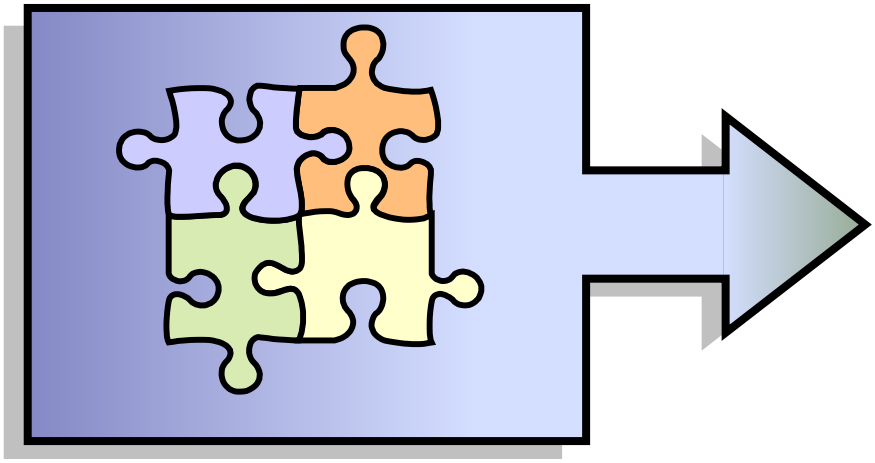
CALTRANS PURPOSE AND NEED TEAM

FINAL REPORT
AND
RECOMMENDATIONS



Team Sponsor:
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July 2003

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Executive Summary

This report, prepared by the Purpose and Need Team (Team) which was constituted in March of 2002, examines ways to improve the process of preparing well-defined purpose and need statements for transportation projects. It lays out the activities of the Team; our findings; the improvement strategies we propose and a means to implement them; and several products that the Team developed to help others prepare purpose and need statements.

The Team recognized that the need for a project drives its purpose, so the Team initially called itself the "Need and Purpose" Team, as shown in its charter. The Team's advisors agreed with this finding, but they pointed out that "Purpose and Need" is the statutory and regulatory term, and it is also used in guidance and common practice; they recommended that Caltrans continue to use that term. The Team agreed, and recommends that Caltrans retain this established usage.

The Team developed a broad range of recommendations to improve the quality of purpose and need statements for Caltrans' projects. The recommendations fell within seven categories: education and training; documentation; resources/funding; continuity; roles and responsibilities; information sources and guidance; and process. These recommendations were further refined to produce five key strategies, with an accompanying implementation plan and schedule for each strategy. The strategies and their implementation are discussed in greater detail in this report. The Team recommends that Caltrans implement the following key strategies to improve purpose and need statements:

1. Issue a Director's Policy that emphasizes the importance of the Purpose and Need Statement and stresses the need for the early formation of multi-functional Project Development Teams to ensure consistency from planning through project approval. The policy would set forth roles and responsibilities from the management level to the working level.

2. Establish a Purpose and Need Website to make guidance and tools more available.

3. Evaluate the usefulness of a rating tool, similar to the Value Analysis priority rating tool, for establishing and weighting the objectives of Purpose and Need Statements. The tool should assist in evaluating how well each alternative meets a project's purpose and need.

4. Establish an ongoing cross-functional steering committee to review existing guidance and tools about purpose and need from Planning, Design, Environmental Analysis, Project Management and other functional areas identified by the committee; and recommend ways to incorporate guidance about: a) early identification of purpose and need, b) cross-functional discussion of purpose and need, and c) formal handoff of information about purpose and need.

5. Prepare a cross-functional Purpose and Need Statement training module, consisting of guidance, references, tools, and a PowerPoint presentation, for use by all functional areas as a stand-alone course and as part of academies and other training courses.

1) THE PURPOSE AND NEED TEAM

a) Team Objective

The objective of the Purpose and Need Team (Team), as identified by the Team itself, was to develop a consistent approach to crafting well-defined purpose and need statements. Refer to the Team's Charter (see below).

b) Who: Team Membership

The Team consisted of members from an array of Caltrans functional units, from the Districts as well as Headquarters:

Carolyn Dierksen	D3 Environmental
Joann Marvelli	D3 Planning
John Linhart	D3 Planning
Howell Chan	D4 Planning
Wendy Waldron	D5 Environmental
Katy Walton	D9 Planning
John Chisholm	D11 Environmental
Brigitte Jaensch	HQ Regional Planning
Ilene Gallo	HQ Planning
Marcia Arrant	HQ Design
Paul Gennaro	HQ Project Management
Marilee Mortenson	HQ Environmental Planning
Karen Lockhart	HQ Legal

Our sponsor was Denise O'Connor (HQ-Environmental). Our advisors were Henry Bass and Sheila Mone (HQ-Environmental), Helen Rainwater (HQ-Planning), and Mickie Ferguson (Legal). Team products were also provided to Joan Bollman of the Federal Highway Administration.

c) How: Team Process

Team meetings were held from March 2002 through March 2003, including teleconferences, videoconferences, and two all-day workshops. The Team developed a Charter to focus our work, and provided it to the Sponsor for approval (see page 6).

Team members found that multi-functional membership was critical to the Team's success. Much of the meeting time was spent cross-training members in the process and the role that each functional unit plays in developing Purpose and Need statements. This enabled the Team to develop an understanding of how a purpose and need statement originates and how it evolves from planning through project approval. By going through this cross-training exercise, members could identify weaknesses and contribute relevant recommendations for process improvement. What we learned is documented in the Team products, such as the Matrices of Purpose and Need

Development Through the Major Project Stages (see Appendix A) and the Matrix of Inputs to Purpose and Need Statements (see Appendix B).

The Team recognized that all projects benefit from a well-defined purpose and need statement. STIP projects and complex SHOPP projects may have a complex purpose and need statement, while simple SHOPP projects may have a single, readily defined purpose and need. The Team felt its most significant contribution would be to focus on the process for STIP projects and complex SHOPP projects, because it can be challenging to prepare quality purpose and need statements for such projects. Nevertheless, the resources the Team identified, as well as the Team's products and recommendations, can improve purpose and need for all projects.

d) What: Team Products

The Team identified several existing tools to assist in developing well-defined purpose and need statements, from conception through PA&ED. The Team also developed additional tools to assist writer(s) in developing purpose and need statements. See the Appendices for these tools:

- Matrices showing who develops and reviews purpose and need, and when it is developed (Appendix A).
- Matrix of inputs to good purpose and need statements. This uses typical purpose and need categories and identifies resources for each category at different project phases, including pre-programming phases (Appendix B).
- Flow Chart: Key Activities for Quality Purpose and Need Statements (Appendix C).
- Useful Acronyms (Appendix D).
- Glossary of terms commonly used in the various tools and guidance on purpose and need (Appendix E).
- List of Resources (Appendix F).

e) Team Charter

See the following pages.

Need and Purpose Team - Team Charter

Team Name	Need and Purpose Team
Mission/Objective Statement	To develop a consistent approach to well-defined Need and Purpose statements (N&P).
Project Background	The pitfalls in a poorly conceived N&P become evident and cause problems during the environmental phase. A good N&P can be an important means of avoiding ill-conceived projects. It is highly desirable to have a consistent N&P concept throughout, keeping in mind that the level of detail increases as the project concept is developed. Ultimately, the N&P needs to include and also exclude certain things in order to get concurrence from partners. A good N&P helps to prioritize projects for programming at the PID stage. It is critical for defining a project's scope, determining which alternatives to study, and evaluating alternatives. It is critical for achieving environmental streamlining. It can also help in identifying potential context-sensitive solutions.
Team Members	Team members are drawn from many functional areas within Caltrans, representing the Districts and Headquarters: **Core members:** Marcia Arrant/HQ/Caltrans/CAGov@DOT Howell Chan/D04/Caltrans/CAGov@DOT John Chisholm/D11/Caltrans/CAGov@DOT Carolyn Dierksen/D03/Caltrans/CAGov@DOT Ilene Gallo/D11/Caltrans/CAGov@DOT Paul Gennaro/D06/Caltrans/CAGov@DOT Brigitte Jaensch/HQ/Caltrans/CAGov@DOT John Linhart/D03/Caltrans/CAGov@DOT Karen Lockhart/HQ/Caltrans/CAGov@DOT Marilee Mortenson/D04/Caltrans/CAGov@DOT Wendy Waldron/D05/Caltrans/CAGov@DOT Katy Walton/D09/Caltrans/CAGov@DOT **Other members:** Al Arana/HQ/Caltrans/CAGov@DOT Michelle Dungan/D08/Caltrans/CAGov@DOT Cheryl Henderson/D07/Caltrans/CAGov@DOT Marie Petry/D08/Caltrans/CAGov@DOT Helen J Rainwater/HQ/Caltrans/CAGov@DOT Gary Stout/HQ/Caltrans/CAGov@DOT Sandy L Wong/D04/Caltrans/CAGov@DOT
Team Sponsor Commitments	The team sponsor and advisors commit to reviewing deliverables and being available for guidance. **Sponsor:** Denise O'Connor/HQ/Caltrans/CAGov@DOT **Advisors:** Sheila Mone/HQ/Caltrans/CAGov@DOT Henry Bass/HQ/Caltrans/CAGov@DOT Maxine Ferguson/HQ/Caltrans/CAGov@DOT Sylvia Vega/D12/Caltrans/CAGov@DOT

Level of team authority / empowerment	Our team is empowered to recommend new N&P approaches for the next revisions of planning guidance, PSR guidance, the PDPM, etc. Our team is empowered to choose the kind(s) of guidance that it wants to develop. The intent is to move toward a more consistent N&P through the project stages.
Roadmap to be used	Process Improvement Roadmap: describes the steps to control and improve a process. Purposefully vague – team success is measured by degree rather than as an absolute. The process may already be running well, but a team is formed to document, monitor, standardize and improve the process. Steps typically include: 1. Define process purpose, scope, inputs, suppliers, outputs, customers 2. Flowchart existing process 3. Define process requirements 4. Define process measurements 5. Monitor the process (collect data) 6. Develop improvement plan 7. Implement improvements and assess the process 8. Monitor and continue improvement
Team member duties	▪ Participate in meetings ▪ Follow through on homework commitments ▪ Contribute resources to the team
Resources	▪ Team members' expertise ▪ Sponsor and advisors ▪ Caltrans and FHWA guidelines, manuals, planning documents ▪ Facilitator ▪ Meeting tools: agendas, videoconference, teleconference, etc.
Deliverables	A Quality Report, to include: ▪ A checklist for use in preparing N&Ps ▪ A PowerPoint presentation that can be shown to the Districts and/or external groups (venues to be determined in consultation with sponsor and advisors) ▪ Recommendations

Reviewed and approved:

Denise O'Connor, Project Sponsor

June 14, 2002
Date

2) PURPOSE AND NEED

a) Purpose and Need: Definitions

For Caltrans projects, "Need" may be defined as a transportation deficiency, and "purpose" may be defined as objectives that will be met to address the transportation deficiency. A solution or a range of solutions (alternatives) can then be developed and evaluated to meet these objectives.

For example, there may be an unusually high accident rate at an intersection. Accident statistics can be used to describe this transportation deficiency (need). The objective (purpose) would be to reduce the accident rate at the intersection. Note that the purpose simply states the objective, and does not state how the objective should be achieved; that is done through the proposal of various design solutions (alternatives) to meet the objective. Possible solutions might include adding signage; adding a left turn lane; signalization; and so on.

b) Statutory requirements

The Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) mandates that Chapter 1 of an Environmental Impact Statement (EIS) or Environmental Assessment (EA) discuss "the purpose of and need for action" (CEQ Regulations, Section 1502.13).

The California Environmental Quality Act (CEQA) requires a "statement of objectives sought by the proposed project," including the underlying purpose of the project (CEQA Guidelines, Section 15124(b)).

c) Quality elements of Purpose and Need

A clear, well-justified purpose and need explains to the public and decision makers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed transportation projects is warranted.

A project's purpose and need is a package comprised of:

- Purpose and Need statement itself. A quality purpose and need statement must briefly and precisely state the transportation problem and the intended project objective.
- Supporting information and data. This must be detailed enough to substantiate the problem and justify the objective expressed in the purpose and need statement. It may include narrative text (e.g., a description of Level of Service), tables and graphs (e.g., changing accident rates over time), or visuals (e.g., photographs of roadway storm damage). In engineering reports and environmental documents, it can be several paragraphs or pages long.

Quality Purpose and Need Statements are developed and refined iteratively from planning through project approval. Broad participation from many functional units as members of the Project Development Team, and data retention and transmission, are key factors in the successful development and refinement of sound Purpose and Need Statements.

A project's purpose and need may broaden and/or increase in specificity as the project progresses through the Project Development phases and as project studies are expanded and enhanced. It is critical to understand, though, that this evolution essentially involves increasing levels of detail rather than major restructuring; a project's purpose and need should exhibit continuity from planning, through each project development phase, to project approval. This continuity should also continue beyond project approval: the project that is designed and constructed needs to reflect its intended purpose and need.

d) What can happen without a quality Purpose and Need Statement

An inadequate or flawed purpose and need statement contributes directly to delays in project implementation, and can result in additional internal coordination, external coordination, and/or revisions to project scope. An inadequate purpose and need statement may even halt a project entirely.

Following are real-life examples of some flawed purpose and need statements and (in some cases) their consequences.

