



SPR Quarterly Progress Report
July 1, 2016 through September 30, 2016

Date October 7, 2016

TO: Technical Advisory Committee Members:

Justin Moderie, ODOT Pavements
Cole Mullis, ODOT Pavements
Larry Ilg, ODOT Pavements
Anthony Boesen, FHWA

1. Project

Title: Mechanistic Design Data from ODOT Instrumented Pavement Sites
SPR 763

2. Project Investigator

Name: Dr. David Timm
Title: Brasfield and Gorrie Professor of Civil Engineering
Agency: Auburn University
Address: 238 Harbert Engineering Center
Auburn University, AL 36849
Phone #: 334-844-6282
Email: timmdav@auburn.edu

3. Project Coordinator

Name: Norris Shippen
Phone: 503 986-3538
E-mail: norris.shippen@odot.state.or.us

4. Key Dates

Project start date: 7/8/2014
Project completion date: 7/1/2016
Amendment 1
Project completion date: 2/28/2017

5. **Project Status** (Completed by project investigator)

Task 1 – Data Procurement and Processing Development

Percent completed reported in last quarterly report: 100%

Percent completed after this quarter: 100%

Key Progress-To-Date

- Obtained all data from the three test sites from ODOT.
- Catalogued all data from the three test sites.
- Developed customized processing schemes for Medford and Redmond sites.
- Deciphered Dever-Conner site data.
- Developed customized processing scheme for Dever-Conner site.

Specific Progress This Quarter

- None to report since Task 1 is 100% complete.

Problems

- None to report since Task 1 is 100% complete.

Work Planned for Next Quarter

- None to report since Task 1 is 100% complete.

Task 2 – Model Evaluation with Measured Data

Percent completed reported in last quarterly report: 100%

Percent completed after this quarter: 100%

Key Progress-To-Date

- Identified candidate truck passes to simulate from Medford and Redmond sites.
- Set up pavement profiles in layered elastic analysis program, WESLEA.
- Identified candidate truck passes to simulate from Dever-Conner sites.
- Further refined pavement cross-sections for simulation using additional information obtained from ODOT.
- Conducted strain simulations using WESLEA for the three test sites.

Specific Progress This Quarter

- None to report since Task 1 is 100% complete.

Problems

- None to report since Task 1 is 100% complete.

Work Planned for Next Quarter

- None to report since Task 1 is 100% complete.

Task 3 – Phase I Report

Percent completed reported in last quarterly report: 97%

Percent completed after this quarter: 97%

Key Progress-To-Date

- Information from Tasks 1 and 2 was compiled for presentation at Phase I meeting held in May, 2015 at ODOT.
- Report outline was created for Phase I report.
- First draft of Phase I report was developed and delivered to ODOT.

Specific Progress This Quarter

- First draft of Phase I report was developed and delivered to ODOT.

Problems

- None to report.

Work Planned for Next Quarter

- If feedback is received from ODOT on Phase I report, the report will be revised and final draft developed.

Task 4 – Data Processing and Database Development

Percent completed reported in last quarterly report: 85%

Percent completed after this quarter: 100%

Key Progress-To-Date

- Improved data processing schemes for Dever-Conner site to accommodate unique data collection activities found in data files.
- All data from Dever-Conner has been processed.
- Revised Medford template with site-specific gauge factors.
- Completed data processing of all Medford files.
- Completed data processing of all Redmond files.

Specific Progress This Quarter

- Completed data processing of all Redmond files.

Problems

- None to report.

Work Planned for Next Quarter

- None to report since Task 4 is 100% complete.

Task 5 – Processing Program and Technology Transfer

Percent completed reported in last quarterly report: 0%

Percent completed after this quarter: 10%

Key Progress-To-Date

- Began cataloguing processing template.

Specific Progress This Quarter

- Began cataloguing processing template.

Problems

- None to report.

Work Planned for Next Quarter

- Continue documenting the processing program in preparation for technology transfer.

Task 6 – Phase II Report

Percent completed reported in last quarterly report: 0%

Percent completed after this quarter: 0%

Key Progress-To-Date

- None to report.

Specific Progress This Quarter

- None to report.

Problems

- None to report.

Work Planned for Next Quarter

- Begin writing Phase II report.

6. Project Coordinator's Comments

A draft final report is expected in December

7. **Finances** (Completed by ODOT)
SPR Project Summary

VENDOR	FY14	FY'15	FY'16	FY'17	TOTALS
ORIGINAL BUDGET	\$ -	\$ -	\$ -	\$ -	\$ -
WORK PLAN BUDGET	\$ -	\$ 93,101	\$ 71,182	\$ -	\$ 164,283
REVISED BUDGET	\$ -	\$ 59,913	\$ 41,000	\$ 60,000	\$ 160,913
EXPENDITURES - VENDOR	\$ -	\$ 59,913	\$ 48,977	\$ -	\$ 108,890
BALANCE	\$ -	\$ -	\$ (7,977)	\$ 60,000	\$ 52,023
ODOT	FY14	FY'15	FY'16	FY'17	TOTALS
ORIGINAL BUDGET	\$44,250	\$86,500	\$44,250	\$ -	\$ 175,000
REVISED BUDGET	\$ 1,368	\$ 9,051	\$ 9,000	\$ -	\$ 19,419
EXPENDITURES - ODOT	\$ 1,368	\$ 9,051	\$ 12,041	\$ 2,224	\$ 24,684
BALANCE	\$ -	\$ -	\$ (3,041)	\$ (2,224)	\$ (5,265)
PROJECT	FY14	FY'15	FY'16	FY'17	TOTALS
ORIGINAL BUDGET	\$ 44,250	\$ 86,500	\$ 44,250	\$ -	\$ 175,000
REVISED BUDGET	\$ 1,368	\$ 68,964	\$ 50,000	\$ 60,000	\$ 180,332
EXPENDITURES - PROJECT	\$ 1,368	\$ 68,964	\$ 61,018	\$ -	\$ 131,350
BALANCE	\$ -	\$ -	\$ (11,018)	\$ 60,000	\$ 48,982