting processes for the complex myriad of transportation projects in the coastal zone. These can range from designing construction projects to avoid barotraumas impacts on sensitive species to creating adequate methodologies for evaluating aesthetic considerations. In this Appendix, the IPT identifies a suite of special initiatives that would benefit from further coordination and have the potential to create programmatic approaches that can assist both agencies in addressing a number of current and recurring issue areas.

These initiatives are in various stages. For example, some are underway through the Interagency Agreement. Some are ideas for additional exploration. The IPT and the Directors agreed to continue to review these special initiatives going forward.

The initiatives reflect additional near- and long-term partnering opportunities for both agencies to streamline processes, expand information sharing, and improve project development and evaluations. Staffs are already working to address many of these issues at the individual project scale as part of the coordinated work that the agencies are doing under the Interagency Agreement. This work has often raised interest in expanding the lessons learned to other projects or Districts. The initiatives in this Appendix are intended to build upon those lessons learned. The work associated with developing these initiatives has included several surveys of Districts and follow-up meetings to better understand needs and the potential benefits of sharing how related obstacle were overcome.

In 2015, all Caltrans and Commission District Directors met to discuss strengthening their partnership and continuing to find ways to coordinate on projects to meet the common goals of each agency. The Directors identified working in more concerted ways to address SLR and issues surrounding the CCT as important focus areas (addressed earlier in this report). They also suggested other topics that might benefit from programmatic approaches rather than project-by-project treatment. Accordingly, many of the initiatives outlined in this document grew out of those suggestions and intersect with some of the common goals of the agencies.

For example, Caltrans Strategic Plan Goal 4 (System Performance) includes an objective to work with partners early in project development processes to identify community, environmental, and aesthetic considerations and build them more efficiently into designs. Similarly, Goal 4 in the Commission's Strategic Plan (Strengthen LCP Planning Program) includes an objective to improve communication and coordination with other state agencies on relevant policy issues related to the Commission's regulatory and planning work.

While not an exhaustive list, the initiatives in this portfolio focus on many areas of concern relative to Caltrans projects as well as those that are ripe for coordination given the sizable amount of new scientific information that can be beneficial to both agencies. It is expected that other fertile areas for successful programmatic approaches will become apparent as the work continues. The remainder of this chapter further describes these initiatives, detailing objectives, purpose/problem statements, goals/objectives, status of work done to date, anticipated level of effort, and recommended next steps.

- Improve Understanding and Implementation of Maintenance and Repair Exclusions.
- Address Acoustic Impacts to Fish and Other Aquatic/Sensitive Species (Hydroacoustic Trauma).
- Engage in Beneficial Sediment Disposal/Management Interagency Efforts.
- Continue to Develop Bridge Rails/Roadside Safety Barriers for the coastal zone.
- Promote Implementation of Fish Passage Improvements.
- Consider Structural Designs to Address Impacts to Avian and Other Sensitive Species.
- Subtopic a: Bird Strikes.
- Subtopic b: Lighting.
- Confer on Appropriate Bridge Shoulder Widths.
- Explore Improved Methodologies for Aesthetic Evaluations.
- Provide for Native Species and Invasives Control in Landscaping Plans.

Initiative 1. Improve Understanding and Implementation of Maintenance and Repair Exclusions

The Commission adopted guidelines under its regulations in 1978 to detail the types of development activities that are considered to be repair, maintenance, or utility hook-up activities that may qualify for exclusions from permit requirements. Caltrans staff have expressed a desire for additional clarity regarding the scope of these regulatory requirements and the process for making exclusion determinations of maintenance and repair projects. Commission staff agrees that a clearer, shared understanding of the exclusion provisions, and their application, could benefit both agencies and create useful time savings. Under this initiative, Commission and Caltrans staff will work to improve interagency communication on this subject, develop simplified guidance regarding the repair and maintenance guidelines and prepare a process flow chart for coordinating determinations.

Objective

Improve understanding of the key tests to be met in the Commission's regulations and the 1978 Repair and Maintenance Guidelines in order to qualify for CDP exclusions, and develop a general flowchart to clarify interagency coordination expectations in making exclusion determinations.

Purpose/Problem Statement

Coordination on repair and maintenance projects between Caltrans and Commission staff occurs in different ways in each District. Both agencies could benefit from a clearer process for notification procedures and/or consultation for repair and maintenance projects to ensure that the exclusions are properly implemented, specific to any particular circumstances within individual Districts. This initiative would entail surveying the Districts to understand how each handle requirements for repair and maintenance projects and, depending on findings, preparing guidance, such as a flowchart, to outline key points of coordination and guiding criteria to improve understanding and the application of the exclusion provisions.

Goals/Desired Outcome

- Improved, timelier coordination between Caltrans and Commission staff on highway repair and maintenance activities.
- Mutual interagency understanding of the applicability of repair and maintenance exclusions from coastal permitting requirements for certain projects and activities necessary to maintain the State Highway System.

Level of Effort

Efforts have already been completed in some Districts to prepare notification/contact list for emergency projects. The preparation of the flow chart would be a relatively simple expansion of this effort to guide processes for determining repair projects that might qualify for permitting exclusions, with clear references to key regulatory and guideline provisions for making such determinations

Recommended Next Steps

- Step 1: Caltrans and Commission staff gather information from District staff from both agencies on protocols/process for maintenance notification and activities.
- Step 2: The Commission convenes a meeting with Caltrans to discuss notification protocols and ideas for streamlining amongst all Districts; discuss ideas for a draft flowchart that would be acceptable amongst all Districts
- Step 3: Prepare flowchart and share with Commission and Caltrans District staff for feedback.
- Step 4: Evaluate if any additional steps should be taken to improve the ability of qualifying maintenance and repair projects to be quickly identified and cleared of permit requirements.

Initiative 2. Address Acoustic Impacts to Fish and Other Aquatic and Sensitive Species (Hydroacoustic Trauma)

Construction-related activities can have negative impacts on marine species. Particularly, in-water sound and pressure waves can result in injurious and behavioral effects on fisheries and marine mammals. Hydroacoustic impacts thresholds for fisheries have been established by the [Fisheries Hydroacoustics Working Group \(FHWG\)](#).¹⁹

In addition, the Office of Protected Resources (OPR), of the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), regulates and establishes sound thresholds likely to cause impacts to marine mammals. Recently, NOAA OPR established interim sound pressure levels to be used when developing temporary (TTS) and permanent (PTS) threshold shift criteria, and assessing injury and behavioral impacts to marine mammals as a result of a wide range of underwater anthropogenic sounds, including from pile driving and use of explosives (See [NOAA's Marine Mammal Acoustic Technical Guidance](#),²⁰ which is intended for use by NOAA analysts and managers, other federal agencies, and other relevant user groups and stakeholders to better predict how a marine mammal's hearing will respond to sound exposure.) Caltrans utilizes the FHWG and NMFS/NOAA thresholds to analyze acoustic impacts to fish and aquatic species in environmental documents.

Objective

Under this initiative, Caltrans and other relevant resource agency staff will review information with Commission staff to improve mutual understanding of the fisheries and marine mammal thresholds and explore how they may be integrated into the Commission's regulatory reviews. One aspect of this work will be to consider Commission participation in the FHWG. Another aspect will be to educate Commission staff about the array of pile driving techniques (or alternatives to pile driving) available to Caltrans and their track record relative to impacts.

Purpose / Problem Statement

Fish and marine mammal species can sustain physical injuries and behavioral effects from sound generated by a number of construction activities (i.e. pile driving, drilling, blasts, etc.). Sound thresholds have been established to better define and quantify potential impacts to these species. On June 12, 2008, the Fisheries Hydroacoustics Working Group, composed by NMFS/NOAA, CDFW, USFWS, the Federal Highway Administration, and the Departments of Transportation for the States of Washington,

¹⁹ url: http://www.dot.ca.gov/hq/env/bio/files/fhwgcriteria_agree.pdf

²⁰ url: <http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm>

Oregon and California adopted an agreement in principle for interim criteria for the onset of injury to fish from pile driving activities.

Caltrans Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish (Caltrans Technical Guidance) (2009) provides a thorough discussion of this issue, including detailed definitions of terminology and measurement metrics.

The Commission is not a participant agency of the FHWG and could benefit from understanding the scientific research underpinning interim thresholds for fisheries for pile driving and NOAA's hydroacoustic thresholds for marine mammals. In addition, Commission staff are interested in learning more about seismic survey blasts that are sometimes part of Caltrans geotechnical surveys. More information on procedures and standards for minimizing or avoiding the impacts of explosions would be very helpful.

