

Security and Emergency Preparedness in the Transportation Planning Process

Oregon Department of Transportation Case Study

final report

prepared for

Federal Highway Administration

prepared by

Cambridge Systematics, Inc.

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date

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Executive Summary

The Oregon Department of Transportation (ODOT) is a multimodal organization responsible for construction and maintenance of highways and bridges, and for motor vehicle and driver licensing. In addition, ODOT supports public transportation operations throughout the State, and is responsible for ensuring safe operation of motor carriers on Oregon's streets and highways.

ODOT's stated mission is "to provide a safe, efficient transportation system that supports economic opportunity and livable communities for Oregonians." As with other state DOTs, its goals to improve safety, move people and goods efficiently, and to improve Oregon's livability and economic prosperity are directly supported by the long-range planning process, which has adopted goals and objectives that are aligned with the broader statewide vision.

The Planning Section of the Transportation Development Division performs long-range planning activities. In concert with other parties, including the public, this group is tasked with developing and updating the 20-year multimodal Oregon Transportation Plan (OTP).

The last OTP was adopted in 1992, and an effort currently is underway to formally update its contents. The updated Plan will cover 2005-2025 and is expected to be adopted in fall 2005. The OTP is a policy and investment strategy-oriented document that serves as the guiding document for state modal plans and local transportation system plans. It considers private and public facilities and the local, regional, and state elements of the system and establishes investment scenarios. Although it does not contain project listings or specific identification of security-related projects, the OTP will address the areas of safety and security. The ultimate treatment of these two areas - whether separately or as an inextricably linked group - continues to be an iterative, ongoing process among the entities described below.

The OTP update is overseen by a committee structure that includes the Oregon Transportation Commission, a Steering Committee, and three Policy Subcommittees, including Mobility and Economic Vitality; Sustainability and Transportation Choices; and Safety and Security. ODOT also has worked to inform committee members about safety and security issues, including security and emergency preparedness. Toward this end, ODOT has prepared a series of background papers to brief the 14-member Safety and Security Committee, and to provide an overview of actions taken by ODOT and its partners in preparing for man-made and natural disasters.

In parallel with efforts to incorporate safety and security in the long-range planning process, ODOT's Office of Maintenance also has played a significant role in the area of emergency preparedness. Assisted in its efforts by its designation as a "first responder" in case of emergencies, ODOT has undertaken and completed

several important activities, including identification of emergency routes, incorporation of ITS technologies for emergency planning, preparation of the all-hazards State Emergency Management Plan, provision of first responder operations-level training for its workers, and participation in training exercises such as the chemical stockpile exercise and a statewide earthquake exercise. While, with the exception of the Emergency Management Plan, these efforts are largely operational in nature, they are still notable in light of the State's continued vulnerability to natural disasters.

While ITS planning is not currently directly integrated into the statewide planning efforts of all modes (specifically, the Statewide Public Transportation Plan), ITS applications still retain visibility in the long-range planning process. The current OTP update has a section on "Technology and Transportation," which includes a discussion of the use of ITS technology for security.

Some of the lessons learned in the course of the Oregon Transportation Plan update include:

- Management of information related to transportation facilities, especially plans for structures like bridges and tunnels, remains an issue for many DOTs. Such plans are generally a matter of public record, and often no mechanism exists to restrict access to transportation-related security sensitive information. The Office of Maintenance needs to develop recommendation regarding how to handle sensitive information about security.
- The *National Strategy for Homeland Security* issued by the Department of Homeland Security in July 2002 identified 13 critical infrastructure sectors. While the OTP already has recognized the role of the transportation system in supporting the activities of other critical infrastructure sectors, a more formal broad statement of recognition and support would more actively engage public-private partnerships to undertake the shared responsibility for protecting critical infrastructure.
- Although it is anticipated that, in the future, the Federal government will likely require that state DOTs perform vulnerability assessments and implementation of protective measures for critical assets, no funding has yet been identified for those activities.
- Communication with the Office of Homeland Security and the future realignment of the U.S. Coast Guard into DHS implies a restructuring of working relationships among the two groups. Currently, it is not clear who will fulfill the Regional Emergency Transportation Coordinator (RETCO) responsibilities in lieu of the U.S. Coast Guard.
- The difficulty in devising performance measures for security was a prominent issue. ODOT faces some difficulties in its attempts to create meaningful performance measures in the security area. Success is largely conceived as avoidance of security breaches or incidents and, therefore, is difficult to quantify.

