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# 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: Consortium for Pavement Surface Properties

Performing Agency: Virginia Tech

Principal Investigator(s): Gerardo Flintsch

Date of This Report: 5/31/10 Next Report Due Date: 8/31/10

## **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):**

- The 4<sup>th</sup> Annual Equipment Rodeo was hosted in Blacksburg during the week of May 17-21, 2010.
  - o Four profilers from South Carolina (2), Virginia and Mississippi and five friction units from Connecticut, Mississippi, Virginia and the Griptester #2 and the Dynatest HFT participated.
  - Analysis of the results will be reported to the Technical Advisory Committee during the Pavement Evaluation 2010 conference in October to take place in Roanoke, with the corresponding Rodeo Report.
- Delivered on March 15 both, the Griptester #1 and the Dynatest HFT system to the Louisiana Transportation Research Council.
  - o LTRC personnel was trained on the use and maintenance both units; this included presentations about the Loan Program, operation and calibrations, data analysis and reporting.
  - o The HFT unit was picked up on May 6, and returned to Blacksburg for participation in the 4<sup>th</sup> Annual Equipment Rodeo held during the week of May 17-21.
  - Griptester # 1 was reported to be ready for return on May 27; and will be shipped from Louisiana back to Blacksburg during the first week in June.
- Contact with the Arizona DOT allowed delivery on May 28 of the HFT system in Phoenix.
  - Training for the GripTester was carried on in Blacksburg April 6-7 and for the Dynatest HFT will be held during the first week of June in Phoenix, Arizona.
  - Griptester #2 was shipped and is scheduled to arrive in Phoenix on June 2, during the period for the training and data analysis at the AZ DOT research facility.
- Final initial Beta version 2 of the GripVAL software was evaluated and is now ready for presentation. ASTM E-17 Committee has agreed to allow a presentation to the friction testing participants in its annual summer meeting on June 8 in Penn State.
- MNRoad personnel have been contacted to explore the possibility of returning GripTester #1 for testing in the summer. Waiting for instructions for shipping.
- More meetings have been completed to plan the Pavement Evaluation 2010 Conference (PE 2010).
  - Abstracts were received on March 1<sup>st</sup> by the steering committee.
  - o Papers were evaluated and the authors notified of the decisions.
  - o Technical chairs have been appointed for the main conference themes.
- Conducted field testing of the moving macrotexture measurement on an optimized permeable friction course in NOVA.
- Submitted two abstract for presentation at the Pavement Evaluation 2010 (PE 2010) national conference in Roanoke, VA, Oct 25-27, 2010.
- Participated in the meeting of the PIARC Technical Committee D2 Road Pavements, Irvine, CA, April 28-30, 2010
  - Presented a revised proposal for hosting the 7<sup>th</sup> International Symposium on Pavement Surface Characteristics - SURF 2012 in Virginia.

#### Problems Encountered:

• Issues with both Griptester units and the HFT may delay their deployment to their destinations.

### **Activities Planned for Next Period:**

- Present the final initial Beta version 2 of the GripVAL software at the ASTM E-17 Committee on June 8, 2010 in State College, PA.
- Complete the analysis of the smoothness and friction data collected during the 4<sup>th</sup> Annual Equipment Rodeo.
- Organize the meeting of the Technical Advisory Board in Roanoke, VA in October, 2010.
- Continue to lead the organization of the Pavement Evaluation 2010 (PE 2010) conference.
- Continue to lead the organization of the 7<sup>th</sup> International Symposium on Pavement Surface Characteristics (SURF 2012).
- Prepare two papers for the 2011 Annual Meeting of the Transportation Research Board.
- Prepare two presentations for Pavement Evaluation 2010 (PE 2010) conference.
- Prepare a paper for the First T&DI Congress (abstract accepted), being organized by ASCE March, 13-16, 2011 in Chicago, IL.
- DYNATEST HFT system scheduled demonstration at Penn State was cancelled. Additional requests by Maryland and Connecticut are now being worked into the schedule.
- After Arizona, an attempt will be made to demonstrate and loan the GripTester units to two additional state DOTs and evaluate the GripVal software.

<b>Budget Status:</b>			
Current FY Project Budget: \$ 355,540 (including cost share)		Project Budget Lifetime: \$ 1,070,465	
Current FY Expenditures: \$ 249,771	as of 05/31/10	Expenditures LTD:	\$ 762,846
Percent Expended this FY: 70 %	(Date)	Percent Expended LTD:	71 %
Timetable: Project is (check):			
On Schedule	$\boxtimes$		
Behind Schedule *	(explain abov	e)	
Ahead of Schedule			
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Preparer's Name and Signature: Gerar	rdo Flintsch	and list	Date: <u>05/31/10</u>
VTRC Staff Technical Monitor:			Date:
Reviewed and Approved By:(VTRC Associate Dir	rector)		Date:
Review Comments: (To be completed by	Research Director a	and Returned to Research	Manager)