

Virginia Transportation Research Council Contract/Grant Progress Report

Project No: <u>07-0219-07</u>	Starting Date: <u>7/1/06</u>	Target Completion Date: <u>6/30/11</u>
Project Title: <u>Consortium for Pavement Surface Properties</u>		
Performing Agency: <u>Virginia Tech</u>		
Principal Investigator(s): <u>Gerardo Flintsch</u>		
Date of This Report: <u>02/28/09</u>	Next Report Due Date: <u>05/31/09</u>	

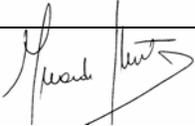
Project Description
 The main objective of the project is to establish a research program focused on enhancing the level of service provided by the roadway transportation system by optimizing pavement surface texture characteristics.

- Research Activities Pursued This Period (Including Tasks):**
- Completed a draft high-friction pavement surfaces (HFS) Report.
 - Developed a fixture to mount the macrotexture stereo vision system on a vehicle.
 - Presented two technical papers at the 88th Annual Meeting of the Transportation Research Board;
 1. Flintsch, G.W., de León Izeppi, E. McGhee, K.K., and Roa, J., "Evaluation of the International Friction Index Coefficients for Various Devices." Paper 09-3240, recommended for publication.
 2. de León Izeppi, E., Flintsch, G.W., Saleh, M., and McGhee, K.K., "Area-Based Macrotexture Measurements: A Stereo Vision Approach." Paper 09-3067.
 - Ordered the second Griptester unit for the Loan Program with small modifications requested for the enclosure system.
 - Developed a schedule and contacted the four Departments of Transportation participating in the FHWA Surface Enhancements at Horizontal Curves (SEAHC) project for a Griptester Loan in conjunction with the testing of the placed high-friction surfaces.
 - Developed a schedule and testing plan the 2009 Annual Equipment Rodeo.
 - Completed the seasonal monitoring study.
- Problems Encountered:**
- Activities Planned for Next Period:**
- Conduct the 3rd Annual Equipment Rodeo.
 - This year's activities will include the set up of a regional calibration and verification site for inertial profilers
 - Implement the plan prepared for the use of the Griptester with the FHWA SEAHC Demonstration Projects.
 - Continue the development of the vehicle-mounted stereo vision system.
 - Study the variation of friction with speed and develop speed correction factors for the locked-wheel skid trailer using the smooth tire.
 - Receive and test Griptester 2 for the Loan Program.

Budget Status:	
Current FY Project Budget: \$ 297,662 (including cost share)	Project Budget Lifetime: \$ 1,070,465.00
Current FY Expenditures: \$ 122,476 as of 2/28/09	Expenditures LTD: \$ 240,931
Percent Expended this FY: 41% (Date)	Percent Expended LTD: 23%

Timetable: Project is (check):

On Schedule	<input checked="" type="checkbox"/>	
Behind Schedule *	<input type="checkbox"/>	(explain above) [fixed-slip continuous friction
Ahead of Schedule	<input type="checkbox"/>	measurement equipment task only]

Preparer's Name and Signature: Gerardo Flintsch 	Date: <u>03/15/09</u>
VTRC Staff Technical Monitor: _____	Date: _____
Reviewed and Approved By: _____	Date: _____

(VTRC Associate Director)

Review Comments: (To be completed by Research Director and Returned to Research Manager)