Goals / Desired Outcomes

- Educate Commission staff about the work of the Hydroacoustic Working Group and the scientific research Caltrans uses to analyze impacts to fish and aquatic species.
- Assist Commission staff in understanding how this research and best available science can assist them in reviewing CDP applications.
- Provide clearer guidance and expectations for Caltrans staff when filing permit applications and analyzing applications for permitting and FCCs.
- Inform Commission staff about pile driving techniques and other related construction alternatives as well as the body of research that has been done (or may need to be done) on these techniques

Status

No discussions on this topic have been convened by Caltrans and the Commission.

Level of Effort

Given the number of scientific papers written and various research projects undertaken on this subject, as well as the high level of involvement by partner federal and state agencies with regulatory responsibilities for the protection of fisheries and marine mammals, the level of effort to accomplish this goal is expected to be low to moderate.

Recommended Next Steps

- Step 1: Schedule conference call with Caltrans and Commission staff to scope out agenda for working session meeting, list/assign advance background information that needs to be gathered, and identify desired participants.

- Step 2: Convene follow-up working meeting with appropriate Caltrans and Commission staff, and other resource agencies as appropriate (including NOAA, CDFW, USFWS, for example) to foster mutual understanding of science, avoid unnecessary redundancy of effort and discuss steps for improving integration into Commission planning and regulatory processes.
- Step 3: Discuss if it would be beneficial to expand this effort to address potential bioacoustic impacts from Caltrans construction activities on terrestrial species.

Initiative 3: Engage in Beneficial Sediment Disposal/Management Interagency Efforts

The beneficial reuse of clean and appropriate sediments for beach replenishment activities is of increasing interest as California grapples with its loss of beaches, particularly in light of SLR. Development in California has significantly changed natural sediment supply and transport patterns (e.g., dams, channelized rivers, seawalls, etc.), with the result that some coastal areas (e.g., beaches) are narrowing due to reduced sediment supply, while others (e.g., wetlands, ports & harbors) are being impacted with excess sediment. Facilitating beneficial use of clean sediment from inundated locations at areas experiencing severe erosion is of increasing interest.

Sediment is an integral component of the coastal ecosystem, representing a public good that must be managed to provide for quality of life, natural resource protection, and economic sustainability. Sediment imbalances resulting from alteration of the natural environment therefore threaten the viability of the public good and require management to restore the natural balance. Coordinated beneficial use of sediment resources within a regional context augments natural processes while simultaneously addressing sediment imbalances.

Caltrans is often identified as an important stakeholder to participate in statewide efforts to address these imbalances, in part because of its frequent needs to dispose of clean material that might support beach replenishment (from construction projects, landslides and other activities) as well as because of the benefits that might accrue to its highway facilities from the nourishment of healthy beaches. One suggestion under this initiative is to develop a pilot project in Caltrans District 7 along the PCH where they have expressed interest in a programmatic approach for beneficially disposing clean landslide materials in a manner that might replicate natural processes and feed sediment-starved beaches. Relative to potential to benefits protection of highway facilities from other nourishment activities, the Surfer's Beach project in District 4/San Mateo County (a rock revetment confronting severe erosion impacts) can serve as a classroom for Caltrans and the Commission to evaluate various aspects of sediment disposal and management to determine if similar interagency strategies might be desirable/replicable elsewhere along the coast. Additionally, this initiative provides an opportunity for Caltrans and the Commission to explore other efforts being conducted as part of the Coastal Sediment Management Working Group and opportunities for participation and/or partnership.

Objective

Outline a potential pilot project for a beneficial reuse/ landslide disposal program along the Ventura/Malibu PCH. Explore if similar options might be available/desirable in other parts of the State. Initiate discussions with the Coastal Sediment Management Working Group to better understand the

role that they have envisioned for Caltrans to play in the implementation of regional sediment management plans along California's coast.

Purpose/Problem Statement

The purpose of this initiative is to determine what can be learned by evaluating and perusing beneficial sediment disposal and management projects that might support implementation of the State's sediment management plans consistent with the Coastal Act.

Goals/Desired Outcomes

- Identify areas where ongoing Caltrans activities might be linked to coastal sediment management efforts in cost effective and mutually-beneficial way.

Level of Effort

Confined to initial investigations, this initiative is anticipated to require a light to moderate level of effort.

Recommended Next Steps

- Step 1: Convene meeting with Caltrans and Commission staff to investigate opportunities and requirements for developing a pilot project along the Malibu/Ventura PCH where a programmatic approach to beneficially disposing clean landslide materials might be tested.
- Step 2: Review regional Sediment Management Plans.
- Step 3: Discuss desirability of Caltrans playing a role in the statewide Coastal Sediment Management Group and what that participation might involve.

Initiative 4. Continue to Develop Bridge Rails/Roadside Safety Barriers for the Coastal Zone

In designing projects, Caltrans is guided by a rigorous and comprehensive body of specifications set forth in the Highway Design Manual, which is supplemented by an array of documents published by the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA). The Commission's review of plans and development proposals is guided by the provisions set forth in the California Coastal Act of 1976 (Coastal Act), which are implemented through the Commission's planning and regulatory programs. Local government review of transportation projects in the coastal zone is guided by the pertinent Commission-certified LCP policies, together with the public coastal access policies of the Coastal Act.

Bridge railings and barriers in the coastal zone have presented a distinct set of challenges, largely because the visual protections established by the Coastal Act reach beyond the structural considerations that have traditionally driven Caltrans design practices. To help address these challenges, the Commission appointed a Road's Edge Subcommittee of two members to work with Caltrans and Commission staff in providing input on selected bridge railings and related features prior to the permit approval stage. Additionally, Caltrans and the Commission developed a document titled "Bridge Rails and Barriers – A Reference Guide for Transportation Projects in the Coastal Zone." The Guide is intended to help designers and other stakeholders better understand options available for potentially successful application of bridge and railing designs. New federal guidelines may be rendering some of those agreed-upon see-through railing designs obsolete. New discussions are necessary to ensure that bridge and highway railings will continue to be designed consistent with Coastal Act policies.

In addition, Caltrans use of the standard metal beam guard rail as a safety barrier along highways has become a component of much of background character of State highways; however, guidance from AASHTO is currently directing the use of Midwest Guard Rail System instead. Midwest Guard Rail Systems are taller/higher than standard metal beam guard rails, and the Commission and local governments with LCPs have expressed serious reservations about the potential view blockage and visual impacts that could result from the blanket application of the Midwest Guard Rails throughout the coastal zone.

Objective

Hold a series of meetings between Caltrans and Commission staff to share information regarding the new railing requirements and Caltrans plans for potential adaptations in the coastal zone. From these discussions, determine how the Bridge Rails and Barriers Guide be updated and/or if a new/expanded reference document needs to be development.

Purpose/Problem Statement

Roadside safety barriers serve an extremely important purpose along state highways; however, the height of the barriers can create visual impacts in the coastal zone and concern by Commission staff over inconsistency with the Coastal Act. There are areas throughout the state where safety barrier heights have raised concern and, for the Commission, have the potential to create a visual impact. In Ventura County, stakeholders have prepared and presented information at a Commission hearing regarding impacts to scenic viewsheds along Highway 1 from the installation of taller safety barriers. The wildfire in Big Sur that began in July 2016 has caused significant environmental damage. During storm season, there is concern about potential erosion and lots of fire-damaged acreage to stabilize.

Goals/Desired Outcomes

Review successful bridge rail guidance and address new ASHTO requirements for railing height increases.

Level of Effort

As much of this work has been addressed, the level of effort for this initiative is considered moderate.

Recommended Next Steps

- Step 1: Add bridge rails/roadside safety barriers as standing item on Caltrans/Commission bi-annual workload coordination meeting agendas.
- Step 2: Caltrans staff work with Structural Design group to review safety barriers in the coastal zone and discuss presenting that information to the Roads Edge Subcommittee.
- Step 3: Hold Roads Edge Subcommittee meeting to review new ASHTO requirements and designs and what that means for Caltrans designers. Get feedback from Roads Edge Subcommittee on new designs.
- Update bridge rails/safety barriers design best practices document and distribute to Commission and Caltrans District staff.

