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TPF-5(299) Improving the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis

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TPF-5(299) Improving the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis - Outline

- Pooled Fund (PF) study formation
- Activities
- Consider Joining

TPF-5(299) Study Formation

- Started 2013
 - 1st meeting May 2014
 - 1st project contract award August 2015
- Why formed
- Administration

Why Formed

- **Industry changes**
 - Service
 - Technology
- **State changes**
 - Programmatic
 - MEPDG
- **National changes**
 - MAP-21 (Performance)
 - HPMS
- **Need to get data**
 - Efficiently
 - Accurately
 - Safely

Why Formed

Methodology	Fast	Safe	Repeatable and Objective
Walking			
Windshield	✓		
Semi-Automated	✓	✓	
Automated	✓	✓	✓

ETG Formed in 2006 - Members as of April 2013

- **FHWA**
 - Thomas Van, HQ Asset Management
 - Jack Springer, TFHRC
 - Andy Mergenmeier, RC
 - Mike Moravec, HQ Pavements
- **States**
 - Rick Miller, Kansas DOT
 - John Andrews, Maryland SHA
 - Magdy Mikhail, Texas DOT
 - Bouzid Choubane, Florida DOT
 - Cole Mullis, Oregon DOT
 - Judith Corley-Lay, North Carolina DOT
- **Industry**
 - Gary Elkins, MACTEC
 - Frank Holt, Dynatest
 - Jerry Daleiden, Fugro
 - Richard Fox-Ivey, Pavemetrics

Why Formed

- Rutting/Cracking Expert Task Group active for several years
 - Did not have the mechanism to conduct studies (\$\$\$\$)
 - April 2013 ETG recommended pooled fund study due to the success of TPF-5(063) Pavement Profiling effort. FHWA administrator

Activities

TPF-5(299) Objectives: Improve the Quality of Pavement Surface Distress and Transverse Profile Data Collection and Analysis by assembling SHAs, the FHWA, and industry representatives to:

- Identify data collection integrity and quality issues
- Identify data analysis needs
- Suggest approaches to addressing identified issues and needs

Based on this information, the SHAs and the FHWA will:

- Initiate and monitor projects intended to address identified issues and needs
- Disseminate results
- Assist in solution deployment

Activities

- Support RPUG
- Develop Research Needs Statements
 - AASHTO, TRB, FHWA – funding by others

Administration

- FHWA is administrator – use Federal contracting procedures
- Technical Advisory Committee – funding agencies
 - Approval
- Friends – all others
 - Provide input, collaboration, assistance
- Funding
 - TAC agency commitment - \$1.7 million
 - FHWA to date \$830k
 - AASHTO-NCHRP approved funding to date \$1 million

Activities

- Development of Standard Data Format for 2-Dimensional and 3-Dimensional (2D/3D) Pavement Image Data that is used to determine Pavement Surface Condition and Profiles – contract complete
 - Follow up contract for Independent Evaluation of Data Format– Georgia Tech, final report 2019

Activities

- TPF-5(299)/FHWA contract: “Calibration, Certification, and Verification of Transverse Pavement Profile Measurements”, Virginia Tech, final report 2020
- NCHRP 20-07/Task 411 Review and Update of AASHTO R87, Determining Pavement Deformation Parameters and Cross-Slope from Collected Transverse Profiles, contract expected to be awarded fall 2018 (1 year contract)

Cracking Data Collection and Analysis

- NCHRP 01-60, Measuring the Characteristics of Pavement Surface Images and Developing Standard Practices for Calibration, Certification, and Verification of Imaging Systems, award expected fall 2018, contract length 3 ½ years - data collection
- NCHRP 01-57A, Standard Definitions for Comparable Pavement Cracking Data, contract completion July 2019 - data analysis (AASHTO R 85)
- TPF-5(299)/FHWA contract: Developing Guidelines for Cracking Assessment for Use in Vendor Selection Process for Pavement Crack Data Collection/Analysis Systems and/or Services, QES, contract completion May 2019

TPF-5(299) Projects

- Jointed Concrete Pavement Faulting Collection and Analysis Standards, contract award expected fall 2018, contract length 3 ½ years
- Guidance for Quality Management of Pavement Surface Condition Data Collection and Analysis, contract award expected winter 2018/19, contract length 3 ½ years

Considering Joining

- 21 state DOT agencies providing funds
- Met yesterday
 - Chairman: Kevin McGhee, VTRC
- Pooled Fund Study SharePoint site:
 - <https://collaboration.fhwa.dot.gov/default.aspx>
 - Register
- Interest in joining TPF-5(299) – New Continuation Project:
<http://www.pooledfund.org/Details/Solicitation/1471>

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Questions/Comments