- The stated purpose of one project was to "construct a four-lane highway." The stated need was that the facility was a two-lane highway. In this example, both the need and the purpose are ill conceived. Presumably there is an actual need for a project at this location, but it is simply not expressed. A two-lane highway in and of itself is not a problem; why is it a problem at this location? The need for the project is identified by digging deeper: is it that traffic volumes are high? How about accident rates, or connections to other parts of the regional transportation system? As for the purpose, it will become easier to express once the need is identified, and then it can be stated as an objective to meet the need. Lesson: ask questions; obtain data. Substantiate the need with facts, and state the purpose as an objective rather than a solution. In this example, the need may be a Level of Service (LOS) E (see Glossary), indicating traffic congestion, or a gap between two other improved portions of the highway network; the purpose may then be to improve the LOS or eliminate the gap. The solutions may include constructing a four-lane highway, but they may also include increasing transit service or improving the existing roadway geometrics.

- Another project had several purposes, one of which was "to reduce environmental impacts." This purpose is stated as an objective, which is good. But the wording is imprecise: the intent of this wording was not to "reduce" environmental impacts with the project, but to design project alternatives so as to avoid or minimize impacts in the process. Since one of Caltrans' stated values is to be a good steward of the environment, a purpose such as "reducing impacts" can typically be left out of Purpose and Need Statements unless other stakeholders specifically call for it. Lesson: word a project's purposes very precisely.

- For a project to make improvements on an urban route, one purpose was "to improve air quality." Years of delay resulted after it was found that none of the build alternatives would achieve this purpose. Lesson: be sure that each project purpose can be met by at least one build alternative.

A project may have an inadequately developed or flawed purpose and need statement for various reasons:

- The writers may not understand the function of a purpose and need statement.
- The writers may not be aware of all the resources available to them to help prepare the purpose and need statement.
- The writers may not understand how a purpose and need statement evolves, and how they contribute to it. They may only see their immediate assignment without understanding how their role fits into the larger process. Without that understanding, it will be harder for them to contribute meaningfully to project continuity. And without project continuity, staff working on subsequent project phases have less to work with. The end result can be a repeating cycle of inadequate purpose and need development at each project phase.

e) Current Guidance on Purpose and Need

Much is written about the importance of a well-defined purpose and need statement. The Project Development Procedures Manual (PDPM) recognizes that the purpose and need for a project is the foundation for identifying the full range of possible alternatives and determining which of these alternatives are reasonable. The need must justify any significant project environmental impacts. The PDPM defers to the Federal Highway Administration (FHWA) Memorandum on Purpose and Need in Environmental Documents (see http://www.fhwa.dot.gov/environment/guidebook/vol2/doc7d.pdf). This memorandum provides a list of topics that should be addressed when identifying the purpose and explaining the need of a proposed action. The memorandum notes that the list "is by no means all-inclusive or applicable in every situation and is intended only as a guide." The Purpose and Need Team used this list as a basis for its matrix in Appendix B, Inputs to Good Purpose and Need Statements.

The FHWA list is a good starting point; however, we must also look elsewhere for guidance in developing a purpose and need that is defensible. The California Environmental Quality Act (CEQA) requires a "statement of objectives sought by the proposed project," including the underlying purpose of the project (Guidelines, Section 15124(b). The National Environmental Policy Act (NEPA) mandates that Chapter 1 of an Environmental Impact Statement (EIS) or Environmental Assessment (EA) discuss "the purpose of and need for action" (Council on Environmental Quality Regulations, Section 1502.13). However, the Council on Environmental Quality (CEQ) does not define the terms "purpose" and "need."

3) PURPOSE AND NEED DEVELOPMENT PROCESS

A purpose and need statement evolves from the time it is first conceived until it becomes the organizing framework of the project approval and the environmental document. Those who understand how it is initiated and how it is later refined will be better equipped to contribute to its progression, regardless of which project phase they are involved in. See the flow chart in Appendix C.

A project's purpose and need statement begins to take shape during the development of the Regional Transportation Plan (RTP), the 10-Year State Highway Operation and Protection Plan (SHOPP), or the Interregional Transportation Strategic Plan (ITSP), where it may be expressed as the broad intent to improve transportation at a system or corridor level with projects or groups of projects. In the Transportation Concept Report, purpose and need within a specific corridor is further refined. During the Project Initiation Document (PID) phase, the purpose and need for individual projects is developed based on the earlier system or corridor planning. Project purpose and need takes its final and most refined form during the Project Approval and Environmental Document (PA&ED) phase.

Functional units in the project development process are responsible for various aspects of the purpose and need statement. Planning ensures that a project's purpose and need statement accurately reflects the RTP, the 10-Year SHOPP, or the ITSP. The Project Development Team develops purpose and need statements during the PID phase and ensures that they are consistent with the planning concept and statewide goals. During PA&ED, Environmental Planning prepares the environmental document that publicly discloses the intent and the supporting evidence for the project. By the end of PA&ED the purpose and need has been finalized. Subsequent project phases, Plans, Specifications and Estimates (PS&E) and Construction, then implement the approved project in a manner that is consistent with the purpose and need.

a) Regional Transportation Plan (RTP) Phase

The need for a transportation project is usually identified initially by the Metropolitan Planning Organization (MPO), the Regional Transportation Planning Agency (RTPA), or the Caltrans Systems Planning Branch. A system-wide deficiency is identified in the Regional Transportation Plan (RTP) prepared by the MPO/RTPA, or in a District System Management Plan prepared by the Caltrans Systems Planning Branch. A corridor deficiency is identified in an MPO/RTPA corridor study or in a Caltrans Route Concept Report (RCR) or Transportation Concept Report (TCR). From these deficiency identifications, a project-specific purpose and need statement is developed in the Project Initiation Document.

b) Project Initiation Document (PID) Phase

Once the project has been included in the fiscally constrained RTP, Caltrans (or the regional agency with Caltrans' guidance) prepares a Project Initiation Document (PID). The purpose and need statement in the PID is project-specific. The purpose and need statement should be developed in a multidisciplinary team approach (generally led by Design with Project Management, Planning, Traffic Operations, Environmental and others, and, perhaps, Legal input) that clearly reflects the stated deficiency and the scope of the proposed objectives. The purpose and need statement in the PID will form the basis for the purpose and need statement in the environmental document. Project programming decisions are influenced by the purpose and need statement.

Project definition involves the need to address "logical termini" and "independent utility." "Logical termini" may be defined as rational end points for a transportation improvement, and rational end points for a review of environmental impacts. "Independent utility" means that a

transportation improvement can stand alone without forcing or requiring other improvements that may have their own impacts. Defining a project with logical termini and independent utility requires that the project be well defined in terms of its project limits and purpose. It is important to address these issues in a project's purpose and need statement at the PID phase. Addressing the issues of logical termini and independent utility is required for federal–aid projects; while it is not required for other projects, they would also benefit from clearly addressing these issues at the PID phase. These components make the purpose and need statement stronger, and the PID phase is the most practical time to adjust either the project's purpose or scope to satisfy the need. Logical termini and independent utility are discussed in greater depth in FHWA's Memorandum, 11/5/93, "Guidance on the Development of Logical Project Termini" (see http://www.fhwa.dot.gov/environment/guidebook/vol2/doc12a.pdf).

The draft PID is circulated for review by the regional agency and the various Caltrans divisions. The Environmental Division and Legal should be included in development and review of the draft PID purpose and need statement, to ensure that it satisfies the scrutiny of the resource agencies during environmental document preparation in the PA&ED phase. The Headquarters Environmental Coordinator should also review the purpose and need statement and the Preliminary Environmental Assessment Report that accompanies the PID.

c) Project Approval and Environmental Document (PA&ED) Phase

During the PA&ED phase, it is the responsibility of the Environmental Planners to fully explain the purpose and need to the public, agencies and other stakeholders, to meet the requirements of the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other environmental statutes and regulations. Environmental Planners work closely with Design, Planning, Traffic Operations, Project Management, Legal and, perhaps other members of the Project Development Team (PDT) to ensure that the purpose and need statement is consistent in the Project Report and the environmental document.

During the PA&ED process, the purpose and need will often be developed or refined as more detailed transportation studies are undertaken. But it is essential that a sound, defensible purpose and need be identified prior to this phase. Resource agencies traditionally become involved during PA&ED through the Memorandum of Understanding for implementing the National Environmental Policy Act and Section 404 of the Clean Water Act (NEPA/404 MOU). This MOU seeks to integrate the two processes of compliance with NEPA and compliance with Section 404 of the Clean Water Act. The existing MOU requires the concurrence of the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, NOAA Fisheries and FHWA on a project's purpose and need. (This MOU currently requires that Caltrans and FHWA obtain resource agency concurrence on a project's purpose and need. The MOU is being revised; when finalized, it may require Caltrans/FHWA to invite resource agency agreement on purpose and need, rather than concurrence.) Early collaboration with the resource agencies at a programmatic level, during the development of the RTP, RCR/TCR and/or PID, would be helpful in getting their official concurrence during PA&ED.

4) RECOMMENDATIONS

a) Implementation Plan for Improving Purpose and Need Statements

The Team developed an implementation plan, for improving purpose and need statements, on the following pages. This plan collates a broad series of initial recommendations that initially fell into seven categories: education and training; documentation; resources/funding; continuity; roles and responsibilities; information sources and guidance; and process. These have been further distilled into five recommendations and a plan for their implementation. The Implementation Plan is on the following pages.

b) Draft Director's Policy

The Team has also drafted a Director's Policy (see pages 17-19). The draft Director's Policy has gone through preliminary reviews. In July 2003, the draft was submitted to the Division of Business, Facilities, Asset Management and Security to begin the formal adoption process.

IMPLEMENTATION PLAN

The Purpose and Need Implementation Plan consists of an Objective; Strategies; Proposed Actions and Tasks; Proposed Schedule; and Draft Charters for New Teams.

Objective

To identify actions, responsibilities and performance measures to facilitate the development of a consistent approach to Purpose and Need Statements from planning through project approval.

Strategies

1. Issue a Director's Policy that emphasizes the importance of the Purpose and Need Statement and stresses the need for the early formation of multi-functional Project Development Teams to ensure consistency from planning through project approval. The policy would set forth roles and responsibilities from the management level to the working level.

2. Establish a Purpose and Need Website to make guidance and tools more available.

    - Obtain approval of useful tools and guidance for preparing quality purpose and need statements as the content of proposed web site (see the Appendices for proposed tools and guidance)
    - Post the tools and guidance on Division of Environmental Analysis (DEA) web site
    - Link to the web sites of other Divisions
    - Provide access to local agencies

3. Evaluate the usefulness of a rating tool, similar to the Value Analysis priority rating tool, for establishing and weighting the objectives of a Purpose and Need Statement and evaluate how well each alternative meets a project's purpose and need.

4. Establish a cross-functional steering committee to review existing guidance and tools from Planning, Design, Project Management and Environmental, and other functional areas identified by the committee. Recommend ways to incorporate guidance about: a) early identification of purpose and need, b) cross-functional discussion of purpose and need, and c) formal handoff of information about purpose and need.

5. Prepare a cross-functional Purpose and Need Statement training module, consisting of guidance, references, tools, and a PowerPoint presentation, for use by all functional areas as a stand-alone course and as part of academies and other training courses.

Proposed Actions and Tasks

1. Issue a Purpose and Need Director's Policy.

Action/Task	Responsibility	Performance Measure
Submit draft Director's Policy for review	Need & Purpose Team	Submittal
Prepare and finalize Director's Policy	Business Facilities, Asset Management & Security (BFAMS)	Dissemination

2. Establish a Purpose and Need website to make guidance and tools more available.

Action/Task	Responsibility	Performance Measure
Submit matrices, glossaries and guidance materials to Team Sponsors for approval	Purpose and Need Team	Submittal
Approve matrices, glossaries, tools, and guidance materials for posting on website	Purpose and Need Team Sponsors	Approval
Convert files to HTML formatting, post N&P materials to a server and website, and to link the site with the web sites of other divisions/programs	Division of Environmental Analysis (DEA) staff	Completion
Test website to ensure that it works properly	DEA staff	Web site functional
Provide links to this site from Transportation Planning and Design sites	Transportation Planning staff and Design staff	Links posted
Collect data and gather feedback on the website to ascertain its usage and determine improvements needed	DEA staff	number of site visits, number and nature of comments received, survey
Update and improve the website	DEA staff	Completion - Ongoing

3. Evaluate the usefulness of a rating tool, similar to the Value Analysis priority rating tool, for establishing and weighting the objectives of the Purpose and Need Statements and evaluate how each alternative meets the project's purpose and need.

Action/Task	Responsibility	Performance Measure
Evaluate VA priority rating tool and submit recommendations to management regarding the potential effectiveness of this rating approach	New team #1	Evaluation report with recommendations

4. Establish a cross-functional steering committee to review existing guidance and tools from Planning, Design, Project Management and Environmental, and other functional areas identified by the committee. Recommend ways to incorporate guidance for a) early identification of purpose and need, b) cross-functional discussion of purpose and need, and c) formal handoff of information about purpose and need.

Action/Task	Responsibility	Performance Measure
Review existing Planning guidance, Project Development Procedures Manual, Environmental Handbook, and other guidance materials, identify guidance and tools that needs revisions to provide better information about quality purpose and need statements	New team #2	List of guidance and tools needing revisions
Review proposed guidance revisions as they become available	New team #2	Comment on revisions and recommend actions to management

5. Prepare a cross-functional Purpose and Need Statement training module consisting of guidance, references, tools, and a PowerPoint presentation for use by all functional areas as a stand-alone course or as part of academies and other training courses.