Initiative 5. Promote Implementation of Fish Passage Improvements

Fish passage through highway crossings of rivers and streams along the Caltrans highway system is one of the agency's priority environmental stewardship commitments. Caltrans has developed design standards for removing and rehabilitating fish passage areas damaged or cut off by historical road crossings as well as for ensuring that new projects fully take into account fish passage issues. In addition, Caltrans has extensively interacted with interagency work groups to conduct detailed inventories, help secure funding partnerships and prioritize project sites. Concerns over potential permitting obstacles to these efforts have been expressed by Caltrans. Commission staff is interested in looking at programmatic approaches with Caltrans to avoid unnecessary regulatory complications and help facilitate installation of beneficial fish passage projects consistent with Coastal Act policies.

Objective

Develop programmatic approaches for processing CDP applications for Caltrans projects with fish passage elements to help foster restoration efforts.

Purpose/Problem Statement

Caltrans and the Commission would benefit from a discussion of Caltrans fish passage design standards and the Coastal Act requirements relative to such habitat protections and restorations. Both agencies support these efforts and desire to correct any misconceptions about the design approach and required permitting processes for fish passage projects.

Goals / Desired Outcomes

- Improve understanding of Commission staff about Caltrans fish passage design standards
- Improve Caltrans understanding of coastal permitting requirements for fish passage projects
- Explore programmatic approach for processing CDP applications
- Develop guidance, information fact sheets, CDP filing check lists or other tools for both agencies

Level of Effort

The level of effort associated with this initiative is expected to be light to moderate, due to the wealth of background information that has been developed and the time requirements for adequate coordination amongst the two agencies' and biology and other technical staff.

Recommended Next Steps

- Step 1: Caltrans staff meet with Caltrans biologists to understand how they are addressing fish passage and what coordination has taken place between Caltrans and other agencies (California Department of Fish and Wildlife, U.S. Fish and Wildlife Service).
- Step 2: Share information about prioritized fish passage projects in the coastal zone.
- Step 3: Caltrans facilitate a meeting with Commission staff and biologists to share how Caltrans has worked with other agencies on fish passage and discuss if a programmatic approach could be appropriate, or understand from the Commission's perspective what would be agreeable and sufficient to the Commission regarding fish passage design standards. Discuss broader scope of issues to be considered in fish passage projects, such as ESHA and wetlands.
- Step 4: Document Caltrans and Commission conclusions from these efforts and provide programmatic guidance for processing fish passage in projects.

Initiative 6. Consider Structural Designs to Address Impacts to Avian and Other Sensitive Species

Avian and other sensitive species can be negatively affected by a number of man-made structures and associated features. Lighting, wires, panels, and poles, among others, can result in disorientation, exhaustion, or bird strikes. These potential issues may not be identified early in the project delivery process and can result in the need for further studies and design modifications late in the project delivery process.

Objective

Share findings gleaned from scientific literature and related background research and develop a common understanding by Caltrans and Commission staff regarding considerations for avoiding and minimizing impacts to birds and other sensitive species from structures built in the coastal zone. Consult with other state and federal resource agencies on specific topics. Examine best practices for analysis of such potential impacts through Caltrans environmental review processes. This initiative focuses on two subtopics related to such structural design considerations and may lead to the identification of other useful areas for joint consultation to improve processes.

Subtopic 6a. Bird Strikes

Purpose/Problem Statement

Address issues surrounding the installation of Sebastian Poles on structures, particularly bridges, in the coastal zone. Recent requirements for Sebastian Poles from the U.S. Fish and Wildlife Service in southern California are at odds with Commission staff Coastal Act consistency analyses. The major concerns revolve around visual impacts from Sebastian poles as well as questions surrounding documentation of problems with bird strikes on California bridges and the applicability of Sebastian poles (designed in Florida) to west coast conditions and bird species.

Goals/Desired Outcomes

- Improve understanding between Caltrans, Commission staff, and USFWS about concerns related to bird species from transportation structures, particularly bridges, in the California coastal zone.
- Identify current and past scientific research regarding bird strikes on the State's highway system.
- Share information about potential methodologies to identify and assess potentially harmful features to avian species.
- Share information among the Commission, USFWS and CDFW to improve understanding about the various agency mandates related to bird strikes.
- Work with the Commission (as well as USFWS and CDFW) to jointly agree on a potential palette of effective impact avoidance and minimization measures.
- Work with the Commission to identify agreeable solutions, in the context of the Coastal Act, for addressing any potential bird impacts identified.
- Seek agreement on programmatic approaches with USFWS and CDFW on these issues in the coastal zone.

Level of Effort

Because there are many potential circumstances and scenarios involved in this topic, the level of effort to address this initiative is expected to be moderate.

Recommended Next Steps

- Step 1: Caltrans staff review current literature and research related to bird strikes on California coastal zone roads and bridges and consult with Commission/USFWS regarding the Service's basis for requiring Sebastian Poles on bridges.

- Step 2: Set up subcommittee of Caltrans and Commission staff based in Southern California to discuss how the agencies should move forward to address questions regarding installation of Sebastian Poles.
- Step 3: Convene meeting of Caltrans, Commission, USFWS and CDFW to review methodologies to analyze impacts and each agency's experience with the subject, discuss agency concerns and regulations on this issues, identify various alternatives for avoiding and minimizing impacts in southern California settings, evaluate the efficacy and impacts of Sebastian Poles, and explore best practices for designing and processing future Caltrans coastal projects, with special focus on bridges.

Subtopic 6b. Lighting

Purpose / Problem Statement

Lighting is an important safety component in transportation infrastructure; however, in some circumstances, lighting can negatively affect navigational patterns and behavior of birds, nocturnal animals and other species. Sensitive habitats such as wetlands, lagoons and shorelines, especially in rural areas, are of particular concern. Scientific research is expanding our understanding of the deleterious effects of “light pollution” and how different light sources and approaches can reduce impacts. Alternatives to electrically-powered lighting can also reduce the production of greenhouse gases. Often times, lighting issues are not recognized early in the project development process, and changes to lighting designs for projects can result in delays or costly modifications. In addition, new alternatives to installing lighting at all, such as use of highly reflective paint, are being identified. Caltrans and the Commission are interested in taking lessons learned from the recent San Elijo bridge projects, including scientific research and design alternatives identified, and providing useful process and information models for other Caltrans projects in the coastal zone.

Goals / Desired Outcomes

- Improve understanding between Caltrans, the Commission, USFWS and CDFW about potential damaging impacts from lighting associated with transportation structures on wildlife, habitats and ecosystems in the coastal zone.
- Share information about methodologies to identify and assess potentially harmful effects from various lighting types and features.
- Identify current and past scientific research regarding lighting impacts in the coastal zone, particularly any from the State’s highway system.
- Work with the Commission to identify a potential palette of effective impact avoidance and minimization measures and options for addressing unavoidable lighting impacts in the context of the California Coastal Act.

Level of Effort

Because there are many potential circumstances and scenarios involved in this topic, the level of effort to address this initiative is expected to be moderate to high.

Recommended Next Steps

- Step 1: Caltrans and Commission staff review and collate current research and information on night lighting impacts developed for the recent San Elijo bridge project, as well as other recent

projects in the coastal zone that raised similar lighting concerns during their CDP approval processes

- Step 2: Cueing off of the San Elijo Bridge and other relevant projects, including the results of the desired outcomes summarized above, Caltrans and Commission staff draft a compendium of design considerations and current methods and technologies available to Caltrans for avoiding and minimizing negative night lighting impacts.
- Step 3: Convene meeting of Caltrans, the Commission, other interested resource agencies and scientific experts in the field to review the information developed in Step 1 and 2, identify other useful resources, methods and technologies and discuss the creation of a lighting reference guide for use by Caltrans and Commission staff.
- Step 4: If there is agreement between Commission and Caltrans staff relative to the content and desirability of such a reference guide, develop a workplan and prepare the document.

Initiative 7. Confer on Appropriate Bridge Shoulder Widths

Numerous bridges in Mendocino County (Caltrans District 1) are beyond their service life and in need of replacement. This bridge replacement work provides an opportunity to implement a pilot project during the planning and environmental review phases of Caltrans' project delivery process to address shoulder widths on bridges. While Caltrans would like to examine a programmatic approach to bridge shoulder widths, the Commission has reservations about applying a set shoulder width to all bridge projects. Commission staff typically recommend shoulder widths more narrow than those provided in the Caltrans design manual in order to reduce impacts to resources such as wetlands, ESHA, and scenic views near bridges. In addition, the Coastal Act directs that Highway 1 in rural areas should remain a two-lane scenic highway; concerns are often raised that wide shoulders are at odds with protecting the scenic visual character of Highway 1.

