# California/Oregon Advanced Transportation Systems

# **Regional Stakeholder Partnership Business Plan**

# **Working Paper**

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for the

State of California Department of Transportation New Technology and Research Program

and

State of Oregon Department of Transportation Traffic Management Section

in cooperation with the

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# **EXECUTIVE SUMMARY**

The purpose of this working paper is to provide California Oregon Advanced Transportation Systems (COATS) stakeholders a plan by which business decisions may be based and an organizational structure to support those decisions. The COATS Business Plan contains information on the project objectives, management structure and decision making process, "early winner" project selection criteria and stakeholder outreach needs. It should be noted information contained in the Business Plan has been prepared for discussion only, and should act as a catalyst for upcoming Steering Committee meetings. At the upcoming meeting the Steering Committee will act and adopt information contained within this Business Plan.

The objective of a business plan and management structure is to provide a framework for policy, process and action among the public and private jurisdictions involved. By establishing a management structure, the interest and involvement of the COATS project members can continue. The organizational structure is arranged to maximize the group's ability to meet its objectives and to minimize bureaucratic impediments, which sometimes result in large groups. In order that each of the policy, technical and stakeholder interests are represented the following roles and responsibilities are proposed (Table i).

Organization	Role and Responsibility	Leader	Frequency of Meeting
Governing Board	<ul> <li>Policy guidance on issues that exceed Steering Committee authority</li> <li>Issues relating to agency roles/ responsibilities, funding sustainability, and politically sensitive matters</li> </ul>	Governing Board Chairperson	• 4 – 6 months (or as needed)
Steering Committee	<ul> <li>Provide strategic direction and oversight</li> <li>Review project progress</li> <li>Review project deliverables, including technical memoranda and reports</li> <li>Participate in project workshops</li> <li>Provide input and guidance to the Western Transportation Institute, MSU</li> <li>Ensure that available funds are programmed for short and long-term ITS demonstrations, operations, and maintenance</li> <li>Encourage community participation</li> <li>Review new technologies and concepts</li> </ul>	<ul> <li>Steering Committee Chairperson and Co- Chairperson from CA and OR</li> <li>Executive Director (liaison and contract manager) Co- Chairperson from CA and OR</li> </ul>	• Approx. every 2 months
Regional Teams	<ul> <li>Build regional public/ private stakeholder consensus</li> <li>Identify "friends of the committee"</li> <li>Assist with identifying regional needs</li> <li>Participate in workshops</li> <li>Advise Steering Committee</li> </ul>	• Caltrans, ODOT or WTI will facilitate	• As needed
Task Force(s)	<ul> <li>Provide detail investigation on specific issues</li> <li>Potential area include but are not limited to Operations, Partnerships, Finance and Policy</li> </ul>	• TBD	• As needed

# **Table i:** Potential COATS Organizational Roles and Responsibilities.

# **1 INTRODUCTION**

The purpose of this working paper is to provide a "context" and "yardstick" by which the California Oregon Advanced Transportation System (COATS) Project can move forward and be measured by. This working paper will also provide and be used to facilitate discussions on the roles and responsibilities of stakeholders in the short and long-term, and define the relationship of this regional "coalition" project to each states' individual initiatives. It should be noted that this document is intended to act as a catalyst for future discussions for the finalization of a Business Plan and should be treated in that context in its' present form.

# 2 BACKGROUND

# 2.1 Project Description

The California/Oregon bi-state study area has diverse transportation needs and challenges (see Figure 1). Despite the relative sparseness of the resident population within the study area, travel to and through the study area is extensive.

The bi-state study area serves the recreational and resource needs of a growing national constituency seeking to utilize or explore the plentitude of national monuments, forests, parks, and recreational areas that are contained in the study area such as Oregon Caves National Monument, Crater Lake National Park, Lava Beds National Monument, Redwood National Park (see Figure 2). Seasonal events that draw national audiences, such as the Shakespeare Festival in Ashland, Oregon add to the transportation challenges in the study area. Recreational travelers through the study area are perhaps more in need of information than local residents. Knowledge of the weather and roadway conditions, location of services, and emergency response can make the difference between life and death. There is also a need for more routine information for the many tourists who are traveling the route for the first time or who travel it infrequently.

Encompassing vital transportation links for the economy and well-being of California and Oregon, the study area functions as the connector for the trucking industry between the Seattle and Los Angeles. Numerous primary and secondary routes encompassed by the study area are utilized by commercial vehicles destined for various urban areas throughout the west coast study area. Commercial traffic is generated from a number of sources located inside and outside the study area (e.g., forestry, mining, and agricultural industries). Many frequently traveled routes in the study area are two-lane and some of these roadway sections have potentially dangerous passing situations that involve semi-trucks, recreational vehicles, and slow moving farm





machinery.

Weather and geography add to the transportation challenges in the study area. During the winter months the road surface over the various mountain passes often consists of sanded, hard-packed ice. Snow and ice storms can impair visibility when driving. Accessibility to popular winter skiing destinations, such as Mt. Shasta Ski Park or Mt. Ashland Ski Area, can be limited by winter road conditions. Portions of the study area are not covered by cellular phone. The varied geography may also preclude reception of commercial AM or FM stations in some areas.