Action/Task	Responsibility	Performance Measure
Prepare a cross-functional Purpose and Need training module	New team #3	Training module made available to all functional areas

Proposed Schedule

Team or Responsible Party	Begin	Complete
Need & Purpose Team • Assist with Director's Policy adoption process as needed	In progress: informal review was completed; revised draft was submitted for formal adoption on 7/10/03	Complete in six months
DEA staff • Implement website	Begin ASAP	Complete in six months
DEA staff • Update and improve website	Begin after posting of website	Complete evaluations at six, twelve, twenty-four months Complete website revisions within two months of evaluations

New Team #1 • Examine VA priority rating tool • Propose similar tool for rating objectives of Need and Purpose Statements and for evaluating alternatives • Test the new tool	Begin ASAP	Complete in eighteen months Recommend whether to proceed with the use of the tool in six to twelve months following its development
New Team #2 • Develop a framework to assist functional units in preparing / revising their Purpose and Need guidance • Review Purpose and Need guidance materials from functional units and recommend revisions	Begin ASAP	Ongoing
New Team #3 • Review and develop training module and plan	Begin ASAP	Complete training module and plan in nine to twelve months Complete first round of training in twelve months following training module
All Divisions • Participate in Departmental efforts at centralizing and storing project information, as a foundation for preparing improved Purpose and Need Statements	Begin ASAP	Ongoing

Draft Charters for New Teams

As shown in the Implementation Plan Proposed Actions and Tasks and Proposed Schedule, the Purpose and Need Team recommends the formation of three new teams:

1) Rating Tool Evaluation Team
2) Purpose and Need Guidance Review Team
3) Purpose and Need Training Module Team

Following are draft charters for these teams.

Rating Tool Evaluation Team – Draft Team Charter

Team Name	Rating Tool Evaluation Team
Mission/Objective Statement	To evaluate the potential usefulness of using a rating tool, similar to the Value Analysis priority rating tool, for establishing and weighting the objectives of a Purpose and Need statement and for evaluating how well each alternative meets a project's purpose and need. To identify pilot project(s) on which to apply such a tool, and evaluate them.
Project Background	Project alternatives can meet project objectives to varying degrees. Ranking and weighting a project's objectives may provide a method for measuring the degree to which each project alternative presents a solution to the identified transportation problem(s). This should help decision makers weigh the relative merits of project alternatives, which in turn should lead to better decisions. This is in keeping with the intent of the National Environmental Policy Act and the California Environmental Quality Act, both of which seek to promote better decision making by government agencies.
Team Members	(Drawn from Design, with support from Planning, Environmental, Project Management)
Team Sponsor Commitments	The sponsor and advisors commit to reviewing products and providing guidance. Sponsors: Dolores Valls & Gary Winters Advisors: Wendy Waldron, Scott McGowan
Level of team authority / empowerment	Our team is empowered to evaluate, recommend and provide guidelines for a ranking tool to improve the quality of Purpose and Need statements.
Roadmap to be used	Process Improvement Roadmap: describes the steps to control and improve a process. Team success is measured by degree rather than as an absolute. The process may already be running well, but a team is formed to document, monitor, standardize and improve the process. Steps typically include: 1. Define process purpose, scope, inputs, suppliers, outputs, customers 2. Flowchart existing process 3. Define process requirements 4. Define process measurements 5. Monitor the process (collect data) 6. Develop improvement plan 7. Implement improvements and assess the process 8. Monitor and continue improvement
Team member duties	▪ Participate in meetings ▪ Follow through on homework commitments ▪ Contribute resources to the team ▪ Report to the Purpose and Need Steering Committee (see other draft charter for the Purpose and Need Guidance Review Team)
Resources	▪ Team members' expertise ▪ Sponsor and advisors ▪ Value Analysis guidelines and references ▪ Meeting tools: agendas, videoconference, teleconference, etc. ▪ Purpose and Need Team Report
Deliverables	An Evaluation Report, to include: ▪ Summary of how ranking tools are used in Value Analysis ▪ Findings and recommendations regarding usefulness of a ranking tool for ranking and weighting the objectives of Purpose and Need statements ▪ (If recommended) Proposed tool model, and guidelines for who should use it, when it should be used (project stage), and how it should be used ▪ (If recommended) Identify project(s) for pilot, evaluate pilot.

DRAFT

Reviewed and approved:

_____ _____

Dolores Valls, Project Sponsor Date

_____ _____

Gary Winters, Project Sponsor Date

Purpose and Need Guidance Review Team – Draft Team Charter

Team Name	Purpose and Need Guidance Review Team
Mission/Objective Statement	To serve as the Steering Committee for the other Purpose and Need teams, serving as a clearinghouse about Purpose and Need, reducing redundancy and providing continuity among the teams. To review existing Planning guidance, the Project Development Procedures Manual, Environmental handbook, and other guidance materials, and to identify internal guidance and tools that need revisions to provide better information about quality purpose and need statements.
Project Background	Every project requires a well-defined purpose and need statement. Caltrans' existing guidance and tools about preparing purpose and need statements are scattered and limited in scope. Guidance and tools can be compiled, made more complete and be placed in more appropriate sections of manuals and on web sites for improved access by staff. This will contribute toward increased ability of staff to prepare and revise well-defined purpose and need statements.
Team Members	(Drawn from Planning, Design, Project Management, Environmental and Legal)
Team Sponsor Commitments	The sponsor and advisors commit to reviewing products and providing guidance. Sponsors: Brian Smith and Brent Felker
Level of team authority / empowerment	Our team is empowered to evaluate and recommend areas of improvements to existing Caltrans guidance on Purpose and Need, and to review revisions to guidance and make recommendations to management regarding those revisions. We are empowered to oversee the effort of other Purpose and Need teams
Roadmap to be used	Problem Solving Roadmap: describes the steps to seek out and eliminate the cause (or causes) of an unacceptable problem. The mission of a problem solving team is to find and eliminate the root cause of a defect. Steps typically include: 1) Organize and plan; 2) Describe the problem; 3) Contain the problem; 4) Identify the root causes; 5) Plan corrective action; 6) Verify corrective action; 7) Make permanent corrective action; 8) Recommend system changes.
Team member duties	▪ Participate in meetings ▪ Follow through on homework commitments ▪ Contribute resources to the team ▪ Identify the tools that functional units use that include or should include Purpose and Need guidance ▪ Receive input from other Purpose and Need teams ▪ Disseminate information to other Purpose and Need teams ▪ Coordinate the effort of other Purpose and Need teams
Resources	▪ Purpose and Need reference materials (see Appendix F of the Purpose and Need Team's Findings Report) ▪ NCHRP #480; FAST Diagram ▪ Team members' expertise ▪ Sponsor and advisors ▪ Meeting tools: agendas, videoconference, teleconference, etc.
Deliverables	▪ List or matrix of guidance and tools needing revisions. ▪ Suggested revisions to guidance and tools ▪ Comments on revisions as they become available, and recommendations to management on actions (adopt, further revise)

DRAFT

Reviewed and approved:

_____ _____

Brian Smith, Project Sponsor Date

_____ _____

Brent Felker, Project Sponsor Date

Purpose and Need Training Module Team – Draft Team Charter

Team Name	Purpose and Need Training Module Team
Mission/Objective Statement	To develop Purpose and Need training module(s) consisting of guidance, references, tools, and a PowerPoint presentation for inclusion in Academies and as a stand-alone course.
Project Background	Every project requires a well-defined purpose and need statement. Caltrans staff who receive training in how and when to prepare and refine Purpose and Need statements will do a better job of preparing them, and will interact more effectively with staff in other functional areas, improving the Department's operations in general. A training module that brings together reference materials and how-to instruction will make this possible.
Team Members	(Drawn from Planning, Design, Project Management, Environmental and Legal)
Team Sponsor Commitments	The sponsor and advisors commit to reviewing products and providing guidance. Sponsors: Joan Sollenberger, Gary Winters Advisors: Chris Hatfield, Sheila Mone, Mickie Ferguson
Level of team authority / empowerment	Our team is empowered to use guidance on Purpose and Need to develop a training module(s), and make it available for inclusion in Academies and as a stand-alone course.
Roadmap to be used	Problem Solving Roadmap: describes the steps to seek out and eliminate the cause (or causes) of an unacceptable problem. The mission of a problem solving team is to find and eliminate the root cause of a defect. Steps typically include: 1) Organize and plan; 2) Describe the problem; 3) Contain the problem; 4) Identify the root causes; 5) Plan corrective action; 6) Verify corrective action; 7) Make permanent corrective action; 8) Recommend system changes.
Team member duties	▪ Participate in meetings ▪ Follow through on homework commitments ▪ Contribute resources to the team ▪ Identify lessons learned about preparing Purpose and Need. ▪ Report to the Purpose and Need Steering Committee (see draft charter for Purpose and Need Guidance Review Team)
Resources	▪ Team members' expertise ▪ Sponsor and advisors ▪ Training offices of Transportation Planning and Environmental Analysis ▪ Purpose and Need reference materials (see Appendix F of the Purpose and Need Team's Findings Report) ▪ Meeting tools: agendas, videoconference, teleconference, etc. ▪ Need and Purpose Team Report
Deliverables	▪ Training module(s) ▪ PowerPoint Presentation

DRAFT

Reviewed and approved:

_____ _____
Joan Sollenberger, Project Sponsor Date

_____ _____
Gary Winters, Project Sponsor Date

_____ _____
Dolores Valls, Project Sponsor Date

California Department of Transportation

DIRECTOR'S POLICY

Number:	XX
Effective Date:	Draft
Supersedes:	New

TITLE Purpose and Need Statements

POLICY

The Department ensures consistency in project purpose and need from the planning process through construction, at the appropriate level of detail commensurate with the stage of project development. The Department develops a well-defined purpose and need for projects, through coordination with local and regional planning agencies and among Department staff; early formation of broad-based Project Development Teams; and retention and transmission of relevant supporting data.

INTENDED RESULTS

A clear, well-justified purpose and need explains to the public and decision makers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed transportation projects is warranted.

Quality Purpose and Need Statements are developed and refined iteratively from planning through project approval. Subsequent project activities must be consistent with a project's approved purpose and need. Broad participation from many functional units and data retention and transmission are key factors in the successful development and refinement of sound Purpose and Need Statements.

A project's "Need" is an identified transportation deficiency or problem, and its "Purpose" is the set of objectives that will be met to address the transportation deficiency. A reasonable solution or range of solutions are developed and evaluated based on these objectives. The Purpose and Need Statement is the foundation for each of California's transportation improvements.

The Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) mandates that Chapter 1 of an Environmental Impact Statement (EIS) or Environmental Assessment (EA) discuss "the purpose of and need for action" (CEQ Regulations, Section 1502.13).

The California Environmental Quality Act (CEQA) requires a "statement of objectives sought by the proposed project," including the underlying purpose of the project (CEQA Guidelines, Section 15124(b).

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RESPONSIBILITIES

Director/Chief Deputy Director

- Encourages and facilitate early development of quality Purpose and Need Statements.
- Recognizes and highlight individuals, teams, and projects that advance the goals of this policy.

Deputy Director for Planning and Modal Programs and Deputy Director for Project Delivery

- Ensure development of strategies to facilitate early development of quality Purpose and Need Statements.
- Require training of staff in the development of Purpose and Need Statements.
- Initiate revision of manuals, guidance, and procedures to reflect this policy.
- Encourage staff participation on Project Development Teams.
- Ensure development of strategies for retention and transmission of project documentation from planning through construction.

Deputy Director for Maintenance and Operations

- Initiates revision of manuals, guidance, and procedures to reflect this policy.
- Encourages staff participation on Project Development Teams.

Chiefs, Divisions of Planning, Local Assistance, Environmental Analysis, and Design

- Develop strategies to facilitate early development of quality Purpose and Need Statements.
- Develop and implement training in the development of Purpose and Need Statements.
- Revise manuals and guidance to reflect this policy.
- Encourage staff participation on Project Development Teams.
- Recommend strategies for retention of project documentation and transmission to subsequent project stages.

Chiefs, Divisions of Project Management, Traffic Operations, Engineering Services, Right of Way, Construction and Maintenance

- Require staff training in the development of Purpose and Need Statements.
- Revise manuals, guidance, and procedures to reflect this policy.
- Encourage staff participation on Project Development Teams.
- Recommend strategies for retention of project documentation and transmission to subsequent project stages.

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District Directors

- Ensure early development of quality Purpose and Need Statements.
- Ensure dissemination of guidance and tools for preparing quality Purpose and Need Statements.
- Ensure staff participation in Project Development Teams.
- Encourage retention of project documentation and transmission to subsequent project stages.

Deputy District Directors for Planning, Project Management, Design and Environmental Planning

- Identify training needs regarding preparation and refinement of Purpose and Need Statements.
- Ensure staff is trained in the preparation of Purpose and Need Statements.
- Implement strategies for early development of quality Purpose and Need Statements.
- Ensure staff participation in Project Development Teams.
- Oversee Project Development Teams in the review, discussion and refinement of project purpose and need.
- Implement procedures to assure retention of project documentation and transmission to subsequent project stages.
- Ensure that project scope changes and design changes following Project Approval & Environmental Document are evaluated against the project's approved purpose and need.

Deputy District Directors for Right of Way and Construction

- Ensure staff participation in Project Development Teams.
- Ensure that project scope changes and design changes following Project Approval & Environmental Document are evaluated against the project's approved purpose and need.

Employees:

- Ensure the continuity and quality of Purpose and Need Statements.
- Participate actively in Project Development Teams.

APPLICABILITY

All employees and others involved in planning, project development and project delivery.

DRAFT

JEFF MORALES
Director

Date Signed

APPENDICES: TEAM PRODUCTS

A. Purpose and Need: Why, Who, When, What, How
B. Inputs to Good Purpose and Need Statements
C. Flow Chart: Key Activities for Quality Purpose and Need Statements
D. Useful Acronyms
E. Glossary of Useful Terms
F. List of Reference Materials

APPENDIX A: PURPOSE AND NEED –WHY, WHO, WHEN, WHAT, HOW

The Purpose and Need Team focused on developing tools to be used for STIP projects. Where applicable, this tool and the other tools developed by the Team can be used for SHOPP projects as well.

