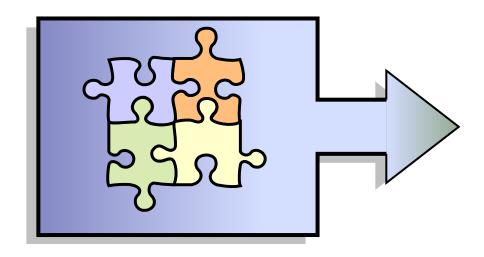
# CALTRANS PURPOSE AND NEED TEAM

# FINAL REPORT AND RECOMMENDATIONS



Team Sponsor: Denise O'Connor Chief, Environmental Management Office Division of Environmental Analysis July 2003

# Contents

**Executive Summary** 

- 1) The Purpose and Need Team
  - a) Team objective
  - b) Who: Team membership
  - c) How: Team process
  - d) What: Team products
  - e) Team Charter
- 2) Purpose and Need
  - a) Definitions
  - b) Regulatory requirements
  - c) Quality elements of Purpose and Need
  - d) What can happen without a quality Purpose and Need Statement
  - e) Current guidance on Purpose and Need
- 3) Purpose and Need Development Process
  - a) Regional Transportation Plan (RTP) Phase
  - b) Project Initiation Document (PID) Phase
  - c) Project Approval and Environmental Document (PA&ED) Phase
- 4) Recommendations
  - a) Implementation Plan for Improving Purpose and Need Statements
  - b) Draft Director's Policy

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

### **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<br>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<br>during the environmental phase. A good N&P can be an important means of<br>avoiding ill-conceived projects. It is highly desirable to have a consistent N&P<br>concept throughout, keeping in mind that the level of detail increases as the<br>project concept is developed. Ultimately, the N&P needs to include and also<br>exclude certain things in order to get concurrence from partners. A good N&P<br>helps to prioritize projects for programming at the PID stage. It is critical for<br>defining a project's scope, determining which alternatives to study, and<br>evaluating alternatives. It is critical for achieving environmental streamlining. It<br>can also help in identifying potential context-sensitive solutions.  |
| Team Members                   | Team members are drawn from many functional areas within Caltrans,<br>representing the Districts and Headquarters:<br>Core members:<br>Marcia Arrant/HQ/Caltrans/CAGov@DOT<br>Howell Chan/D04/Caltrans/CAGov@DOT<br>John Chisholm/D11/Caltrans/CAGov@DOT<br>Carolyn Dierksen/D03/Caltrans/CAGov@DOT<br>Ilene Gallo/D11/Caltrans/CAGov@DOT<br>Brigitte Jaensch/HQ/Caltrans/CAGov@DOT<br>Brigitte Jaensch/HQ/Caltrans/CAGov@DOT<br>Karen Lockhart/HQ/Caltrans/CAGov@DOT<br>Marilee Mortenson/D04/Caltrans/CAGov@DOT<br>Karen Lockhart/HQ/Caltrans/CAGov@DOT<br>Marilee Mortenson/D04/Caltrans/CAGov@DOT<br>Katy Waldron/D05/Caltrans/CAGov@DOT<br>Katy Waldron/D05/Caltrans/CAGov@DOT<br>Katy Waldron/D09/Caltrans/CAGov@DOT<br>Katy Waldron/D09/Caltrans/CAGov@DOT<br>Michelle Dungan/D08/Caltrans/CAGov@DOT<br>Michelle Dungan/D08/Caltrans/CAGov@DOT<br>Helen J Rainwater/HQ/Caltrans/CAGov@DOT<br>Helen J Rainwater/HQ/Caltrans/CAGov@DOT<br>Sondy L Wong/D04/Caltrans/CAGov@DOT |
| Team Sponsor<br>Commitments    | The team sponsor and advisors commit to reviewing deliverables and being<br>available for guidance.<br>Sponsor: Denise O'Connor/HQ/Caltrans/CAGov@DOT<br>Advisors: Sheila Mone/HQ/Caltrans/CAGov@DOT<br>Henry Bass/HQ/Caltrans/CAGov@DOT<br>Maxine Ferguson/HQ/Caltrans/CAGov@DOT<br>Sylvia Vega/D12/Caltrans/CAGov@DOT  |

| Level of team authority /<br>empowerment | Our team is empowered to recommend new N&P approaches for the next<br>revisions of planning guidance, PSR guidance, the PDPM, etc. Our team is<br>empowered to choose the kind(s) of guidance that it wants to develop.<br>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   |
|  | <ol> <li>Define process measurements</li> <li>Monitor the process (collect data)</li> </ol>  |
|  |  |
|  | <ol> <li>Develop improvement plan</li> <li>Implement improvements and assess the process</li> </ol>  |
|  | <ol> <li>8. Monitor and continue improvement</li> </ol>  |
| Team member duties                       | Participate in meetings  |
|  | <ul> <li>Follow through on homework commitments</li> </ul>   |
|  | <ul> <li>Contribute resources to the team</li> </ul>   |
| Resources                                | Team members' expertise  |
|  | <ul> <li>Sponsor and advisors</li> </ul>   |
|  | <ul> <li>Caltrans and FHWA guidelines, manuals, planning documents</li> </ul>  |
|  | <ul> <li>Facilitator</li> </ul>  |
|  | <ul> <li>Meeting tools: agendas, videoconference, teleconference, etc.</li> </ul>  |
| Deliverables                             | A Quality Report, to include:  |
|  | <ul> <li>A checklist for use in preparing N&amp;Ps</li> </ul>  |
|  | <ul> <li>A PowerPoint presentation that can be shown to the Districts and/or external<br/>groups (venues to be determined in consultation with sponsor and advisors)</li> </ul>  |
|  | <ul> <li>Recommendations</li> </ul>  |