Detection and response times to emergency situations can be considerable. Because of the abundant national forests contained in the study area, deer, elk, and farm animals often present unexpected roadway obstacles to travelers.

The combination of varied, often less-than desirable driving conditions coupled with abundant off-road, commercial and recreational traffic, indicates an immediate and ever growing need for increased traffic safety and information dissemination measures. Intelligent Transportation Systems (ITS) are the strongest technology available and appears to be appropriate for the study area. Intelligent Transportation Systems applies advanced communication, information and electronics technology to solve existing transportation problems. Collectively, a broad range of diverse technologies are known as ITS. In its simplest form, ITS is data and information sharing.

# 2.2 **Project Benefits**

The Northern California/Southern Oregon Rural Intelligent Transportation Systems (ITS) Areawide Travel and Safety Improvement Project will, through a needs assessment of the study area and initial small-scale ITS improvements, generate recommendations and necessary capital equipment actions for larger-scale implementations of ITS that will fulfill the growing demand for transportation and related services between southern Oregon and northern California. When effectively researched, developed, tested and demonstrated, ITS implementation can provide enhanced, safer, and more secure travel, while assisting rural transportation users and operators achieve improved levels of productivity.

- <u>Increase Safety</u>. National statistics document that approximately 60 percent of fatalities occur in rural areas and of those fatalities, 70 percent are due to run-off-the-road vehicles. This project will examine the applications of advanced technologies to reduce accidents, reduce the impact of weather on driving conditions, reduce the impact of driver/roadway operations characteristics, and reduce impact of vehicle mix on safety.
- <u>Improve Emergency Response</u>. National statistics document that rural areas have approximately 2:1 greater response time to incidents and arrival at medical facilities. This project will aim to improve incident response time, emergency preparedness and hazardous cargo identification.
- <u>Improve Commercial Vehicle Operations</u>. Given that rural areas such as this are dependent on CVO efficiencies, this project will examine technologies that would serve to streamline CVO regulation and operation and improve CVO safety in the study area.
- <u>Increase Travel Information and Trip Enhancement</u>. This project will identify traveler information needs, and identify strategies and technologies to improve traveler information systems.
- <u>Improve Interagency Communications</u>. Communications, cooperation and coordination are essential to ITS effectiveness. This project will address institutional issues, determine methods and systems that may assist in communication, and improve relationships between stakeholders.

- <u>Reduce Congestion</u>. Many of the roadways in the study area have non-recurrent congestion (i.e., congestion caused by incidents) challenges. While recreational attractions such as national parks, national monuments, or ski areas, have recurring congestion challenges at gate entrances and visitor site specific locations. This project will examine advanced technologies to improve traffic flow in these areas.
- <u>Increase Economic Activity</u>. Tourism is critical to the regional economy and improvement in the areas of tourism and travel may only assist in economic productivity. This project will determine how ITS technologies may impact economic activity.

This project will impact both the public and private sector participants in California and Oregon. Equally important, the motoring public will realize significant operational and safety benefits from its implementation. These benefits will include the following:

- To the motoring public increased safety, and information, as well as reduced congestion.
- To the public sector increased coordination, reduced operating costs through the automated traveler information system interfaces including variable message signs, highway advisory radio, kiosks, etc. Additional benefits will be realized through the ability to more efficiently plan and manage their traffic operations.
- To the private sector increased abilities to provide tourism information and the development of technology that is marketable throughout the world due to the wide range of tourists that visit the area.

This project will position northern California and southern Oregon, and subsequently other rural areas, to take advantage of the benefits of ITS. This project will result in more effective, coordinated and integrated ITS development and demonstration activities for both California and Oregon.

# **3 PROJECT OBJECTIVES**

The overall goal of rural ITS planning, demonstration, and demonstration is to make "*rural travel safe, dependable and convenient*." It is the goal of this project to provide an integrated system where transportation agencies, transit providers, emergency managers, and tourism operators will be able to provide the information and control needed to manage the



predominantly rural study area (see Figure 3).

The objectives of this project include: (1) identifying rural problems, (2) matching potential ITS-related solutions, and (3) determining feasible ways to implement them. The attainment of these objectives will include investigating technical, institutional, planning, maintenance, operations, phasing, cost, and implementation issues. Specifically, this project will:

- identify the transportation and information needs within the study area
- determine ITS solutions that would be beneficial, cost-effective, and implementable for demonstration within the study area on the basis of the identified needs (researchers will draw from the nationally-defined ITS user services/market packages)
- identify, design, and demonstrate and evaluate initial, small-scale ("early –winner") projects/systems on a multi-year basis to test feasibility of rural ITS
- develop a Model Deployment and Evaluation Plan that describes a strategic approach for implementing rural ITS strategies on a larger scale. Emphasis will be placed on integration and expansion of future ITS components within the study area to showcase rural applications.