Caltrans and the Commission are working to hold a meeting of the Roads Edge Subcommittee in FY 2016-17 to discuss bridge shoulder widths in District 1. Following the meeting, Caltrans and Commission staff will explore options for a programmatic approach to evaluating bridge shoulder widths in the coastal zone, such as articulation of the various physical factors to take into account when determining appropriate dimensions, for projects, including the following possibilities: ADT, safety, accidents, multi-modal usage, and Local Coastal Program policies.

Objective

Develop a framework and criteria for addressing shoulder widths on bridges, using Mendocino County bridge replacement projects as a pilot, if deemed applicable following the Roads Edge Subcommittee meeting on the subject.

Purpose/Problem Statement

Caltrans District 1 has identified nine bridges in Mendocino County requiring retrofit or replacement in the next 4 to 10 years. Several of the bridge projects are already in the environmental phase of Caltrans project delivery and are moving into the design stage. Commission and Caltrans staff have not come to final agreement on appropriate shoulder widths for the various bridge designs under consideration. Caltrans staff proposes reviewing their current information and analyses regarding four of the bridge replacement projects with the Commission Road's Edge Subcommittee. In conjunction with this effort, Caltrans would like to explore a general programmatic approach to determining and designing bridge shoulder widths that meet both Caltrans design standards and Coastal Act provisions.

Goals / Desired Outcomes

- Develop a consistent process to evaluate and design shoulders for bridges that achieves consistency with Coastal Act and meets Caltrans concerns for safety and other factors.

- Outline the key factors for determining appropriate, context-sensitive bridge shoulder widths.
- Prepare a bridge shoulders guide for use by Caltrans and Commission staff in during early project coordination.
- Encourage staff to identify appropriate bridge features early in the design process to avoid costly redesigns later.

Level of Effort

While work is underway, this initiative is expected to require a moderate to high level of effort due to the coordination required by Caltrans and Commission staff and preparation and review of materials.

Recommended Next Steps

- Step 1: Caltrans District 1 staff prepare information for a meeting with the Commission's Road's Edge Subcommittee in winter/spring 2017.
- Step 2: Following the Road's Edge Subcommittee meeting and gathering feedback from Subcommittee members, Caltrans and Commission staff will meet to discuss potential development of a programmatic approach to bridge shoulder widths.
- Step 3: Should such a programmatic approach for shoulder widths be deemed feasible, Caltrans and Commission staff will work together to prepare a workplan for producing appropriate documents to facilitate such a process.

Initiative 8. Explore Improved Methodologies for Aesthetic Evaluations

While a number of coastal policies regulate the protection of viewsheds, scenic resources and aesthetics, such assessments and protection strategies are highly context specific. Developing better methodologies for evaluating scenic impacts could add to the quality of decision-making during the design and regulatory reviews of projects. This initiative would explore the potential value of applying FHWA methodologies to create additional informational tools for evaluating potential viewshed, scenic resource and aesthetic impacts of projects in the coastal zone.

Objective

Explore options for using the FHWA methodology as an informational tool to evaluate potential scenic impacts and guide considerations of project changes to avoid, ameliorate or mitigate visual and aesthetic resource impacts in the coastal zone. Develop guidance for ensuring that visual simulations in Caltrans CDP applications provide the greatest utility for assessing project alternatives.

Purpose/Problem Statement

The purpose of this initiative is for Caltrans to share how they use existing FHWA methodology to assess and mitigate impacts to visual and aesthetic resources in the coastal zone. While a number of policies are in place to protect aesthetics and scenic resources, the Commission does not apply a specific methodology to assess and quantify potential impacts on these resources and the corresponding/commensurate mitigation measures that may be applied. Although the Commission attempt to apply past precedents, impact analysis on coastal scenic resources and aesthetics is often times experienced as a subjective process when determining consistency with Coastal Act or LCP policies.

Goals/Desired Outcomes

- Share information about the use of existing FHWA methodology as a tool to determine and quantify the level of visual and aesthetic impacts.
- Explore establishing thresholds for impacts to inform mitigation requirements.
- Determine if tailoring the FHWA methodology might be appropriate for Coastal Act consistency analysis.

- Expand use of visual simulations for projects by identifying existing facilities in the simulations and what the changed viewshed could look like relative to a new facility in order to improve understanding, information-sharing and decision-making based on the representation provide in the simulation.
- Build library of simulations used in past Caltrans CDP applications that were useful to the Commission.

Level of Effort

Caltrans uses FHWA- approved methodology and criteria to determine visual impacts. However, because sensitivity to visual impacts can vary from individual to individual and from organization to organization, agreeing on a common methodology and associated impact thresholds to assess and mitigate visual impacts can result in a moderate to high level of effort.

Recommended Next Steps

- Step 1: Caltrans create subgroup of staff to review FHWA methodology.
- Step 2: Identify study set of past projects and compare simulations done for the projects to the final results; make recommendations for potential improvements to such simulation approaches.
- Step 3: Caltrans convene meeting with the Commission to (a) review methodology and potential applicability to Coastal Act and LCP considerations and (b) provide guidance on best practices for preparing visual simulations for CDP applications.
- Step 4: Caltrans and the Commission develop content for a shared training that can be delivered to each agencies' staff.

Initiative 9. Provide for Native Species and Invasives Control in Landscaping Plans

Caltrans and the Commission support exploring ways to improve landscaping planning, installation and maintenance in ways that protect and enhance native species and promote wise water use.

Objective

Work collaboratively to improve attention to control of invasive species and use of native species within Caltrans landscaping plans, including consideration of whether any adjustments to CDP permit conditions (such as reflecting Caltrans established procedures) would bolster the State's ability to meet this objective.

Purpose/Problem Statement

Some landscaped areas of the state highway right-of-way are infested with invasive vegetation and/or include non-native plantings that compete with natives or require more water than indigenous species. Further, invasives from the ROW can infest adjacent areas and impact significant swaths of habitat, agricultural lands and other properties. In addition, highway corridors provide opportunities for the movement of invasive species through the landscape, while vehicles, and the loads that they carry, can deposit invasive species along the corridor.

Goals / Desired Outcomes

- Within the coastal zone, improved control of invasive trees, shrubs and plants in and along the State's highway corridors; expanded use of native vegetation in Caltrans landscaping plans; and improved water conservation from the use of drought-tolerant native species.

Level of Effort

The level of effort on this initiative is likely light to moderate.

Recommended Next Steps

- Step 1: Caltrans and Commission staff hold meeting to (a) review typical CDP landscaping provisions and share information about Caltrans typical maintenance requirements in landscaped medians and (b) discuss the best available science on this issue in California.

Step 2: Caltrans and Commission staff determine if any adjustments to typical CDP landscaping conditions would advance achievement of this initiative's objective.

Appendix 3. Common Goals: Caltrans and Coastal Commission Strategic Plans

This document compares the goals/objectives of the Caltrans Strategic Management Plan 2015-2020 to a selective sample of the Commission Strategic Plan 2013-2018. The Caltrans Strategic Plan goals and subgoals are listed and crosswalked with corresponding or similar goals/objectives in the Commission Strategic Plan.