Reviewed and approved:

unn 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 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 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 | Dissemination       |
|   | Management & Security      |                     |
|   | (BFAMS)                    |                     |

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<br>Sponsors for approval   | Purpose and Need Team                                | Submittal   |
| Approve matrices, glossaries, tools, and guidance materials for posting on website  | Purpose and Need Team<br>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<br>Environmental Analysis<br>(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<br>Design sites   | Transportation Planning<br>staff and Design staff    | Links posted  |
| Collect data and gather feedback on the website to ascertain<br>its usage and determine improvements needed                                       | DEA staff  | number of site visits, number<br>and nature of comments<br>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 | New team #1    | Evaluation report with |
| to management regarding the potential effectiveness of this |                | recommendations        |
| rating approach   |                |                        |

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<br>Procedures Manual, Environmental Handbook, and other<br>guidance materials, identify guidance and tools that needs<br>revisions to provide better information about quality purpose<br>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<br>recommend actions to<br>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 |                | Training module made available to all functional areas |

# **Proposed Schedule**

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

| New Team #1   | Begin ASAP | Complete in eighteen months  |
|---|------------|--|
| <ul> <li>Examine VA priority rating tool</li> <li>Propose similar tool for rating objectives of Need and Purpose Statements and for evaluating alternatives</li> <li>Test the new tool</li> </ul>   |            | Recommend whether to<br>proceed with the use of the<br>tool in six to twelve months<br>following its development                                   |
| <ul> <li>New Team #2</li> <li>Develop a framework to assist functional units in preparing / revising their Purpose and Need guidance</li> <li>Review Purpose and Need guidance materials from functional units and recommend revisions</li> </ul> | Begin ASAP | Ongoing  |
| <ul> <li>New Team #3</li> <li>Review and develop training module and plan</li> </ul>  | Begin ASAP | Complete training module and<br>plan in nine to twelve months<br>Complete first round of<br>training in twelve months<br>following training module |
| <ul> <li>All Divisions</li> <li>Participate in Departmental efforts at centralizing<br/>and storing project information, as a foundation<br/>for preparing improved Purpose and Need<br/>Statements</li> </ul>                                    | 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         | To evaluate the potential usefulness of using a rating tool, similar to the Value   |
| Statement                 | 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  |
| i roject background       | 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  |
|                           | 1 0   |
|                           | California Environmental Quality Act, both of which seek to promote better  |
| T M                       | decision making by government agencies.   |
| Team Members              | (Drawn from Design, with support from Planning, Environmental, Project  |
|                           | Management)   |
| Team Sponsor              | The sponsor and advisors commit to reviewing products and providing guidance.   |
| Commitments               | Sponsors: Dolores Valls & Gary Winters  |
|                           | Advisors: Wendy Waldron, Scott McGowan  |
| Level of team authority / | Our team is empowered to evaluate, recommend and provide guidelines for a   |
| empowerment               | 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                         | 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  |
| $\backslash$              | Contribute resources to the team  |
|                           | <ul> <li>Report to the Purpose and Need Steering Committee (see other draft charter</li> </ul>  |
|                           | for the Purpose and Need Guidance Review Team)  |
| Resources                 | • Team members' expertise   |
|                           | <ul> <li>Sponsor and advisors</li> </ul>  |
|                           | <ul> <li>Value Analysis guidelines and references</li> </ul>  |
|                           | <ul> <li>Meeting tools: agendas, videoconference, teleconference, etc.</li> </ul>   |
|                           | Purpose and Need Team Report  |
| Deliverables              | An Evaluation Report, to include:   |
|                           | <ul> <li>Summary of how ranking tools are used in Value Analysis</li> </ul>   |
|                           |   |
|                           | • Findings and recommendations regarding usefulness of a ranking tool for   |
|                           | ranking and weighting the objectives of Purpose and Need statements   |
|                           | <ul><li>ranking and weighting the objectives of Purpose and Need statements</li><li>(If recommended) Proposed tool model, and guidelines for who should use</li></ul> |
|                           | ranking and weighting the objectives of Purpose and Need statements   |

Reviewed and approved:

Dolores Valls, Project Sponsor

Date

Date

15

### Purpose and Need Guidance Review Team – Draft Team Charter

| Team Name                 | Purpose and Need Guidance Review Team   |
|---------------------------|---|
| Mission/Objective         | To serve as the Steering Committee for the other Purpose and Need teams, serving                |
| Statement                 | 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'                     |
| Troject Dackground        | 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              | The sponsor and advisors commit to reviewing products and providing guidance.                   |
| Commitments               | Sponsors: Brian Smith and Brent Felker  |
| Communents                | sponsors. Brian sinth and brent renker  |
| Level of team authority / | Our team is empowered to evaluate and recommend areas of improvements to                        |
| empowerment               | existing Caltrans guidance on Purpose and Need, and to review revisions to                      |
| F - ···                   | 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  |
|                           | <ul> <li>Identify the tools that functional units use that include or should include</li> </ul> |
|                           | 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   |
|                           | <ul> <li>Sponsor and advisors</li> </ul>  |
|                           | <ul> <li>Meeting tools: agendas, videoconference, teleconference, etc.</li> </ul>               |
| Deliverables              | <ul> <li>List or matrix of guidance and tools needing revisions.</li> </ul>                     |
|                           | <ul> <li>Suggested revisions to guidance and tools</li> </ul>                                   |
|                           | <ul> <li>Comments on revisions as they become available, and recommendations to</li> </ul>      |
|                           | management on actions (adopt, further revise)   |

