

RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation
DT1241 4/2010

INSTRUCTIONS:

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

WisDOT research program category: <input type="checkbox"/> Policy research <input type="checkbox"/> Wisconsin Highway Research Program <input checked="" type="checkbox"/> Other <input type="checkbox"/> Pooled fund TPF#		Report period year: 2010 <input checked="" type="checkbox"/> Quarter 1 (Jan 1 – Mar 31) <input type="checkbox"/> Quarter 2 (Apr 1 – Jun 30) <input type="checkbox"/> Quarter 3 (Jul 1 – Sep 30) <input type="checkbox"/> Quarter 4 (Oct 1 – Dec 31)
Project title: Estimating Cost Per Mile for Routine Highway Operations and Maintenance		
Project investigator: Teresa Adams	Phone: 263-3175	E-mail: adams@engr.wisc.edu
Administrative contact: Greg Waidley	Phone: 262-2013	E-mail: gwaidley@engr.wisc.edu
WisDOT contact: Scott Bush	Phone: 266-8666	E-mail: Scott.Bush@dot.wi.gov
WisDOT project ID: 0092-06-12	Other project ID: MRUTC 07-12	Project start date: 12/14/2006
Original end date: 10/14/2007	Current end date: 3/31/2010	Number of extensions: 5

Project schedule status:

On schedule
 On revised schedule
 Ahead of schedule
 Behind schedule

Project budget status:

Total Project Budget	Expenditures Current Quarter	Total Expenditures	% Funds Expended	% Work Completed
\$40,626.00	\$0.00	\$40,626.00	100%	98%

Project description:

When transportation agencies prepare designs for new highway construction or major improvements to existing highways, the agency and user lifecycle costs are considered in project design decisions. Yet when highway projects are completed, maintenance budgets are rarely adjusted to accommodate the routine maintenance of new lane miles.

This problem is worsened by the fact that each year the number of vehicle miles traveled per highway mile increases. Maintenance budgets do not keep pace or remain constant. The growing disparity between maintenance budgets and maintenance requirements causes agencies to make tough choices about maintenance priorities. Aside from concerns about preserving capital investment; highway operations and maintenance bureaus have concerns about safety and loss of operational efficiency due to deteriorating condition of roadways.

The focus of this research is estimating the cost of ongoing routine operations and maintenance cost components of the total highway lifecycle cost. There are two main activities:

1. Perform a correlation study to characterize the relationship between maintenance cost and maintenance condition.
2. Develop models equations for estimating the recurring annual cost for routine, county-level highway maintenance.

Progress this quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Related agency cost and condition data. Submitted completed draft to WisTrans communications specialist to edit.

Anticipated work next quarter:

Report will then go to Scott Bush for his final review.

Circumstances affecting project or budget:

Relating agency cost and condition data is more difficult than anticipated. This study has attempted to make the best use of data available from the Wisconsin Department of Transportation in order to provide meaningful equations that relate maintenance cost to maintenance condition. Maintenance cost and condition are difficult to study because data is in separate systems supporting different business processes and therefore not easy to relate physically. However a more challenging obstacle is that the parameters are often incompatible making it nearly impossible to logically related cost to condition.

Attach / insert Gantt chart and other project documentation

FOR WISDOT USE ONLY

Staff receiving QPR:	Date received:
Staff approving QPR:	Date approved:

