



**OREGON DEPARTMENT OF TRANSPORTATION**

Research Unit  
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**SPR Quarterly Progress Report**  
April 1, 2008 through June 30, 2008

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Date June 30, 2008

**TO:** Technical Advisory Committee Members:  
Kent Fretwell, DAS Fleet Operations Manager  
Bill (William) Ward Oregon DOT Fleet Coordinator  
Jeff Graham, FHWA Operations Engineer  
Richard Munford, Transportation Economist

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

**1. Project**

Fleet Condition Model Review  
SPR # 670

**2. Key Dates**

Start Date for ODOT: December 1, 2007  
Completion Date for ODOT: September 30, 2009

**3. Principal Investigator**

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**4. Progress**

Completed:  
*Task # 1: Analyze equipment replacement models in research literature.*

A comprehensive review of the research literature covering modeling approaches used in related equipment replacement models will be conducted. The salient features of models potentially applicable to the challenge faced by ODOT Fleet Services will be summarized and presented to ODOT. A written summary of the most relevant models found in the research literature will be included in the final report.

Task # 2: Assessment of state-of-the-art in fleet replacement models.

An assessment of the state-of-the-art in fleet replacement models in use by other DOTs, government agencies, and private industry will be conducted. Contact with different entities will be established via phone calls, electronic mail and personal site visits (when feasible). Information collected will be summarized and a list of 'best practices' in replacement models will be developed.

- Tasks 3 and 4 are 60% complete. Started some development of a web based form to collect supplementary information from equipment crews.

## 5. **Problems**

- We discovered that the current Fleet Condition Model (MS Access application) is not well documented and structured. The direction we are heading is to create a new Microsoft Access Application from scratch that is well documented and structured. Future ODOT plans include updating their databases in which the data that this project pulls, resides. This major ODOT project is not due until 2011. This provides a life-span of this MS Access application, in which it will need to be incorporated into the larger ODOT project or updated in 2011.

## 6. **Work Planned for Next Quarter**

- Complete tasks 3 and 4 and begin task 5.

## 7. **Finances**

SPR Project Summary

<b>VENDOR</b>	<b>FY'08</b>	<b>FY'09</b>	<b>FY'10</b>	<b>FY11</b>	<b>TOTALS</b>
ORIGINAL BUDGET	\$ 101,688	\$ 50,844			#####
<b>REVISED BUDGET</b>	\$ 121,046	\$ 43,010			#####
EXPENDITURES - VENDOR	\$ 14,227	\$ -	\$ -	\$ -	\$ 14,227
<b>BALANCE</b>	\$ 106,819	\$ 43,010	\$ -	\$ -	#####

<b>ODOT</b>	<b>FY'08</b>	<b>FY'09</b>	<b>FY'10</b>	<b>FY11</b>	<b>TOTALS</b>
ORIGINAL BUDGET	\$ 4,000	\$ 2,000			\$ 6,000
<b>REVISED BUDGET</b>	\$ 7,000	\$ 2,000			\$ 9,000
EXPENDITURES - ODOT	\$ 6,438	\$ -	\$ -	\$ -	\$ 6,438
<b>BALANCE</b>	\$ 562	\$ 2,000	\$ -	\$ -	\$ 2,562

<b>PROJECT</b>	<b>FY'08</b>	<b>FY'09</b>	<b>FY'10</b>	<b>FY11</b>	<b>TOTALS</b>
ORIGINAL BUDGET	\$ 105,688	\$ 52,844	\$ -	\$ -	#####
<b>REVISED BUDGET</b>	\$ 128,046	\$ 45,010	\$ -	\$ -	#####
EXPENDITURES - PROJECT	\$ 20,665	\$ -	\$ -		\$ 20,665
<b>BALANCE</b>	\$ 107,381	\$ 45,010	\$ -	\$ -	#####