Reviewed and approved:

Brian Smith, Project Sponsor

Date

Date

Brent Felker, Project Sponsor

#### Purpose and Need Training Module Team – Draft Team Charter

| Team Name                   | Purpose and Need Training Module Team   |
|-----------------------------|---|
| Mission/Objective           | To develop Purpose and Need training module(s) consisting of guidance,                              |
| Statement                   | references, tools, and a PowerPoint presentation for inclusion in Academies and                     |
| Statement                   | as a stand-alone course.  |
| Project Background          | Every project requires a well-defined purpose and need statement. Caltrans staff                    |
| Floject Background          | 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<br>Commitments | The sponsor and advisors commit to reviewing products and providing guidance.                       |
| Commitments                 | Sponsors: Joan Sollenberger, Gary Winters<br>Advisors: Chris Hatfield, Sheila Mone, Mickie Ferguson |
|                             | Advisors: Chris Hattield, Sheha Mone, Mickle Ferguson   |
| Level of team authority /   | Our team is empowered to use guidance on Purpose and Need to develop a                              |
| empowerment                 | 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   |
|                             | <ul> <li>Follow through on homework commitments</li> </ul>  |
|                             | <ul> <li>Contribute resources to the team</li> </ul>  |
|                             | <ul> <li>Identify lessons learned about preparing Rurpose and Need.</li> </ul>                      |
| 5                           | 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  |
|                             | <ul> <li>Training offices of Transportation Planning and Environmental Analysis</li> </ul>          |
|                             | • Purpose and Need reference materials (see Appendix F of the Purpose and                           |
|                             | Need Team's Findings Report)  |
|                             | <ul> <li>Meeting tools: agendas, videoconference, teleconference, etc.</li> </ul>                   |
|                             | Need and Purpose Team Report  |
| Deliverables                | <ul> <li>Training module(s)</li> </ul>  |
|                             | PowerPoint Presentation   |

Reviewed and approved:

Joan Sollenberger, Project Sponsor

Gary Winters, Project Sponsor

Dolores Valls, Project Sponsor

Date

Date

Date

California Department of Transportation

| DIRECTO                                   | DR'S POLICY   | Number:  | xx   |
|---|---|--|--|
| a de la servició de la Statute de Statute | en se a filio de la constitución de la  | Effective Date:  | Draft  |
|   |   | Supersedes:  | New  |
| TITLE                                     | Purpose and Need Statem   | ents   |  |
| POLICY                                    |   |  |  |
|   | The Department ensures of<br>the planning process throud<br>detail commensurate with<br>Department develops a w<br>through coordination with<br>among Department staff;<br>Development Teams; and<br>supporting data. | ugh construction, at t<br>the stage of project<br>ell-defined purpose a<br>local and regional p<br>early formation of br | he appropriate level of<br>development. The<br>and need for projects,<br>lanning agencies and<br>oad-based Project |
| INTENDED                                  |   | ~  |  |
| RESULTS                                   | A clear, well-justified pur<br>decision makers that the e<br>worthwhile and that the p<br>other needed transportation   | expenditure of funds<br>right the project is lon projects is warrant   | is necessary and<br>being given relative to<br>ed.   |
|   | Quality Purpose and Need<br>iteratively from planning<br>project activities must be<br>and need. Broad particips<br>retention and transmission<br>development and refinem   | through project appro-<br>consistent with a pro-<br>tion from many func-<br>have key factors in th                       | oval. Subsequent<br>ject's approved purpos<br>ctional units and data<br>as successful                              |
|   | A project's "Need" is an i<br>problem, and its "Purpose<br>address the transportation<br>of solutions are developed<br>The Purpose and Need Sta<br>California's transportation  | " is the set of objecti<br>deficiency. A reason<br>and evaluated based<br>atement is the foundation                      | ves that will be met to<br>nable solution or range<br>on these objectives.   |
| 2   | The Council on Environm<br>implementing the Nationa<br>mandates that Chapter 1 o<br>or Environmental Assess<br>for action" (CEQ Regulat   | Il Environmental Poli<br>of an Environmental I<br>nent (EA) discuss "th  | icy Act (NEPA)<br>impact Statement (EIS)<br>and purpose of and need  |
|   | The California Environme<br>"statement of objectives s<br>underlying purpose of the<br>15124(b).  | ought by the propose   | d project," including fl   |

Director's Policy Number XX Page 2

#### 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.

Director's Policy Number XX Page 3

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.