WHY: Why a well-defined Purpose and Need statement is important

- Avoids developing an ill-conceived project
- Develops a shared understanding of the transportation problems, objectives and possible solutions
- Defines a project's scope, guiding development of alternatives, and evaluating alternatives
- Achieves environmental streamlining
- Helps to identify potential context sensitive solutions
- Allows transportation decisions to be legally defensible
- Justifies impacts and spending of funds
- Helps justify projects for programming

WHO: Who develops the Purpose and Need, who participates, and who reviews

See the notes following the table for the definitions of the acronyms used.

	RTP	TCR / RCR	PID	PA&ED
Develops Purpose and Need	MPO or RTPA	CT System Planning	PDT (CT/Local Agency)	PDT CT Environmental Planning
Contributes to development	CT Local agencies Community FHWA FTA Air Districts Other resource agencies	Other CT functional units	Other CT functional units Other external stakeholders	Other CT functional units Other external stakeholders FHWA Regulatory agencies Resource agencies FTA
Reviews draft	CT Local agencies Community FHWA FTA Air Districts Other resource agencies Native American Tribal governments Adjoining CT District(s), state(s), county (counties), country	MPO or RTPA Local agencies Community FHWA FTA Air Districts Other resource agencies Native American Tribal governments Adjoining CT District(s), state(s), county (counties), country	MPO or RTPA Local agencies Community Resource agencies Native American Tribal governments Adjoining CT District(s), state(s), county (counties), country	MPO or RTPA Local agencies Community FHWA FTA Resource agencies Regulatory agencies Native American Tribal governments Adjoining CT District(s), state(s), county (counties), country

Table Notes: Acronyms (for PDPM references, see http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm)

CT.....Caltrans
FHWA.....Federal Highway Administration
FTA .....Federal Transit Administration
MPO .....Metropolitan Planning Organization (see PDPM Chapter 1, Section 4)
PAED .....Project Approval / Environmental Document (PDPM Chapters 10 and 12)
PDPM.....Project Development Procedures Manual (see http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm)
PDT .....Project Development Team (see PDPM Chapter 8)
PID .....Project Initiation Document (see PDPM Chapter 9)
RTP .....Regional Transportation Plan (see PDPM Chapter 1, Section 4)
.....Regional Transportation Plan Guidelines:
.....http://www.dot.ca.gov/hq/tpp/orip/offices/orip/rtp/rtpguidelines/Contents.htm
RTPA.....Regional Transportation Planning Agency (see PDPM Chapter 1, Section 4)
TCR / RCR..Transportation Concept Report / Route Concept Report (see PDPM Chapter 1, Section 4)

WHEN: When a project's Purpose and Need is developed (ongoing, increasingly detailed)

	RTP	TCR / RCR	PID	PA&ED
When developed	Developed when the RTP is drafted: continuous process	Updated as needed	At initiation of PID, refined throughout PID process	At initiation of environmental document, refined throughout environmental process
How developed	Identifies existing / future system deficiencies [through modeling, traffic surveys, counts, trends, demographics, accident rates, land use, etc.] Deficiencies are turned into basic statements of intent that may encompass groups of projects Public and stakeholder participation	Identifies existing / future corridor deficiencies [through modeling, traffic surveys, counts, trends, demographics, accident rates, land use, etc.] Public and stakeholder participation	Looks at project background, current data PDT meetings Public and stakeholder participation	Looks at project background, current data PDT meetings Consultation with regulatory and resource agencies and FHWA, FTA Public and stakeholder participation

WHAT: Elements of a Project's Purpose and Need

A project's purpose and need is a package comprised of:

- Purpose and Need statement itself. A quality purpose and need statement must briefly and precisely state the transportation problem and the intended project objective.
- Supporting information and data. This must be detailed enough to substantiate the problem and justify the objective expressed in the purpose and need statement. It may include narrative text (e.g., a description of Level of Service), tables and graphs (e.g., changing accident rates over time), or visuals (e.g., photographs of roadway storm damage). In engineering reports and environmental documents, it can be several paragraphs or pages long.

Elements of a Project's Need

- Establishes evidence of current or future transportation problem or deficiency
- Is factual and quantifiable
- Justifies commitment of resources and impacts to the environment
- Identifies a problem that is fixable/solvable
- Establishes and justifies logical termini (23 CFR 771.111(f))

Elements of a Project's Purpose

- Presents objectives to address the need
- Can be used to develop and evaluate potential solutions
- Is achievable
- Is unbiased
- Is comprehensive enough to allow for a reasonable range of alternatives, and specific enough to limit the range of feasible alternatives
- Allows for a range of alternatives that are in context with the setting
- Focuses on multi-modal transportation system

HOW: Assorted Suggestions and Lessons Learned

- Participate actively as a member of a Project Development Team (PDT). Start attending early in the process. Stay involved. Use them as a means of communicating a functional unit's concerns to the project team. Use them as a forum to work through project issues. Use them to help retain and transfer project information. This will help the PDT identify the needs, the objectives that must be achieved to meet those needs, and the solutions that will fulfill the objectives.
- Avoid stating a specific transportation solution as a project's purpose. For instance, do not state that a project's purpose is to "build a four-lane highway." Worded this way, the purpose specifies a solution to the need, rather than an objective. There may be many other possible solutions, but this wording would preclude consideration of those other options. Instead, try to state the purpose as an objective that must be met; this will make it possible to capture various possible solutions. In this example, the actual objective may be to "relieve congestion" or "improve safety." This wording allows the project team to

consider a range of appropriate solutions to the problem without dictating a specific outcome.

- Verify that the Purpose and Need is consistent with strategies as defined in state, regional and local plans, goals and objectives.
- When defining a project purpose, be sure that all of the objectives are actually achievable. If certain objectives are not achievable, this can create project delays. In particular, do consider air quality requirements during project development, but do not state that a project purpose is to "improve air quality." This may not be achievable.
- At the Project Approval & Environmental Document stage (PA&ED), identify any project changes since the Project Initiation Document (PID) was prepared. This will help to clarify what the transportation problem is.
- Make every effort to keep project files current and accessible. Be aware that others at subsequent phases may need the information in those files so they won't have to start from scratch to do their work. Each functional unit is part of a much larger process to plan, program and deliver projects and then maintain and operate the facilities. Retaining and transferring project information to others creates continuity, consistency and streamlining.
- Advocacy groups can influence the way a project's purpose and need are defined and can also affect which solutions are considered to meet the stated objectives. Where such input is anticipated, be sure to incorporate resources in project workplans for the interactions.

APPENDIX B: INPUTS TO GOOD PURPOSE AND NEED STATEMENTS

This matrix identifies many of the information sources, or inputs, about project purpose and need. These can contribute to the development of supporting information for good purpose and need statements. This matrix is intended to increase awareness of information sources and also encourage broader communication. As noted in the Report, the Purpose and Need Team focused on developing tools to be used for STIP projects. Where applicable, this Inputs Matrix and the other tools developed by the Team can also be used for SHOPP projects or local projects.

Rows: The typical inputs to good purpose and need statements are arranged in rows according to the categories of purpose and need identified by the Federal Highway Administration (FHWA) in its guidance on Purpose and Need (refer to http://www.fhwa.dot.gov/environment/guidebook/vol2/doc7d.pdf), and similar categories in Caltrans' Project Development Procedures Manual. Where FHWA's guidance and the PDPM do not share a similar category, this is noted. Note: a project purpose and need can be developed around additional categories that are not explicitly listed, such as context-sensitive solutions; livable communities; goods movement; etc.

Columns: For each of these categories, inputs are arranged in columns according to project phase, including some important pre-programming phases. Information developed during one project phase often becomes an important input to the next phase; for instance, the Regional Transportation Plan (RTP) that is prepared during the RTP phase is used during the Project Initiation Document (PID) phase. Inputs may be used at several project phases, and in fact this is encouraged.

Individual entries are sorted into three broad groupings: Document (a report, plan, manual, software, model or other written or electronic medium that can be referred to); Contact (a person, functional unit or agency that can be consulted); and Action (a meeting or other activity that can be performed). Inputs are not always provided for all three groupings.

This matrix is not exhaustive; the inputs to a good purpose and need statement are not limited to the resources identified below. Also, the inputs will not apply to every project; relevant and available inputs will vary on a case-by-case basis.

The sources for these inputs will vary from District to District, so no attempt has been made here to describe where they are located. For additional information about many of the specific inputs, please refer to the other Appendices in this Report, especially Appendix E (Glossary). Guidance provided by your own functional area is also strongly recommended as a source of additional information.

Appendix B, Inputs to Good Purpose and Need Statements, is designed to work together with Appendix D, Useful Acronyms, and Appendix E, Glossary of Useful Terms. Together, these tools provide information about various resources that can help project teams to prepare and refine quality purpose and need statements.

INPUTS TO GOOD PURPOSE AND NEED STATEMENTS: Rows show categories of project Purpose and Need from FHWA's guidance. Columns focus on major project phases, from pre-programming through construction. Individual entries are sorted into three broad groupings: Document (a report, plan, manual, software, model or other written or electronic medium that can be referred to); Contact (a person, functional unit, agency or group that can be conferred with); and Action (an activity that can be performed). The inputs to a good purpose and need statement are not limited to the resources identified below. Also, not all inputs will apply to every project; relevant and available inputs will vary on a case-by-case basis. The sources for these inputs will also vary from District to District within Caltrans, so no attempt has been made to describe where they are located. For additional information about many of the specific inputs, please refer to the other Appendices in this Report, especially Appendix E (Glossary). Guidance provided by your own functional area is also strongly recommended as a source of additional information. See the introduction to Appendix B for additional information about this matrix. While the focus of this matrix is on STIP projects, it can also be used for SHOPP projects and local projects where applicable.

