



OREGON DEPARTMENT OF TRANSPORTATION

Research Unit
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SPR Quarterly Progress Report
July 1, 2008 through September 30, 2008

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Date: September 30, 2008

TO: Technical Advisory Committee Members:

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FROM: Jon Lazarus, Research Coordinator, (503) 986-2852

1. Project

Work Zone Design and Operations Enhancements
SPR # 669

2. Key Dates

Start Date for ODOT: November 2007
Completion Date for ODOT: June 2009

3. Principal Investigator

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4. Progress

- Task 2: Literature Review
 - This task was completed earlier this year, however, publications and article databases will periodically be monitored during the course of the study to

collect any newly published literature on the topic. Any new literature found will be incorporated into the research and final report where applicable.

- Task 3: Survey ODOT Personnel and Consultants
 - Several additional attempts were made to increase the response rate, and obtain survey responses from each Region, OBDP representatives, inspectors, TCP reviewers, and design consultants. Based on the additional efforts, the total number of responses increased from 31 to 50. It is not expected that more responses will be received and the survey has been closed.
 - A final analysis of the survey data is currently being conducted with the assistance of Dr. Michael Behm from East Carolina University who was included in the study to provide statistical analysis support. The results of the survey analysis will be included in the next interim report to the TAC for review.
- Task 4: Develop Sample of Study Projects
 - The number of case study projects was increased from 14 to 37. More projects were added in order to have adequate representation of different project characteristics in the study sample (i.e., type of project, type of highway, regional representation, etc.). No additional projects are expected to be added to the sample unless sufficient information cannot be gathered on those already on the list.
- Task 5: Collect Project Data
 - Basic project information (e.g., location, size, type of work, type of roadway, complexity, etc.) along with the TCP documents have been collected for all of the projects. We are working on getting the crash data for the projects from the ODOT databases.
 - In addition, we are reaching out to get contact information for people to interview on each project. We have contact information for the design firms, and need contact information for the inspectors, reviewers, and ODOT project managers.
 - Lists of questions have been developed for each of the involved disciplines on the projects (TCP designers, reviewers, implementers, inspectors, etc.). At least one interview is planned for each role on each project.
- Participate in work zone tours
 - Graduate research assistant, Mike Johnson, participated in the annual work zone tours. As part of the tours, Mike conducted focused project surveys of the project superintendents and inspectors, and gained insight into the TCP issues and traffic control measures in work zones. This additional data, along with the work zone survey score sheets submitted by the tour participants, will be included in the analysis (Task 6).

5. **Problems**

No specific problems have been encountered to date that are expected to prevent the completion of the study. The identification of people involved in each case study project, along with their contact information, is critical to completing Task 5 in a timely manner.

Additional assistance from ODOT in identifying case study project participants to interview, and their contact information, is needed.

6. Work Planned for Next Quarter

- Task 3: Survey ODOT Personnel and Consultants
 - Complete the final analysis of the survey data.
 - Submit the findings in the next interim report for review by the TAC.
- Task 5: Collect Project Data
 - Continue to collect case study project information (crash data, work zone tour scores, and inspection logs).
 - Obtain contact information for the people to interview on each case study project.
 - Interview the case study project participants.
- Task 6: Analyze data
 - Begin analysis of the TCP documentation, interview results, and work zone data to determine: the TCP features that contributed to work zone crashes, potential revisions to the TCP design and review process to improve safety, and the impacts of ODOT’s TCP design practices on the quality and consistency of TCPs.

7. Finances

SPR Project Summary

VENDOR	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 50,000	\$ 81,716	\$ -		\$ 131,716
REVISED BUDGET	\$ 15,770	\$ 115,946	\$ -		\$ 131,716
EXPENDITURES - VENDOR	\$ 15,770	\$ -	\$ -	\$ -	\$ 15,770
BALANCE	\$ -	\$ 115,946	\$ -	\$ -	\$ 115,946
ODOT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 2,500	\$ 5,000	\$ 2,000		\$ 9,500
REVISED BUDGET	\$ 5,234	\$ 5,000	\$ 2,000		\$ 12,234
EXPENDITURES - ODOT	\$ 5,234	\$ 8,418	\$ -	\$ -	\$ 13,652
BALANCE	\$ -	\$ (3,418)	\$ 2,000	\$ -	\$ (1,418)
PROJECT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 52,500	\$ 86,716	\$ 2,000	\$ -	\$ 141,216
REVISED BUDGET	\$ 21,004	\$ 120,946	\$ 2,000	\$ -	\$ 143,950
EXPENDITURES - PROJECT	\$ 21,004	\$ 8,418	\$ -		\$ 29,422
BALANCE	\$ -	\$ 112,528	\$ 2,000	\$ -	\$ 114,528