

Research Progress Report

For Quarter Ending December 31, 2007

Today's Date 01/10/2008

Project Number	P	Project Title						
RT215	2	86 Implementation o	of Concrete	e Paven	nent Prese	ervation and PCC	Surface	
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Percent of Dollars Paid	Dollars A	Allocated	Dollars Pa	id	•	Percent Project	Completion	
2	617,000	.00	11,002.05			25		
Original Project Start Date		Original Project End I	*		t Completion Date			
			01/28/2011			•		
01/01/2007		01/28/2011			01/28/	2011 1 1		
DESCRIPTION OF RESEARCH				Start Date		Original	Completion	
Task Title					Task	Completion Date	Date	
Technical Evaluation and Coordination				01/29/2007		01/28/2011		
Field measurement and data colection of new and existing text				01/29/2007		09/30/2009		
Data Analysis and report writing				01/29/2007		01/28/2011		
State Technical Working Group administration				01/29/2007		01/30/2010		
Plan, Develop, and Execute Technology Transfer Experimen plan development			al	01/29/2007		01/28/2011		



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Accepted

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05/04/2007						

Primary Investigator Concerns, Problems, Needs or No-Cost Extension Requests

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Project Progress to Date and other pertinent information

Products and tangible results this quarter (reports/articles written, oral reports/reviews given):

- Surface characteristics "blog" initiated to present data and audio collected in Europe.
- Presentation given at ACPA Annual Meeting, November 30, 2007.
- Made presentations at NoiseCon'07 in Reno and ACPA Annual Meeting.
- Submitted a paper to the Noise Control Engineering Journal in response to an invitation.

Interaction with Technical Monitor and/or Project Advisory Committee:

Technical Advisory Committee conference call held on November 16, 2007.

Brief summary of this quarter's research:

- *Completion of the European data collection. Sites in Austria, Belgium, the Netherlands, and Germany were tested with the same equipment used on US sections.
- Development of the Texturing Guideline is just over 50% complete.
- Launched CPSCP website on SurfaceCharacteristics.com --- used as a portal for sharing data and perspectives.
- Further analysis of Aquated-SRTT database to establish correlation between test tires on various surfaces.

Difference varies from 0.7 to 3.0 dBA depending on specific surface.

- Further analysis of sound level variability as a function of windowing function and averaging time.
- Analysis of joint noise effects and its impact on overall noise levels of various test sections.
- Analysis of acoustical durability of Type 1 and 2 test sections.
- Development of standard methods for data reporting from test sites.
- Participated in Texas OBSI Rodeo providing data collected before and after European testing, and comparing to Texas DOT and UT Austin data.

Main emphasis for next quarter:

- Data analysis from Part 2 of the study is continuing, along with new data collected in Part 3.
- Continue work with Purdue TPTA project to understand joint effects on noise.
- Complete Texturing guidelines document
- Continue to pursue additional Type 1 sites.
- Work with Paul Donavan to identify variability sources and improve data presentation.

Subject surface characteristics Keywords surface characteristics