1.0 Introduction - Transportation Planning in a New Context: Security and Emergency Preparedness in the Post-9/11 World

1.1 PURPOSE OF STUDY

Planning agencies at all levels have become more security conscious. Practical demonstrations integrating security issues into Federal, state, and local planning organizations, procedures, and products are needed to advance institutional capabilities. In addition, information resources that support comparative analyses are needed to improve the collective understanding of the planning profession.

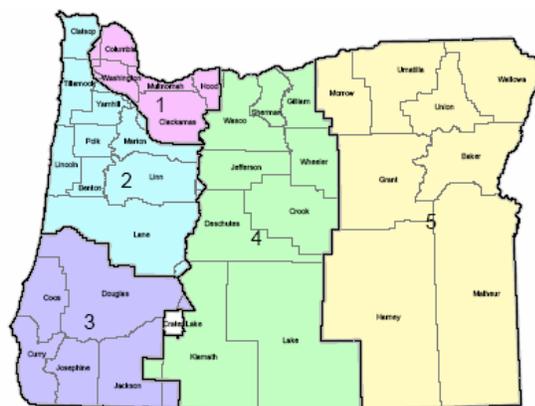
For the purposes of this report, security planning includes activities and products developed in response to identified criminal threats to high value, vulnerable elements of the transportation system. Preparedness planning includes activities and products developed in response to the threat of environmental hazards and natural occurrences. Some of the activities that can be characterized as contributing to the integration of security and emergency preparedness into the transportation planning process include chartering committees and organizations; establishing liaisons or otherwise designating planning staff resources; establishing project categories and program funding; conducting vulnerability and threat assessments; and developing and exercising plans. This report is intended to:

- Improve national awareness of how state and local agencies are integrating security and preparedness issues into their planning processes and organizations;
- Identify transportation planning agencies who are leaders in the integration of security and preparedness issues into their planning processes and organizations; and
- Facilitate technology transfer by documenting leading experiences and lessons learned.

1.2 BACKGROUND: OREGON DEPARTMENT OF TRANSPORTATION

Location/Description

Located in the Pacific Northwest, the State of Oregon has a population of about 3,421,399.¹ For planning purposes, the State is organized in terms of five regions, including the Portland Metro (Region 1), Northwest Oregon (Region 2), Southwest Oregon (Region 3), Central Oregon (Region 4), and Eastern Oregon (Region 5). The Oregon Department of Transportation (ODOT) has jurisdiction over approximately 6,640 bridges (2,670 of them are State-owned) and about 8,067 centerline miles of state highway (otherwise expressed as 19,076 lane miles). The highway characteristics include about 34.3 billion vehicle-miles traveled throughout the State in 2002, with 20.9 billion on the Oregon State Highway System. The public transit usage amounts to about 108.1 million rides annually, with the largest transit system – Tri-Met – accounting for about 88.6 million of total rides. Although not under the purview of ODOT, it is worthwhile noting



that the State also has one large commercial airport – Portland International – and six commercial service airports. Additionally, the State sustains a significant amount of freight movements of goods and commodities. The highway system moves about 250-300 million tons annually, railroads move about 60.3 million tons, air freight accounts for about 122.3 thousand tons, and 31.7 million tons are moved by water.²

Source: http://www.odot.state.or.us/tdmappingpublic/PDFs/regmap/reg_cnty.pdf.

Figure 1.1 ODOT Regions Map

1.3 ORGANIZATIONAL CHARACTERISTICS

ODOT’s stated mission is “to provide a safe, efficient transportation system that supports economic opportunity and livable communities for Oregonians.” As with other states, its goals to improve safety, move people and goods efficiently,

¹ Source: U.S. Bureau of the Census 2000.

² Source: All travel statistics are from 2000 and can be found in Oregon’s *Transportation Key Facts 2004*; http://egov.oregon.gov/ODOT/COMM/2004_KeyFacts.shtml.

and to improve Oregon’s livability and economic prosperity are directly supported by the long-range planning process, which has adopted goals and objectives that are aligned with the broader statewide vision.