### 3.1 Preliminary Vision

Effective ITS demonstration requires commitment and a shared vision. The vision is the logical starting point for developing an architecture or framework, and is the component that drives all other goals, objectives and project development. The vision statement provides a description of the likely transportation system in the next 5, 10 and 20 years based on the National ITS Architecture. The vision identifies the ITS User Services that the transportation system is to provide. A more detailed vision that describes how a fully deployed and integrated ITS system will operate in the study area will be prepared in future Tasks and will allow all stakeholders to understand how each incremental investment is building the vision. *It should be noted that the following sections are provided in preliminary draft form in order to begin discussions on selected project needs. It is not WTIs' intent to define the vision for stakeholders but rather to offer a "strawman" by which stakeholders may then produce a vision which meets their needs.* 

A draft vision statement is as follows:

"The California Oregon Advanced Transportation System (COATS) Project is a cooperative public-public and public-private sector project that will develop a comprehensive ITS strategic plan. The plan and related demonstration will address unique rural regional and local challenges to provide for safety, mobility, travel demand management, tourism information and services, commercial vehicle operations, electronic payment, economic viability and ensure the ability to fuse and exchange data regionally. The general benefits of this planning effort are summarized in the following seven categories of ITS systems:

- Safety management systems to provide for road/weather information, collision avoidance warning systems for animal or foreign object detection, emergency management, vision enhancement, and safe speed advisories.
- Commercial vehicle operation systems to provide for increased efficiency, advisory and enforcement of carrier compliance (registration, weight, insurance, condition, etc.) through pre-clearance, weigh-in-motion, permitting and inspection improvements and to aid in hazardous material identification.
- Traveler information services systems to provide for en-route and pre-trip information on road construction, weather and traffic conditions, traveler orientation, business/yellow page information and also to increase existing public radio emergency broadcast utilization.
- Tourism and transportation institutional network to provide for the coordination, integration and seamlessness of solutions that in turn provide for economic vitality and productivity in gateway communities, states and the region, and monitoring of economic activity.
- Travel demand management strategies to provide for improved gate access, transit operations and fleet management, parking management, and reservation systems to effectively handle capacity demands.
- Electronic payment systems to provide for the ability to monitor economic activity, collect visitor profile information and expenditures, and reward transit use.
- Information clearinghouse to provide for data and information exchange, data fusing, agency coordination, public/private partnerships and agency autonomy of individual actions."

The COATS Project can serve as a catalyst for agency leadership in ITS through research, demonstration, evaluation, and training. The project will also increase the knowledge and understanding of issues of the respective agencies, incorporate a philosophy of "acting locally, but thinking regionally" in their transportation decisions, and give the traveling public state-of-the-art mobility and real-time information.

## **3.2 Mission Statement**

The mission statement addresses the goals and objectives of the desired transportation system, i.e. through the Northern California/Southern Oregon Region.

"The Rural COATS project will serve as to unify member agencies, focusing on a seamless, state-of-the art, multi-modal transportation network benefiting travelers, goods movement, economic activity, and transportation operators in Oregon and California. Through communication and cooperation, the COATS project and it's partnership coalition will serve as an information clearinghouse to provide for 1)

effective and efficient ITS development, demonstration, and delivery and 2) the promotion of safety, mobility, trip enhancement, and environmental quality."

### **3.3** Goals and Objectives

The following goals and objectives support the vision and mission for the Rural COATS project. Note that the pursuit of the individual goals and objectives is dependant on the specific study area challenges and the project selection process (i.e., transit improvements may not be perceived as a priority, hence, no "early winner" projects may relate to transit. The pursuit of Goal #2 and its related objectives may be abandoned.)

# Goal #1. Improve the safety and security of the Northern California/Southern Oregon Region rural transportation system users.

Objectives:

- Provide sustainable traveler information systems that disseminate credible and accurate "real-time" information.
- Provide systems that advise regional transportation system users of slow-moving vehicles, obstructions and weather conditions.
- Provide systems that advise unfamiliar motorists of alignment and speed conditions, tourist attractions, services, construction, weather, and the ability to request assistance.
- Coordinate public fleet responses to unsafe conditions (weather, incidents, detour routes) and provide for improved regional movement.
- Reduce the severity of vehicle accidents and their related fatality rates through improved emergency response times.
- Reduce exposure to unsafe driving situations through motorist aid devices.
- Provide improved methods for commercial vehicle monitoring, and hazardous material identification.

# Goal # 2. Enhance personal mobility and accessibility to services and enhance convenience and comfort of motorists traveling in and through Northern California/Southern Oregon.

**Objectives**:

- Increase public awareness of public transportation alternatives to and within the states.
- Encourage and provide incentives for increased transit utilization.
- Expand information availability for tourist areas and services.

- Coordinate transit services to State or National Parks.
- Provide parking information to reduce internal State or National Park congestion.

# Goal # 3. Increase operational efficiency and productivity of the transportation system focusing on system providers.

#### Objectives:

- Collect, process and share data between local, state, and federal agencies to increase efficiency and resources utilization.
- Provide automated notification of conditions that may impact operations and maintenance of regional roadways to improve resource management and allocation.
- Improve communication system capabilities to provide for increased coordination of services (i.e. radio, wire-line/wireless).

