PROJECT COMMUNICATION HANDBOOK

Second Edition September 2007



Office of Project Management Process Improvement 1120 N Street, Mail Station 28 Sacramento, CA 95814 www.dot.ca.gov/hq/projmgmt

Project Communication Handbook September, 2007

Preface

Purpose This document provides an overview of the basic concepts and processes

that guide project communication at the Department. The purpose of the Project Communication Handbook is to assist the project team in identifying internal and external stakeholders, developing the Project Communication

Plan, and enhancing communication among all parties involved.

All Department Capital Delivery Program personnel, including project Audience

managers, their teams and supporting hierarchy.

This is the 2nd edition of the *Project Communication Handbook*. Background

This revision represents the original version of the 2^{nd} edition. **Revisions**

Titles of books and other documents appear in *italics*. Conventions

Web site URLs appear in **bold italics**.

Like this example. Supplementary information appears in the left margin alongside normal

text in the right column.

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OVERVIEW

This chapter summarizes Department project communication by:

- ▶ Defining "project communication" and "project communication management"
- ▶ Explaining the purpose and goals of project communication management at the Department

What Is Project Communication?

Project communication is the exchange of project-specific information with the emphasis on creating understanding between the sender and the receiver. Effective communication is one of the most important factors contributing to the success of a project.

For more information about project stakeholders, see the Project Management Handbook.

The project team must provide timely and accurate information to all stakeholders. Members of the project team prepare information in a variety of ways to meet the needs of project stakeholders. Team members also receive feedback from these stakeholders.

Project communication includes general communication between team members but is more encompassing. It utilizes the Work Breakdown Structure (WBS) for a framework, it is customer focused, it's limited in time, it is product focused with the end in mind, and it involves all levels of the organization. For details about the WBS, see "Work Breakdown Structure" on page 25.

For each WBS element, there are:

- ▶ Suppliers who provide inputs needed for the WBS element
- ▶ Task managers who are responsible for delivering the WBS element
- ▶ Customers who receive the products of the WBS element

Suppliers must communicate with the task managers, and the task managers must communicate with suppliers and customers. The supplier is often the task manager for an earlier deliverable in the project lifecycle; the customer may be a task manager for a later deliverable. Good project communication includes notifying the next task manager in the project delivery chain about when to expect a deliverable. The supplier and customer may also be the functional manager.

It is important to note that the communication should be reciprocal between the task manager and supplier and the task manager and customer, i.e., although communication is the responsibility of the task manager, the customer/supplier should always validate expected deliverable dates (see Figure 1).

For more information about task managers, see the Project Management Handbook.



Figure 1. Communicating WBS element

The project communication plan is a part of the overall project plan. It builds on the project workplan, which shows:

- ▶ What will be produced on the project the deliverable including the WBS
- ▶ Who will produce it the Cost Center
- ▶ When will it be produced

For more information, see

"Prepare the Communication Plan Draft" on page 12.

What Is Project Communication Management?

Project Communication Management is the knowledge area that employs the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval and ultimate disposition of project information.¹

Project Communication is the responsibility of everyone on the project team. The project manager, however, is responsible to develop the Project Communication Management Plan with the input from the task managers and Project Development Team (PDT).

Task Manager Role in Communication

A task manager responsible for a deliverable needs to know why the customer wants it, what features they want, how long it will take, and how they want to receive it.

The task manager tells their customer exactly when to expect the deliverable. If that deliverable is linked to a WBS element on the critical path, it is even more important that task manager informs their internal customer when the deliverable will arrive. The recipient functional manager must have their staff ready to start work immediately after it arrives.

The task manager must ensure that internal customers know about any changes in the delivery date. This allows the recipient functional manager to schedule their resources accordingly. The task manager follows up with the customer of each deliverable. The task is not complete merely because the final product is delivered to the customer. The task manager contacts the customer to confirm that the deliverable met his/her needs and expectations. The task manager should enter feedback that others might use in future projects into the lessons learned database and into the Department's guidance and training materials.

 $^{^{\}mathrm{1}}$ PMBOK Guide –Third Edition, page 221

Why Do We Do It?

The project communication management processes provides the critical links among people and information that are necessary for successful communications.

Project managers use project communication management to:

- ▶ Develop a communication plan for the project
- ▶ Distribute information via the methods that reach customers most effectively
- ▶ File data using the Project Development Uniform Filing System and Construction Organization of Project Documents
- ▶ Archive records in accordance with Department Records Retention policies

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PROCESSES

This chapter explains the various processes involved in Department project communication.

O V ER V I E W P R O C E S S E S

Overview

Understanding the communication process is the first step in communication planning. Consider these five factors:

- ▶ Who is involved in the communication process the identified stakeholders, such as Project Team Members, project management and staff, customer management and staff, and external stakeholders.
- ▶ What is being communicated the message; the information being communicated.
- ▶ When the information is communicated weekly, monthly, quarterly, as needed, or as identified.
- ▶ How the information is distributed— in a meeting, a memorandum, an email, a newsletter, a presentation, etc.
- ▶ Who will provide the information being communicated.

For more information about the roles of the customers, Deputy District Director for Program and Project Management (DDDPPM), and District Director, see the Project Management Handbook.

Develop the Communication Plan

Preparing the project communication plan assists the project team in identifying internal and external stakeholders and enhances communication among all parties involved in the project. The project manager leads the project development team to prepare a communication plan to ensure that an effective communication strategy is built into the project delivery process. The plan is a framework and should be a living, evolving document that can be revised when appropriate. The communication plan is part of the project management plan. Figure 2 shows the steps in the development of the communication plan.

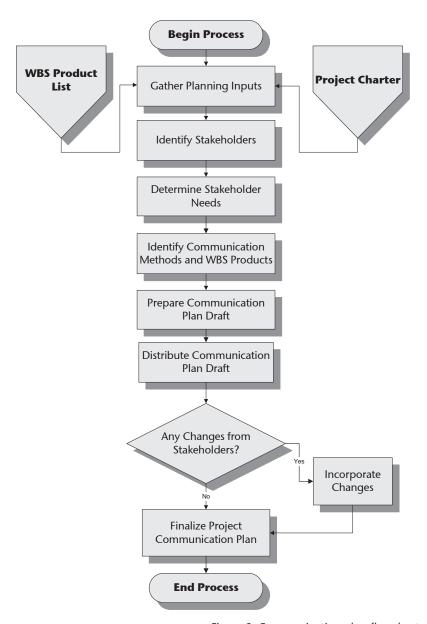


Figure 2. Communication plan flowchart

The project development team (PDT) develops a communication plan by asking the following questions:

- ▶ Who needs what information?
- ▶ When do they need the information?
- ▶ Who delivers the information?
- ▶ How should the information be delivered?

While all projects share the need to communicate project information, the specific information needs and the methods of distribution may vary widely.

Gather Planning Inputs

The PDT develops two inputs for the project communication planning process:

- ▶ WBS product list a list of potential project products, based on the workplan that includes all the elements of the WBS, and the subproducts of the WBS.
- ▶ Project charter the record of the agreement between the sponsor and the project manager on the key elements of a project. The project charter lists the project manager, the project sponsor, and the PDT (for further details about the project charter, see the Project Management Handbook).

Identify Stakeholders

Project stakeholders have information and communication needs. Identifying the information needs of the stakeholders and determining a suitable means of meeting those needs are important factors for project success.

The PDT must identify the stakeholders on a project, determine what their needs and expectations are, and then manage and influence those expectations to ensure a successful project.

The PDT brainstorms a list of stakeholders using the roles identified in the *Project Management Handbook*, the RBS/OBS list of functional areas, and the Innovation Checklists for project manager (*see Project Management Directive (PMD) 007R*).

Determine Stakeholder Needs

As early as possible, the PDT assigns team members to contact local, regional, state, and federal agencies that have even a minor stake in a project. By working with these agencies from the earliest stages, the project team reduces the chance of conflict at critical times.

For more information about external project stakeholders, see "Involve the Community" on page 19.

The key to successful community involvement is communicating with external project stakeholders early and often.

For more information about the PDT, see the Project Management Handbook and the third edition of the PMBOK Guide section 10.4, pages 221 and 235.

Identify Communication Methods and WBS Products

Project team members and stakeholders use different communication methods at particular times during the project lifecycle. For examples of communication methods, see "Communication Methods" on page 26.

The project team uses the WBS product list to identify the products that may be needed on the project. The PDT identifies:

- ▶ Who produces the product
- ▶ Who receives the product
- ▶ The method of product transmittal

This information is tied directly to WBS elements and sub-products required for the project.

Prepare the Communication Plan Draft

The project communication plan includes the information needed to successfully manage project product deliverables.

The project communication plan includes the following (see Figure 4. Sample communication plan on page 31):

- ▶ Brief introduction and background answers the question, "Why do we need a project communication plan?"
- ▶ A list of the project sponsor, project manager, PDT members, and other key stakeholders.
- ▶ Methods of communications to be used, including formal meetings to be held (who, what, when, how).
- ▶ Project reporting information answers the question, "How will project performance be collected and distributed to the internal and external project stakeholders?"
- ▶ Stakeholders analysis includes internal stakeholders (name and contact information) identified by Cost Center number and function, and external stakeholders (name and contact information) identified by agency or organization. The stakeholders analysis is designed to help the PDT analyze internal and external stakeholder needs by gathering the following information from each stakeholder:
 - Goals for the project. What is each stakeholder's desired outcome for the project? The project manager should ensure at the start that there is a consistent vision for the project.
 - Preferred methods of communication. Project team members will use this information as a means to meet individual communication needs. If the team cannot reasonably communicate through each stakeholder's preferred medium, the team needs to negotiate a method to ensure that each stakeholder receives and understands the project communication.
 - Preferred method for recognizing performance of the team, within the constraints of what is achievable. The PDT uses this information to plan appropriate celebrations at the completion of each project component. For a list of possible rewards, see "Decide How to Acknowledge the Performance of the Team" on page 14.

For a stakeholders analysis sample, see "Figure 5. Sample stakeholder analysis" on page 32.

Templates for the stakeholder analysis and the communication matrix are available on the Internet at:

http://www.dot.ca. gov/hq/projmgmt/ guidance.htm



▶ Communication matrix — this tool is used to track project performance by project component and WBS element. The WBS product list is the input. It includes the WBS codes, WBS titles, subproducts, and Uniform Filing System location numbers. The list also indicates which sub-products should be filed in the Project History File (PHF). To complete the communication matrix, the PDT indicates if the sub-product is required, who produces it, who receives it, the method of transmittal, and the date submitted.