Agency Strategic Plan Goals

<p>Caltrans Strategic Management Plan 2015-2020:</p> <ul style="list-style-type: none"> • Goal 1: Safety and Health • Goal 2: Stewardship and Efficiency • Goal 3: Sustainability, Livability and Economy • Goal 4: System Performance • Goal 5: Organizational Excellence 	<p>CA Coastal Commission Strategic Plan 2013-2018:</p> <ul style="list-style-type: none"> • Goal 1: Maximize Public Access and Recreation • Goal 2: Protect Coastal Resources • Goal 3: Address Climate Change through LCP Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education • Goal 4: Strengthen the LCP Planning Program • Goal 5: Improve the Regulatory Process, Compliance and Enforcement • Goal 6: Enhance Information Management and E-Government • Goal 7: Build Agency Capacity
--	--

Crosswalk of Common Goals

<p>Caltrans Goal 1: Safety and Health – <i>Provide a safe transportation system for workers and users and promote health through active transportation and reduced pollution in communities</i></p>	<p>Coastal Commission Goal 1: Maximize Public Access and Recreation – Better understand, inventory, and assess current public access resources; Improve mitigation strategies, including methodologies for measuring beach impacts that account for economic and ecosystem services approaches; Improve coastal access information in the digital format; Focus support for the California Coastal Trail and its implementation through inter-agency coordination, LCP planning and ongoing permit reviews where applicable.</p>
<p>Objective: Promote community health through active transportation and reduced pollution</p>	<p>Objective 1.4: Expand the California Coastal Trail (CCT) System through enhanced planning and implementation.</p>
<p>Summary: The Caltrans objective to promote community health through active transportation and reduced pollution and the Commission’s objective to expand the CCT system through enhanced planning and implementation comport with each other and provide several opportunities to work together to reach respective goals within the coastal zone.</p> <ul style="list-style-type: none"> • Improve multimodal and public access opportunities in transportation projects • Participate in various planning efforts, including: <ul style="list-style-type: none"> ○ California Transportation Plan 2040 ○ Regional Transportation Plans ○ Transportation Concept Reports ○ Corridor System Management Plans ○ Local Coastal Programs 	

<p>Caltrans Goal 2: Stewardship and Efficiency <i>Money counts. Responsibly manage CA's transportation-related assets</i></p>	<p>Commission Goal 3: Address Climate Change through LCP Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education - The Commission will pursue strategies to work closely with local governments to update LCPs to address coastal adaptation, including providing for resilient community development and infrastructure and ensuring the long term protection of public coastal resources such as vulnerable coastal habitats, recreation beach environments, and public access.</p> <p>Goal 2: Protect Coastal Resources – Continue to implement Coastal Act policies that require protection and restoration of environmentally sensitive habitats, wetlands, and the marine environment as well as public access and recreation, coastal agriculture, scenic and cultural resources, and coastal-dependent/ related land uses.</p>
<p>Objective: Effectively manage taxpayer funds and use of financial resources</p>	<p>Objective 3.2 – Assess Coastal Resource Vulnerabilities to Guide Development of Priority Coastal Adaptation Planning Strategies</p> <p>Objective 2.1 - Strengthen Implementation of Coastal Act ESHA and Wetland Policies with Updated Policy Guidance</p> <p>Action 2.1.6 - In cooperation with other agencies, nonprofits, and local governments, direct mitigation monies to identified habitat areas in need of restoration and protection.</p>
<p>Summary: The Caltrans objective to effectively manage transportation-related assets and prudently invest taxpayer funds aligns with the Commission’s objective to assess coastal resource vulnerabilities and guide development of priority coastal adaptation planning strategies. Working in collaboration with others, both agencies can assess threats to the State’s infrastructure caused by climate change, especially SLR. Various actions should follow such assessments, including:</p> <ul style="list-style-type: none"> • Early coordination with local governments and other agencies on adaptation strategies; • Cost/benefit analyses, including environmental services and the value of healthy coastal resources to the State’s economy, tourism industry and quality of life, as well as other evaluations that allow for the comparison of various options over the long term; and • Planning for resilient transportation infrastructure and land uses that avoid or reduce long-term maintenance costs and resource impacts. <p>Beyond climate change considerations, these Caltrans fiscal objectives also need to be carried out in ways that avoid and minimize impacts to valuable coastal resources in order to achieve the agency’s overarching goals of sustainability.</p>	

<p>Caltrans Goal 3: Sustainability, Livability and Economy – <i>Make long-lasting, smart mobility decisions that improve the environment, support a vibrant economy, and build communities, not sprawl</i></p>	<p>Coastal Commission Goal 1: Maximize Public Access and Recreation</p> <p>Goal 4: Strengthen the Local Coastal Program (LCP) Planning Program (especially Objective 4.2 Work with Local Governments to Update LCPs Where Feasible)</p>
<p>Objective: People – Improve the quality of life for all Californians by providing mobility choice, increasing accessibility to all modes of transportation and creating transportation corridors - includes increased bike, pedestrian, and transit travel</p>	<p>Objective 1.4 – Expand the CA Coastal Trail (CCT) System through enhanced planning and implementation</p>
<p>Summary: Caltrans, the Commission and other stakeholders have opportunities to work together to improve mobility choices within transportation corridors that support/expand the CCT network and generally improve access along the California coast. In addition, the Commission certifies, and local governments implement, LCPs that adhere to Coastal Act policies, many of which align with this and other Caltrans objectives. For example, LCPs have land use policies and zoning ordinances to establish stable urban-rural boundaries and guide new development into areas with adequate public services, including highway and other multi-modal transportation capacities. All of these combine to underpin many Smart Growth strategies.</p> <p>As the Commission works with local governments to update LCPs, Caltrans has an opportunity to assist in better integrating transportation plans and projects with local land use plans in ways that implement many of the Caltrans Strategic Plan sustainability goals and objectives.</p>	

<p>Goal 3: Sustainability, Livability and Economy – <i>Make long-lasting, smart mobility decisions that improve the environment, support a vibrant economy, and build communities, not sprawl</i></p>	<p>Coastal Commission Goal 2: Protect Coastal Resources</p> <p>Goal 3: Address Climate Change through LCP Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education</p> <p>Goal 4: Strengthen the Local Coastal Program (LCP) Planning Program (especially Objective 4.2 Work with Local Governments to Update LCPs Where Feasible)</p>
<p>Objective: Planet: Reduce environmental impacts from the transportation system with emphasis on reduction of greenhouse gas emissions - includes reduction of air emissions and water pollution</p>	<p>Objective 4.2 - Work with Local Governments to Update LCPs Where Feasible</p> <p>Objective 2.4 - Avoid and Mitigate Adverse Impacts of Development on Water Quality</p> <p>Objective 3.1 – Develop Planning and Permitting Policy Guidance for Addressing the Effects of Climate Change on Coastal Resources.</p> <p>Objective 3.2- Assess Coastal Resource Vulnerabilities to Guide Development of Priority Coastal Adaptation.</p> <p>Objective 3.3 – Reduce Greenhouse Gas emissions by Implementing Smart Growth, other mitigation strategies and public education</p>
<p>Summary: Both agencies have goals and objectives to reduce greenhouse gas emissions, improve water quality, and support Smart Growth. Caltrans and the Commission have a history of collaboration and providing input on guidance produced by our agencies. Recent examples include the Commission’s Sea Level Rise Guidance, the California Transportation Plan 2040 and the I-5/LOSSAN Public Works Plan/ TREP. Many additional opportunities for productive results from collaboration remain. For example, Coastal Act policies call for the minimization of energy consumption and vehicle miles travelled (VMT), both of which are important ingredients for the reduction of GHGs.</p> <p>Caltrans and the Commission could partner more in the development of integrative strategies in LCPs, Regional Transportation Plans, and other transportation efforts toward reductions in energy consumption and VMT. And, as noted above, both Caltrans and the Commission should work together to assess threats to the State’s transportation system and other coastal development caused by climate change, especially SLR, and develop resilient adaptation strategies. (Also see summary discussion above.)</p>	

<p>Caltrans Goal 4: System Performance <i>Utilize leadership, collaboration, and strategic partnerships to develop an integrated transportation system that provides reliable and accessibly mobility</i></p>	<p>Coastal Commission Goal 4: Strengthen the Local Coastal Program (LCP) Planning Program (especially Objective 4.2 Work with Local Governments to Update LCPs Where Feasible)</p> <p>Goal 1: Maximize Public Access and Recreation</p> <p>Goal 5: Improve the regulatory process, compliance and enforcement – This goal identifies various objectives to improve the Commission’s regulatory processes ranging from improving public information services to building condition compliance and enforcement capacity.</p>
<p>Objective: Improve integration and operation of the transportation system</p>	<p>Objective 5.1: Update the Commission’s code of regulations</p> <p>Objective 5.2: Improve Public Information and Services to the Public</p> <p>Objective 5.3: Ensure Compliance with CDP Conditions</p>
<p>Summary: Caltrans and the Commission are strategic partners for improving coastal access. Both agencies should collaboratively work with local and regional partners in the planning and design of projects to meet access needs along the coast. Many opportunities also exist for integrating various transportation/coastal public access considerations and Smart Growth principals through the updating of Local Coastal Programs and Regional Transportation Plans.</p> <p>When resources are available, the Commission’s Strategic Plan calls for potential regulation updates and Caltrans would be a strategic partner for evaluating any potential process and procedure improvements (including possible changes to regulations governing the development of Public Works Plans). Caltrans could also be a strategic partner in improving public information and services to the public, particularly in the area of Smart Growth (and Smart Mobility). In addition, improving compliance with CDP conditions on transportation projects would also contribute toward meeting sustainability goals for protecting valuable coastal resources.</p>	