#### Goal # 4. Enhance economic productivity of individuals, businesses and organizations.

Objectives:

- Develop projects that meet local needs but provide for national "showcase".
- Improve identification of goods, services, and opportunities in regional communities (i.e. en-route information, transportation service information, etc.)
- Provide mechanism by which tourism industry, transportation and transit services can work more closely together.
- Provide opportunity for commercial vehicles and goods to be moved more efficiently (i.e. pre-clearance systems).

#### Goal # 5. Reduce energy consumption, environmental costs and negative impacts.

**Objectives**:

- Improve hazardous material incident response.
- Promote and encourage the use of alternative fuels and the use of transit in the Parks.

# Goal # 6. Develop and foster long-term partnerships that will result in the demonstration of ITS initiatives and traditional solutions that address rural needs of the region.

**Objectives:** 

- Establish formal and informal opportunities to inform public and private sector decision-makers on initiatives for the COATS project and gain support for ITS efforts from key stakeholders.
- Facilitate a technical and financial group for the promotion of partnership projects.
- Develop opportunities for public-public and public private partnerships for operations and maintenance

### Goal # 7. Ensure compatibility with statewide and national ITS initiatives.

Objectives:

- Coordinate Northern California/Southern Oregon project with statewide efforts.
- Provide for technology transfer between state agencies.

# Goal # 8. Incorporate ITS into the State Transportation Improvement Program planning efforts.

Objectives:

• Provide for the incorporation of advanced technology applications to be considered in the Transportation Improvement Plan (TIP) process.

# 4 BUSINESS PLAN AND MANAGEMENT STRUCTURE

## 4.1 Introduction

The objective of a business plan and management structure is to provide a framework for policy, process and action among the public and private jurisdictions involved. By establishing a management structure, the interest and involvement of the COATS project coalition can continue. The interest must continue in order for the evaluation of demonstration of solutions to maintain continued success. The organizational structure is arranged to maximize the group's ability to meet its objectives and to minimize bureaucratic impediments, which sometimes result in large groups. In order that each of the policy, technical and financial interests are represented the following structure is proposed

### 4.2 Management Structure

The purpose of the management structure as characterized in this document is to provide for an orderly decision making process regarding the COATS project. It is important to articulate the anticipated roles of the various project participants and to document a structured decision making process to fully engage participation in the project from key stakeholders.

As shown above in Figure 4, the collective group will consist of transportation



stakeholders organized essentially in four primary groups, the Governing Board (an executive board), a Steering Committee, Regional Teams and Task Forces (as needed). Together, these groups are arranged to emphasize the group's ability to meet its objectives and lessen administrative obstacles. Their role is to create an atmosphere that will expand institutional linkages to reach consensus in developing an ITS in Northern California and Southern Oregon. Additionally, their purpose is to provide an environment that will encourage ideas, outreach, and consensus to meet local needs (Regional Team priorities); provide an opportunity to address detailed technical issues as needed (Technical Task Force(s)); provide a method to decide program direction, focus, and approve deliverables (Steering Committee priorities); and, as necessary, provide long-term direction and resolve politically sensitive issues (Governing Board priorities). A more detailed description of each function is described below.

# 4.3 Governing Executive Board

The role of the Governing Board is to provide policy guidance for those issues that are beyond the authority of the Steering Committee. Though the Steering Committee decides the majority of technical and institutional issues, some specific and critical issues may arise that will require input above those involved at a Steering Committee level. Some of these issues relate to long-term agency roles and responsibilities, funding sustainability, and politically sensitive matters. An Executive Board consisting of the highest level managers will undertake these issues, meeting at intervals of four to six months (or as needed). Table 1 below exhibits the membership to the Governing Board.

CALIFORNIA	OREGON
JOHN WEST Program Manager, New Technology and Research Program	JEFF SCHEICK State Traffic Engineer
HAMED BENOUAR Program Manager, Caltrans Traffic Operations	<b>RON SCHAADT</b> Transportation Development/Planning
RICK KNAPP District 1 Director	PAUL MATHER Region 3 Director
ROY BUSHEY District 2 Director	CAPT. GREG WILLEFORD State Police
<b>ROBERT RATCLIFF</b> California Alliance for Advanced Trans. Sys.	LANA NELSON ITS Oregon President
<b>JEFF LINDLEY</b> Federal Highway Administration	STEVE McNAB Region 4 Manager
PAUL PISANO FHWA/USDOT	

 Table 1: Governing Board Members.