The project manager assigns a team member to complete the draft project communication plan for each appropriate project component:

- ▶ Project Initiation Document (PID)
- ▶ Permits and Environmental Studies
- ▶ Plans, Specifications, and Estimates (PS&E)
- ▶ Right of Way
- ▶ Construction

Decide How to Acknowledge the Performance of the Team

Some forms of recognition that are achievable in California State service are:

- ► Gold and Silver Superior Accomplishment awards & Employee Recognition Program Accomplishment awards
- ▶ End-of-project phase team celebrations organized by the project manager and sponsored by appropriate managers and project stakeholders
- ▶ Certificates, posters, and letters of appreciation from the District Director, Deputy District Director, or other appropriate manger
- Certificates and letters of appreciation from local agencies and other external stakeholders
- Excellence in Transportation awards presented by the Department
- ► Tranny awards presented by the California Transportation Foundation
- Purcell, Roberts, and Moskowitz awards presented by the Department
- Excellence in Highway Design awards presented by the Federal Highway Administration
- ▶ Environmental Excellence awards presented by the Federal Highway Administration
- Public Affairs Skills awards presented by the Federal Highway Administration
- ▶ Other External Professional Awards such as Project of the Year awards by the ASCE

Develop a Conflict Management Strategy

A good communication plan includes a conflict management strategy which is designed to make issues between stakeholders more manageable. Project managers minimize conflicts and resolve issues through constant communication with the project sponsor(s), project team members, and other project stakeholders. Project managers can use the sample strategy that appears later in this section, or can develop a more specific strategy.

The project manager negotiates and/or mediates conflict resolution. Project managers encourage project stakeholders to seek win-win solutions to their problems when possible. Because the project manager discusses and develops a conflict management strategy before the project begins, issues are more manageable. The project manager documents in the project record any decisions that utilize the conflict management strategy.

Figure 3 shows an overview of conflict management (also see Appendix B for conflict management plan).

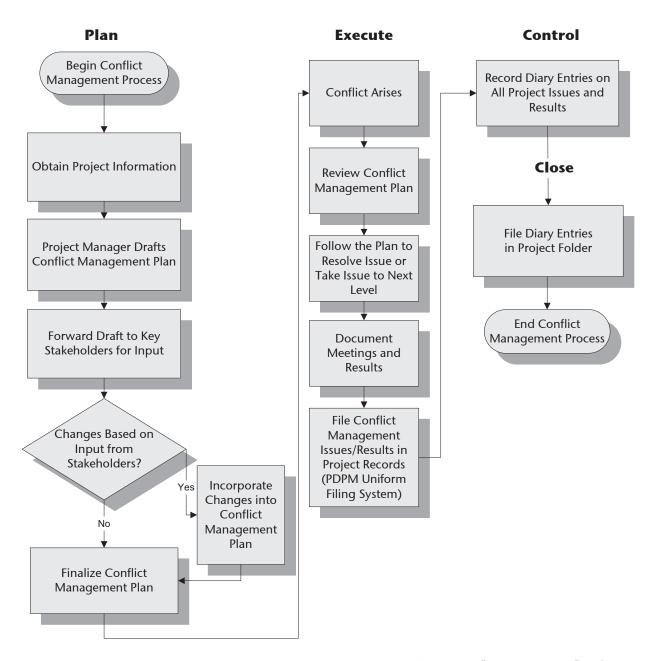


Figure 3. Conflict management flowchart

The project manager prepares the conflict management strategy with input from stakeholders. Stakeholders use this strategy to resolve issues at any time during the project.

Sample Conflict Management Strategy

The project manager and the project stakeholders meet and agree to attempt to resolve all conflicts at an individual level as much as possible. Two (or more) parties with a dispute will meet and use the following guidelines:

▶ To resolve conflicts within the scope of the project:

Step	Action
1	Acknowledge the conflict
2	Establish ground rules
3	Establish common ground and shared goals
4	Separate the problem from the people
5	Have the parties share collected data related to the conflict
6	Explore solutions, listing as many alternatives as possible
7	Evaluate solutions, looking for a win-win solution
8	Select the best solution
9	Share the solution with the project stakeholders

If a conflict cannot be resolved at an individual level, the conflict may need to be escalated by the project manager with the functional manager or the Chief of Program/Project Management. (See Appendix B for timetable for escalation process.)

Each time stakeholders meet to resolve a conflict, they record the following information:

- Issues
- Meeting date and location
- Attendees
- Results of meeting

Distribute the Communication Plan Draft

For complete definitions of task managers and functional managers, see the Project Management Handbook.

The project manager sends the draft project communication plan to the project stakeholders for review and input. When reviewing the communication matrix, functional managers ensure that a task manager is assigned to each WBS elements listed in the functional managers' area of responsibility. The functional managers list all the assigned task managers on the communication matrix and the stakeholder analysis.

Incorporate
Changes and
Finalize the
Communication
Plan

The project manager or PDT members incorporate changes from the project stakeholders into the project communication plan. The project manager then distributes the final project communication plan to the project team members. The project management support unit (PMSU) uses the finalized project communication matrix to track the progress of project deliverables. (For a sample of a completed project communication plan, see "Appendix A: Sample Project Communication Plan" on page 30.)

Distribute Information

For a complete definition of a stakeholder, see the Project Management Handbook.

Proper information distribution makes information available to project stakeholders in a timely manner. Following the communication plan ensures that all members of the project team are aware of their responsibilities to communicate with external stakeholders. The more information stakeholders have regarding a project or deliverable, the less likely last minute conflicts, changes, or complaints will affect a project.

Team members can improve overall project communication by adhering to the following communication guidelines:

Awareness

- Base communication strategies on stakeholder needs and feedback.
- Ensure that communication is shared in a timely manner.