	Planning Prior to Project Initiation Document			**Project Initiation Documents (PIDs) and Feasibility Study Reports**	**Project Approval / Environmental Document (PAED)**	**Plans, Specifications and Estimates (PS&E)**	**Construction**
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(1) Project Status Briefly describe the project history including actions taken to date, other agencies and governmental units involved, actions pending, schedules, etc.	Not Applicable	Document: • Regional Transportation Plan (RTP) • RTP environmental document • General Plan – Circulation element • Previous Route Concept Reports/Transportation Concept Reports (RCRs/TCRs) • Previous project files • California Transportation Plan (CTP) • Interregional Transportation Strategic Plan (ITSP) • Statewide and Federal Systems & Designations (e.g., Scenic Highway System, IRRS, STRAHNET, Functional Classification, etc.) • Statutes • Intergovernmental Review (IGR) documents Contact: • Regional Transportation Planning Agency (RTPA) • Chamber of Commerce • Planning Departments • Public Works Departments • Public officials • Law enforcement • Advocacy groups • Civic groups • Public land-holding agencies • Historical Societies • Caltrans System Planning • Caltrans Regional Planning • Caltrans IGR • Caltrans Air Quality Coordinator • Caltrans Goods Movement Coordinator Action: • Town Hall meetings • Other community/public meetings		Document: • RTP • System Planning documents (RCRs/TCRs) • TSDP • Old project files • Previous studies • IGR documents Contact: • Caltrans Intergovernmental Review (IGR) • Caltrans Air Quality Coordinator • Caltrans Goods Movement Coordinator • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Resource agencies with jurisdiction Action: • Form Project Development Team (PDT); draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase	Document: • State Implementation Plan (SIP) • Transportation Control Measures (TCMs) for air quality • Project Initiation Document (PID) • Preliminary Environmental Analysis Report (PEAR) • Draft Project Report • PDT meeting minutes • Project files • RTP-stage information Contact: • PDT members • Caltrans Regional Planning Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(2) System Linkage Is the proposed project a "connecting link"? How does it fit in the transportation system?	Document: • Statutes (e.g. Section 230 to Section 635 of the Streets and Highways Code) • Previous RTP • General Plan elements (Circulation, Bike) • RTP Guidelines • Tribal Plans • Federal agency Master Plans • Statewide Plans (TSDP) • Air Quality Conformity Plans • Plans for Airports, Ferries, etc. • Congestion Management Plans • Transit Plans Contact: • Planning Departments • Modal advocacy groups • Trucking associations	Document: • General Plan Circulation element • RTP • RTPA environmental document • Transit information Contact: • Caltrans System Planning • RTPA • Local agencies • FHWA/FTA • Advocacy groups (bike & trail groups) – through Caltrans Regional Planning and Community Planning • Caltrans Goods Movement Coordinator		See left; also: Document: • System Planning documents (RCRs/TCRs) • CTP • Interregional Road System (IRRS) • Interregional Transportation Strategic Plan (ITSP) Contact: • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts	See left; also: Document: • PID • Draft Project Report • RTP-stage information Contact: • Caltrans Regional Planning • PDT members • Local/regional agencies • Advocacy or special interest groups • Other stakeholders Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts as needed	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement •	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(3) Capacity Is the capacity of the present facility inadequate for the present traffic? Projected traffic? What capacity is needed? What is the level(s) of service for existing and proposed facilities?	Document: • Traffic modeling • Highway Capacity Manual • Existing and projected land use planning • General Plan: Housing and Land Use elements and Zoning Maps • Caltrans Highway Logs • Caltrans Sign Logs • Caltrans forecasts • Caltrans Statewide Model (TSIP) • Transit Studies Contact: • Planning Departments • Modal advocacy groups Action: • Traffic modeling • Air Quality modeling • Transportation Demand modeling	Document: • RTP • State Implementation Plan (SIP) • Agency Corridor Studies • Traffic counts • Traffic Accident Surveillance & Analysis System (TASAS) • Circulation Plans • Functional Classification • Air Quality models • Major Investment Study (MIS) • Cost/benefit analysis (may be more appropriate under project status) • IGR documents • IRRS (Interregional Road System) • ITSP • ITMS (Intermodal Transportation Management System) • Statewide Model • MPO models • General Plan • Highway Capacity Software (HCS) • Highway Capacity Manual (HCM) • Simulation Models Contact: • Caltrans Traffic Operations • Caltrans Transportation Modeling • Caltrans System Planning • Caltrans IGR • Caltrans Goods Movement Coordinator • Caltrans Mass Transportation • Air Resources Board Action: • Collect data • Calculate Level of Service (LOS) • Calculate Demand/Capacity (D/C)		See left; also: Document: • System Planning documents (RCRs/TCRs) • Transportation System Development Program (TSDP) • DSMP (District System Management Plan) • RTP • IGR documents Contact: • Caltrans IGR • Caltrans Goods Movement Coordinator • Caltrans Mass Transportation • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts	See left; also: Document: • PID • Draft Project Report • Traffic forecasts • RTP-stage information • Contact: • Caltrans Regional Planning • Caltrans Traffic Operations • Caltrans Design • PDT members • Local/regional agencies • Advocacy or special interest groups • Other stakeholders Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts as needed	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(4) Transportation Demand Including relationship to any statewide plan or adopted urban transportation plan together with an explanation of the project's traffic forecasts that are substantially different from those estimates from the 23 U.S.C. 134 (Section 134) planning process.	See Capacity inputs, above.	See Capacity inputs, above.		See Capacity inputs, above. Also: Contact: • Caltrans Forecastng and Modeling • Caltrans Traffic Operations • Caltrans IGR • Local and regional agencies, e.g., cities, counties, COGs	See Capacity inputs, above, and see left. Also: Document: • TCR/RCR • PID • Draft Project Report • Traffic forecasts	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(5) Legislation Is there a Federal, State, or local government mandate for the action?	Document: • TEA 21 - Transportation Equity Act for the 21st Century • State Implementation Plan • Americans with Disabilities Act • Title VI • Clean Air Act • Clean Water Act • Initiatives/Measures Contact: • FHWA/FTA	See left. Also: Document: • RTP • SB 45 • Seismic Retrofit Program • Noise Attenuation Program • Regulatory agency mandates • Court orders Contact: • Planning Department • Local government offices • Air Resources Board • Regulatory agencies • Caltrans Legal • Caltrans Legislative Analyst's Office		See left. Also: Document: • TCRP (Traffic Congestion Relief Program) (Statute) • Previous Project Files • Design Exceptions on previous projects • Listings of Department commitments Contact: • Caltrans Legal • Caltrans HQ Environmental Division • Caltrans Air Quality Coordinator • SHOPP Program Managers • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance • Local and regional agencies, e.g., cities, counties, COGs • Local politicians • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase	See left. Also: Document: • • Design Exceptions from Previous Projects • Project Initiation Document • Land use plans • PDT meeting minutes Contact: • SHOPP Program Managers • Local/regional agencies • Advocacy or special interest groups • Other stakeholders Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(6) Social Demands or Economic Development New employment, schools, land use plans, recreation, etc. What projected economic development/land use changes indicate the need to improve or add to the highway capacity?	Document: • General Plans (Housing and Land Use elements) • Tentative Parcel Maps • Subdivision Maps • Specific Plans (e.g., large residential/ commercial developments) • Plans for major events (e.g., Olympics) • Security plans • Plans for context-sensitive solutions Contact: • Planning Department • FHWA/FTA • Tribes Action: • Hold public meetings	See left. Also: Document: • RTP • TCR/RCR • Economic Plan • Zoning maps • Models • Public agency Master Plans • Tribal Plans Contact: • Chamber of Commerce • Visitor/Welcome Centers • Redevelopment Agency • State Department of Housing and Development • Local Recreation Department • State Office of Tourism • School Districts • Department of Finance (for census) • Community-based organizations • Elected officials • Tribes Action: • Hold public meetings		See left. Also: Document: • RTP environmental document Contact: • Caltrans Goods Movement Coordinator • IGRCEQA Reviewer • District Encroachment Permits Engineer • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • For PEAR, perform environmental scoping for socio-economic and Environmental Justice issues • Initiate or update traffic analysis, traffic model and forecasts, and safety studies	See left. Also: Document: • PID • PEAR • Draft Project Report • Traffic forecasts Contact: • IGR CECQ Reviewer • District Encroachment Permits • Local/regional agencies • Advocacy or special interest groups • Other stakeholders • Caltrans Public Affairs Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts, and safety studies as needed • Keep up on local news	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

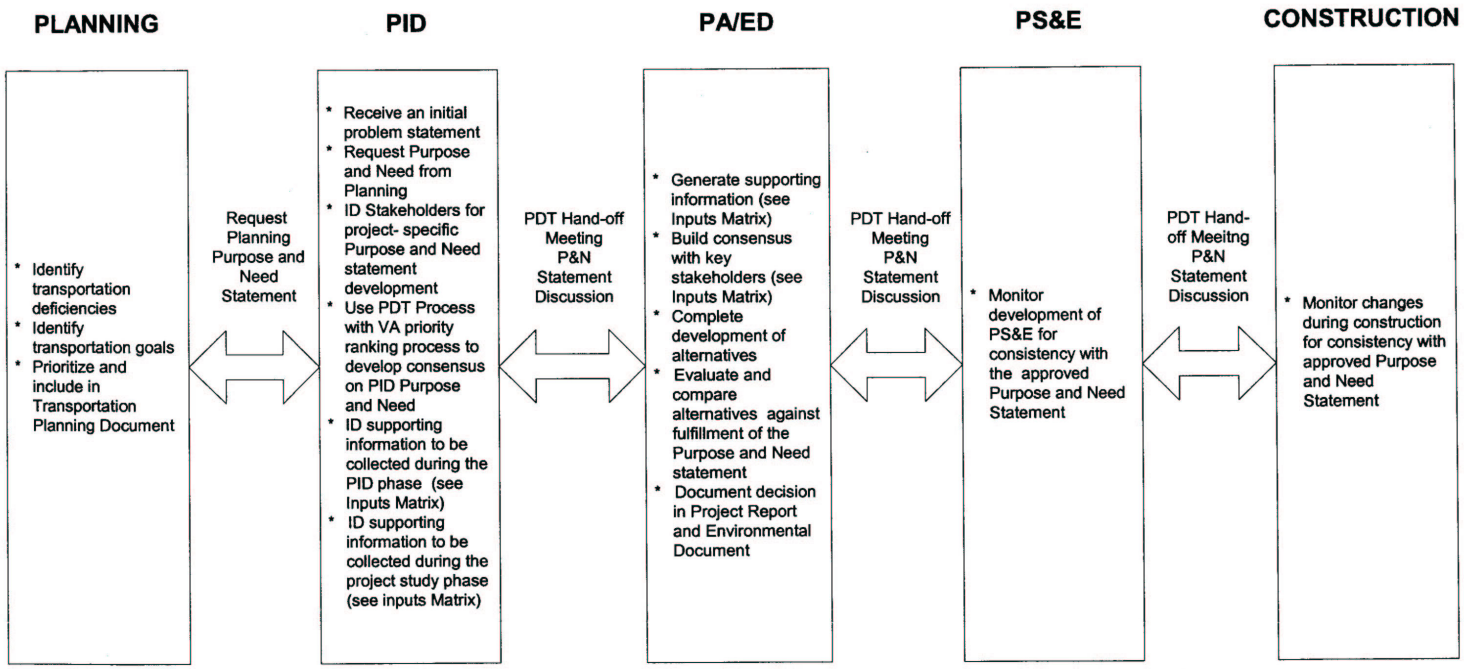
	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(7) Modal Inter-relationships How will the proposed facility interface with and serve to complement airports, rail and port facilities, mass transit services, etc?	See System Linkage, above. Also: Document: • General Plan • Transit studies • Airport Land Use Plans • California Aviation System Plan • California Trade and Goods Movement Plan • Rail and Port studies Contact: • Planning Department • FHWA/FTA • FAA • State Department of Aeronautics • Transit Agencies • Rail and Port Authorities • Trucking associations • Consolidated Transportation Service • Airport Land Use Plans • Modal advocacy groups	See left. Also: Document: • RTP • Contact: • RTPA/MPO • Caltrans Goods Movement • Caltrans Mass Transportation • Caltrans Local Assistance • Rail and Port operators • Caltrans Division of Rail • Regulatory agencies Action: • Meet with mode providers/agencies • Meet with advocacy groups		See left. Also: Document: • TCR/RCR • FHWA's "Flexibility in Highway Design" • Caltrans' "Main Streets: Flexibility in Design and Operations Guide 2002" Contact: • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Local transit providers • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase Action: • Form PDT; draft or revise purpose and need statement • Field review • Meet with mode providers/agencies	See left. Also: Document: • PID Contact: • Local/regional agencies • Local transit providers • Local bike groups • Other advocacy and special interest groups • Other stakeholders • Caltrans Public Affairs Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Keep up on local news	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(8) Safety Is the proposed project necessary to correct an existing or potential safety hazard? Is the existing accident rate excessively high? Why? How will the proposed project improve it?	Document: • Accident reports Contact: • CHP • Local law enforcement • Caltrans Planning • Caltrans Traffic Operations Action: • Hold public meetings	See left. Also: Document: • RTP • TASAS • Transportation Research Board Reports • Structures Maintenance: Bridge Management System (BMS) and Structure Replacement and Improvement Needs (STRAIN) Report • Feasibility Study Reports • Coastal Plan • Alquist-Priolo Fault Zones • Avalanche Plans Contact: • Caltrans Maintenance • Caltrans Structures Maintenance • Caltrans Division of New Technology and Research • State Office of Transportation Safety • State Office of Emergency Services (OES) • Federal Emergency Management Agency (FEMA) Action: • Collect data • Calculate Safety Index (S.I.) • Calculate accident rates		See left. Also: Document: • TASAS—accident rates • Safety index (calculated as a cost/benefit ratio) Contact: • Caltrans Traffic Safety • California Highway Patrol • Caltrans Truck Permitting—for bridge vertical clearances and bridge loading standards • Caltrans Structures Maintenance • Caltrans Safety SHOPP Program Manager • Caltrans Roadside SHOPP Program Manager • Caltrans Design Coordinator • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Local advocacy groups • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update safety studies	See left. Also: Document: • PID Contact: • Caltrans Design Coordinator • Local/regional agencies • Advocacy groups • Other stakeholders • Caltrans Public Affairs Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update safety studies as needed • Update TASAS and safety index • Keep up on local news	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(9) Roadway Deficiencies Is the proposed project necessary to correct existing roadway deficiencies (e.g., substandard geometrics, load limits on structures, inadequate cross-section, or high maintenance costs)? How will the proposed project improve it?	Document: • General Plan (Circulation element) • TCR/RCR Contact: • Caltrans Planning • Local Public Works Department • Rail and Port Authorities • Truckers' Association • Modal advocacy groups Action: • Public meetings • Field reviews • Data collection	Document: • Operations Management Plan • Intelligent Transportation System (ITS) Plan • Pavement management surveys • Structures Maintenance: Bridge Management System (BMS) and Structure Replacement and Improvement Needs (STRAIN) Report • Caltrans Highway Design Manual Contact: • Caltrans Maintenance • Caltrans Structures Maintenance • Caltrans Traffic Operations • Caltrans Engineering Service Center • Translab • Caltrans Design Action: • Public meetings • Field reviews • Data collection		See left. Also: Document: • As-builts • Pavement Management System (regular surveys of roadways for rideability, etc) • Bridge Management System Contact: • Caltrans SHOPP Program Managers (Safety, Roadside, Roadway, Mobility) • Caltrans Design Coordinator • Caltrans Traffic Coordinator • Caltrans District Hazardous Waste • Caltrans District Maintenance • Caltrans District Traffic Operations • Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Safety, Design, Environmental, Legal • Local and regional agencies, e.g., cities, counties, COGs • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts, and safety studies	See left. Also: Document: • PID Contact: • Caltrans Design Coordinator • Local/regional agencies • Advocacy or special interest groups • Other stakeholders • Caltrans Public Affairs Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Initiate or update traffic analysis, traffic model and forecasts, and safety studies as needed • Keep up on local news	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

	Planning Prior to Project Initiation Document			Project Initiation Documents (PIDs) and Feasibility Study Reports	Project Approval / Environmental Document (PAED)	Plans, Specifications and Estimates (PS&E)	Construction
	Regional Transportation Plan (RTP)	**System Planning Documents (Route Concept Reports / Transportation Concept Reports) & Corridor Studies**	**10-Year SHOPP**				
(Later guidance) Bicycle / Pedestrian Facilities If the proposed project includes a bicycle or pedestrian facility, is the facility a link in the local plan? Will it reduce project impacts to community access?	Document: • General Plan Bike element (if there is one) • Land Use Plans • Trails Plan • Specific Plans • Community Plans • Americans with Disabilities Act • Caltrans System Plans • FHWA's "Flexibility in Highway Design" • Caltrans' "Main Streets: Flexibility in Design and Operations Guide 2002" • Caltrans' "Context-Sensitive Solutions" Contact: • Planning Department • Advocacy groups Action: • Hold public meetings	See left. Also: Document: • RTP Contact: • Caltrans Non-motorized Transportation Team • Bicycle/pedestrian advocacy groups Action: • Hold outreach meetings with advocacy groups		See left. Also: Document: • TCR/RCR Contact: • Caltrans System Planning and Regional Planning • Caltrans District Bicycle/ Pedestrian Coordinator • Caltrans Community Planning • Caltrans IGR • Appropriate Caltrans Functional Units, e.g., Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal • Local and regional agencies, e.g., cities, counties, COGs • Bicycle and pedestrian advocacy groups • Resource agencies with jurisdiction Action: • Form PDT; draft or revise purpose and need statement • Field review • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase	See left. Also: Document: • PID • PEAR Contact: • Other stakeholders Action: • Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies • Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase • Hold outreach meetings with advocacy groups	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that PS&E are consistent with purpose and need statement	Document: • Project Report • Environmental Document Contact: • Project Manager • PDT Action: • Hold PDT meetings; assign new members as needed • Refer to Project Report and Environmental Document, verify that project being constructed is consistent with purpose and need statement

Appendix C
Key Activities for Quality Purpose and Need Statements



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APPENDIX D: USEFUL ACRONYMS

Appendix D, Useful Acronyms, is designed to work together with Appendix B, Inputs to Good Purpose and Need Statements, and Appendix E, Glossary of Useful Terms. Together, these tools provide information about various resources that can help project teams to prepare and refine quality purpose and need statements.

