OREGON DEPARTMENT OF TRANSPORTATION

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SPR Quarterly Progress Report
July 1, 2006 through September 30, 2006

Date October 12, 2006

TO: Technical Advisory Committee Members:
Rene Renteria, Oregon Department of Transportation
Larry Ilg, Oregon Department of Transportation
Don Crownover, Oregon Department of Transportation
Elizabeth Hunt, Oregon Department of Transportation
Jim Huddleston, Asphalt Paving Association of Oregon
Anthony Boesen, Federal Highway Administration

FROM: Norris Shippen, Research Coordinator (ph: (503) 986-3538)

1. Project

Mechanistic Pavement Design Input Parameters
SPR-642

2. Key Dates

Start Date for ODOT: October 2005
Completion Date for ODOT: June 2007

3. Principal Investigator

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4. Progress

- A Technical Advisory Committee (TAC) meeting was held on August 22 where progress on the project was reported to the TAC and guidance was obtained for conducting additional field and laboratory testing.
- The transfer functions developed during the NCHRP 1-37A project (i.e., those to be used in the new AASHTO Design Guide) have been researched in detail and summarized in a step-by-step procedure for manual and independent verification.
- A spreadsheet has been set up to manually evaluate the transfer functions and the overall design procedure.
- A work plan to install the lateral positioning system at the I-5 MP 239 site on Oct. 18th has been written. All required equipment and supplies have been identified and collected (or scheduled to be rented).
- A subgrade soil sampling plan has been established, including specific locations for sampling at 10 locations throughout Oregon.
- Climate data sources have been located for inputs into the new design program.

- Evaluation of the backcalulation software is ongoing.
- Data from the strain gauges has been gathered and analyzed on several occasions.

5. Problems

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6. Work Planned for Next Quarter

- Install the lateral positioning system over the strain gauges.
- Collect the design parameters for past ODOT projects and use the inputs to manually evaluate the new AASHTO Design Guide program.
- Collect the soil samples from around the state and begin the process of material characterization.
- Continue the analysis of the backcalulation software.
- Collect on-site data from the strain gauges.

7. Finances

SPR Project Summary

VENDOR	**FY'06**	FY'07	FY'08	TOTALS
ORIGINAL BUDGET				$ -
REVISED BUDGET	**$ 41,544**	$ 49,667	$ 33,777	$ 124,988
EXPENDITURES - VENDOR	**$ 41,544**	$ -	$ -	$ 41,544
BALANCE	**$ -**	$ 49,667	$ 33,777	$ 83,444

ODOT	**FY'06**	FY'07	FY'08	TOTALS
ORIGINAL BUDGET	**$ 40,000**	$ 80,000	$ 40,000	$ 160,000
REVISED BUDGET	**$ 9,023**	$ 30,000	$ 4,000	$ 43,023
EXPENDITURES - ODOT	**$ 9,023**	$ 3,316	$ -	$ 12,339
BALANCE	**$ -**	$ 26,684	$ 4,000	$ 30,684

PROJECT	**FY'06**	FY'07	FY'08	TOTALS
ORIGINAL BUDGET	**$ 40,000**	$ 80,000	$ 40,000	$ 160,000
REVISED BUDGET	**$ 50,567**	$ 79,667	$ 37,777	$ 168,011
EXPENDITURES - PROJECT	**$ 50,567**	$ 3,316	$ -	$ 53,883
BALANCE	**$ -**	$ 76,351	$ 37,777	$ 114,128