▶ Content

- Advocate open, honest, face-to-face, two-way communication.
- Create an environment where project team members and other stakeholders can constructively challenge behavior and ideas.

▶ Context

- Remember that communication is two-way. Listen as well as deliver the message.
- Involve senior management when appropriate.

▶ Communication flow

- Coordinate communication with project milestone events, activities, and results.
- Include key stakeholders in developing an interest-based conflict management process.

▶ Effectiveness

- Conduct regular assessments of the communication plan and process.
- Communication must focus on the customer.

Format and media

- Take advantage of existing communication vehicles and opportunities.
- The project team has a variety of methods to share information. For examples, see "Communication Methods" on page 26.

Processes Distribute Information

Involve the Community

The Department has adopted a number of policies that encourage community involvement and building partnerships. The key to successful community involvement is communicating with external project stakeholders early and often. Project team members must be familiar with the Department's policies and procedures related to:

- ▶ **Community involvement** extensive information related to working with external project stakeholders, including preparing community involvement plans, can be found in the *Project Development Procedures Manual (PDPM)*, Chapter 22. All project team members must be aware of this information and follow established procedures. For more information, see the complete chapter at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt22/chapt22
- ▶ **Context sensitive solutions** the Department has adopted a number of policies that encourage designers to respond to community values where state highways serve as main streets. The *Director's Policy on Context Sensitive Solutions* details the roles and responsibilities of all project team members. For more information, see the complete policy statement at:

http://www.dot.ca.gov/hq/oppd/context-solution.pdf

• Accommodating non-motorized travel — the Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations, and project development activities and products. The *Deputy Directive on Accommodating Non-Motorized Travel* details the roles and responsibilities of project team members. For more information, see the complete policy statement, at:

http://www.dot.ca.gov/hq/oppd/non-motor-travel.pdf

▶ **Public information** — the Department has an established policy on public information. Project team members must be familiar with this policy and understand their roles and responsibilities related to the distribution of public information. Headquarters Public Affairs provides information about statewide and policy concerns, while District Public Affairs Offices answer questions related to local and/or internal District operations.

Report Communication Performance

The Communication Plan is reviewed continuously throughout the project to ensure that it remains effective.

Periodically, the project manager asks the project stakeholders if the project communication is sufficient to suit the stakeholder's needs. In some cases, project stakeholders may need greater detail or more frequent delivery. In other cases, certain stakeholders may need summary information, or may request notification only if problems arise.

▶ To evaluate and report communication performance:

Step	Action
1	Review the project communication plan
2	Solicit feedback from the project stakeholders, verbally or in writing, as to whether the current information or communication method is adequate, based on the following criteria:
	➤ Type of information
	► Frequency of information
	▶ Depth/detail of information
	➤ Format of information
	► Method of transmittal
3	Discuss the stakeholder feedback with the PDT
4	Update the project communication plan if needed

Maintain and Archive Project Records

From the start of the project until the award of the construction contract, the Project Engineer maintains a set of project records. These are organized and indexed according to the Project Development Uniform Filing System. From construction award to final closeout, the Resident Engineer maintains a set of project records that are organized and indexed according to the Construction Organization of Project Documents.

These filing systems address one of the most error-prone aspects of project communication — communication over long spans of time. In many cases, the recipients of deliverables may not need the deliverables until several years after they are produced. The future recipient must know where to find the deliverable and understand previous project decisions, even if the task manager and other project team members are no longer available.

For more information about these filing systems, see "Filing Systems" on page 24.

The project team archives the Project History File (PHF) when the project is complete. This file includes selected project development records, final project records, the project Risk Management Plan, the project Charter, and the project Communication Plan. These include all letters, memos, reports, etc., that document project decisions, or that would be useful to develop a subsequent project.

The *Project Delivery Procedure Manual (PDPM)* indicates which project development records are included in the PHF and describes the archival process. For more information, see the complete chapter at:

http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt07/chapt07. htm

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Tools AND METHODS

This chapter describes some of the communication tools and methods used by Department project team members. Stakeholders must choose appropriate tools and methods to accomplish the communication task at hand.

Communication Tools

Project team members use a variety of tools to organize and present project information.

Project Fact Sheet

The project fact sheet contains summary data for stakeholders outside the project team, and is typically posted on the project website. No set standard exists for a project fact sheet. Districts use information from the project charter and other sources. The table below shows what information is in the charter as compared to the fact sheet.

Information	Charter	Fact Sheet
Background	Х	Х
Project purpose	Х	Х
Project component objectives	Х	
Project description/scope statement	Х	Х
Project/component constraints, assumptions and risks	Х	
Component deliverables	Х	
Key team members	Х	
Deliverable management process	Х	
Location map	Х	Х
Major milestone delivery dates		Х
Estimated cost		Х
Project contacts (short list; keep to level 5 Task Managers)		Х

Filing Systems

A filing system is a set of agreed-upon folder and file naming conventions used to classify project documents to make them easier to find. It is, essentially, a numbering scheme used to identify different types of documents and the folders where they are stored. All project records must be filed according to the following file systems:

TOOLS AND METHODS COMMUNICATION TOOLS

For more information, see Chapter 7 of the PDPM located at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt07/chapt07.htm, and Section 5-102 of the Construction Manual located at: http://www.dot.ca.gov/hq/construc/manual2001/chapter5/chp5_1.pdf

- ▶ The Project Development Uniform Filing System the standard filing system for project records up until the award of the construction contract.
- ▶ The Construction Organization of Project Documents the standard filing system for project construction records from the award of the construction contract onwards.
- ▶ Electronic filing systems with standardized District formats also serve as centralized stores for project information.