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

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

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

| Table Notes: Acronyms         (for PDPM references, see <a href="http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm">http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm</a> ) |
|---|
| CTCaltrans  |
| FHWAFederal Highway Administration  |
| FTAFederal Transit Administration   |
| MPO   |
| PAEDProject Approval / Environmental Document (PDPM Chapters 10 and 12)   |
| PDPMProject Development Procedures Manual (see  |
| http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm)   |
| PDTProject Development Team (see PDPM Chapter 8)  |
| PIDProject Initiation Document (see PDPM Chapter 9)   |
| RTPRegional 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   |
| RTPARegional 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<br>the RTP is<br>drafted:<br>continuous<br>process   | Updated as needed  | At initiation of<br>PID, refined<br>throughout PID<br>process  | At initiation of<br>environmental<br>document,<br>refined<br>throughout<br>environmental<br>process  |
| How developed  | Identifies existing /<br>future <u>system</u><br>deficiencies<br>[through<br>modeling, traffic<br>surveys, counts,<br>trends,<br>demographics,<br>accident rates,<br>land use, etc.]<br>Deficiencies are<br>turned into basic<br>statements of<br>intent that may<br>encompass<br>groups of<br>projects<br>Public and<br>stakeholder<br>participation | Identifies existing /<br>future <u>corridor</u><br>deficiencies<br>[through<br>modeling, traffic<br>surveys, counts,<br>trends,<br>demographics,<br>accident rates,<br>land use, etc.]<br>Public and<br>stakeholder<br>participation | Looks at <u>project</u><br>background,<br>current data<br>PDT meetings<br>Public and<br>stakeholder<br>participation | Looks at <u>project</u><br>background,<br>current data<br>PDT meetings<br>Consultation with<br>regulatory and<br>resource<br>agencies and<br>FHWA, FTA<br>Public and<br>stakeholder<br>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 P                                | rior to Project Initiation Document   | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports   | Project Approval / Environmental<br>Document (PAED)   | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|--|---|---|--|---|---|--|
|  | <b>Regional Transportation Plan (RTP)</b> | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP   | <b>z co</b> stanty z co <b>por co</b>  | 2 ******** (****2)  |   |  |
| (1) Project Status<br>Briefly describe the<br>project history<br>including actions<br>taken to date, other<br>agencies and<br>governmental units<br>involved, actions<br>pending, schedules,<br>etc. | Not Applicable                            | <ul> <li>Document: <ul> <li>Regional Transportation Plan (RTP)</li> <li>RTP environmental document</li> <li>General Plan – Circulation element</li> <li>Previous Route Concept Reports/Transportation Concept Reports (RCRs/TCRs)</li> <li>Previous project files</li> <li>California Transportation Plan (CTP)</li> <li>Interregional Transportation Strategic Plan (ITSP)</li> <li>Statewide and Federal Systems &amp; Designations (e.g., Scenic Highway System, IRRS, STRAHNET, Functional Classification, etc.)</li> <li>Statutes</li> <li>Intergovernmental Review (IGR) documents</li> </ul> </li> <li>Contact: <ul> <li>Regional Transportation Planning Agency (RTPA)</li> <li>Chamber of Commerce</li> <li>Planning Departments</li> <li>Public Works Departments</li> <li>Public officials</li> <li>Law enforcement</li> <li>Advocacy groups</li> <li>Civic groups</li> <li>Civic groups</li> <li>Caltrans System Planning</li> <li>Caltrans IGR</li> <li>Caltrans IGR</li> <li>Caltrans Goods Movement Coordinator</li> </ul> </li> <li>Action: <ul> <li>Town Hall meetings</li> <li>Other community/public meetings</li> </ul> </li> </ul> | <ul> <li>Document: <ul> <li>RTP</li> <li>System Planning documents (RCRs/TCRs)</li> <li>TSDP</li> <li>Old project files</li> <li>Previous studies</li> <li>IGR documents</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Intergovernmental Review (IGR)</li> <li>Caltrans Air Quality Coordinator</li> <li>Caltrans Goods Movement Coordinator</li> <li>Caltrans Goods Movement Coordinator</li> <li>Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal</li> <li>Local and regional agencies, e.g., cities, counties, COGs</li> <li>Resource agencies with jurisdiction</li> </ul> </li> <li>Action: <ul> <li>Form Project Development Team (PDT); draft or revise purpose and need statement</li> <li>Field review</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> </ul> </li> </ul> | <ul> <li>Document:</li> <li>State Implementation Plan (SIP)</li> <li>Transportation Control Measures (TCMs) for air quality</li> <li>Project Initiation Document (PID)</li> <li>Preliminary Environmental Analysis Report (PEAR)</li> <li>Draft Project Report</li> <li>PDT meeting minutes</li> <li>Project files</li> <li>RTP-stage information</li> </ul> Contact: <ul> <li>PDT members</li> <li>Caltrans Regional Planning</li> </ul> Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