<p>Caltrans Goal 4: System Performance <i>Utilize leadership, collaboration, and strategic partnerships to develop an integrated transportation system that provides reliable and accessibly mobility</i></p>	<p>Commission Goal 1: Maximize Public Access and Recreation</p>
<p>Objective: Increase the number of Complete Streets features on State highways that are also local streets in urban, suburban, and small town settings</p>	<p>Objective 1.3: Improve public information about public access opportunities and the CCT through outreach and education.</p> <p>Objective 1.4: Expand the CCT System through Enhanced Planning and Implementation</p> <p>Action 1.3.4: Evaluate and pursue opportunities to provide information and increase public access and recreation for inland communities and other areas of the state to which the coast is less accessible.</p>
<p>Summary: Currently, Caltrans Regional Transportation Guidelines make the connection of the CCT to the Complete Streets program and require the inclusion of provisions for the CCT; responses to this guidance vary along the coast. Caltrans and the Commission could partner with other stakeholders to develop more detailed best practice strategies for including the CCT in RTPs, LCPs and Complete Street Programs. Moreover, carefully evaluating the relationship of Caltrans projects in the coastal zone to the CCT and Complete Streets program could substantially advance both Caltrans and the Commission’s goals for innovative, reliable and sustainable multi-modal access.</p>	

<p>Caltrans Goal 4: System Performance <i>Utilize leadership, collaboration, and strategic partnerships to develop an integrated transportation system that provides reliable and accessible mobility</i></p>	<p>Commission Goal 4: Strengthen the LCP Planning Program</p> <p>Goal 5: Improve the regulatory process, compliance and enforcement.</p> <p>Goal 7: Build Agency Capacity Accomplish this by establishing a public information program; revitalizing its coastal program through evaluation, promotion and public participation; expanding its public education program; increasing program funding and support through program evaluation and information sharing; succession planning; developing a staff recruitment strategy; staff mentoring, training and professional development opportunities; and improved communication, coordination and collaboration</p>
<p>Objective: Work with our partners early in project development to identify community, environmental, and aesthetic considerations</p>	<p>Objective 4.2: Work with local governments to update LCPs where feasible</p> <p>Objective 5.4: Increase compliance with and enforcement of the Coastal Act.</p> <p>Objective 7.8.3: Improve communication and coordination with other state agencies on relevant policy issues related to the Commission’s regulatory and planning work.</p>
<p>Summary: Caltrans and the Commission should continue to strive for advance coordination in Caltrans project planning and development processes. By identifying and understanding applicable Coastal Act and LCP policies early in system planning and project initiation, Caltrans can build those policy considerations into the technical studies, alternatives analyses, and design features necessary for successful LCP and coastal development processing.</p> <p>This type of business practice also promotes Caltrans Goal 1 to manage CA's transportation-related assets in a fiscally responsible way by limiting costly project redesigns, avoiding coastal resource impacts (or building in mitigation funding requirements early in project planning when resource impacts are unavoidable), and reducing risks of construction schedule delays. Furthermore, Caltrans could review transportation related elements in LCP updates to identify opportunities to promote transportation sustainability and Smart Growth goals. Such collaborations also improve LCP and Coastal Act policy compliance and reduce the likelihood of costly and lengthy appeals of projects.</p>	

<p>Caltrans Goal 5: Organizational Excellence <i>Be a national leader in delivering quality service through excellent employee performance, public communication, and accountability</i></p>	<p>Commission Goal 4: Strengthen the LCP Planning Program</p> <p>Goal 5: Improve the regulatory process, compliance and enforcement</p>
<p>Objective: Improve internal and external communications</p>	<p>Objective 4.4: – Continue to Improve Communication and Planning with Local Government</p> <p>Objective 5.2: Improve Public Information and Services to the Public</p>
<p>Summary: Both Caltrans and the Commission have interests in improving collaborative partnerships with each other and other stakeholders. There are opportunities, especially through the Interagency Agreement, to continue collaboration between Caltrans, the Commission and local governments -- both at the project-specific level as well as through updating Local Coastal Programs at a broader, regional level-- to implement Strategic Plan goals and State mandates. Improved external communication and information distribution to other stakeholders and the general public also strengthens and enhances the delivery of plans and projects that service the public. Notably, these types of efforts will be extremely important to successfully move forward with plans and projects to address climate change impacts.</p>	

<p>Caltrans Goal 5: Organizational Excellence <i>Be a national leader in delivering quality service through excellent employee performance, public communication, and accountability</i></p>	<p>Coastal Commission Goal 2: Protect Coastal Resources Goal 3: Address Climate Change through LCP Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education Goal 7: Build Agency Capacity</p>
<p>Objective: Improve partnerships with agencies, industries, municipalities, and tribal governments</p>	<p>Objective 2.2 - Protect Marine and Ocean Resources through Inter-Agency Coordination, Policy Review, and Updated Guidance Objective 3.2.2 - Work with Caltrans and other agencies to assess and address roadway, rail, and other infrastructure vulnerabilities Objective 7.8.3: Improve communication and coordination with other state agencies on relevant policy issues related to the Commission’s regulatory and planning work.</p>
<p>Summary: Caltrans and the Commission have long partnered on various efforts to provide access and protect natural and cultural resources. There are many productive examples, including the Big Sur Coast Highway Management Plan, the I-5/LOSSAN North Coastal Corridor PWP/TREP and the Marin 1 Repair Guidelines. Among the many public services expected of both agencies, Caltrans and the Commission will need to continue working together on climate change related issues, especially SLR. Caltrans has commented on the Commission’s SLR guidance, and will continue to coordinate and partner on several next steps to assist the State’s efforts to grapple with the consequences of SLR. Other efforts that will require successful partnering of the two agencies include key initiatives such as Complete Streets and the CCT.</p>	

Appendix 4. Repair, Maintenance, and Utility Hook-Up Exclusions from Permit Requirements

On September 5, 1978, the California Coastal Commission adopted guidelines detailing “Repair, maintenance and utility hook-up exclusions from permit requirements.” The original and complete text of the guidelines is provided on the following pages.

The Caltrans Standard Environmental Reference, Volume 5 (Coastal Requirements), [Chapter 5 \(Permits and Approval Required\)](#)²¹ provides additional information about coastal permitting and when exclusions may apply.

²¹ url: http://www.dot.ca.gov/ser/vol5/coastal_ch5.pdf



REPAIR, MAINTENANCE AND UTILITY HOOK-UP
EXCLUSIONS FROM PERMIT REQUIREMENTS

(Adopted by the California Coastal Commission on September 5, 1978)

NOTE: This guideline applies only to exclusions established in subsections (c) and (e) of Section 30610. For other exceptions to the permit requirements, see Section 13250 of the Commission Regulations (additions to existing single-family houses), Sections 13200 through 13210 (vested rights), Sections 13211-13213 (permits granted under the 1972 Coastal Act), Sections 13215-13235 (urban land), Sections 13240-13249 (categories of development), Sections 13136-13144 (emergency permits) and Sections 13145-13154.5 (administrative permits).

I. General Provisions.

Section 30610 of the Coastal Act states in part:

...no coastal development permit shall be required for...(c) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of such repair or maintenance activities; provided, however, that if the Commission determines that certain extraordinary methods of repair and maintenance that involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained under this chapter. (e) The installation, testing, and placement in service or the replacement of any necessary utility connection between an existing service facility and any development approved pursuant to this division; provided, that the Commission may, where necessary, require reasonable conditions to mitigate any adverse impacts on coastal resources, including scenic resources.

This guideline is intended to detail the types of development activities the Commission considers repair, maintenance or utility hook-ups related to the on-going work of various types of public and private agencies. Such lists obviously cannot be exhaustive and the exclusions also apply to activities comparable to those listed. Where a proposed activity is not included in this guideline, the Regional Commission Executive Director, after consultation with the State Commission Executive Director, if necessary, will determine whether a permit is required.

The standards for these exclusions are stated in Section 30610 of the Coastal Act: they do not relate to the environmental impact of the proposed activity. The repair and maintenance exclusion is intended to allow continuation of existing developments and activities which began before the effective date of the Coastal Act. The utility hook-up exclusion exempts utilities from obtaining permits for work to serve developments because Commission review of such work is included in the review of the development itself.