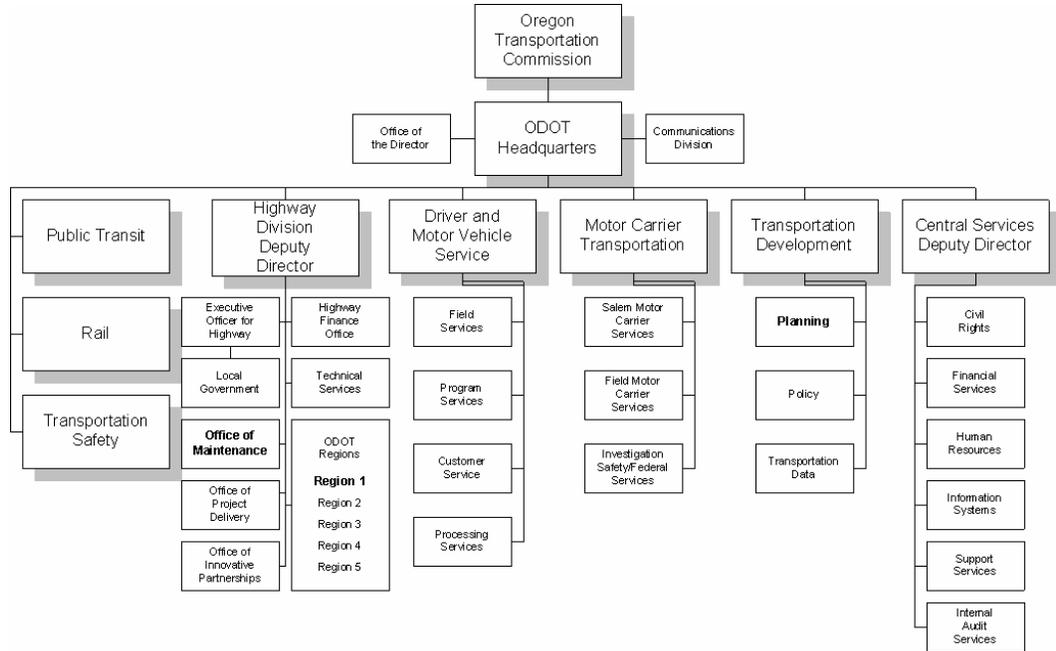


Figure 1.2 ODOT Organizational Chart

The Oregon Transportation Commission, an appointed body, has overall responsibility for transportation policy and direction. The Director of ODOT manages the Headquarters staff, with the support of the Communications Division. ODOT’s five maintenance regions report to the Deputy Director, who is in charge of the Highway Division. The elements with the most direct relevance to the issues explored in this case study, are the Office of Maintenance and ODOT Region 1 under the Highway Division Deputy Director, and the Planning Section under the Division of Transportation Development. Their roles and responsibilities are highlighted below.

1.4 ROLES AND RESPONSIBILITIES

Emergency Preparedness – Office of Maintenance

ODOT is the only state DOT that has been selected as a case study candidate, due in large measure to its status as the state-designated “first responder” for assisting state or local governments with transportation and other needs during emergencies. Within ODOT, the Office of Maintenance (part of the Highway Division) is the lead on security measures. The Office works cooperatively with the Oregon State police Office of Public Safety and Security, the Federal Bureau of Investigation and various groups, including Infragard and the Pacific

Northwest Economic Region's infrastructure protection working group to address security issues.

The Office also is working with the Bridge Section and Districts to assess critical highway infrastructure and identify funding sources, such as domestic preparedness grants, to help implement security measures. ODOT is eligible to apply for a U.S. Department of Justice grant program administered by the Oregon State Police. However, at this time, no specific funding has been identified.

In order to ensure that highway operations are available to meet military and public needs in the event of a national security emergency, the Office of Maintenance works with the Oregon Military Department and other state agencies as needed to plan for such events. The members of the ODOT Emergency Preparedness Committee, which includes Traffic Management, Motor Carrier and Region representatives, support the Office of Maintenance in this effort.



Source: <http://www.bygonebyways.com/101-OR-Astoria-Columbia%20River%20Bridge.jpg>.

Figure 1.3 Astoria Bridge

ITS Technologies - ODOT Region 1

The ODOT Regional Divisions within the Highway Division are the implementing entities for ITS technologies, including those technologies with added safety and security benefits. Oregon has four transportation operations centers (TOC), in Portland, Salem, Central Point and Bend, which provide critical services (traffic surveillance, road/weather condition monitoring, incident detection, etc.) to both public and agency stakeholders. The TOCs serve as a coordination center for transportation operations in their respective ODOT regions. They identify,

verify, and coordinate incident response activities, and work with management and field personnel to minimize incident response time and maximize safety for the traveling public. This is accomplished by employing a variety of ITS devices, such as variable message signs and highway advisory radio.

