OREGON DEPARTMENT OF TRANSPORTATION

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SPR Quarterly Progress Report
January 1, 2008 through March 31, 2008

Date April 21, 2008

TO: Technical Advisory Committee Members:
Cole Mullis, Oregon Department of Transportation
Larry Ilg, Oregon Department of Transportation
Elizabeth Hunt, Oregon Department of Transportation
Norris Shippen, Oregon Department of Transportation
Anthony Boesen, Federal Highway Administration
Michael Remily, Oregon Department of Transportation
Gary Thompson, Asphalt Pavement Association of Oregon

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

1. Project

Density Verification for Hot Mixed Asphalt Concrete Pavement
SPR # 666

2. Key Dates

Start Date for ODOT: October 1, 2007
Completion Date for ODOT: December 31, 2008

3. Principal Investigator

Todd V. Scholz, Ph.D., P.E.
School of Civil and Construction Engineering
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4. Progress

- Completed the literature review.
- Developed a table summarizing method of density measurement, number of samples and locations, and acceptance criteria for the majority of states in the U.S.
- Conducted visits to ODOT region 1 and 2 to observe the calibration procedure of nuclear density gauges.

- Obtained and summarized information from Barb Worbington regarding density measurements made on the calibration blocks in ODOTs five regions.
- Obtained and summarized information developed by Tony Mandich regarding the development of the ODOT calibration procedure for nuclear gauges.
- Compared ODOTs calibration procedure with that of CPN, Troxler, and ASTM.
- Met with ODOT Pavement Services personnel on February 22, 2008 to discuss the experiment plan. Based on this meeting, a draft experiment design was developed and submitted to Norris Shippen. Comments from the TAC were solicited and incorporated into the experiment plan.

5. Problems

- Difficulty in finding exact calibration procedure of various entities for exact gauge models.

6. Work Planned for Next Quarter

- Select projects for conducting the experimental plan.
- If possible, conduct field testing and sample collection as per the experiment plan (depends on target project paving schedules).
- If possible, initiate lab testing of cores and loose mix samples collected from the projects (depends on target project paving schedules).

7. Finances

SPR Project Summary

VENDOR	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	$ 55,000	$ 85,000			$ 140,000
REVISED BUDGET	$ 55,000	$ 65,000			$ 120,000
EXPENDITURES - VENDOR	$ -	$ -	$ -	$ -	$ -
BALANCE	$ 55,000	$ 65,000	$ -	$ -	$ 120,000

ODOT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	$ 4,000	$ 5,000			$ 9,000
REVISED BUDGET	$ 4,000	$ 5,000			$ 9,000
EXPENDITURES - ODOT	$ 1,412	$ -	$ -	$ -	$ 1,412
BALANCE	$ 2,588	$ 5,000	$ -	$ -	$ 7,588

PROJECT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	$ 59,000	$ 90,000	$ -	$ -	$ 149,000
REVISED BUDGET	$ 59,000	$ 70,000	$ -	$ -	$ 129,000
EXPENDITURES - PROJECT	$ 1,412	$ -	$ -		$ 1,412
BALANCE	$ 57,588	$ 70,000	$ -	$ -	$ 127,588