# 4.4 Steering Committee

The role of the Steering Committee is to provide strategic direction and oversight for the project. Specific functions of the Committee include:

- Review project progress
- Review project deliverables, including technical memoranda and reports
- Participate in project workshops
- Provide input and guidance to the Western Transportation Institute
- Ensure that available funds are programmed for short and long-term ITS demonstrations, operations, and maintenance
- Encourage community participation
- Review new technologies and concepts

The Steering Committee will consist of one voting representative for each active member agency. The Committee is responsible for organizing itself, establishing rules and conducting business. The current Steering Committee members are shown in Table 2 below:

The Steering Committee will consist of 17 voting and two exofficio (FHWA)

CALIFORNIA	OREGON
PAT CONROY	GALEN McGILL
Caltrans New Technology and Research	ITS Manager, Salem
CHERYL WILLIS	STEVE WILSON
Caltrans District 1	Region 4 Traffic Manager, Bend
RUSS WENHAM	DON EHRICK
Caltrans District 2	District 5 Manager
SPENCER CLIFTON	JIM AHO
North Coast Team	Regional Team Representative
SCOTT MAAS	DAN MOORE
Northeast Team	Regional Team representative
<b>ROBERT FORREST</b>	LT. RON NELSON
Highway Patrol	Oregon State Police, Bend
GEORGE EDGERTON California Trucking Association	KEN EVERT ODOT Motor Carriers Transportation Br., Salem
BOB WARREN	JOE HUNKINS
Shasta Cascade Association	Southern Oregon Visitor's Association
JOHN THOMPSON Redwood Empire Association	
<b>FRANK CECHINI</b>	<b>ED FISHER</b>
FHWA, Region 9 (exofficio)	FHWA, Region 10 (exofficio)

**Table 2:** Steering Committee Members.

representatives. The Caltrans New Technology and Research Program; ODOT; and WTI will provide staff support to the Committee. It is anticipated that the Committee will meet at two-month intervals.

#### 4.4.1 Steering Committee Chairperson and Co-Chairperson

The Steering Committee will select a Chairperson ad Co-Chairperson from the public sector serving for a period to be determined by the Steering Committee. The Co-Chairpersons representing Oregon and California will act as the presiding officer over meetings held in their respective states. After the period determined by the Steering Committee, a new Chairperson will be selected by the Steering Committee. The duties may expand as the Business Plan is further developed. For example, in the event the Steering Committee determines a need to form a task force; the Chair may be responsible for appointing task force members. The anticipated Chairperson duties include:

- To call the meeting to order at the appointed time.
- To review agendas to ensure appropriate issues are included.
- To preside at meetings held in the Chair's resident state.
- To move the meetings forward in an orderly manner.
- To state and put to a vote all motions that are properly brought before the Steering Committee.
- To announce the results of the votes on motions.
- To elevate, or direct the co-Executive Directors to elevate, issues to the Governing Board at the request of the Steering Committee or when a consensus cannot be achieved.
- To serve as the Steering Committee representative on the Governing Board.

### 4.4.2 Executive Director/Co-Executive Director

The Executive Director in consultation with the Co-Executive Director, operates under advisement of the Steering Committee and is responsible for contract management of the Western Transportation Institute, MSU. The Executive Director is an employee from the lead administrative state that controls expenditures from the funding source. The Executive Director is responsible for project management, contract administration, authorizing payments and informing the Steering Committee of all project and contract progresses. Progress and information items or resolution issues will take place through telephone contact between the Co-Executive Director and Steering Committee Co-Chairperson when issues arise or at a minimum prior to Governing Board and Steering Committee meetings.

As of March 27, 1998 California is the lead administrative state and Coco Briseno, Caltrans is the Executive Director and Robert Fynn, ODOT is the Co-Executive Director.

### 4.4.3 Regional Teams

The role of the Regional Teams is to build regional consensus among public and private stakeholders regarding ITS priorities. Each Team acts as an advisory group to the Steering Committee to bring their regional stakeholders' recommendations to the Steering Committee for

inclusion in the project. Each Regional Team will select a member from their Team to formally represent their interests on the Steering Committee. The Team members will reach out to stakeholders or "Friends of the Committee" in their region that are not formal members of the project (for example transit providers, health and human service providers, intercity transportation providers, and others).

The Team representatives will consider project ideas, concepts, and priorities for their region and be responsible for screening regional stakeholder input to bring it to the attention of the Steering Committee. The Regional Teams may address issues relating to operations, partnerships, and policy. Some examples may include:

- traffic
- safety
- enforcement
- emergency response and management
- transit
- fleet management
- commercial vehicle operations
- identification of early winner projects
- outreach to industry, institutions, and public sector representatives

Additionally, each Team may review project deliverables, including technical memoranda and reports, and participate in project workshops.

The Teams will operate in a relatively informal network and structure and meet as often as deemed necessary in each state/region. Staff from the Caltrans New Technology and Research Program, ODOT Traffic Management Section, and/or the Western Transportation Institute will facilitate Team meetings as necessary. Table 3 exhibits the membership to the Regional Teams.

#### 4.4.4 Task Forces

Task forces study, in detail, those areas of interest identified by the Steering Committee or Executive Board. Potential task force activities may include problem definition, private sector participation, and future program planning. Voting authority on task forces issues is limited to Steering Committee member agencies. This authority may be given to an agency's full Steering Committee member or a designated representative. While task force(s) and members have not yet been determined Table 4 (page 18) may be used as an organization tool. Example of possible task forces may include but are not limited to:

- Operations Task Force
- Partnership Task Force
- Finance and Policy Task Force.

### 4.5 Management Decision Process

In order to provide context to how and what decisions may be required by the Steering Committee the following guidelines are offered.