While the TOCs share a common goal of efficiently collecting and disseminating information to key agencies (including ODOT Operations, law enforcement, and others), the TOCs' systems currently are operationally separate. ODOT currently is developing an integrated operating system for the TOCs that will allow seamless operations and information exchange. The purpose of this project is to take ODOT's four existing transportation operations centers and fully integrate them to better serve the transportation community throughout Oregon, with a primary focus on rural communities and transportation facilities. This project addresses information collection, analysis, dissemination, and archiving needs in operations, traffic, incident, and emergency management.

ITS applications that routinely provide real-time information on traffic, speed/travel time, and incidents to travelers would perform the same functions in the event of a declared emergency, while also delivering other information relevant to the situation. Information from the Traffic Management System is disseminated through a web site, feed to cable TV, and the 511 traveler information system. The objective, whether in routine operation or emergency situations, is to provide as much information to the public, in as timely a fashion as possible.

In addition to ITS technologies deployed on the Portland region's highway system, the State's largest transit provider, Tri-Met, was mentioned as an innovator in the use of ITS technologies for security. Toward that end, Tri-Met has incorporated silent alarm, surveillance, and Automated Vehicle Location (AVL) technologies into their fixed-route bus and light rail transit systems.

The TOC staff work in concert with other partner agencies in addressing security issues. ODOT is working cooperatively with traffic operations staffs at the local and county levels to build the infrastructure for a regional fiber optic communications network, which is necessary for high bandwidth applications such as video. ODOT and the counties are working with locals due to the need to install fiber optic cable under local streets. The counties and ODOT already have portions of the fiber network established, and share existing lines rather than creating parallel facilities. In addition, eight partner agencies, including the FBI and the United States Coast Guard, work with the Portland Region TOC to discuss protection of critical infrastructure and to delineate roles/responsibilities in case of security incidents.

ODOT staff also works with another group called the "Transport Group," which has held monthly meetings in the Portland, OR region over the last eight years. Traditionally, ODOT has hosted and run the meetings. The purpose of the meetings is to discuss ITS developments and to begin to address security issues. The Transport Group includes:

- METRO (the regional planning agency);
- City of Portland;
- ODOT;
- TRIMET;
- Washington, Clackamas, and Multnomah counties;
- Beaverton, Oregon;
- Vancouver, Washington;
- Washington State DOT;
- 911 centers in the cities; and
- Other agencies and commissions.

The group has an official role in reviewing ITS projects that are candidates for inclusion in the regional Transportation Improvement Program.³ The group has historically operated informally, but is moving toward official status with the adoption of by-laws. The Transport Group will be a subcommittee of the MPO policy advisory committee, to be chaired by ODOT; METRO will be the Secretary of that Subcommittee.⁴

1.5 LONG-RANGE PLANNING FOR SAFETY AND SECURITY – TRANSPORTATION DEVELOPMENT DIVISION/PLANNING SECTION

The Planning Section of the Transportation Development Division performs long-range planning activities. In concert with other parties, including the public,

³ Part of the ranking criteria for the STIP includes ITS elements, which are reviewed by the Transport Group. There is no distinct funding stream for ITS deployment. Grants for security components on ITS projects (through the Department of Homeland Security, or DHS) are currently driving the process; this funding is outside the MPO planning process now. Generally, there has not been a marked shift in priority of ITS elements toward security objectives. Security is not outweighing other priorities, and the security element is not perceived as driving up the costs of implementing ITS technologies.

⁴ A Joint Policy Advisory Committee (JPAC) directs METRO. Another Committee, called the Transportation Policy Advisor Committee, functions as the region's metropolitan planning organization, comprising upper level management from agencies. METRO has a dedicated stream of revenue from waste disposal, zoo, and the facilities they run; in addition, they have an elected Board.

this group is tasked with developing and updating the 20-year multimodal Oregon Transportation Plan (OTP).

The OTP is a policy and investment strategy-oriented document. Although it does not contain project listings or specific identification of security-related projects, the areas of safety and security will continue to be addressed.⁵ The OTP includes policies for bicycle and pedestrian facilities, public transportation, highways, waterways, airports and railroads, and serves as the guiding document for the state modal plans and local transportation system plans. It considers private and public facilities and the local, regional, and state elements of the system and establishes investment scenarios. The current OTP update also has a section on “Technology and Transportation,” which includes a discussion of the use of ITS technology for security.

