

State of Wisconsin/Department of Transportation
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: December 31, 2005

<p>Project Title: Incorporating Road Safety into Pavement Management: Maximizing Surface Friction for Road Safety Improvements</p> <p>Administrative Contact: Nina McLawhorn</p> <p>WisDOT Technical Contact: Jason Bittner</p> <p>Approved by COR/Steering Committee:</p> <p>Project Investigator (agency & contact): UW-Madison, David Noyce</p>	<p>Project ID: 04-04</p> <p>Sponsor: MRUTC</p> <p>Approved Starting Date: July 1, 2003</p> <p>Approved Ending Date: March 31, 2006</p>
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Percent Complete: 97%

Description: The objective of this research is to integrate road safety and pavement management strategies. Specifically, objectives include:

1. Determine the relationship between skid resistance and traffic safety;
2. Develop asphalt pavement mix design strategies that consider skid resistance as its primary measure of effectiveness;
3. Identify existing prediction models for skid resistance, propose modifications to models, and identify minimum skid resistance ranges to trigger the need for roadway maintenance;
4. Incorporate skid resistance and safety in a pavement asset management tool.

Total study budget	Expenditures for current quarter	Total Expenditures to date
\$221,038 (\$93,001 from other sources)	\$0 (LZ06) \$0 (ME92)	\$128,037.00

Progress This Quarter: This quarter was spent summarizing data, generating the components of the final report, and drafting the final report. The literature review continues to be updated when new material is available. We continue to analyze the skid data, sand patch data, and crash data to generated findings.

Work Next Quarter:

Finish the report.

Circumstances affecting progress/budget: It took over 6 months to get the necessary field and crash data. WisDOT required some cost share for their skid trailer data collection. We requested a no cost time extension so we have the summer construction season to conduct a few follow up experiments and complete the report in early Fall. Formal approval of the time extension is requested. Several project team members have left the university requiring others to join and learn the project details.

Please attach Gantt chart

Tasks		2003						2004						2005										
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Task 1: Literature Review; Focusing on the Region 5 States	Proposed	█	█	█	█																			
	Actual		█	█	█	█	█																	
Task 2: Analyze Existing DOT Skid Numbers	Proposed		█	█	█	█	█																	
	Actual		█	█	█	█	█	█	█	█	█	█	█	█	█	█								
Task 3: Define Correlation Between Road Safety and Skid Resistance	Proposed							█	█	█	█	█	█	█										
	Actual						█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Task 4: Develop methods for measuring skid numbers	Proposed											█	█	█	█	█								
	Actual															█	█	█	█	█	█	█	█	█
Task 5: Develop Guidelines for Using Skid Numbers	Proposed														█	█	█	█	█					
	Actual															█	█	█	█	█	█	█	█	█
Task 6: Develop Maintenance Activities guidelines	Proposed																█	█	█	█				
	Actual																						█	█
Task 7: Prepare and submit final report	Proposed																				█	█	█	█
	Actual																						█	█

Tasks (CONTINUED)		2005												
		J	F	M	A	M	J	J	A	S	O	N	D	
Task 1: Literature Review; Focusing on the Region 5 States	Proposed													
	Actual													
Task 2: Analyze Existing DOT Skid Numbers	Proposed													
	Actual	█	█	█	█	█	█							
Task 3: Define Correlation Between Road Safety and Skid Resistance	Proposed	█	█	█	█	█								
	Actual	█	█	█	█	█	█	█	█	█	█	█	█	
Task 4: Develop methods for measuring skid numbers	Proposed	█	█	█	█	█								
	Actual	█	█	█	█	█	█	█	█	█	█	█	█	
Task 5: Develop Guidelines for Using Skid Numbers	Proposed	█	█	█	█	█								
	Actual						█	█	█					
Task 6: Develop Maintenance Activities guidelines	Proposed						█	█						
	Actual										█	█		