AADT	Annual average daily traffic
ADT	Average daily traffic
APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARB	Air Resources Board
BMS	Bridge Management System
CBD	Central Business District
CBO	Community-based Organization
CE	Categorical Exclusion (see NEPA) or
CE	Categorical Exemption (see CEQA)
CEQA	California Environmental Quality Act and Amendments
CMA	Congestion Management Agency
CMAQ	Congestion Mitigation and Air Quality Program
CMP	Congestion Management Program
CMS	Congestion Management System
COG	Council of Governments
CTC	California Transportation Commission
CTIS	California Transportation Investment System
CTP	California Transportation Plan
D/C	Demand to Capacity Ratio
DSMP	District System Management Plan
EA	Environmental Assessment (NEPA document)
ED	Environmental Document
EIR	Environmental Impact Report (CEQA document)
EIS	Environmental Impact Statement (NEPA document)
EJ	Environmental Justice
FAHP	Federal Aid Highway Program
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact (NEPA document)
FSTIP	Federal State Transportation Improvement Program
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GIS	Geographical Information System
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
HSR	High Speed Rail
IC	Interchange
IGR	Intergovernmental Review (also called IGR/CEQA)
IIP	Interregional Improvement Program
IRRS	Interregional Road System
IS	Initial Study (CEQA document)
ISTEA	Intermodal Surface Transportation Efficiency Act (1991-1998)
ITIP	Interregional Transportation Improvement Program
ITS	Intelligent Transportation System
ITSP	Interregional Transportation Strategic Plan
LIFT	Low-Income Flexible Transportation
LTC	Local Transportation Commission
LDR	Local Development Review
LEDPA	Least Environmentally Damaging Practicable Alternative
LOS	Level of Service
MIS	Major Investment Study
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NAP	Non-attainment Area Plan
NBSSR	Noise Barrier Scope Summary Report
ND	Negative Declaration (CEQA document)
NEPA	National Environmental Policy Act
NGO	Nongovernmental organization
NHS	National Highway System
NOA	Notice of Availability
NOD	Notice of Determination (CEQA document)
NOI	Notice of Intent (NEPA document)
NOP	Notice of Preparation (CEQA document)
OES	State Office of Emergency Services
OPR	Governor's Office of Planning and Research
OWP	Overall Work Program
PA/ED	Project Approval & Environmental Documentation
PDPM	Project Development Procedures Manual
PDT	Project Development Team
PE	Preliminary Engineering
PEAR	Preliminary Environmental Analysis Report (for state highway projects)
PES	Preliminary Environmental Study (for local projects)
PID	Project Initiation Document
PKm	Post Kilometer

PM	Post mile
PMS	Pavement Management System
PS&E	Plans, Specifications, and Estimates
PSR	Project Study Report (one type of PID)
PSR-PDS	Project Study Report – Project Development Support
PSR/PR	Project Study Report/Project Report
PSSR	Project Scope Summary Report (one type of PID)
RCR	Route Concept Report
RDP	Route Development Plan
RIP	Regional Improvement Program
ROD	Record of Decision (issued pursuant to NEPA)
ROW	Right of Way (also see R/W)
RTIP	Regional Transportation Improvement Program
RTL	Ready to List (for construction)
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
R/W	Right of Way (also see ROW)
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SHOPP	State Highway Operation and Protection Program/Plan
SIP	State Implementation Plan
SR	State Route
SRTP	Short Range Transit Program
STIP	State Transportation Improvement Program
STRAHNET	Strategic Highway Network
STRAIN	Structure Replacement and Improvement Needs
TASAS	Traffic Accident Surveillance and Analysis System
TCCR	Transportation Corridor Concept Report
TCM	Transportation Control Measure
TCR	Transportation Concept Report
TCRP	Traffic Congestion Relief Program
TCS	Transportation Corridor Study
TDM	Transportation Demand Management
TEA 21	Transportation Equity Act for the 21st Century (1998 - 2003)
TERO	Tribal Employment Relations Ordinances
TLC	Transportation for Livable Communities
TMS	Traffic Monitoring System
TOD	Transit-oriented Development
TOPS	Traffic Operation Program Strategies
TSDP	Transportation System Development Program
TSIP	Transportation System Information Program
TSM	Transportation System Management
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles of Travel

APPENDIX E: GLOSSARY OF USEFUL TERMS

Appendix E, Glossary of Useful Terms, is designed to work together with Appendix B, Inputs to Good Purpose and Need Statements, and Appendix D, Useful Acronyms. Together, these tools provide information about various resources that can help project teams to prepare and refine quality purpose and need statements.

Accident Rate (or Collision Rate): The number fatal and non-fatal accidents in relation to the average traffic volume and length of the roadway segment being considered. It is typically calculate using three years of data. It is used for comparison between existing roads and other roads of the same type or to predict the average rates on new roads.

Acquisition: The process of obtaining right of way.

Action: A NEPA term, the construction or re-construction, including associated activities, of a transportation facility. An action may be categorized as a " categorical exclusion" or a " major federal action."

Air Quality Management District (AQMD): A regional agency, which adopts and enforces rules to achieve and maintain state and federal air quality standards.

Air Quality Non-Attainment Area: An air basin which does not meet federal ambient air quality standards due to levels of pollutants such as CO, Ozone and Particulate Matter.

Alquist-Priolo Fault Zones: Active fault zones, identified pursuant to the Alquist-Priolo Earthquake Fault Zone Act. This Act is intended to prevent the construction of new buildings for human occupancy over active faults. It requires identification of active fault zones and regulation of development within those zones. General Plan Safety Elements typically incorporate the Act's requirements. The Act does not apply to publicly owned facilities, critical facilities and lifelines or industrial facilities.

Annual Average Daily Traffic (AADT): The average 24-hour volume, being the total number during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year. The term is commonly abbreviated as ADT or AADT.

Arterial: A general term denoting a highway or local road that primarily serves through traffic, usually on a continuous route.

As-Builts: The final plans of a project after the project is constructed. These plans depict both the highway facilities as designed and as built.

Average Daily Traffic (ADT): The average number of vehicles passing a specified point during a 24-hour period.

Average Daily Trips: The average number of vehicles passing a traffic count location.

Beneficial Use: A use or action that enhances the social, economic, and environmental well-being of the user.

Benefit/Cost Ratio: For a project or a project alternative, the sum of the advantages or profits, divided by the sum of the detriments or expenses. Calculating the Benefit/Cost Ratio is a project management technique for assigning values to pros and cons and analyzing the relationship between them.

Bridge Management System (BMS): Contains a complete inventory of all bridges in the State of California. The BMS tracks inventory data, structure condition, preservation needs and projects for all bridges. The BMS software contains tools that permit economic evaluation of alternative action plans, deterioration simulation and system-wide budget estimating tools. The BMS also contains a complete online archive of all inspection reports, as-built plans and other pertinent documentation related to structure.

Bypass: An arterial highway or local road that permits traffic to avoid part or all of an urban area.

California Environmental Quality Act (CEQA): State legislation enacted in 1970 and subsequently amended. It protects the environment for the people of California through requiring public agencies and decision makers to consider and document the environmental consequences of actions.

California Transportation Commission: A State Commission, established by State Assembly Bill 402 (AB 402) with 9 appointed members and 2 ex-officio members, responsible for the programming and allocating of funds for the construction of highway, passenger rail and transit improvements throughout California. The CTC also provides guidance and recommendations on transportation policies. See http://www.catc.ca.gov/.

California Transportation Plan (CTP): The state's long-range transportation plan, with a minimum 20-year forecast period, for all areas of the state, that provides for the development and implementation of California's intermodal transportation system. (Title 23 United States Code, Section 135). Per California statute, the CTP may not be project-specific.

Capacity: Service expectation, e.g., (1) The maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in one direction, or in both directions of a highway during a given time period under prevailing roadway and traffic conditions. (2) The number of passengers that can be transported over a given section of a transit line in one direction during a given time period (usually one hour) under prevailing conditions.

Capacity Enhancements: New projects, facilities and operational improvements that add capacity.

Capital Improvement Program (CIP): A program of projects to maintain or improve the level of service and performance standards and to mitigate transportation impacts, e.g., in a Congestion Management Program, a transit plan, an Aviation Systems Plan, etc.

Categorical Exclusion (CE): Pursuant to the National Environmental Policy Act (NEPA), various categories of actions that do not individually or cumulatively have a significant effect on the environment and are exempt from the requirement to prepare an environmental assessment or an environmental impact statement. This replaces the federal term "nonmajor-action."

Categorical Exemption (CE): Pursuant to the California Environmental Quality Act (CEQA), classes of projects that have been determined by the Secretary of the Resources Agency not to have a significant effect on the quality of the environment. An Initial Study or an Environmental Impact Report is not required. Article 19 of the CEQA Guidelines, Appendix A-4, describes and gives examples for each class of categorical exemption applicable to Caltrans.

Central Business District (CBD): The downtown core area of a city, generally an area of high land valuation, traffic flow, and concentration of retail business offices, theaters, hotels, and service businesses.

CEQA Review: The review of environmental and other documents pursuant to California Environmental Quality Act (CEQA) Statutes & Guidelines.

Certification: Metropolitan Planning Organization and state compliance with federal legislative and regulatory requirements, which enables the Federal Highway Administration and the Federal Transit Administration to approve their metropolitan and statewide planning and programming processes.

Channelization: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of vehicles, bicycles and pedestrians.

CMP: -See Congestion Management Program.

CMS: See Congestion Management System.

COG: See Council of Governments.

Concept: A strategy for future improvements proposed to meet a transportation need. The planning concept defines the type(s) or mode(s) of a facility; e.g., highway, transit, rail or a combination that is proposed to meet a transportation need. For highway facilities, this is refined to freeway, expressway, or conventional highway. The design concept is an update of the planning concept.

Concept Facility: A highway facility type and characteristics considered viable with or without improvement within the 20-year planning period assuming certain financial, growth, environmental, planning and engineering factors.

Concept LOS: The highest and best level of service that can be attained by the end of the 20 year planning period based on the Concept Facility. The urban standard is "E" and the rural standard is "D".

Congestion: Defined by Caltrans as highway operating speeds reduced to less than 35 miles per hour for longer than 15 minutes.

Congestion Management Agency (CMA): The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

Congestion Management Program: An integrated approach to programming transportation improvements. This state approach stipulates detailed consideration of the complex relationships among transportation, land use and air quality. The federal equivalent is the Congestion Management System.

Congestion Management System: A requirement of ISTEA, maintained in TEA-21, to improve transportation planning.

Conventional Highway: A highway without control of access that may or may not be divided.

Cooperating agency: Any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or reasonable alternative) for legislation or other major Federal action/project significantly affecting the human environment. A State or local agency of similar qualifications. When the effects are on a reservation an Indian Tribe may, by agreement with the lead agency, become a cooperating agency. 40 CFR § 1508.5.

Corridor: An area between two termini within which demand, traffic, topography, environment, and other characteristics are evaluated for transportation purposes.

Council of Governments: A voluntary consortium of local governments formed to cooperate on problem solving, e.g., regional transportation planning and programming. Some RTPAs, and MPOs are COGs.

CTC: See California Transportation Commission.

Cumulative impacts: Broadly, the effects of an action, when added to other past, present, and reasonably foreseeable future actions. State and federal statutes and regulations should be consulted for various legal definitions.

D/C: See Demand to Capacity Ratio.

Delay: The time lost while mobility is impeded by some element over which the traveler has no control.

Demand: The transportation need at a point in time, e.g., traffic volume on a segment of road at a point in time, projected traffic volume on a segment of road in 2020, current peak period ridership on a bus route, children crossing at a signed intersection on school days.

Demand to Capacity Ratio (D/C): The relationship between the demand for trips and the number of trips that can be accommodated.

Density: The number of vehicles per kilometer on the traveled way at a given instant.

Design capacity: The maximum number of vehicles that can pass over a lane or a roadway during one hour without operating conditions falling below a pre-selected design level.

Design concept: The type of facility identified by the project, e.g., freeway, expressway, arterial highway, grade-separated highway, reserved right-of-way rail transit, mixed-traffic rail transit, exclusive busway, etc. 40 CFR § 51.392.

Design Life: The length of time that a transportation facility or improvement is intended to remain serviceable, frequently expressed in years.

Design Speed: A speed selected to establish specific minimum geometric design elements for a particular section of highway.