The last OTP was adopted in 1992, and an effort currently is underway to formally update its contents with the aid of a three-tier committee structure. The updated Plan will cover 2005-2025 and will be accomplished mostly through continuous coordination and broad outreach directed by a Steering Committee chaired by a member of the Oregon Transportation Commission, the highest-level decision-making body.⁶ It is worth noting that some interest has been expressed by the Steering Committee in shifting the overall direction of the Plan update toward a system approach to issues versus a modal approach, although it is yet too early to determine the implications of such a shift, if it indeed happens.⁷ The ODOT web site reports fall 2005 as the estimated plan adoption timeframe.

The current OTP activities include the use of policy tools and “modeling” efforts to determine the most economically efficient (i.e., “the best bang for the buck”) investment strategy policies. The OTP also is just delving into the “policy analysis piece.” In terms of the implementation timeline, the OTP update, once complete, will initially go to the Transportation Commission. Then it will go out for public review, and return to the various committees so they can address public comments.

⁵ Even in the shorter, four-year transportation capital improvement program – or STIP document – security projects are undifferentiated from other more “traditional” projects. For example, a current major bridge rehabilitation process that will result in seismic retrofitting of 300 bridges is classified primarily as a rehabilitation project, though this project will also result in increased blast resistance. Similarly, the installation of security cameras and intrusion detection as part of other projects has been funded on an ad-hoc basis as grant money becomes available.

⁶ The Steering Committee, however, will not work in isolation but rather draw on guidance from other committees.

⁷ Meeting Summary of the Steering Committee; May 7, 2004.

1.6 THE PLANNING PROCESS

The planning process described below is focused on the OTP update and, specifically, on the structure, roles, and activities that are in place with the express goal to affect safety and security considerations.

The OTP update is overseen by a committee structure that includes the Oregon Transportation Commission at the top of the hierarchy, a Steering Committee in the tier below, and three Policy Subcommittees, including Mobility and Economic Vitality; Sustainability and Transportation Choices; and Safety and Security. The structure and roles of the three main bodies in forging a safety and security policy in the Plan update are summarized below:

- **Oregon Transportation Commission**
 - Membership: Comprised of five Governor-appointed Commissioners for a four-year term (with the added stipulation that one member must live east of the Cascade range, and no more than three can belong to one political party)
 - Frequency of meetings: Monthly
 - Responsibilities: Developing the State Transportation Policy and a comprehensive, long-range plan for a multimodal transportation system; providing guidance for planning, development and management of a statewide integrated transportation network; and exercising other powers according to state law (ORS 184.615 to 184.620)
- **Steering Committee**
 - Membership: Comprised of 16 members (Committee Chair is from the Oregon Transportation Commission; other members represent Metro, the Port of Portland, ODOT, universities, the state business council and private interests)
 - Frequency of meetings: Monthly
 - Responsibilities: Overseeing the development and direction of the OTP update, including investment priorities and funding strategies.
- **Safety and Security Committee**
 - Membership: Comprised of 14 members (several agencies represented, including the ODOT Rail Division, the City of Portland, a local transit system, emergency operations, state police, and Salem airport)
 - Frequency of meetings: Monthly
 - Responsibilities: Developing or updating policies to support safety and security in the transportation system, with a focus in addressing trends and policy gaps involving safety and security; making recommendations to the Steering Committee.

As part of the process of briefing the members of the committees engaged in the OTP update, ODOT has prepared a series of background papers that provide an overview of actions taken by ODOT and its partners in preparing for man-made and natural disasters. The background material also includes references to safety elements in previous versions of the Plan, and the work currently being done to address prior policies and action plans. The conclusions and policy inferences derived from these materials have shaped the early recommendations for the Plan update, such as the recommendation that the OTP require vulnerability assessments and implementation of critical asset protection measures, as well as raising the issue of how to protect sensitive information about the transportation system.