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

|   | Planning Price   | or to Project Initiation Document   | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports  | Project Approval / Environmental<br>Document (PAED)   | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|---|--|---|---|---|---|--|
|   | <b>Regional Transportation Plan (RTP)</b>  | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP   |   |   |   |  |
| (3) Capacity<br>Is the capacity of<br>the present facility<br>inadequate for the<br>present traffic?<br>Projected traffic?<br>What capacity is<br>needed? What is<br>the level(s) of<br>service for existing<br>and proposed<br>facilities? | Document:<br>• Traffic modeling<br>• Highway Capacity Manual<br>• Existing and projected land use<br>planning<br>• General Plan: Housing and Land Use<br>elements and Zoning Maps<br>• Caltrans Highway Logs<br>• Caltrans Sign Logs<br>• Caltrans forecasts<br>• Caltrans Statewide Model (TSIP)<br>• Transit Studies<br>Contact:<br>• Planning Departments<br>• Modal advocacy groups<br>Action:<br>• Traffic modeling<br>• Air Quality modeling<br>• Transportation Demand modeling | Document:         • RTP         • State Implementation Plan (SIP)         • Agency Corridor Studies         • Traffic Accident Surveillance & Analysis System<br>(TASAS)         • Circulation Plans         • Functional Classification         • Air Quality models         • Major Investment Study (MIS)         • Cost/benefit analysis (may be more appropriate under<br>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 Goods Movement Coordinator         • Caltrans Goods Movement Coordinator         • Caltrans Bass Transportation         • Air Resources Board         Action:         • Collect data         • Calculate Level of Service (LOS)         • Calculate Demand/Capacity (D/C) | <ul> <li>See left; also:</li> <li>Document: <ul> <li>System Planning documents (RCRs/TCRs)</li> <li>Transportation System Development Program (TSDP)</li> <li>DSMP (District System Management Plan)</li> <li>RTP</li> <li>IGR documents</li> </ul> </li> <li>Contact: <ul> <li>Caltrans IGR</li> <li>Caltrans Goods Movement Coordinator</li> <li>Caltrans Mass Transportation</li> <li>Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal</li> <li>Local and regional agencies, e.g., cities, counties, COGs</li> <li>Resource agencies with jurisdiction</li> </ul> </li> <li>Action: <ul> <li>Form PDT; draft or revise purpose and need statement</li> <li>Field review</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Initiate or update traffic analysis, traffic model and forecasts</li> </ul> </li> </ul> | See left; also:<br>Document:<br>PID<br>Draft Project Report<br>Traffic forecasts<br>RTP-stage information<br>Contact:<br>Caltrans Regional Planning<br>Caltrans Traffic Operations<br>Caltrans Design<br>PDT members<br>Local/regional agencies<br>Advocacy or special interest<br>groups<br>Other stakeholders<br>Action:<br>Hold PDT meetings; assign<br>new members as needed;<br>revisit purpose and need and<br>revise as needed based on<br>updated studies<br>Identify whether NEPA/404<br>coordination is necessary per<br>MOU; if necessary, contact<br>MOU signatories and initiate<br>process for this phase<br>Initiate or update traffic<br>analysis, traffic model and<br>forecasts as needed | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

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

|   | Planning Pr   | ior to Project Initiation Document  | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports  | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|---|---|---|---|--|---|--|
|   | <b>Regional Transportation Plan (RTP)</b>   | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP   |   |  |   |  |
| (5) Legislation<br>Is there a Federal,<br>State, or local<br>government<br>mandate for the<br>action? | Document:<br>• TEA 21 - Transportation Equity Act<br>for the 21 <sup>st</sup> Century<br>• State Implementation Plan<br>• Americans with Disabilities Act<br>• Title VI<br>• Clean Air Act<br>• Clean Water Act<br>• Initiatives/Measures<br>Contact:<br>• FHWA/FTA | See left. Also:<br>Document:<br>• RTP<br>• SB 45<br>• Seismic Retrofit Program<br>• Noise Attenuation Program<br>• Regulatory agency mandates<br>• Court orders<br>Contact:<br>• Planning Department<br>• Local government offices<br>• Air Resources Board<br>• Regulatory agencies<br>• Caltrans Legal<br>• Caltrans Legislative Analyst's Office | See left. Also:Document:• TCRP (Traffic Congestion<br>Relief Program) (Statute)• Previous Project Files• Design Exceptions on<br>previous projects• Listings of Department<br>commitmentsContact:• Caltrans Legal• Caltrans HQ Environmental<br>Division• Caltrans Air Quality<br>Coordinator• SHOPP Program Managers• Appropriate Caltrans<br>Functional Units, e.g.,<br>System Planning, Regional<br>Planning, Local Assistance,<br>Traffic Operations, Traffic<br>Safety, Environmental,<br>Design, Maintenance• Local and regional agencies,<br>e.g., cities, counties, COGs• Local politicians• Resource agencies with<br>jurisdictionAction:• Form PDT; draft or revise<br>purpose and need statement<br>• Field review• Identify whether NEPA/404<br>coordination is necessary per<br>MOU; if necessary, contact<br>MOU signatories and initiate<br>process for this phase | See left. Also:<br>Document:<br>Design Exceptions from<br>Previous Projects<br>Project Initiation Document<br>Land use plans<br>PDT meeting minutes<br>Contact:<br>SHOPP Program Managers<br>Local/regional agencies<br>Advocacy or special interest<br>groups<br>Other stakeholders<br>Action:<br>Hold PDT meetings; assign<br>new members as needed;<br>revisit purpose and need and<br>revise as needed based on<br>updated studies<br>Identify whether NEPA/404<br>coordination is necessary per<br>MOU; if necessary, contact<br>MOU signatories and initiate<br>process for this phase | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