Work Breakdown Structure

The WBS is a deliverable-oriented grouping of project elements that organizes and defines the total scope of the project. Project communication relates to WBS elements. Team members use the WBS, and OBS to create the communication plan. For more information about the WBS, see http://www.dot.ca.gov/hq/projmgmt/guidance.htm

Resource Breakdown Structure

The RBS is a standardized, hierarchical list of roles that is used to produce a project deliverable. Project team members use the RBS to determine what roles are needed to produce project-specific WBS elements and to identify who needs to receive certain communication products. For more information about the RBS, see

http://www.dot.ca.gov/hq/projmgmt/guidance.htm

Project Charter

The project charter documents the agreement between the sponsor and the project manager over the key elements of a project and component. The charter helps the project manager guide the project team efficiently and effectively through the project development process.

Organization Breakdown Structure (OBS)

The OBS describes the Caltrans organization chart. It groups personnel into successively smaller units, each reporting to a single manager or supervisor. Districts and divisions consist of offices, which are subdivided into branches. In large districts and divisions, branches may be further subdivided into sections, and sections sometimes subdivided into squads.

Performance Reporting

Performance reporting involves the collection of all baseline data, and distribution of performance information to stakeholders. Performance Reporting should generally provide information on scope, schedule, cost, and quality. By analyzing deviations from plan (variances) a project manager can spot developing problems in time to take corrective action before they become serious. Earned-value analysis translates both schedule and budget measures into dollar values and tracks them against the original planned expenditure of effort, again translated into its dollar value.

Communication Methods

Project team members use a variety of communication methods to deliver project information, including meetings, telephone calls, email, voicemail, and websites. Meetings in particular are often the most effective way to distribute information to project stakeholders. Before planning a meeting, the project manager or assigned team member should consider the communication objectives carefully and choose a meeting format that will meet the objectives.

For more information about the applicability, format, publicity, and considerations for meetings, see Chapter 22 of the *PDPM*, located at: http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt22/chapt22.htm

Project team members use meetings and many other communication methods:

Method	Purpose	Responsibility	Frequency	Audience
Project development team meeting	Develop a formal baseline workplan, which is used to define, monitor, and manage project execution. Identify the basic task elements of a project and assess the resource needs for delivering a project within an assigned time frame.	Project manager	Weekly until baseline workplan is signed	Project manager and all stakeholders
Project management senior staff meeting	Communicate changes in Department policy or procedures, manage program expectations, and enhance training processes.	Single focal point (SFP) or Chief of PPM	Weekly at designated time	Project manager and functional managers
Project status review meeting	Report status and progress of scheduled milestones and activities. Identify and discuss problems and solutions for project obstacles.	SFP or Chief of PPM	Monthly at designated time	Project manager, DDDPPM, and database administrative staff
Project team meeting	Report project status and progress of scheduled milestones and activities. Identify and discuss project issues and corrective actions.	Project manager	As needed (weekly, monthly, quarterly, or ad hoc)	Project manager, functional managers, and task managers working on the specific project
Office meeting	Report status and progress of projects and scheduled tasks. Identify and discuss office related issues.	Project manager, functional manager, or task manager	Weekly	Office supervisor and staff

Tools and Methods Communication Methods

Method	Purpose	Responsibility	Frequency	Audience
External customer and/or supplier meeting	Involve external customers and suppliers in the project. For more information, see "Involve the Community" on page 19.	Project manager, functional manager, or task manager	As needed	All stakeholders
Project Internet site	Report status and progress of scheduled milestones and activities.	Webmaster	as needed	All stakeholders
Teleconference	Communicate changes in Department policy or procedures, manage program expectations, and enhance training processes. Report status and progress of scheduled milestones and activities. Identify and discuss problems and solutions for project obstacles.	Varies	Weekly at designated time	HQ staff, project manager, DDDPPM
Correspondence (letters, memos, email, etc.)	Document status of action items, decisions made, and problems encountered.	All stakeholders	As needed	All stakeholders
Site visit	Identify and discuss problems and solutions for project obstacles.	Project manager or functional manager	As needed	All stakeholders

Useful Website References

Stakeholder Analysis:

http://www.dot.ca.gov/hq/projmgmt/guidance.htm

Project Development Records:

http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt07/chapt07.htm

Construction Manual Records:

http://www.dot.ca.gov/hq/construc/manual2001/chapter5/chp5_1.pdf

Community Involvement:

http://www.dot.ca.gov/hq/oppd/pdpm/chap_htm/chapt22/chapt22

Guide to More Effective Meeting:

http://onramp.dot.ca.gov/hq/cpsd/Project_HR_Mgmt/7-meeting_skills/Eff_mtg_guide_v6.doc



APPENDICES

The Appendices contain templates and samples of the project communication plan, stakeholder analysis, communication matrix, and conflict management plan.

Appendix A: Sample Project Communication Plan, Stakeholder Analysis, and Communication Matrix

Project Communication Plan District 8 Project 34040K SB-395

Permits and Environmental Studies Phase

Introduction and Background

The purpose of the Project Communication Plan is to provide consistent and timely information to all project stakeholders. This plan will assist the project team in building an effective communication strategy to enhance communication throughout project delivery.

The project manager assigns team members to create the communication matrix with input from the PDT members. Figure 4 shows the communication matrix template.

The project manager assigns team members to create the stakeholders analysis with input from the PDT members. Figure 3 shows the stakeholders analysis template.