II. Description of Activities Excluded.

The following construction activities comparable to those listed do not require a coastal development permit except as specified below:

A. Roads. No permit is required for repair and maintenance of existing public roads including landscaping, signalization, lighting, signing, resurfacing,

installation or expansion of retaining walls, safety barriers and railings and other comparable development within the existing right-of-way as specified below. Maintenance activities are generally those necessary to preserve the highway facility as it was constructed, including: construction of temporary detours, removal of slides and slip cuts, restoration and repair of drainage appurtenances, slope protection devices, installation of minor drainage facilities for preservation of the roadway or adjacent properties, restoration, repair and modifying for public safety bridges and other highway structures, restoring pavement and base to original condition by replacement, resurfacing, or pavement grooving. A permit is required for excavation or disposal of fill outside of the roadway prism. The following maintenance and alteration programs of the State Department of Transportation, or their equivalent conducted by local road departments, which do not result in an addition to or enlargement or expansion of the existing public road facility itself, do not require a permit except as noted: (1) Flexible Roadbed Program; (2) Rigid Roadbed Program; (3) Roadside Maintenance Program; (4) Roadway Litter and Debris Program; (5) Vegetation Control Program; (6) Pavement Delineation Program; (7) Sign Program; (8) Electrical Program; (9) Traffic Safety Devices Program; (10) Public Service Facility Program except that a permit is required for construction of new facilities; (11) Landscape Program; (12) Bridge and Pump Maintenance Program; (13) Tubes, Tunnel and Ferry Maintenance Program; (14) Bridge Painting Program; (15) Miscellaneous safety projects, provided there is not expansion in the roadway or number of traffic lanes; (16) Major damage maintenance, repair and restoration; (17) Comparable Minor Alterations.

(NOTE: See Appendix I for more detailed description of activities included in these programs.)

B. Public Utilities.

1. Natural Gas, Chilled Water and Steam Facilities.

a. Service Connections. Install, test and place in service the necessary piping and related components to provide natural gas, chilled water and/or steam service to development either exempted or approved under the Coastal Act, including:

(1) Extend underground gas, chilled water and/or steam mains, except in marshes, streams or rivers, from terminus of existing main piping to proper location in front of customer's property. Break and remove pavement as necessary, open trench or bore, for installation of main piping, install mains and appurtenances, pressure test for leakage, backfill open cuts, purge air from piping and introduce gas, chilled water and/or steam into newly installed piping. Restore pavement as necessary. Provide for cathodic protection as necessary.

(2) Extend underground gas, chilled water and/or steam service piping from the main locations, except in marshes, streams or rivers, to the meter location on the customer's property. Construction activities are similar to those in Item (1) above.

(3) Construct and install the meter set assembly, generally above ground, on the customer's property, including installation of associated valves, pressure regulator, meter and necessary piping to connect the gas, chilled water

and/or steam service to the customer's piping system.

(4) When necessary, install gas, chilled water and/or steam pressure regulation equipment and related components, to control pressure where the source of the supply is at a higher pressure than the pressure in the district distribution main system. Construction includes necessary excavation, installation of piping, valves, regulators, below ground vaults and related components.

(5) Install necessary cathodic protection facilities for main and service extensions to new and existing customers.

b. Distribution and Transmission Facilities.

(1) Operate, inspect and maintain distribution and transmission mains, services, meter set assemblies and district regulator stations. Conduct leakage surveys, repair leaks, handle emergency or hazardous incidents, maintain supply pressure, inspect and adjust pressure regulators, operate valves, locate and mark facilities to help prevent damage to them and to provide for public safety.

(2) Install, replace, alter, relocate or remove piping and cathodic protection facilities as necessary due to corrosion, interference with other underground or surface construction, franchise requirements, mechanical damage, reinforcement to existing distribution systems to provide for increased usage (provided such usage is to provide service to development either exempted or approved under the Coastal Act). Isolation of piping segments or systems to provide emergency control and the restoration of service to a customer.

c. Production and Storage Facilities. Perform necessary maintenance, replacement, repair, relocation, abandonment and removal work to gas storage facilities, chilled water and/or steam plant facilities, mechanical equipment including prime movers and pumping equipment, chilled water and/or steam production facilities, gas and oil processing facilities, pollution control facilities, cooling towers, electric equipment, controls, gas injection and withdrawal wells, and other miscellaneous plant and pipeline structures. Installation of any required new safety devices and pollution control facilities within existing structures or equipment or where land coverage, height, or bulk of existing structures will not be increased.

d. Miscellaneous. Perform necessary maintenance, repair, replacement, relocation, abandonment and removal work to pipeline roads, rights-of-way, fences and gates, sprinkler systems, landscaping, odorizing stations, telemetry equipment, lighting facilities, mechanical and electrical equipment, cathodic protection facilities and environmental control equipment.

e. Grading and Clearing. Maintenance activities shall not extend to the construction of any new roads to the site of the work. A permit is required for grading an undisturbed area of greater than 500 sq. ft., removal of trees exceeding 12 inches dbh or clearing more than 500 sq. ft. of brush or other vegetation unless the Executive Director of the Regional Commission determines the activity does not involve the removal of major vegetation.

2. Electric Utilities.

a. Generation Stations, Substations, Fuel Handling, Transportation

-4-

and Storage Facilities and Equivalent Facilities. A coastal permit is not required for repairs, maintenance, and minor alterations which do not increase the capacity of the facility or work required to supply increased demand of existing customer's facilities in order to maintain the existing standard of service. A coastal permit is not required for installation of any required new safety devices and pollution control facilities within existing structures of equipment or where land coverage, height or bulk of existing structures will not be increased.

b. Transmission and Distribution and Communication Facilities. A coastal permit is not required to maintain, replace, or modify existing overhead facilities, including the addition of equipment and wires to existing poles or other structures, right-of-way maintenance, and minor pole and equipment relocations. A coastal permit is not required to install, test and place in service power line extension facilities and supply points specifically required to provide service to development permitted or exempted under the Coastal Act, or work required to supply increased demand of existing customers' facilities in order to maintain the existing standard of service.

A coastal permit is not required to install, test, place in service, maintain, replace, modify or relocate underground facilities or to convert existing overhead facilities to underground facilities provided that work is limited to public road or railroad rights-of-way or public utility easements (P.U.E.).

c. Services. Electrical service and metering facilities may be installed and placed in service to any development permitted or exempted under the Coastal Act. A coastal permit is not required to maintain, replace, or relocate service or metering facilities for developments permitted or exempted under the Coastal Act.

d. Grading, Clearing and Removal of Vegetation. Excluded activities shall not extend to the construction of any new road to the site of the work. In cases involving removal of trees exceeding 12 inches dbh, grading of any undisturbed area of greater than 500 sq. ft. or clearing of more than 500 sq. ft. of brush or other vegetation, the utility shall consult with the Executive Director of the Regional Commission to determine whether the project involves removal of major vegetation such that a permit is required. A coastal permit is not required for removal of minor vegetation for maintenance purposes (tree trimming, etc.) for safety clearances.

e. Definitions.

(1) Line Extension. All facilities for permanent service excluding transformers, services and meters, required to extend electric service from the utility's existing permanent facilities to one or more supply points.

(2) Service. A single set of conductors and related facilities required to deliver electric energy from a supply point to the customer's facilities.

(3) Supply Point. Any transformer, pole, manhole, pull box or other such facilities at which the utility connects one or more sets of service conductors to the utility's permanent electric facilities.

3. Telephone. No permit or conditions are required for the activities of a telephone company that come within the following areas:

a. Repair and maintenance of existing damaged or faulty poles, wires, cables, terminals, load cases, guys and conduits, including the necessary related facilities, to restore service or prevent service outages.

-5-

b. Placement of existing telephone facilities underground, provided such undergrounding shall be limited to public road or railroad rights-of-way or public utility easements (P.U.E.) and provided there is no removal of major vegetation and the site is restored as close as reasonably possible to its original condition.

c. Placement of additional aerial facilities on existing poles.

d. Removal of existing poles and facilities thereon, where new, replacing facilities have been placed underground.

e. Performance of work in connection with or placement of facilities to expand service to existing customers or to serve new customers, including placement of underground service connections or aerial service connections from existing poles with any necessary clearance poles.

f. Removal of minor vegetation for maintenance purposes (tree trimming, etc.).

g. Maintenance activities shall not extend to the construction of any new roads to the site of the work. A permit is required for grading an undisturbed area of greater than 500 sq. ft., removal of trees exceeding 12 inches dbh or clearing more than 500 sq. ft. of brush or other vegetation unless the Executive Director of the Regional Commission determines the activity does not involve the removal of major vegetation.