Design Volume: A volume determined for use in design, representing traffic expected to use the highway. Unless otherwise stated, it is an hourly volume.

Direct impacts: Effects that are caused by an action and occur at the same time and place as the action.

District System Management Plan (DSMP): A part of the system planning process. A district's long-range plan for management of transportation systems in its jurisdiction. It establishes the Districts policies and priorities of development.

Eminent Domain: The power to take private property for public use without the owner's consent upon payment of just compensation.

Encroachment: Use or occupancy of state right of way by non-state structures or objects of any kind or character.

Endangered Species Act: Federal legislation enacted in 1973, as amended, that extends legal protection to plants and animals listed as "threatened" or "endangered" and includes consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

Environment: The physical conditions which exist within the area which will be affected by a proposed project or alternative, including but not limited to land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or esthetic significance. The environment includes both natural and man-made conditions.

Environmental assessment (EA): A concise public document for which a Federal agency is responsible that serves to: (1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. (2) Aid an agency's compliance with NEPA when no environmental impact statement is necessary. (3) Facilitate preparation of an EIS when one is necessary. An EA shall include brief discussions of the need for the proposal, the alternatives considered, and the environmental impacts of the proposal and alternatives, and include a listing of agencies and persons consulted. 40 CFR § 1508.9. . The federal government uses the term “environmental assessment” in place of the term “ initial study” which is used in CEQA.

Environmental Document (ED): A comprehensive term applied to any of the following items prepared pursuant to NEPA or CEQA: Draft or Final Environmental Impact Statement (EIS), Draft or Final Environmental Impact Report (EIR), Finding Of No Significant Impact (FONSI), Environmental Assessment (EA), Initial study (IS), or Negative Declaration (ND).

Environmental Impact Report (EIR): A detailed statement prepared under CEQA describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects. An EIR

is prepared for use by the public, public agencies and agency decision-makers to weigh the environmental consequences of a proposed action. California Resources Agency, Title 14, section 15362.

Environmental Impact Statement (EIS): An analytical document prepared under NEPA that portrays potential impacts to the human environment of a particular course of action and its possible alternatives. An EIS is prepared for use by the public, public agencies and agency decision-makers to weigh the environmental consequences of a proposed action. A detailed written statement as required by section 102(2)(C) of NEPA. 40 CFR § 1508.11.

Expressway: An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Federal Highway Administration (FHWA): The Federal agency within the U.S. Department of Transportation responsible for administering the Federal-aid Highway Program and the Motor Carrier Safety Program.

Federal Transit Administration (FTA): An agency within the U.S. Department of Transportation responsible for administering federal funds for public transportation planning, programming and projects.

Federal Transportation Improvement Program (FTIP): -An MPO's 3-year program of projects that include federal funding, require a federal approval or are regionally significant. FTIPs include the region's STIP and SHOPP projects. The FTIPS plus federal and locally funded rural highway and transit projects constitute the Federal State Transportation Improvement Program (FSTIP).

Finding of No Significant Impact (FONSI): A document by a federal agency briefly presenting the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and therefore does not require the preparation of an EIS.

Fiscal Year (FY): The accounting period for the budget. The state fiscal year is July 1 to June 30 and the federal fiscal year is October 1 to September 30.

Forecast: The best estimate of future conditions.

Freeway: A highway to which the owners of abutting lands have no right or easement of direct access or to which such owners have only limited or restricted right or easement of access. The Highway Design Manual describes a freeway as a divided arterial highway with full control of access and with grade separations at intersections. Final approval of a freeway requires that the CTC adopt an alignment for a facility that has been identified by statute as part of the freeway and expressway system.

Freeway Capacity: The maximum sustained 15 minute rate of flow that can be accommodated by a uniform freeway segment under prevailing traffic and roadway conditions in a specified direction.

Functional Classification (or Designation) : Guided by federal legislation, refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, i.e., Principal Arterials, Minor Arterial Roads, Collector Roads, Local Roads.

General Plan: A policy document that cities and counties adopt to guide their future. The seven required elements are: land use, circulation, housing, conservation, open space, noise and safety. The Circulation Element identifies local/regional transportation goals. Optional elements, such as a Bike element, can also provide transportation goals.

Geometric Design: Geometric design is the arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

Goods Movement: The transportation of commodities by any or all of the following commercial means; aircraft, railroad, ship, or truck.

Highway Capacity Manual (HCM) : Revised in 2000 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation (see Level of Service) of transportation systems as freeways, arterial, transit, and pedestrian facilities.

Highway Capacity Software (HCS): Software based on the HCM. Available through Mctrans Center for Microcomputers in Transportation/University of Florida and other companies. To be used on a desktop PC computer. Contains all the algorithms found in the HCM.

High Occupancy Toll (HOT) Lanes: New HOV lanes that allow single occupant vehicles access for a fee.

High Occupancy Vehicle (HOV) Lanes: A lane of freeway reserved for the use of vehicles with at least a preset number of occupants. Buses, taxis, carpools (which satisfy the occupancy minimum) and motorcycles generally may use HOV lanes..

High Speed Rail (HSR): Trains that operate at 125 MPH or above.

Indirect Impacts: Impacts that are caused by an action and occur later in time, or at another location, yet are reasonably foreseeable.

Interchange. A system of interconnecting roadways in conjunction with one or more grade separations providing for the routing of traffic between two or more roadways on different levels.

Intergovernmental Review (IGR): A program mandated by federal law (Presidential Executive Order 12372) and state law (Governor's Executive order D-24-83). These laws require Caltrans to review all planning and development activity that has the potential to impact the state highway system, and to recommend mitigation (improvements) that either eliminate the impacts or reduce them to a level of insignificance.

Intermodal Surface Transportation Efficiency Act (ISTEA) : Federal transportation legislation adopted in 1991. It provided increased funding and program flexibility for multimodal transportation programs. Upon its expiration, ISTEA was succeeded by TEA-21.

Intermodal Transportation Management System (ITMS): Originally one of six management systems required by ISTEA (see ISTEA). A computerized database, it performs modal analysis and assists planning corridor improvements.

Interregional Road System (IRRS): A series of state highway routes, outside the urbanized areas, that provide access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions.

Interregional Transportation Improvement Program (ITIP): The ITIP is a list of proposed interregional transportation projects submitted to the California Transportation Commission by Caltrans. Approved projects are eligible for 25 percent of the funds in the State Transportation Improvement Program (see STIP).

Interregional Transportation Strategic Plan (ITSP): A plan that describes and communicates the framework in which the state will carry out its responsibilities for the Interregional Improvement Program (IIP), the state's 25 percent of STIP funds. It also identifies how Caltrans will work with regional agencies to consult and seek consensus on the relative priority of improvements. The plan is evaluated in terms of its progress in carrying out its objectives, strategies and actions.

Latent travel demand: The potential number of trips that could be made by people who cannot now travel because of the inconvenience or unavailability of present modes or inability to use them.

Lead Agency: The public agency which has primary responsibility for preparing environmental documents and for carrying out or approving a project which may have a significant effect on the environment. (14 CCR 15367).

Level of Service (LOS): A measure describing operational conditions within a traffic stream. It measures such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The six defined levels of service use letter designations from A to F, with LOS A representing the best operating conditions and LOS F representing the worst. Each LOS represents a range of operating conditions.

Load limits: Weight restrictions used to prohibit vehicles that exceed a specified weight from using a transportation facility.

Local and Regional LOS Standards: Identifies the standards for level of service set by local and regional jurisdictions in general plans and congestion management programs.

Local Street or Local Road: A street or road primarily for access to residence, business, or other abutting property.

Major Investment Study (MIS): Required under ISTEA, but deleted as a requirement under TEA-21, an MIS is a tool to integrate social, economic and environmental considerations earlier in planning analyses and transportation decisionmaking. Its fifteen factors (which were listed in Title 23 United States Code, Section 134, but were amended out with TEA-21) address an array of factors in a focused fashion; land use, environmental, transportation system performance and community resources. It is similar to an alternatives analysis for transit projects.

Major Street or Major Highway: An arterial highway with intersections at grade and direct access to abutting property and on which geometric design and traffic control measures are used to expedite the safe movement of through traffic.

Metropolitan Planning Organization (MPO): A regional agency designated by the governor and local elected officials as responsible, together with the state, for the transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government. It has responsibilities specified under federal law.

Metropolitan Transportation Authority (MTA): A network of subways, buses, and railroads providing alternate transportation services to travelers.

Milestone: An event of special importance, e.g., completion of a major deliverable.

Mitigation: Methods or procedures which may: (1) avoid an impact altogether by not taking a certain action or parts of an action; (2) minimize an impact by limiting the degree or magnitude of the action and its implementation; (3) rectify an impact by repairing, rehabilitating, or restoring the affected environment; (4) reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action; or (5) compensate for an impact by replacing or providing substitute resources or environments.

Mode, Modal: Travel methods, e.g. train, bus, plane, car, bicycle, walking, etc.

Multimodal: Pertaining to more than one method of travel.

National Environmental Policy Act (NEPA) : Federal legislation enacted in 1969 that require agencies to include in the decision-making processes: (1) appropriate consideration of all environmental effects; and (2) procedures to avoid or minimize adverse effects; and restore and enhance environmental quality as much as possible.

National Highway System (NHS): Consists of 155,000 miles (plus or minus 15 percent) of the major roads in the U.S. Included will be all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

Natural Diversity Information: Identifies special status of habitats and species found within 300 meters of centerline of the existing highway facility.

Negative Declaration (ND): A document prepared pursuant to CEQA, which states that a project will have no significant environmental impact.

Notice of Completion (NOC): A brief notice filed with the Office of Planning and Research in the Governor's office by the Lead Agency, as soon as it has completed a draft EIR pursuant to CEQA.

Notice of Determination (NOD): A formal written notice pursuant to CEQA, which requires that such notice be filed by a lead state agency when deciding to carry out or approve any project that was subject to the preparation of a ND or an EIR.

Notice of Intent (NOI): A notice, pursuant to NEPA, that an EIS will be prepared and considered. The NOI is published by the lead federal agency in the Federal Register.

Notice of Preparation (NOP): A brief notice sent by the public agency with principal responsibility for carrying out or approving a project to notify other agencies that an EIR is being prepared pursuant to CEQA.

Peak (Peak Period, Rush Hours): The period during which the maximum amount of travel occurs. It may be specified as the morning ((A.M.) or afternoon or evening (P.M..) peak. The period during which the demand for transportation service is the heaviest.

Plans, Specifications and Estimates (PS&E): A phase or milestone in the life cycle of a project following PA&ED and preceding construction; includes the preparation of construction contract documents, the acquisition of right of way, and the securing of permits.

Post Kilometer (PKm) : The mileage measured in kilometers from a county line or the beginning of a route to another county line or the ending of the route. Each post mile along a route in a county is a unique location on the State Highway System.

Post Mile (PM): The mileage measured in statute miles from a county line or the beginning of a route to another county line or the ending of the route. Each post mile along a route in a county is a unique location on the State Highway System.

Preliminary Environmental Analysis Report (PEAR): Provides input to the Project Initiation Document (PID). The PEAR provides the initial environmental evaluation of a project and all feasible alternatives before a project is programmed. It identifies potential environmental constraints and estimates the scope, schedule and costs of environmental compliance. It serves as the foundation for the studies by the environmental team during the Project Report phase. A PEAR is prepared for state highway projects; a Preliminary Environmental Study, or PES, is prepared for local projects.

Programming: The process of prioritizing and scheduling projects for development and implementation; the phase or milestone in the life cycle of a project following PID and preceding PA&ED.

Project: A temporary endeavor undertaken to produce a unique outcome. A Caltrans capital project is a temporary endeavor undertaken to create a unique physical improvement to the transportation system in California. For the purposes of environmental review, a project is the entirety of an action which has potential for resulting in a physical change in the environment. Under CEQA, transportation plans and programs are projects. TEA-21 specified transportation plans and programs are not subject to NEPA.

Project Approval and Environmental Document (PA&ED): A major phase in the life cycle of a project following the Project Initiation Document and Programming but preceding PS&E. It includes performance of preliminary engineering and environmental studies, preparation of the Project Report (PR) and

Environmental Document (ED), approval of the PR and ED, and other approval activities as described in Chapter 12 of the Project Development Procedures Manual (PDPM).

Project Development Team: An interdisciplinary team composed of key members of the project team and external stakeholders who act as a steering committee in directing the course of studies required to evaluate the various project alternatives during the early phases of the project life cycle.

Project Initiation Document (PID): A decision document that identifies the need, purpose and feasibility of a candidate project for programming. It serves as a record of agreement on the scope, cost and schedule of a project.

Project Study Report (PSR): A type of PID that is required before a project may be programmed.

Record of Decision (ROD): A formal written statement, required under NEPA, wherein a federal lead agency must present the basis for its decision to approve a selected project alternative, summarize mitigation measures incorporated into the project, and document any required Section 4(f) approval.

Regional Transportation Improvement Program)RTIP): A list of proposed regional transportation projects submitted to the California Transportation Commission by the RTPAs. RTIPs are funded with 75 percent of the funds in the STIP. RTIPs must be consistent with the RTPs. Interregional projects in the Interregional Transportation Improvement Plan (See ITIP) are eligible for the other 25 percent of the STIP funds.

Regional Transportation Plan (RTP): A State-mandated 20+-year plan, developed and cyclically updated by a Regional Transportation Planning Agency (RTPA) or Metropolitan Planning Organization (MPO). It consists of policy, action, and financial elements and it identifies proposed transportation projects for a given region.

Regional Transportation Planning Agency (RTPA): The agency responsible for the preparation of RTPs and RTIPs and designated by the State Business Transportation and Housing Agency to allocate transit funds. RTPAs can be Local Transportation Commissions, COGs, MPOs or statutorily created agencies.