This project is one of the two segments of the proposed improvements on US-395 from I-15 to SR-14. The location of this project is from the junction of I-15/US-395 to 0.5 miles south of Farmington Road. The first part of this segment from I-15 to Purple Sage Road will be realigned and widened to a 4 or 6-lane freeway. The second portion from Purple Sage Road to Farmington Road will be widened to a 4-lane expressway.

Project Team Representatives

Project Sponsor: Frank White Project Manager: Lisa Gonzales

Assistant Project Manager: Maher Ahmad

The PDT is made up of the following Project Team Representatives:

Name	Division	Telephone
Lisa Gonzales	Project Management	(909) XXX-XXXX
Maher Ahmad	Project Management	(909) XXX-XXXX
Wendy Young	Design I	(909) XXX-XXXX
Donald Johnson	Planning	(909) XXX-XXXX
Michael Burns	Environmental Cultural Studies	(909) XXX-XXXX
Allen Wong	Construction	(909) XXX-XXXX
Ram Vapari	Design I	(909) XXX-XXXX
Tanya Khan	Materials	(909) XXX-XXXX
Mary Lee	Environmental Project Management	(909) XXX-XXXX
Ian Jones	Right of Way	(909) XXX-XXXX
Ricky Scott	Public Affairs	(909) XXX-XXXX

Community Involvement

In March 1990, the Department developed a Community Involvement Program for the study of the realignment of US-395. Two groups were organized: the Community Advisory Committee (CAC) and the Project Development Team (PDT). During the time of the study, the CAC had 9 meetings and the PDT had 12. Two public meetings were held, one in June 1990 and the other in August 1991. A Community Involvement Program Report was completed by Resource Management International, Inc., and accepted by the Department in July 1992.

During the period from June 1999 to July 2000, informational meetings were held between the Department, local and Federal agencies and property/business owners to discuss different alternatives of the proposed realignments. The Department's Districts 6, 8, and 9 as well as regional MPO's and RTPA's and the Counties of San Bernardino and Kern have been working in partnership with local agencies, cities and communities to find a viable alternative for the eventual upgrading of US-395.

Communication Methods

The Project Manager schedules formal monthly PDT meetings during the PA&ED phase. Notices/invitations are sent out through Lotus Notes. Meetings are held in the District 8 Conference Room. Notes will be taken and distributed to the PDT. The Project Manager also meets with the Functional Units informally on an as needed basis to discuss/resolve issues.

The Environmental Branch will be meeting regularly with the Bureau of Land Management as issues arise. The Project Manager will participate in these meetings on an as needed basis.

Project Reporting Information

District 8 utilizes an online Data Retrieval System. From this site, the user can query much of the data that is available in electronic format through the District 8 website.

Conflict Management Strategy

All parties agree to work cooperatively to avoid and resolve conflicts at the lowest level possible. If disagreements emerge which cannot be resolved, the following procedure will be followed:

- 1. All parties involved must agree that an impasse exists
- 2. All parties involved must be able to respond in the affirmative to the following statements:
 - > The position taken is legal and ethical
 - > The position taken is good for our customers
 - > The position taken makes efficient use of resources
 - Each party accepts full responsibility for the position he/she is taking
 - > The position taken works towards meeting project delivery goals

When the parties at the lowest level are unable to come to a solution, the problem must be escalated to the next working level.