2.0 Impetus for Focus on Planning for Safety and Security and Emergency Preparedness

2.1 LONG-RANGE PLANNING FOR SAFETY AND SECURITY

The most recent 1992 statewide plan already contained a safety element, since this area had been a traditional consideration in the long-range planning process. Transportation security focused on the potential effects of terrorist acts on the energy sector in addition to transportation of hazardous materials. The experience of 9/11, in addition to feedback obtained from about 70-100 internal ODOT interviews, compelled the Department to consider security in a fundamentally different light than in the 1992 Plan. The focus shifted away from the disruption of energy resources and toward the protection of transportation infrastructure.

Although safety and security had been largely recognized as discrete elements, differences of opinion have emerged between the Safety and Security Committee and the Steering Committee on how to conceive of and relate the two in the OTP update, and it is still too early to tell what the final policy language will entail. Discussions within the Safety and Security Committee led members of that body to treat safety and security as “inextricably linked,” and to interlace strategies for safety and security. The Steering Committee took a different view, and wanted to see safety policies and action items and security elements separated out one from another.

The “give-and-take” between the two committees is illustrated by the stance taken during the May 7, 2004 Steering Committee Meeting. In summary, the Steering Committee members recognized that, at the highest policy level, the possibility existed for the two issues to be integrated successfully, and that both required facility and response planning as well as a “holistic approach.” However, the committee also outlined differences between the two areas at the action and implementation levels, and noted that procedures for tackling each have competing mindsets (i.e., “prevention of risk” versus “response to threat”). While security was seen as the prevention of intentional acts which can encompass unpredictable human behavior, safety was conceived from the vantage point of the user and the related effort to seek behavioral changes or infrastructure improvements.

In terms of safety, the Safety and Security Committee calls for the creation of a safety leadership group of governmental, public, and private entities, in addition

to the development of a Strategic Transportation Safety Action Plan that addresses all modes of transportation based on risk analysis, to reduce fatal, injury, and property damage accidents among system users.

The key issues identified for security were the sharing of threat-based information and need-to-know assessments. The Safety and Security Committee recommended that the “Oregon Office of Homeland Security” assume the role as the security leadership group, with the majority of security direction derived from Federal sources through the Department of Homeland Security. Transportation officials were advised to defer to that group’s expertise on security issues. Although the proposed policy recognized that the Federal government would be leading security responses and that the State would be responding to national guidelines, a strong thrust was retained for increased planning and improved communication, coordination, and cooperation. Additionally, ITS technologies were promoted by the Committee as having potential applications in both safety and security.

2.2 EMERGENCY PLANNING AND PREPAREDNESS

The evolution of emergency planning and response efforts can be traced back to as early as the 1960s, when ODOT developed its first Emergency Highway Traffic Regulation (EHTR) Plan. As an FHWA requirement, the EHTR describes how the state DOT and law enforcement agencies would regulate the use of state highways for military shipments during national security emergencies. At that time, the plan was heavily influenced by Cold War era thinking, focusing planning efforts on preparing for a nuclear weapons attack and landscape contamination caused by high levels of radiation. The 1960s EHTR Plan has been updated as of 1998. More recently, in August 2002, FHWA issued updated guidance to state DOTs for revising their EHTR plans in light of new security concerns. The ODOT Office of Maintenance is working with the Oregon Military Department to ensure that military needs regarding the use of state highways are addressed.

A related effort – the identification of emergency routes – evolved from a 1997 ODOT task to identify “lifeline” routes for each county in Oregon, which was used to prioritize bridges for seismic retrofit work. The goal to seismically retrofit bridges had a security benefit in its own right by providing these structures with greater blast resistance.

The importance of emergency preparedness in Oregon was elevated by the occurrence of significant natural disasters. In 1996, a major flood led to Federal disaster declaration status for 30 out of 36 Oregon counties, prompting the creation of a full-time position to guide future emergency management efforts and the development of the all-hazards Emergency Operations Plan. Promulgated by the ODOT Office of Maintenance, this Plan took about 18 months to develop and remains as a controlled-distribution document. The State Emergency Management plan designates ODOT as both Emergency Support Function (ESF) No. 1

(Transportation) and ESF No. 3 (Public Works and Engineering). It also contains a terrorism response chapter with color-coded alert levels, which has been developed jointly with the State Police and the Department of Homeland Security.

In summary, emergency preparedness efforts emerged as a discrete issue several decades ago due to requirements driven by the Cold War paradigm, but more recently have been shaped by direct factors such as:

1. Other state needs that led to deeper thinking about emergency preparedness (e.g., the goal to retrofit bridges);
2. Unanticipated natural events (e.g., major flooding); and
3. New realities such as 9/11 that have spurred closer cooperation with the Department of Homeland Security and its activities.

