State of Wisconsin/Department of Transportation

RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: June 30, 2008

Program: SPR-0010(36) FFY99	**Part: II Research and Development**
Project Title: Friction Coefficients for Stainless Steel/PTFE (Teflon) Bearings.	**Project ID:** 0092-08-13
Administrative Contact: Andrew Hanz	**Sponsor:** WisDOT
WisDOT Technical Contact: Travis McDaniel	**Approved Starting Date:** Jan 16, 2008
Approved by COR/Steering Committee: $25,000	**Original End Date:** Jan 16, 2009
Project Investigator (agency & contact): John Stanton, University of Washington	**Current End Date:** Jan 16, 2009
	Number of Extensions: 0

Percent Complete: 15%

Request a No Cost Time Extension (Please Select One): ☐ **YES** ☒ **NO**

Reason for No Cost Time Extension:

Project Description: The goal of the project is to determine the coefficient of friction that can be obtained with types of PTFE and stainless steel other than those defined in the AASHTO Bridge Design Specifications. The latter materials provide very low friction, but are available from only a small number of suppliers and are expensive. Construction delays can also result from an unsuccessful test on an individual batch of material and the need to order replacements. The cost of these delays may be greater than the cost of the materials. If more commonly available materials can be shown to have higher, but still acceptable low, friction properties, they may offer an attractive alternative to the AASHTO-specified materials.

Progress This Quarter:
Notice to proceed was given on 16th Jan 2008. A student has been selected to work on the project, and has conducted the literature review. We have submitted the testing plan, assembled the test rig and prepared several test samples. The next steps will be for WisDOT to approve the test plan and for us to start the testing. The materials for testing have already been provided by WisDOT.

Work Next Quarter:
Receive approval of testing plan from WisDOT
Start testing

Circumstances Affecting Progress/Budget: None

		Contract month no. -->	1	2	3	4	5	6	7	8	9	10	11	12
		Year (2008) -->	8	8	8	8	8	8	8	8	8	8	8	8
		Calendar Month -->	1	2	3	4	5	6	7	8	9	10	11	12
Task		**Description**	wi			spr			su			au		
1	1.01	Review Literature	x	x	x									
2	2.01	Plan tests	x	x	x									
		WisDOT approval				x								
3	3.01	Set up test rig			x	x								
4	4.01	Obtain materials				x	x							
5	5.01	Friction testing					x	x	x	x	x			
6	6.01	Data analysis							x	x	x			
		Consequences for design								x	x	x	x	
7	6.01	Quarterly reports			X			X			X			
		Final Report											x	X