staken	olders Analy	212					
EA Number:	34040K						
	Rte/PM: 08-SBD-395	-0.5					
Project Man	ager: Lisa Gonzales						
RBS Group	Function	Name	Telephone	Stakeholders Goals on this Project	Preferred Method of Communication	Second Preferred Method of Communication	Preferred Method for Rewarding the Team
106	Project	Lisa Gonzales	/000\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Efficient project	email	soll phone	Team Celebration
140	Management Project Management	Peggy Wright	(909) XXX-XXXX	completion Project completed within cost, scope and schedule	email	cell phone telephone	Team Celebration
146	Program Management	Robert Johnson	(909) >>>>	Keep project on track	email	telephone	Certificate
147	Capital Outlay Mgmt	Fred Carter	(909) XXX-XXXX	Secure funding	email	telephone	Team Celebration
168	Envr- Biological/Permits	Slandra Vijay	(909) XXX-XXXX	Having all mitigation	email	telephone	Team Celebration
170	Envr-Mamt	Jim Black	(909) >>>>	Environmental requirements covered	lemail	cell phone	Team Award
170	Envi-wgini	Paul	(303) 777-7777	Complete	eman	celi pilone	Team Awaru
178	Envr-Cultural	Hernandez	(909) XXX-XXXX	mitigation To produce	email	cell phone	Team Award
195	Forecasting	David Blake	(909) XXX-XXXX	accurate data	email	in person	Team Celebration
233	Design P Design I	Fathi Wendy Young	(909) XXX-XXXX (909) XXX-XXXX	plans Meet the functional design	telephone cell phone	email email	Team Celebration Team Award
303	Agreements	Cathy Pickett	(909) XXX-XXXX	Clear and concise agreements	email	telephone	Certificate
308	Surveys/RW Engineering	Nasreem Maljai	(909) XXX-XXXX	Accurate and timely right of way maps and deeds	email	telephone	Team Celebration
312	Hydraulics Materials	Ron Ho	(909) XXX-XXXX	orders/As-Builts Minimum amount	email	telephone	Team Celebration
327	Engineering	Ken Lee Norma	(909) XXX-XXXX	of retesting To find acceptable	email	telephone	Team Celebration
332	Envr-Engineering L/S Architecture –	Sanchez Peter	(909) XXX-XXXX	mitigation sites	email	telephone	Team Celebration
340	Br. A L/S Architecture –	Tanaka	(909) XXX-XXXX	Public Support Positive feedback	email	telephone	Team Award
341 351	Br. B Truck Service Manager	Loren Bird Susan Wong	(909) XXX-XXXX (909) XXX-XXXX	from the public No equipment delays	email email	telephone telephone	Team Celebration Team Celebration
365	Operations Services	Mark Brown	(909) XXX-XXXX	No traffic accidents	email	telephone	Team Celebration
368	Operations- Surveillance	Amanda Flores	(909) XXX-XXXX	Positive feedback from the public on traffic lane	email	telephone	Team Award
ECON - ANGL	Transportation			No complaints			North Section 1999
370 375	Mgmt TMP/District Traffic	Kamal Ghol Yang So	(909) XXX-XXXX (909) XXX-XXXX	from the public No traffic accidents	email email	telephone telephone	Team Celebration District Director Recognition
380	Traffic Design – SBD	Anita Moore	(909) XXX-XXXX	Meet the traffic design	email	telephone	Team Celebration
381	Traffice Design B	Ted Martin	(909) XXX-XXXX	Positive feedback on plans	email	telephone	Team Celebration
391	Freeway Systems	Nigel Gallagher	(909) XXX-XXXX	Constructability	email	telephone	Team Celebration
392	Electrical Operations	Samer Anssari	(909) XXX-XXXX	Electrical systems in place Meet electrical	email	telephone	Team Award
396 400	Electrical Design B	Frank Ortiz Jose Ferrer	(909) XXX-XXXX (909) XXX-XXXX	design RW Certification	email email	telephone telephone	Team Celebration
529	Field Construction	Kelly Flake	(909) XXX-XXXX	Construction per design	in-basket	telephone	District Director Recognition
External							
Local Governmen	SBd Co Transportation	Larry Floyd	(909) XXX-XXXX	Public Support	telephone	cell phone	Team Celebration
U.S. Governmen	Bureau of Land Management	Patty Zhu	(909) XXX-XXXX	Stay involved until project is complete	email	U.S. Mail	Team Celebration

Figure 5. Sample stakeholder analysis

WBS Code	WBS Title	Sub-Product	Product Required on this Project? (Y/N)	Product Produced by (Task Manager Name)	Product Received by (Name of person receiving the product)	Method of Transmittal (mail, e- mail, fax, etc.)	Date of Submittal (one-time product) or Frequency (repetitive products)	Uniform Filing System Location	PHF
165	Perform Environmen	tal Studies And Prepare Draft	Enviror	imental Doc	ument (DED)			
165.05.	Perform Environmental Scoping and Select Alternatives for Study								
165.05.05.	Review Project Information	• Initial Environmental Project File Setup	Y	Jane Moore	Jane Moore/Wendy Young	mail		421.01	
165.05.10.	Public and Agency Scoping Process	Draft Notice of Intent for FHWA publication	Υ	Jane Moore	Rich Williams/FHWA	mail		331.09	X
165.05.10.	Public and Agency Scoping Process	Published Notice of Preparation with mailing list and State Clearinghouse documentation.	Υ	Jane Moore	Rose Wilson	mail		231.1	Х
165.05.10.	Public and Agency Scoping Process	Public Participation Plan	Υ	Public Affairs	Lisa Gonzales	e-mail		233.01	X
165.05.10.	Public and Agency Scoping Process	MPO/APCD comments on and concurrence with Public Participation Plan.	Υ	Slandra Vijay	FHWA/SCAG	mail		231.09	X
165.05.10.	Public and Agency Scoping Process	Minutes, Records of Meeting, Newsletters, press materials, and Public Participation Reports for meetings and other public participation activities.	Y	Slandra Vijay	Lisa Gonzales /FHWA	mail		251.01	X
165.05.10.	Public and Agency Scoping Process	Project Mailing List	Y	Jane Moore	Lisa Gonzales	e-mail		231.1	X
165.05.15.	Select Alternatives for Further Study	Alternative(s) selection memo	Υ	Slandra Vijay/Wendy Young	Lisa Gonzales	mail		243.01	Х
165.05.15.	Select Alternatives for Further Study	NOP/NOI Alternatives discussion (EIR/EIS projects only)	Υ	Jane Moore /Design I	Rich Williams/FHWA	mail		243.01	X
165,05,15.	Select Alternatives for Further Study	Major Investment Study (MIS) if necessary	Y	Eric Wagner	Jane Moore/Wendy Young	mail		141.02	
165.05.20.	Maps for Environmental Evaluation	Adequate project maps for initiation of environmental studies for the selected alternatives.	Y	WendyYoung	Jane Moore/Rich Williams	mail		472.01	
165.10	Perform General Environmental Studies	All technical study reports necessary for the preparation of the environmental document for a project, other than those related to Biology (See WBS activity 165.15) and Cultural Resources (see WBS activity 165.20).	Y	Ferouz Syed	Jane Moore	mail			
165.10.05.	Surveys and Mapping for Environmental Studies	Site maps for environmental studies	Y	WendyYoung	Jane Moore	mail		472.01	
165,10,10.	Right of Entry for Environmental Studies	Formal Rights of Entry	Y	lan Jones	Ferouz Syed/Betty Simpson	mail		371.09	X
165,10,10,	Right of Entry for Environmental Studies	Informal entry documents - Includes verbal agreements, etc.	Y	lan Jones	Ferouz Syed/Betty Simpson	mail		371.09	X
165,10,10,	Right of Entry for Environmental Studies	Personnel identification documents	Υ	Clark Thompson	Ferouz Syed/Betty Simpson	mail		371.09	X
165.10.15.	Community Impact, Land Use, and Growth Studies	Technical Report	Y	Clark Thompson	Rich Williams/FHWA /Clark Thompson	mail		231.04	X
165,10,15,	Community Impact, Land Use, and Growth Studies	Technical report Abstract for use in Environmental Document text	Υ	Clark Thompson	Clark Thompson /Rich Williams	mail		231.04	Х