Relinquishment: A transfer of the State's right, title, and interest in and to a highway, or portion thereof, to a city or county as authorized by statute.

Replacement Planting. Planting to replace planting (installed by Caltrans or others) that is damaged or removed during highway construction activity, including irrigation modification and/or replacement.

Resource Agencies: Federal or state agencies with statutory authority over particular resources.

Responsible agency: Under the California Environmental Quality Act (CEQA), a public agency, other than the lead agency, which has responsibility for carrying out or approving a project (see PRC §21069; CEQA Guidelines §15096, 15381). This includes agencies with permitting or funding authority. The comparable term under the National Environmental Policy Act (NEPA), "cooperating agency," is more broadly defined: any federal agency that has jurisdiction by law or special expertise (see 40 CFR §1501.6, 1508.5).

Revegetation: Planting of indigenous plants to replace natural vegetation that is damaged or removed as a result of highway construction projects or permit requirements.

Right of Access: The entitlement of an abutting land owner to enter or exit his/her property via a public road.

Roadbed: That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

Roadside: A general term denoting the area adjoining the outer edge of the roadbed to the right of way line. Extensive areas between the roadbeds of a divided highway may also be considered roadside.

Roadway: That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Route Concept Report RCR)(also see Transportation Concept Report): Analyzes a transportation corridor service area, establishes a twenty-year transportation planning concept and identifies deficiencies and modal transportation options and alternative applications needed to achieve the twenty year concepts.

Rural: Used to describe areas lying outside the U. S. Census urban area boundary.

Safety Index (SI): The cost of the accidents that a proposed project would prevent compared with the cost of implementing the project. The SI provides a consistent basis by which to evaluate the safety impacts of a proposed project. It is also used to prioritize projects.

SB 45: State Senate Bill 45, passed in 1997, revised transportation funding priorities at the State level, allocating 75% of capital outlay dollars to regional agencies, and 25% to the State.

Scenic Highway System: A list of the highways that are eligible to become, or are designated as, official scenic highways. Many state highways are located in areas of outstanding natural beauty. California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq.

Scoping: A process for determining the issues to be addressed in an EIS and for identifying significant issues to be analyzed in depth.

Secondary Impacts: See Indirect Impacts.

Seismic Retrofit: Upgrading of a structure or facility to withstand seismic events. Following the 1989 Loma Prieta and the 1994 Northridge earthquakes, projects to retrofit state-owned structures and bridges were exempted from the requirements of CEQA.

Sensitive species: Generic term for any plant or animal species which is recognized by the government or a conservation group as being rare, threatened, or endangered or having some other special status.

Shoulder: The portion of the roadway contiguous with the traveled way for accommodations of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

Significant effect: A substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or esthetic significance (14 CCR 15382). It requires consideration of both context and intensity. Under the federal definition, there may be a significant beneficial impact (40 CFR 1508.27).

Stakeholder: Individuals or organizations actively involved in transportation or whose interests may be positively or negatively affected as a result of transportation planning and projects.

State Highway Operation and Protection Program (SHOPP): A four-year program proposed by Caltrans and adopted by the CTC, limited to projects related to State highway safety and rehabilitation. The funding source and the 10-year plan for such projects are also called SHOPP. Some intelligent transportation system (ITS) operational improvements are funded with SHOPP.

State Implementation Plan (SIP): The state's plan for attaining the National Ambient Air Quality Standards. Per federal law, transportation plans and programs in air quality non-attainment areas must conform to the SIP.

State Route (SR) : A highway within the State Highway System that is distinctively designed to serve intrastate and interstate travel. The termini of the State Routes are described in Article 3 of the Streets and Highway Code.

State Transportation Improvement Program (STIP): A list of transportation projects, proposed in RTIPs and the ITIP, which are approved for funding by the CTC. The STIP has two main funding components: the Regional Improvement Program (RIP, the 75% allocated to the regions for regional improvements) and the Interregional Improvement Program (IIP, the 25% allocated to Caltrans for interregional improvements). Beginning with the 2002 STIP, it is a 5-year program of projects, updated every 2 years. It is also the biennial estimate of funds anticipated to be available for programming during the STIP cycle.

Statement of Overriding Considerations: Pursuant to CEQA, a written explanation prepared by a public agency that explains why it approved a project, despite the presence of significant, unavoidable environmental impacts.

Strategic Highway Network (STRAHNET): A system of public highways that is a key deterrent in United States strategic policy. It provides defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war. Most large military convoys use the Strategic Highway Network. These routes connect military bases to the interstate highway network and include over 15,000 miles of roadway nationally. STRAHNET roadways are those that would be used for the rapid mobilization and deployment of armed forces in the event of war or peacekeeping activity.

Structure Replacement and Improvement Needs (STRAIN) Report: A listing of all major preservation needs that have currently been identified for each State owned bridge. The needs identified in the STRAIN report are typically addressed by the State Highway Operation Protection Program (SHOPP) or State Transportation Improvement Plan (STIP).

System Linkage: The degree to which a project is part of an integrated program to solve congestion within the larger system setting. The degree to which the project is compatible with or enhances adjacent projects. The relative role of the project among improvements in a Congestion Management Plan. A Project's system linkage can be established by explaining whether/how it provides a connecting link in the regional or area-wide system of transportation modes that would enhance utility and or efficiency.

System Plan: A long-rang planning document for interregional transportation in addition to statewide travel analysis. These documents help identify current and future deficiencies on the State Highway System as well as recommended solutions to meet mobility goals.

TEA 21: Federal legislation, the Transportation Equity Act for the 21st Century, PL 105 178. TEA-21 was signed into law in 1998, authorizing highway, highway safety, transit and other surface transportation programs for the following 6 years. TEA 21 built on the initiatives established in the 1991 ISTEA (see ISTEA.)

Tiering: The process of preparing multiple levels of an environmental review, typically including general matter in broad environmental impact statements with subsequent narrower environmental impact statements.

Total Accidents Per Million Vehicle Miles (TOT/MVM): See Accident Rates.

Traffic Accident Surveillance and Analysis System (TASAS): A system that provides a detailed list and/or summary of accidents that have occurred on highways, ramps or intersections in the State Highway System. Accidents can be selected by location, highway characteristics, accident data codes and combinations of the above.

Traffic Conditions: Any characteristics of the traffic stream that may affect capacity or operations, including the percentage composition of the traffic stream by vehicle type and driver characteristics (such as the differences between weekday commuters and recreational drivers).

Traffic Congestion Relief Program (TCRP): This State program was established by the Transportation Congestion Relief Act of 2000 (AB 2928 and SB 1662). The program was designed to relieve congestion, improve goods movement and improve the connectivity between different modes of transportation. Additionally, more than two-thirds of that funding is allocated for rail and mass transit projects. TCRP provides a specific list of projects and designates the amount of funding for which each project is eligible from this source. Most of the projects will also need additional funding from other sources. The projects, funds, lead applicant and implementing agencies are specified in Government Code Section 14556.40.

Traffic Forecast: A best estimate of future roadway travel conditions, demand and resulting volumes. A forecast also identifies whether or not the subject segment of a route is designated as being part of a system. National Highway System (NHS), Interregional Highway System (IRRS), Freeway/Expressway System, Scenic Highway, National Truck Network, Terminal Access Route for the National Truck Network, Strategic Highway Network (STRAHNET), and/or Highways of Regional Significance.

Traffic Operations: The safe and efficient movements of vehicles, people, and goods. The typical measures of effectiveness are travel times, delay, accidents per vehicles miles, and level of service.

Transit: Generally refers to passenger service provided to the general public with fixed or variable schedules and routes at published fares. Related terms include public transit, mass transit, public transportation, urban transit and paratransit.

Transportation Concept Report (TCR) (also see Route Concept Report): A long-range planning document that describes the current characteristics of the transportation corridor and establishes a twenty-year planning concept. The TCR defines the California Department of Transportation's (Caltrans) goal for the development of the transportation corridor in terms of level of service (LOS) and type of facilities, and broadly identifies the improvements needed to reach those goals. Facility information (e.g., roadway widths, number of lanes) contained in the TCR represents a preliminary planning approach to identifying candidate improvements and to determining estimated costs. All information in TCR documents is subject to revision as conditions change and new information is obtained. Consequently, the nature and the size of identified improvements may change as they move through the project development stages. Final determinations are made at the time of project planning and design.

Transportation Control Measure (TCM): Includes elements of both transportation system management (TSM) and transportation demand management (TDM)(see transportation system management and transportation demand management). Specific TCMs that have air quality conformity impacts are listed in Section 108(f) of the Clean Air Act Amendments.

Transportation Demand Management (TDM): Policies, programs and actions directed toward decreasing use of single occupant vehicles and shifting travel from peak periods.

Transportation System Development Program (TSDP): A System Planning document that lists a set of projects that could be proposed for funding consideration assuming a specified funding level program.

Transportation System Information Program (TSIP): Responsible for canvassing the Districts annually and maintaining a file on the status of the traversable highways. TSIP should be contacted to get advice on procedures for the adoption of a traversable route, preparation of the report covering the proposal, and Caltrans assumption of maintenance. Since adoption of a traversable highway has effects on Caltrans resources, the Maintenance and Traffic Operations Programs and DLP must be involved in the action. The facility is brought up to State highway standards before assumption of maintenance is considered. (See Project Development Procedures Manual (PDPM) CH23 ARTICLE 5 - Traversable Highway, Transfer of Highway Location.)

Transportation System Management (TSM): Use of transportation improvements to increase the efficiency of the existing transportation system, e.g., high occupancy vehicle lanes, traffic flow improvements, park-and-ride lots, etc. The intent is to make better use of the existing transportation system by using short term

capital transportation improvements that generally cost less and can be implemented more quickly than system development actions.

Traveled Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Tribal Employment Relations Ordinances (TERO): Allow employment preference to tribal members for projects constructed on tribal lands.

Trustee Agency: A state agency with legal jurisdiction over natural resources held in trust for the people of the state.

Unconstrained Flows: Traffic condition on a facility in which there is sufficient capacity to handle traffic demands, i.e., not congested.

Urban: An area lying within a U. S. Census urbanized boundary.

Urban Transportation Planning System (UTPS): This is a tool for multimodal transportation planning developed by the Urban Mass Transportation Administration (now the Federal Transit Administration) and the Federal Highway Administration. It is used for both long- and short-range planning, particularly system analysis and covers both computerized and manual planning methods. UTPS consists of computer programs, attendant documentation, user guides and manuals that cover one or more of five analytical categories: highway network analysis, transit network analysis, demand estimation, data capture and manipulation, and sketch planning.

Vertical Clearances: The unobstructed distance above the roadway surface; the height at which a vehicle may pass beneath a structure without any physical contact between the vehicle and the structure. The standards for the minimum allowable vertical clearance vary with the type of highway facility.

Volume: The number of persons or vehicles that pass a given point during a specified period of time. The period of time is often one hour and expressed in vehicles.

Volume/Capacity (V/C): The ratio of the number of vehicles operating in comparison to available capacity for a particular transportation facility.

Workplan: A resourced project schedule that identifies the project activities by the project team and the associated resources needed for Environmental, Design, Right-of-Way and Construction.

APPENDIX F: LIST OF REFERENCE MATERIALS

References that specifically address Purpose and Need:

Federal Highway Administration (FHWA) Memorandum, 9/18/90, "The Importance of Purpose and Need in Environmental Documents":

http://www.fhwa.dot.gov/environment/guidebook/vol2/doc7d.pdf

Federal Highway Administration (FHWA) Memorandum, 11/5/93, "Guidance on the Development of Logical Project Termini":

http://www.fhwa.dot.gov/environment/guidebook/vol2/doc12a.pdf
In the conclusion to its guidance on logical termini, FHWA states, "By following this guidance, proposed highway projects will be more defensible against litigation claims of project segmentation, and decision makers and the public will have a clearer picture of the transportation requirements in the project area **and a better understanding of the project purpose and need**." *(Emphasis added)* See FHWA regulations on logical termini at 23 CFR 771.111(f).

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NEPA/404 MOU, MOU Guidelines, and related documents:

http://www.dot.ca.gov/ser/mou.htm

North Carolina Department of Transportation's guidelines for preparing planning-level purpose and need statements:

http://www.ncdot.org/planning/statewide/PN-report-8-29dist.doc

References related to development of project alternatives:

NEPA/404 MOU Guidelines (Criteria for Selection of Alternatives):

http://www.dot.ca.gov/ser/mou.htm

NEPA and CEQ Guidelines: reasonable alternatives

Section 4(f): prudent and feasible alternatives 49 U.S.C. 303

Section 404, Executive Order 11988 (Floodplains), and Executive Order 11990 (Wetlands): practicable alternatives

References of general help or interest:

California Environmental Quality Act (CEQA) guideline checklist, in Appendix G of the CEQA Guidelines:

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/appendices.html

Regional Transportation Plan Guidelines (12/99):

http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/rtpguidelines/Contents.htm

Regional Planning Handbook:

http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/2002_Regional_Planning_Handbook.pdf

Caltrans' "Main Streets: Flexibility in Design and Operations Guide 2002":

http://www.dot.ca.gov/hq/oppd/context/main-streets-flexibility-in-design.pdf

FHWA's "Flexibility in Highway Design":

http://www.fhwa.dot.gov////////environment/flex/

Glossaries:

http://www.fhwa.dot.gov/environment//conformity/basic5gd.htm

http://www.dot.ca.gov/dist3/departments/planning/149tcr/149glossary.html

http://www.dot.ca.gov/dist3/departments/planning/32tcr/32tcrdefine.html