CALIFORNIA		OREGON		
North Coast Team	Northeast Team	Team		
Vacant Del Norte LTC	SCOTT MAAS* Lassen LTC	<b>JIM AHO</b> City Manager, Burns	DAN MOORE COG, Central Point	
SPENCER CLIFTON* Humboldt COG	DEBBIE FOGLE Modoc LTC	ERICK THOMPSON The Driftwood Group	<b>TERRY COLE</b> ODOT Region 2	
PHIL DOW Lake COG/Mendocino COG	MARTIN BYRNE Plumas LTC	<b>ROBERT</b> <b>SECHLER</b> ODOT Region 3 Traffic	<b>ART ALANIZ</b> ODOT District 1	
	JOHN STOKES Shasta LTC	LT. GORDON RENSKERS Oregon State Police	TINA WELCH US Forest Service	
	<b>TOM ANDERSON</b> Siskiyou LTC			
	BARBARA O'KEEFE Tehama LTC			
	SCOTT WHITE Trinity LTC			

**Table 3:** Regional Team Members.

\*Regional Team to the Steering Committee

#### 4.5.1 Officer Selection

As discussed in previous sections there will be various officers of the COATS project including Governing Board Chairperson, Steering Committee Co-Chairpersons and Executive Director Co-Chairpersons. While the Executive Director Co-Chairpersons are related to managing work efforts and coordinating actions, and as such selection is by default Caltrans and ODOT managers, the Steering Committee selection is not. Steering Committee Co-Chairpersons will be determined through a solicitation of members, and then voted on by members at a Steering Committee meeting. Once the solicitation names have been received, either Executive Director Co-Chairpersons may summarize the names and then either Executive Direction may make a motion for the vote on individuals responding to the solicitation at the next Steering Committee meeting. A similar process may be followed for the Governing Board.

### 4.5.2 Meeting Issues

In order to resolve issues which arise on at Steering Committee or Governing Board meetings the Steering Committee Chairperson(s) may which to consider the following actions:

- make a motion for a decision;
- make a motion for discussion;
- make a motion for further study by a Task Force or WTI; or
- make a motion for tabling the issue until the next meeting.

Table 4: Potential Task Force Committee Members.				
Name	Representative Organization	Study Area Operations Task Force	Partnership Task Force	Finance and Policy Task Force
Pat Conroy	Caltrans New Technology and Research			
Cheryl Willis	Caltrans District 1			
Russ Wenham	Caltrans District 2			
Spencer Clifton	North Coast Team			
Scott Maas	Northeast Team			
Robert Forrest	Highway Patrol			
George Edgerton	California Trucking Association			
Bob Warren	Shasta Cascade Association			
John Thompson	Redwood Empire Association			
Frank Cechini	FHWA, Region 9 (exofficio)			
Galen McGill	ITS Manager, Salem			
Steve Wilson	Region 4 Traffic Manager, Bend			
Don Ehrick	Region 5 Manager, Eugene			
Jim Aho	Regional Team Representative			
Dan Moore	Regional Team Representative			
Lt. Ron Nelson	Oregon State Police, Bend			
Ken Evert	ODOT Motor Carrier Transportation Br., Salem			
Joe Hunkins	Southern Oregon Visitor's Association			
Ed Fischer	FHWA, Region 10 (exofficio)			
Other				

### 4.5.3 Technical Report Comments

During the course of the project WTI will be providing Steering Committee members technical reports for review and comment. Because there exists the potential for conflicting direction, when issues can not be decided on by the Executive Directors then those conflicting issues will be brought before the Steering Committee for action. If a decision on the issue can not be resolved at the Steering Level then they will be brought before the Governing Board.

# **5 PROJECT SELECTION**

The general goal of the COATS project is to develop a regional strategic plan that "improves rural traveler safety, convenience and mobility". In the end, the plan will consist of a set of interrelated projects that provide individual benefits and collective, synergistic benefits. The Steering Committee will decide which projects meet their needs. The end result will be a regional ITS plan.

The following sections describe a regional ITS plan and related potential benefits; project implementation process and responsibilities; overall project selection process; early winner nomination process; and the relationship between the project and individual state strategic plans.

### 5.1 Overview

A regional ITS plan sets the general direction for ITS demonstration based on the region's transportation needs. Its primary purpose is to develop a clear picture of what is envisioned for the region's ITS implementation, and to define a series of projects that will implement that vision. Typically, to achieve this purpose, it is necessary to review the region's goals and objectives (these may already by included in a regional transportation plan or early deployment plan); identify stakeholders in regional ITS deployment; identify additional needs and problems; screen potential ITS solutions; determine how these stakeholders can share information with each other, what functions the ITS systems should perform to achieve the region's goals and objectives, how existing ITS components can be integrated, which procurement strategies work best, how the systems in a region can be operated and maintained in an efficient and cost-effective manner, and how system performance evaluation can be used in future upgrades of ITS systems.

Figure 5 outlines a general process that translates regional transportation needs into candidate ITS projects for the Transportation Improvement Plan (TIP).