4. Others, including Water, Sewer, Flood Control, City and County Public Works, Cable T.V. No permit is required for repair or maintenance of existing facilities that do not alter the service capacity, installation of new or increased service to development permitted or exempted under the Coastal Act, placement of additional facilities on existing poles, or placement of existing facilities underground, provided such undergrounding shall be limited to public road or railroad rights-of-way or public utility easements (P.U.E.) and provided there is no removal of major vegetation and the site is restored as close as reasonably possible to its original condition. A permit is required for installation of service to vacant parcels or installation of capacity beyond that needed to serve developments permitted or exempted under the Coastal Act.

Maintenance activities shall not extend to the construction of any new roads to the site of the work. A permit is required for grading an undisturbed area of greater than 500 sq. ft., removal of trees exceeding 12 inches dbh or clearing more than 500 sq. ft. of brush or other vegetation unless the Executive Director of the Regional Commission determines the activity does not involve the removal of major vegetation. No permit is required for removal of minor vegetation (e.g., tree trimming) where it interferes with service pipes or lines.

C. Parks. No permit is required for routine maintenance of existing public parks including repair or modification of existing public facilities where the level or type of public use or the size of structures will not be altered.

D. Industrial Facilities. No permit is required for routine repair, maintenance and minor alterations to existing facilities, necessary for on-going production that do not expand the area or operation of the existing plant. No permit is required for minor modifications of existing structures required by governmental safety and environmental regulations, where necessary to maintain existing production capacity, where located within existing structures, and where height or bulk of existing structures will not be altered.

E. Other Structures. For routine repair and maintenance of existing structures or facilities not specifically enumerated above, no permit is required provided that the level or type of use or size of the structure is not altered. (NOTE: See Section 13250 of the Commission Regulations for exclusions or additions to existing single-family houses.)

F. Dredging and Beach Alteration. (NOTE: Maintenance dredging of navigation channels is exempted by Section 30610 (b). Other dredging and sand movement projects, where part of an established program may be exempt from the permit requirements of the Coastal Act by reason of vested rights, where such rights have been reviewed and acknowledged by the Regional Commission. Contact the Regional Commission office for information and application forms.)

APPENDIX I

Detailed description of activities included in road maintenance programs for which no coastal development permit is required.

1. Flexible Roadbed Program. This program covers the restoration and repair of both surface and base within the previously paved portion of the roadway. This includes previously paved asphalt concrete shoulders two feet or greater in width where the shoulder is designated by traffic marking, pavement delineation or traffic use. Paved shoulders less than two feet in width will be considered as included in the traveled way lanes.

2. Roadbed, Rigid. The Rigid Roadbed Program covers the restoration and repair of both surface and base within that paved portion of the roadway used for the movement of vehicles. This includes asphaltic concrete or oiled shoulders two feet or greater in width. Paved shoulders less than two feet in width will be considered as included in the traveled way lanes. This program does not include roadbed widening projects.

3. Roadside Maintenance Program. This program includes the repair, replacement, and cleaning of ditches, culverts, underdrains, horizontal drains and miscellaneous headwalls and debris racks. Also included are fence repairs, roadside section restoration (e.g., drift removal, bench cleaning, slide removal, and fill slope replacement). In addition, repairs or replacement of retaining walls, installation of slope protection devices, minor drainage facilities, sidewalks and curbs, bins, cattle guards and other such structures where there is no increase in size (or adding to what exists) is included in this program. This program shall not include seawalls or other shoreline protective works, activities subject to review under Section 1601 of the Fish and Game Code, or excavation or disposal of fill outside of the roadway prism.

4. Roadway Litter and Debris Program. This program includes all work concerning roadbed and roadside cleanup operations to insure that the highway presents a neat, clean and attractive appearance.

5. Vegetation Control Program. Vegetation control refers to the maintenance treatment of all vegetative material growing native within the highway rights-of-way. Included is cutting and trimming by hand and mechanical means.

6. Pavement Delineation Program. The pavement delineation program involves all work necessary to place and maintain distinctive roadway markings on the traveled way. This includes layout, removal of old stripe, painting of new or existing stripe including striping for bike lanes, installation and/or removal of raised pavement markers including cleaning of such markers and the use of thermoplastic, tape or raised bars for pavement markings. Changing of striping for more lanes is not included in this program.

7. Sign Program. The sign program includes all work performed on existing signs for the purpose of warning, regulating or guiding traffic including bicycle traffic using bike lanes. The work consists of manufacture, assembly and installation of new signs to replace existing signs and the repair, cleaning and painting of signs.

8. Electrical Program. This program includes all work performed on in-place highway electrical facilities used to control traffic with signal systems, provide safety and sign lighting, illuminate maintenance building and grounds, generate standby power, operate bridges, pumps and automatic watering systems. Certain navigational lighting installed on bridges and bridge fenders or piling are included in this program.

9. Traffic Safety Devices Program. Work performed under this program includes replacement of guide posts, markers, skid resistant grooves, and also replacement, cleaning and/or painting of guard rails. The repair of median barrier cable chain link fence and portland cement concrete walls; the repair and maintenance of energy dissipators such as water type bumpers, sand traps or other devices installed for the purpose of absorbing vehicle energy are included in this program.

10. Public Service Facility Program. Public Service Facilities consist of roadside rests, vista points, map stops, historical monuments, roadside fountain areas and vehicle inspection stops. Work to be performed under this program consists of a wide variety of custodial maintenance in connection with existing restrooms, fountains and picnic areas.

11. Landscape Program. This program refers to the treatment maintenance and replacement of all vegetative material planted within the State Highway right-of-way. Work includes watering, fertilizing, plant replacement, weed control by hand and mechanical means and tree trimming.

12. Bridge and Pump Maintenance Program. The Bridge and Pump Maintenance Program includes work performed on all structures which provide for passage of highway traffic over, through or under obstacles and/or qualify for bridge numbers as assigned by the Division of Structures.

13. Tubes, Tunnel and Ferry Maintenance Program. The Tubes, Tunnel and Ferry Maintenance Program includes maintenance and repair of tunnels, tubes, ferries and docks or slips. Tunnel or tube maintenance includes washing, cleaning, tile repair and the maintenance of electro-mechanical equipment. Tunnel structural repairs will be performed under this program when covered by approved Division of Structures reports of work needed.

14. Bridge Painting Program. This program involves bridge maintenance painting performed in conformance with the requirements of air pollution control and water quality control agencies having jurisdiction.

15. Miscellaneous Safety Projects. Elimination of hazards within the operating areas or the operating right-of-way or projects modifying existing features such as curbs, dikes, headwalls, slopes, ditches, drop inlets, signals and lighting, etc., within the right-of-way to improve roadside safety.

16. Major Damage Maintenance, Repair and Restoration. Provides temporary road openings and related maintenance and returns highway facilities to serviceable states as rapidly as possible following major damage from storms; earthquakes; tidal waves; ship, train or vehicle collisions; gasoline truck fires; aircraft crashes, and all other kinds of physical violence. (NOTE: These items may be developments rather than repair or maintenance activities, but would be subject to the emergency permit provisions of the Coastal Act. Inquiries should be directed to the Regional Commission staff if at all possible, prior to commencement of construction.)

17. Miscellaneous Alterations.

a. Installation, modification or removal of regulatory, warning or informational signs, according to the standards of the State Department of Transportation Uniform Sign Chart.

b. Traffic channelization - improvements to local service and safety by delineation of traffic routes through the use of curbs, dikes, striping, etc., including turn pockets, where construction is performed by State Department of Transportation Maintenance Department or equivalent activities by local road departments.

c. Maintenance of existing bicycle facilities.

d. Modification of traffic control systems and devices including addition of new elements such as signs, signals, controllers, and lighting.

e. Devices such as glare screen, median barrier, fencing, guard rail safety barriers, energy attenuators, guide posts, markers, safety cable, ladders, lighting, hoists, paving grooving.

f. Alteration or widening of existing grade separation structure where the primary function and utility remains unaltered.

g. Minor operational improvements such as median and side ditch drainage facilities, where not subject to review under Section 1601 of the Fish and Game Code or involving excavation or disposal of fill outside of the roadway prism.

h. Modification, upgrading, alteration, relocation, or removal of railroad grade crossings, railroad grade crossing protection, and the construction of bus and truck stop lanes at railroad grade crossings.