|   | Planning Prie   | or to Project Initiation Document  | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports   | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|---|---|--|--|--|---|--|
|   | Regional Transportation Plan (RTP)  | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP  |  |  |   |  |
| (6) Social Demands<br>or Economic<br>Development<br>New employment,<br>schools, land use<br>plans, recreation,<br>etc. What<br>projected economic<br>development/land<br>use changes<br>indicate the need to<br>improve or add to<br>the highway<br>capacity? | Document:<br>• General Plans (Housing and Land<br>Use elements)<br>• Tentative Parcel Maps<br>• Subdivision Maps<br>• Specific Plans (e.g., large residential/<br>commercial developments)<br>• Plans for major events (e.g.,<br>Olympics)<br>• Security plans<br>• Plans for context-sensitive solutions<br>Contact:<br>• Planning Department<br>• FHWA/FTA<br>• Tribes<br>Action:<br>• Hold public meetings | See left. Also:<br>Document:<br>• RTP<br>• TCR/RCR<br>• Economic Plan<br>• Zoning maps<br>• Models<br>• Public agency Master Plans<br>• Tribal Plans<br>Contact:<br>• Chamber of Commerce<br>• Visitor/Welcome Centers<br>• Redevelopment Agency<br>• State Department of Housing and Development<br>• Local Recreation Department<br>• State Office of Tourism<br>• School Districts<br>• Department of Finance (for census)<br>• Community-based organizations<br>• Elected officials<br>• Tribes<br>Action:<br>• Hold public meetings | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>RTP environmental document</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Goods Movement Coordinator</li> <li>IGRCEQA Reviewer</li> <li>District Encroachment Permits Engineer</li> <li>Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal</li> <li>Local and regional agencies, e.g., cities, counties, COGs</li> <li>Resource agencies with jurisdiction</li> </ul> </li> <li>Action: <ul> <li>Form PDT; draft or revise purpose and need statement</li> <li>Field review</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>For PEAR, perform environmental Justice issues</li> <li>Initiate or update traffic analysis, traffic model and forecasts, and safety studies</li> </ul> </li> </ul> | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>PID</li> <li>PEAR</li> <li>Draft Project Report</li> <li>Traffic forecasts</li> </ul> </li> <li>Contact: <ul> <li>IGR CECQ Reviewer</li> <li>District Encroachment Permits</li> <li>Local/regional agencies</li> <li>Advocacy or special interest groups</li> <li>Other stakeholders</li> <li>Caltrans Public Affairs</li> </ul> </li> <li>Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Initiate or update traffic analysis, traffic model and forecasts, and safety studies as needed</li> <li>Keep up on local news</li> </ul> </li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

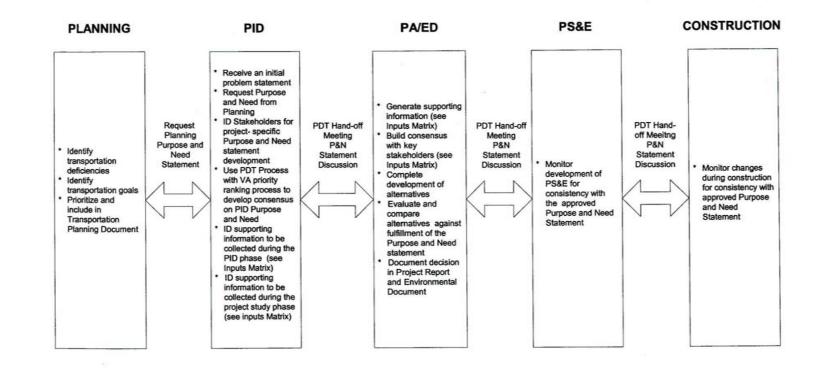
|  | Planning Pri  | or to Project Initiation Document  | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports   | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|--|---|--|--|--|---|--|
|  | Regional Transportation Plan (RTP)  | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP  |  |  |   |  |
| (7) Modal Inter-<br>relationships<br>How will the<br>proposed facility<br>interface with and<br>serve to<br>complement<br>airports, rail and<br>port facilities, mass<br>transit services,<br>etc? | <ul> <li>See System Linkage, above. Also:</li> <li>Document: <ul> <li>General Plan</li> <li>Transit studies</li> <li>Airport Land Use Plans</li> <li>California Aviation System Plan</li> <li>California Trade and Goods<br/>Movement Plan</li> <li>Rail and Port studies</li> </ul> </li> <li>Contact: <ul> <li>Planning Department</li> <li>FHWA/FTA</li> <li>FAA</li> <li>State Department of Aeronautics</li> <li>Transit Agencies</li> <li>Rail and Port Authorities</li> <li>Trucking associations</li> <li>Consolidated Transportation Service</li> <li>Airport Land Use Plans</li> <li>Modal advocacy groups</li> </ul> </li> </ul> | See left. Also:<br>Document:<br>• RTP<br>•<br>Contact:<br>• RTPA/MPO<br>• Caltrans Goods Movement<br>• Caltrans Mass Transportation<br>• Caltrans Local Assistance<br>• Rail and Port operators<br>• Caltrans Division of Rail<br>• Regulatory agencies<br>Action:<br>• Meet with mode providers/agencies<br>• Meet with advocacy groups | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>TCR/RCR</li> <li>FHWA's "Flexibility in Highway Design"</li> <li>Caltrans' "Main Streets: Flexibility in Design and Operations Guide 2002"</li> </ul> </li> <li>Contact: <ul> <li>Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Traffic Safety, Environmental, Design, Maintenance, Legal</li> <li>Local and regional agencies, e.g., cities, counties, COGs</li> <li>Local transit providers</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> </ul> </li> <li>Action: <ul> <li>Form PDT; draft or revise purpose and need statement</li> <li>Field review</li> <li>Meet with mode providers/agencies</li> </ul> </li> </ul> | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>PID</li> </ul> </li> <li>Contact: <ul> <li>Local/regional agencies</li> <li>Local transit providers</li> <li>Local bike groups</li> <li>Other advocacy and special interest groups</li> <li>Other stakeholders</li> <li>Caltrans Public Affairs</li> </ul> </li> <li>Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Keep up on local news</li> </ul> </li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