Some benefits of regionally planning for ITS include:

- Spending time and effort up front allows your region to maximize its investment in ITS.
- Up front planning reduces the cost of the overall effort.
- Planning helps target (focus) ITS solutions to transportation problems that cross multiple modes.
- Provides clear and consistent direction, and allows better tracking and management of projects.
- Assists with managing expectations.
- Helps to explain (and perhaps defend) regional initiatives and prioritize ITS goals.

Formulating a Regional ITS Plan is not a one-time exercise; rather, the plan requires periodic revision to adjust to the region's evolving needs and goals. Consequently, the plan is maintained over time and is a long-term asset of the region. If, at some point in the future, it is necessary to expand ITS, then the same plan will facilitate that expansion by supporting



interoperability, agreements between transportation agencies, and the use of system interface standards.

Items to consider in developing a Regional ITS Plan include:

- stakeholders;
- inventory of existing and committed ITS;
- information sharing needs;
- regional ITS systems architecture;
- operation and maintenance requirements;
- phasing of projects and funding; and
- evaluation plan.

## 5.2 Project Implementation and Responsibilities

The COATS project will involve the research and development leading to the planning, design, evaluation and operation of ITS. Because approximately \$400,000 of the \$900,000 budget is dedicated to the demonstration of "early winner" projects, and project implementation roles and responsibilities will be performed by various agencies within the multi-state region, and because communication, coordination and cooperation is an essential element to effective

long-term regional management of the transportation system, it is anticipated that a Memorandum of Agreement (MOA) may need to be developed. The MOA would provide for a formalized mechanism by which the public and private sector organizations may agree on existing and proposed improvements within the study area. The areas addressed within the MOA could include:

- organizations involved;
- premise for agreement (ie. purpose and benefits of participation);
- agreement specifics (goals, description of project/ program/ management oversight);
- term of agreement (length);
- authorized signatures; and
- party responsibilities and budget.

## 5.3 Overall Planning Process

The overall planing process for project selection process will be based on the FHWA Strategic Planning process (Version 2.2). The Strategic Plan will identify early winner, short-term, medium-term, and long-term improvements. Because the plan will detail ITS improvements by jurisdiction, it will be the responsibility of that jurisdiction to ensure that the defined project meets their individual needs. Projects will also be developed that cross jurisdictional lines. An example of this project type may include the development of a traveler information system by which variable message signs are placed upstream of known high incident locations and in proximity of highway interchanges where motorists make route decisions. The variable message signs could be located in California and Oregon and still be defined as a single project i.e. traveler information system.

### **5.4 Early Winner Nomination Process**

Because it is important to build political and public support for ITS and because there are typical projects that have immediate benefits, "early winners" will be identified. The early winner projects simultaneously meet public identified problems and obvious public sector need.

The following selection process is intended to quantify the relative importance and value of proposed initiatives based on agency and group requirements. Each member will rank each proposed project; the most useful projects will be included in the demonstration plan.

The six selection criteria are proposed by WTI for use by the Steering Committee to assess individual projects are as follows:

- 1. <u>Value and sustainability of results and efforts (30 %)</u>. This is the most important criterion because it rates the value and usefulness of the project.
- 2. <u>Sustainability to the Northern California/Southern Oregon Region (20%)</u>. This criteria is meant to determine whether or not this is an appropriate project for the COATS Project based on its goals, objectives and consistency with group needs.
- 3. <u>Project feasibility (15%)</u>. Can this project be implemented and completed?

- 4. <u>Timeliness of project (15%)</u>. To what degree is the proposed project timely to the Northern California/Southern Oregon coalition? Is it appropriate at this time?
- 5. <u>Cost realism (10%)</u>. Does the anticipated cost for the proposed project seem reasonable and appropriate?
- 6. <u>National recognition (10%)</u>. Does the project "showcase" solutions that may attract increased public or private sector funding from national sponsors?

Once Steering Committee members rank the proposed projects using the prepared ranking form (Figure 6), the Western Transportation Institute will ensure that they meet long-term goals and fit within the COATS Project System Architecture and report back to the Executive Director, Steering Committee and Governing Board. Each agency may choose not to participate in a project or decide that the decision is dependent on the Governing Board's recommendation.

### 5.5 Project vs. Statewide Strategic Plan

The COATS project's mission is to cooperatively research, develop, demonstrate and evaluate Intelligent Transportation Systems throughout the study area. An important part of the COATS project is to develop a coherent vision of the future "end state" of ITS and its relationship to broader statewide initiatives. The COATS project is a focused multi-state, area-wide strategic plan with small scale demonstration that is concentrating on specific existing and foreseeable transportation study area challenges and should not be confused with a statewide strategic plan.