Just as importantly though, ODOT's emergency preparedness efforts are heavily influenced by its state designation as a "first responder."

3.0 Leadership Commitment with Respect to Safety and Security and Emergency Preparedness

Leadership commitment to security elements of the OTP Plan update has been demonstrated by the fact that the Director of ODOT is an active member of the Steering Committee, which has shown a strong interest in safety and security issues. With respect to ITS technologies, ODOT management was perceived by staff interviewed in the course of the case study research as generally supportive in providing the necessary capital funding, although it was now more reliant on maintenance funds. Management support for emergency preparedness, on the other hand, was unequivocal, due in large part to the direct experience of the flooding experienced statewide in 1996, as mentioned above. That incident was a major contributing factor in devising a strong focus for emergency preparedness efforts, in tandem with funding to create a leadership position with authority in this area, as well as resulting formal policy document known as the Emergency Operations Plan.

Additional funding has not been allotted in order to consider security and emergency planning in the general long-range planning process. The Plan update is expected to proceed in similar fashion as other updates, and there are no known significant changes in this process that are driven by additional funds.

3.1 ITS TECHNOLOGIES

There is likewise no separate, additional Federal-aid funding for security-related ITS projects, as these projects have been mainly funded through Department of Homeland Security grants which fall outside of the traditional MPO process and, by extension, the state planning process. It was reported, however, that adequate funding was obtained from ODOT to cover some capital needs while a majority of security enhancements were covered through grants. Security add-ons to existing projects were only marginally more costly, according to the ITS manager for Region 1, particularly since the most expensive element of ITS projects – the communications infrastructure – already is in place. Security objectives were not perceived as having been implemented at the expense of other priorities.

A summary of reported safety and security funding for ITS applications is as follows:

FY 2001	\$10,000 for radio purchase
FY 2002	\$400,000 for bridges (cameras, intrusion equipment)
FY 2003	\$400,000 for pilot project for integrating dispatch
FY 2004	\$200,000 for cameras for Portland bridges
Total Funding:	\$1.01 million in Department of Homeland Security grants

3.2 EMERGENCY PLANNING AND PREPAREDNESS

Generally, there has been significant support for emergency response activities in terms of net resource commitments, mainly due to the 1996 flooding crisis which affected the majority of the State and prompted a more directed effort to manage the response to natural disasters. That incident prompted the dedication of new resources and the development of a formal emergency preparedness document.

Due to their presence on roadways throughout the State, highway maintenance workers are often the first state employees to arrive on the scene of an incident or disaster, and are thus de facto “first responders.” The Office of Maintenance has acknowledged this reality by enabling their maintenance workers to obtain first responder, operations-level training. The role of the maintenance worker has evolved away from the traditional “pothole-filler” and toward the function of system manager and operator. The training support is in line with this new reality.

Related training exercises involve activities among the state police and emergency management functions. There was mention of ongoing coordination regarding a chemical stockpile (Army site) exercise and a statewide earthquake exercise. The chemical stockpile is evaluated by the U.S. Federal Emergency Management Agency (FEMA).

In contrast to the above examples, resource availability for critical infrastructure assessments is not yet in place and needs to be addressed in the future. The Office of Maintenance works with the ODOT Bridge Section and ODOT Districts to assess critical infrastructure and identify funding sources (e.g., domestic preparedness grants) to help implement security measures. While ODOT is eligible to apply for a U.S. Department of Justice grant program administered by the Oregon State Police, no specific funding has yet been identified.

4.0 Outcomes

4.1 LONG-RANGE PLANNING FOR SAFETY AND SECURITY

The main outcomes of the OTP update include the refinement and clarification of policy language in these areas, as well as a series of related action items. These action items include the following:

- Creation of a safety leadership group consisting of public and private parties to address safety issues strategically and to improve the safety program;
- Provision of security that is consistent with leadership of Federal, state, and local homeland security entities; ensuring that all modes have security plans, and that those plans provide a coordinated response across all entities;
- Development of a multimodal Strategic Transportation Action Safety Plan based on risk analysis;
- Support for the development and improvement of interoperable communication systems among safety and security-related agencies;
- Assurance that laws and regulations are appropriate in meeting multimodal safety and security goals;
- Ensuring the development of coordinated and comprehensive education and training programs;
- Supporting delivery of timely emergency medical services;
- Addressing impact of security measures on mobility;
- Developing comprehensive and reliable transportation data reporting program; and
- Defining and evaluating safety performance measures and programs.