Figure 6. Sample communication matrix

Appendix B: Sample Conflict Management Plan

TYPICAL CONFLICT MANAGEMENT PLAN

This process supplements the MOU for project delivery between Caltrans District XX and (Local Agency) concerning projects on State Highways. This document, developed jointly by Caltrans and (Local Agency), is intended to provide a framework for resolving conflicts between the parties, should they arise and an impasse has occurred between the parties.

PRINCIPLES

Caltrans and (Local Agency) share the following principals in the resolution of conflicts:

- 1. The efficient delivery of effective, appropriate projects is the primary goal of both parties under this MOU.
- 2. The parties will focus on their common goals rather than differences.
- 3. Win/win solutions to conflicts should be sought.
- 4. Differences of opinion are okay.
- 5. Timely, open honest communication is the key to avoiding and resolving conflicts.
- 6. Decisions should be made and conflicts should be resolved at the lowest possible level.

DECISION PROCESS

The attached "Conflict Resolution Plan" matrix is to be followed to identify the process by which unresolved issues may be elevated to a higher decision authority.

Level	Local Agency	Caltrans participant	Caltrans Participant	
	Participant	for single-project	for Program-wide	
		issues	issues	
1. Decision timeframe	Program Manager	Project Manager	Dist. Div. Chief for	
1-15 days			Program/Proj. Mgmt.	
2. Decision timeframe	Executive Director	Dist. Div. Chief for	District Director	
16-30 days		Program/Proj. Mgmt.		
3. Decision timeframe	Agency Board	District Director	District Director	
31-90 days				

If the 90-day limit is reached, the local agency may submit a written request for further review by Caltrans to the District Director. The request must describe the position of the local agency on the issue. The District Director will forward the agency's request to the Caltrans Division Chiefs for Transportation Programming and Project Management. In addition, the District Director will provide a report describing the steps taken to attempt to resolve the issue. This report should provide an issue overview, a discussion of the items that are in dispute with references to sections in policy manuals and memos that support the District's position, and a District recommendation on the issue.

A meeting may be convened, by either the Caltrans Program Manager for Transportation Programming or the Program Manager for Project Management to consider the issue, and include local agency and District representatives. If a solution is reached that is agreeable to both parties, the agency and the District will work to implement the solution. If the agreement is not achieved, the issue may be addressed to the California Transportation Commission for consideration. All decisions and agreements should be documented fully and a copy should be kept in the PM project files.



GLOSSARY

Definitions

Administrative Closure Consists of documenting project results to formalize acceptance of the

product of the project by the sponsor (or customer).

Communication In general terms, is the process of creating understanding between a sender

and a receiver. For communication to occur, the message received must match the message sent. The sender should ensure this match with

feedback from the receiver.

Conflict Management Prescribed method of resolving problems arising during the course of a

project.

Construction
Organization of
Project Documents

Standard filing system for project construction records.

Critical Path The set of activities that are critical to completing the project on schedule,

and it determines the duration of a project. The critical path changes as

activities are completed ahead of, or behind, schedule.

Customer A person or organization receiving a completed project deliverable.

External customers receive the final deliverable.

Deliverable A tangible project element with a scheduled completion date.

Filing System A numbering scheme used to identify different types of documents. In

order to quickly find and identify files, every Department document has a

file naming convention.

Project Charter Documents the agreement between the sponsor and the project manager

on the key elements of a project and component. It provides the authorization for the project manager to execute the project.

Project Component Refers to the five components listed: 1) PID Phase. 2) Permits &

Environmental Studies. 3) PS&E. 4) Right of Way. 5) Construction.

Project Communication Project communication is the exchange of project-specific information with the emphasis on creating understanding between the sender and the

receiver.

Project Development Uniform Filing System

The standard filing system for all project records and documents up until

the award of the construction contract.

Project Fact Sheet A summary of project information for external customers.

Project Milestone An event used to measure the progress of a project. Signifies the start or

completion of a major project deliverable.

Stakeholders Individuals and organizations who are actively involved in the project, or

whose interests may be positively or negatively affected as a result of

project execution or successful project completion.

Supplier A person or organization responsible for producing the required input to

begin a process or activity.

Resource Breakdown

Structure

The RBS is a standardized, hierarchical list of roles that might be needed to

produce a project deliverable. Project team members use the RBS to

determine what roles are needed to produce project-specific WBS elements and to identify who needs to receive certain communication products.

WBS Product List A complete list of potential sub-products of a project.



ACRONYMS

HQ Headquarters

OBS Organizational Breakdown Structure

PDPM Project Development Procedures Manual

PDT Project Development Team

PHF Project History File

PID Project Initiation Document

PMSU Project Management Support Unit

PS&E Plans, Specifications, and Estimates

RBS Resource Breakdown Structure

SFP Single Focal Point

WBS Work Breakdown Structure

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