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OREGON DEPARTMENT OF TRANSPORTATION

SPR Quarterly Progress Report

July 1, 2016 through September 30, 2016

Date October 7, 2016

TO: Technical Advisory Committee Members:

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1. Project

Chip Seal Design and Specifications
SPR # 777

2. Project Investigator

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3. Project Coordinator

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4. Key Dates

Project start date: July 1, 2014
Project completion date: December 31, 2016*
**Note the completion date change from July 31, 2016*

5. Project Status (Completed by project investigator)

Task 1-Literature Review and Assessment of Design Methods
Percent completed reported in last quarterly report: 100%
Percent completed after this quarter:

Task 2-Identification of Field Projects—
Percent completed reported in last quarterly report: 100%
Percent completed after this quarter:

Task 3-Characterization of Existing Project Conditions
Percent completed reported in last quarterly report: 100%
Percent completed after this quarter:

Task 4-Assessment of Field Projects Constructed with Different Chip Seal Designs
Percent completed reported in last quarterly report: 92%
Percent completed after this quarter:

Task 5-Final Report
Percent completed reported in last quarterly report: 40%
Percent completed after this quarter:

Key Progress-To-Date

- Identification of field projects
- Obtained pre-construction and post-construction data for additional project sections
  - Pavement condition surveys
  - Mean texture depths
  - DFT- when appropriate (note: DFT cannot be performed on chip seals within the first several days of construction)
- Obtained 1-year post-construction assessment of pavement field sections
  - Mean texture depths at 1 year post construction

- Aggregate testing has been completed
  - Gradation analysis
  - Flakiness Index
  - Micro Deval
  - Specific Gravity
- Aggregate Imaging
  - Preparation and sieving of samples
  - Aggregate Imaging
  - Analysis in progress
- Dynamic Friction Testing
- Analysis and correlations of all of the above measurements
- Database of the project information was used for analysis of the data
  - Analyze trends in the data
  - Analyze correlations between multiple factors
- Spreadsheet developed for analyzing a large amount of DFT data.
- Further development of graphs for reports and presentations
- Correlations were developed into graphs and summarized in tables
- A detailed project report outline was developed
- Development of chip seal design recommendations
- Completion of the project's draft report and specification recommendations

Specific Progress This Quarter

- Compilation and analysis of year 2 field performance data
- Completion of Draft Report
- Development of project poster and presentations for to present the work of the project.

Problems

- No problems encountered

Work Planned for Next Quarter

- Make any recommended changes to the draft report.

6. <u>Project Coordinator's Comments</u> (Completed by ODOT)

- Excellent work on this project. ODOT is looking into implementation of results, however, funding may be an issue. ODOT will be applying for the State Transportation Innovation Council Incentive (STIC) Program in an attempt to fund technology transfer to the various stakeholders. Draft report received and under TAC review. Anticipated publication November 2016.

7. **Finances** (Completed by ODOT)

SPR Project Summary

VENDOR	FY'15	FY'16	FY'17	FY'18	TOTALS
ORIGINAL BUDGET					$ -
WORK PLAN BUDGET	$ 100,000	$ 75,000	$ -	$ -	$ 175,000
REVISED BUDGET	**$ 102,108**	**$ 52,892**	**$ 20,000**	**$ -**	**$ 175,000**
EXPENDITURES - VENDOR	$ 102,108	$ 43,644	$ -	$ -	$ 145,752
BALANCE	$ -	$ 9,248	$ 20,000	$ -	$ 29,248
ODOT	FY'15	FY'16	FY'17	FY'18	TOTALS
ORIGINAL BUDGET	$ 57,000	$ 65,000	$ 47,000	$ 21,000	$ 190,000
REVISED BUDGET	**$ 14,130**	**$ 2,108**	**$ -**	**$ -**	**$ 16,238**
EXPENDITURES - ODOT	$ 14,130	$ 13,840	$ 5,477	$ -	$ 33,447
BALANCE	$ -	$ (11,732)	$ (5,477)	$ -	$ (17,209)
PROJECT	FY'15	FY'16	FY'17	FY'18	TOTALS
ORIGINAL BUDGET	$ 57,000	$ 65,000	$ 47,000	$ 21,000	$ 190,000
REVISED BUDGET	**$ 116,238**	**$ 55,000**	**$ 20,000**	**$ -**	**$ 191,238**
EXPENDITURES - PROJECT	$ 116,238	$ 57,484	$ 5,477	$ -	$ 179,199
BALANCE	$ -	$ (2,484)	$ 14,523	$ -	$ 12,039