4.2 EMERGENCY PLANNING AND PREPAREDNESS

A few noteworthy partnerships were mentioned in the context of emergency response, one of which is an effort led by the State Fire Marshall for an Urban Search and Rescue Team (USAR) for Oregon State (such teams already are in place in California and Washington). Three USAR teams would be supported by agreement. Trailers and equipment would be funded by the Dept of Homeland Security and would be stored at ODOT facilities. The trailers would be transported by ODOT to emergency scenes as part of its Emergency Support Function (ESF) responsibilities.

There also is an outstanding agreement within the State Health Plan with regard to vaccine stockpiles. ODOT will coordinate the transportation, allocation, and distribution of these stockpiles, in addition to providing warehouse facilities.

Some notable ITS projects related to emergency preparedness include:

1. The use of Highway Advisory Radio (HAR) in conjunction with the Chemical Stockpile Emergency Preparedness Plan (CSEPP) for the Umatilla Chemical Weapons Depot in eastern Oregon. In the event of an accident at the site, which currently is devoted to the neutralization or destruction of chemical weapons, HAR would be used to notify the public that a stretch of the I-84 in Eastern Oregon is closed and to advise travelers of alternative routes;
2. The placement of HAR on 12 locations on Highway 101, the Pacific Coast Highway, to advise travelers about events like landslides which have closed sections of the highway in the recent past; and
3. Wireless communications in the Hermiston area, also in conjunction with the CSEPP for the Umatilla depot.

5.0 Conclusions: Lessons Learned

Some of the lessons learned in the course of the Oregon Transportation Plan update include:

- Management of information related to transportation facilities, especially plans for structures like bridges and tunnels, remains an issue for many DOTs. Such plans are generally a matter of public record, and often no mechanism exists to restrict access to transportation-related security sensitive information. The Office of Maintenance needs to develop recommendation regarding how to handle sensitive information about security.
- The *National Strategy for Homeland Security* issued by the Department of Homeland Security in July 2002 identified 13 critical infrastructure sectors. While the OTP already has recognized the role of the transportation system in supporting the activities of other critical infrastructure sectors, a more formal broad statement of recognition and support would more actively engage public-private partnerships to undertake the shared responsibility for protecting critical infrastructure.
- Although it is anticipated that, in the future, the Federal government will likely require that state DOTs perform vulnerability assessments and implementation of protective measures for critical assets, no funding has yet been identified for those activities.
- Communication with the Office of Homeland Security and the future realignment of the U.S. Coast Guard into DHS implies a restructuring of working relationships among the two groups. Currently, it is not clear who will fulfill the Regional Emergency Transportation Coordinator (RETCO) responsibilities in lieu of the U.S. Coast Guard.
- The difficulty in devising performance measures for security was a prominent issue. ODOT faces some difficulties in its attempts to create meaningful performance measures in the security area. Success is largely conceived as avoidance of security breaches or incidents and, therefore, is difficult to quantify.

6.0 References for the ODOT Case Study

Phone interview with Carolyn Gassaway (OTP Co-Manager/Highway Plan Manager, Planning Section, ODOT Transportation Development Division) and Rose Gentry (Statewide Emergency Operations Manager, Office of Maintenance, ODOT Highway Division) on July 29, 2004.

On-site interview with Carolyn Gassaway, Rose Gentry, and Denis Mitchel (Head of the Traffic Operations Center, Region 1 – Portland Area/Traffic Manager for the Portland Region) on September 1, 2004.

Population statistics on U.S. Bureau of the Census web site:

<http://www.census.gov>.

Oregon transportation statistics:

http://egov.oregon.gov/ODOT/COMM/2004_KeyFacts.shtml.

Oregon OTP update information:

<http://www.odot.state.or.us/tdb/planning/OTPUupdate/>.

Information on the Oregon Transportation Commission:

http://www.oregon.gov/ODOT/COMM/otc_main.shtml.

Information on the OTP Steering Committee:

<http://www.odot.state.or.us/tdb/planning/OTPUupdate/steering.htm>.

Information on the OTP Safety and Security Committee:

<http://www.odot.state.or.us/tdb/planning/OTPUupdate/safety.htm>.