|  | Planning P   | rior to Project Initiation Document   | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports  | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|--|--|---|---|--|---|--|
|  | Regional Transportation Plan (RTP)   | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP   |   |  |   |  |
| (8) Safety<br>Is the proposed<br>project necessary to<br>correct an existing<br>or potential safety<br>hazard? Is the<br>existing accident<br>rate excessively<br>high? Why? How<br>will the proposed<br>project improve it? | Document:<br>• Accident reports<br>Contact:<br>• CHP<br>• Local law enforcement<br>• Caltrans Planning<br>• Caltrans Traffic Operations<br>Action:<br>• Hold public meetings | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>RTP</li> <li>TASAS</li> <li>Transportation Research Board Reports</li> <li>Structures Maintenance: Bridge Management System (BMS) and Structure Replacement and Improvement Needs (STRAIN) Report</li> <li>Feasibility Study Reports</li> <li>Coastal Plan</li> <li>Alquist-Priolo Fault Zones</li> <li>Avalanche Plans</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Maintenance</li> <li>Caltrans Structures Maintenance</li> <li>Caltrans Division of New Technology and Research</li> <li>State Office of Transportation Safety</li> <li>State Office of Emergency Services (OES)</li> <li>Federal Emergency Management Agency (FEMA)</li> </ul> </li> <li>Action: <ul> <li>Collect data</li> <li>Calculate Safety Index (S.I.)</li> <li>Calculate accident rates</li> </ul> </li> </ul> | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>TASAS—accident rates</li> <li>Safety index (calculated as a cost/benefit ratio)</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Traffic Safety</li> <li>California Highway Patrol</li> <li>Caltrans Truck Permitting—for bridge vertical clearances and bridge loading standards</li> <li>Caltrans Structures</li> <li>Maintenance</li> <li>Caltrans Safety SHOPP Program Manager</li> <li>Caltrans Design Coordinator</li> <li>Appropriate Caltrans Functional Units, e.g., System Planning, Regional Planning, Local Assistance, Traffic Operations, Environmental, Design, Maintenance, Legal</li> <li>Local and regional agencies, e.g., cities, counties, COGs</li> <li>Local advocacy groups</li> <li>Resource agencies with jurisdiction</li> </ul> </li> <li>Action: <ul> <li>Form PDT; draft or revise purpose and need statement</li> <li>Field review</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Initiate or update safety studies</li> </ul> </li> </ul> | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>PID</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Design Coordinator</li> <li>Local/regional agencies</li> <li>Advocacy groups</li> <li>Other stakeholders</li> <li>Caltrans Public Affairs</li> </ul> </li> <li>Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Initiate or update safety studies as needed</li> <li>Update TASAS and safety index</li> <li>Keep up on local news</li> </ul> </li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

|   | Planning Prior to Project Initiation Document   |  | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports   | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|---|---|--|--|--|---|--|
|   | Regional Transportation Plan (RTP)  | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP  |  |  |   |  |
| (9) Roadway<br>Deficiencies<br>Is the proposed<br>project necessary to<br>correct existing<br>roadway<br>deficiencies (e.g.,<br>substandard<br>geometrics, load<br>limits on structures,<br>inadequate cross-<br>section, or high<br>maintenance<br>costs)? How will<br>the proposed<br>project improve it? | Document:<br>• General Plan (Circulation element)<br>• TCR/RCR<br>Contact:<br>• Caltrans Planning<br>• Local Public Works Department<br>• Rail and Port Authorities<br>• Truckers' Association<br>• Modal advocacy groups<br>Action:<br>• Public meetings<br>• Field reviews<br>• 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 Engineering Service Center         • Translab         • Caltrans Design         Action:         • Public meetings         • Field reviews         • Data collection | See left. Also:         Document:         • As-builts         • Pavement Management<br>System (regular surveys of<br>roadways for rideability, etc)         • Bridge Management System         Contact:         • Caltrans SHOPP Program<br>Managers (Safety, Roadside,<br>Roadway, Mobility)         • Caltrans Design Coordinator         • Caltrans Design Coordinator         • Caltrans District Coordinator         • Caltrans District Hazardous<br>Waste         • Caltrans District Maintenance         • Caltrans District Traffic<br>Operations         • Appropriate Caltrans<br>Functional Units, e.g.,<br>System Planning, Regional<br>Planning, Local Assistance,<br>Traffic Safety, Design,<br>Environmental, Legal         • Local and regional agencies,<br>e.g., cities, counties, COGs         • Resource agencies with<br>jurisdiction         Action:         • Form PDT; draft or revise<br>purpose and need statement         • Field review         • Identify whether NEPA/404<br>coordination is necessary per<br>MOU; if necessary, contact<br>MOU signatories and initiate<br>process for this phase         • Initiate or update traffic<br>analysis, traffic model and<br>forecasts, and safety studies | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>PID</li> </ul> </li> <li>Contact: <ul> <li>Caltrans Design Coordinator</li> <li>Local/regional agencies</li> <li>Advocacy or special interest groups</li> <li>Other stakeholders</li> <li>Caltrans Public Affairs</li> </ul> </li> <li>Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Initiate or update traffic analysis, traffic model and forecasts, and safety studies as needed</li> <li>Keep up on local news</li> </ul> </li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