# **COATS Project Selection Criteria**

Project Ranking Form

Date:

Project Title:

Agency Representative:

		Points	Weighted
		(0-10)	Value
1.	Value and sustainability of results and efforts (30%)		
	This is the most important criterion because it rates the value and		
	usefulness of the project. Weighted 30%		
No	Value 010 Highly Valuable		
2.	Sustainability to the COATS Region (20%)		
	This criterion is meant to determine whether or not this is an		
	appropriate project for the Northern California/Southern Oregon		
	Rural ITS Areawide Travel and Safety Improvement Project based		
	on its goals, objectives and consistency with group needs.		
	Weighted 20%		
No	t Sustainable 010 Very Sustainable		
3.	Project feasibility (15%)		
	Can this project be implemented and completed? Weighted 15%		
No	t Feasible 010 Highly Feasible		
4.	Timeliness of project (15%)		
	To what degree is the proposed project timely to COATS? Is it appropriate at this time? Weighted 15%		
Not	t Appropriate 05510 Very Appropriate		
5.	Cost realism (10%)		
	Does the anticipated cost for the proposed project seem reasonable and appropriate? Weighted 10%		
No	t Reasonable 010 Very Reasonable		
6.	National recognition (10%)		
	Does the project "showcase" solutions that may attract increased public or private sector funding from national sponsors? Weighted 10%		
No	t Nat'l in Scope 05510 Nat'l in Scope		
	Sub-Total		
	Total		

Figure 6: Early Winner Project Ranking Form.

# 6 STAKEHOLDER OUTREACH

Consensus building is the key to effective transportation planning. Developing a formal approach to a challenge and involving key people in decision making is the first step in this process. As such, it is critical to expand and involve regional stakeholders to increase the likelihood of project success. As evidenced by the May 15, 1997 Caltrans District 1 Stakeholder Workshop, held in Redding, CA, the need exists to expand and increase stakeholder attendance (Figure 7).



# 6.1 Existing Project Partners

A coalition of possible users, partners, individuals or organizations with an interest in applying ITS within the region is being established for this project. Initially this partnership has been informal; however, over time and with sufficient interest, it is envisioned that a more formal "coalition" may be established. The purpose of the COATS project will be to enhance communications and participation in the project planning process to include a broader group of potential ITS users, partners or other organizations. To date, project partners have included those stakeholder groups shown in Table 5.

## 6.2 Additional Involvement

By far, the predominant stakeholder-related problem was poor attendance at stakeholder meetings. As shown previously by the May 15, 1997 Workshop held in Redding, CA, the need exists to expand and increase stakeholder attendance (Figure 7). Typically, the stakeholders comprised a mix of federal, state, county, and city transportation personnel but few representatives from non-transportation related disciplines or the private sector (Table 5). Because the implementation of ITS could involve or affect a wide variety of disciplines, the in order to make Steering Committee (and future stakeholder meetings) meetings more meaningful representatives from these groups should be in attendance. This involvement could be accomplished by a "Friends of the Committee" organizational structure (Figure 4). Stakeholders invited as ""Friends of the Committee" and correspondence would be transmitted to them for attendance by WTI.

Public Sector	Private Sector
Oregon Department of Transportation <ul> <li>District 5</li> <li>District 11</li> <li>Region 2</li> <li>Region 3</li> <li>Region 4</li> <li>ITS</li> <li>Motor Carriers</li> <li>Traffic Management Section</li> <li>Transportation Development Branch</li> </ul>	Commercial Vehicle Operations <ul> <li>California Trucking Association</li> </ul>
<ul> <li>California Department of Transportation</li> <li>Traffic Operations</li> <li>New Technology and Research</li> <li>District 1</li> <li>District 2</li> </ul>	<ul><li>Chamber of Commerce</li><li>Southern Oregon Visitors Association</li></ul>
City/County Government • City of Burns • Siskiyou County Commission • Plumas County • Humboldt County • Lake County • Mendocino County • Mendocino County • Modoc County • Trinity County • Shasta County • Lassen County • Lassen County • Del Norte Local Transportation Commission • Tehama County • Rogue Valley COG	Communications <ul> <li>Driftwood Group Media Services</li> </ul>
Transit Carriers <ul> <li>Tri-Met</li> </ul>	<ul><li>Tourism</li><li>Redwood Empire Association</li><li>Shasta-Cascade Wonderland Assoc.</li></ul>
<ul> <li>Police</li> <li>California Highway Patrol</li> <li>Oregon State Police</li> <li>FHWA</li> <li>California Division</li> <li>Koin Center, Region 10</li> </ul>	<ul> <li>Private Transportation</li> <li>California Alliance of Advanced Transportation Systems</li> </ul>
State of California • State Controller's Office	

 Table 5: COATS Stakeholder Groups.

# 7 SUMMARY AND NEXT STEPS

In summary, this working paper has provided a starting point for discussions COATS project mission and provided potential organizational structure alternatives for consideration by the Steering Committee. The next steps in providing added-value to this working paper will be to 1) finalize Steering Committee input on the vision, mission statement, goals and objectives; 2) define the vision conceptually, both written and schematically, and 3) define how ITS is expected to function in a statewide or regional transportation system. A written vision or "theme" provides a description for a wide-ranging audience, from elected officials to field technicians. The vision will provide a general idea of how advanced technologies can be used to solve rural transportation challenges. A schematic vision will be developed that will provide similar benefits and address similar audiences as the written vision. This latter work will be a result of future tasks.