|  | Planning Price  | or to Project Initiation Document   | Project Initiation Documents (PIDs)<br>and Feasibility Study Reports   | Project Approval / Environmental<br>Document (PAED)  | Plans, Specifications and<br>Estimates (PS&E)   | Construction   |
|--|---|---|--|--|---|--|
|  | Regional Transportation Plan (RTP)  | System Planning Documents<br>(Route Concept Reports /<br>Transportation Concept<br>Reports) & Corridor Studies10-Year SHOPP   |  |  |   |  |
| (Later guidance)<br>Bicycle / Pedestrian<br>Facilities<br>If the proposed<br>project includes a<br>bicycle or<br>pedestrian facility,<br>is the facility a link<br>in the local plan?<br>Will it reduce<br>project impacts to<br>community access? | <ul> <li>Document:</li> <li>General Plan Bike element (if there is one)</li> <li>Land Use Plans</li> <li>Trails Plan</li> <li>Specific Plans</li> <li>Community Plans</li> <li>Americans with Disabilities Act</li> <li>Caltrans System Plans</li> <li>FHWA's "Flexibility in Highway Design"</li> <li>Caltrans' "Main Streets: Flexibility in Design and Operations Guide 2002"</li> <li>Caltrans' "Context-Sensitive Solutions"</li> </ul> Contact: <ul> <li>Planning Department</li> <li>Advocacy groups</li> </ul> Action: <ul> <li>Hold public meetings</li> </ul> | See left. Also:<br>Document:<br>• RTP<br>Contact:<br>• Caltrans Non-motorized Transportation Team<br>• Bicycle/pedestrian advocacy groups<br>Action:<br>• Hold outreach meetings with advocacy groups | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>TCR/RCR</li> </ul> </li> <li>Contact: <ul> <li>Caltrans System Planning<br/>and Regional Planning</li> <li>Caltrans District Bicycle/<br/>Pedestrian Coordinator</li> <li>Caltrans Community<br/>Planning</li> <li>Caltrans IGR</li> <li>Appropriate Caltrans<br/>Functional Units, e.g., Local<br/>Assistance, Traffic<br/>Operations, Traffic Safety,<br/>Environmental, Design,<br/>Maintenance, Legal</li> <li>Local and regional agencies,<br/>e.g., cities, counties, COGs</li> <li>Bicycle and pedestrian<br/>advocacy groups</li> <li>Resource agencies with<br/>jurisdiction</li> </ul> </li> <li>Action: <ul> <li>Form PDT; draft or revise<br/>purpose and need statement</li> <li>Field review</li> <li>Identify whether NEPA/404<br/>coordination is necessary per<br/>MOU; if necessary, contact<br/>MOU signatories and initiate<br/>process for this phase</li> </ul> </li> </ul> | <ul> <li>See left. Also:</li> <li>Document: <ul> <li>PID</li> <li>PEAR</li> </ul> </li> <li>Contact: <ul> <li>Other stakeholders</li> </ul> </li> <li>Action: <ul> <li>Hold PDT meetings; assign new members as needed; revisit purpose and need and revise as needed based on updated studies</li> <li>Identify whether NEPA/404 coordination is necessary per MOU; if necessary, contact MOU signatories and initiate process for this phase</li> <li>Hold outreach meetings with advocacy groups</li> </ul> </li> </ul> | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings; assign<br>new members as<br>needed<br>Refer to Project<br>Report and<br>Environmental<br>Document,<br>verify that PS&E<br>are consistent<br>with purpose and<br>need statement | Document:<br>Project Report<br>Environmental<br>Document<br>Contact:<br>Project<br>Manager<br>PDT<br>Action:<br>Hold PDT<br>meetings;<br>assign new<br>members as<br>needed<br>Refer to<br>Project Report<br>and<br>Environmental<br>Document,<br>verify that<br>project being<br>constructed is<br>consistent with<br>purpose and<br>need statement |

Appendix C Key Activities for Quality Purpose and Need Statements



Purpose and Need Team Final Report

Page C-1

July 2003

## **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 |
| CEQA  | 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                                   |
| СТР   | California Transportation Plan           |
| D/C   | Demand to Capacity Ratio                 |
| DSMP  | District System Management Plan          |
| EA    | Environmental Assessment (NEPA           |
| 2.1   | 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                |
| НОТ   | High Occupancy Toll                      |
| HOV   | High Occupancy Vehicle                   |
| HSR   | High Speed Rail                          |
| IIDIC | men opeen Ran                            |

| 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 |   |
| 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<br>PMS<br>PS&E<br>PSR<br>PSR-PDS<br>PSR/PR | Post mile<br>Pavement Management System<br>Plans, Specifications, and Estimates<br>Project Study Report (one type of PID)<br>Project Study Report – Project<br>Development Support<br>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<br>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<br>Program/Plan  |
| SIP   | State Implementation Plan   |
| SR  | State Route   |
| SRTP  | Short Range Transit Program   |
| STIP  | State Transportation Improvement<br>Program   |

| STRAHN        | ET 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                   |
| <b>TEA 21</b> | Transportation Equity Act for the 21 <sup>st</sup> |
|               | 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 <a href="http://www.catc.ca.gov/">http://www.catc.ca.gov/</a>.
- **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, gradeseparated 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<del>.</del>
- **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).

Project Development Procedures Manual

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