# TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

| Lead Agency (FHWA or State DOT          | [): Virginia DOT (VDOT)  |  |
|---|--------------------------|--|
| Load / igono, (i i i i i i i ciato Bo i | , ,. viigiina boi (vboi) |  |
|   |                          |  |

## **INSTRUCTIONS:**

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

| Transportation Pooled Fund Program Project # (i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)  TPF-5(345) Pavement Surface Properties Consortium  – A Research Program at the Virginia Smart Road Phase II |                                      | Transportation Pooled Fund Program - Report Period: |   |  |
|--|--------------------------------------|---|---|--|
|  |                                      | ☐ Quarter 1 (January 1 – March 31)                  |   |  |
|  |                                      | ☐ Quarter 2 (April 1 – June 30)                     |   |  |
|  |                                      | ☑ Quarter 3 (July 1 – September 30)                 |   |  |
|  |                                      | ☐ Quarter 4 (October 1 – December 31)               |   |  |
|  |                                      | = quarter + (Ostober + December 01)                 |   |  |
| Project Title:   |                                      |   |   |  |
| Pavement Surfa   | ace Properties C                     | onsortium: A Researc                                | h Program                               |  |
| Name of Project Manager(s): Phone Number   |                                      |   | E-Mail                                  |  |
| Kevin Kenneth McGhee   | (434) 293-1956                       |   | Kevin.McGhee@VDOT.Virginia.gov          |  |
| Lead Agency Project ID:<br>82650   | Other Project ID (i.e., contract #): |   | Project Start Date: 5/19/2016           |  |
| Original Project End Date:   | <b>Current Project</b>               |   | Number of Extensions:                   |  |
| 2/28/2022  | 2/:                                  | 28/2022   |   |  |
| Project schedule status:   |                                      |   |   |  |
| ✓ On schedule ☐ On revised sche  | dula 🗆                               | Ahead of schedule                                   | ☐ Behind schedule                       |  |
| ☑ On scriedule ☐ On revised scrie  | edule $\square$ A                    | Ariead of schedule                                  | □ Beriiria scriedule                    |  |
| Overall Project Statistics:  |                                      |   |   |  |
| Total Project Budget   | Total Cos                            | t to Date for Project                               | Percentage of Work<br>Completed to Date |  |
| \$832,181*   |                                      | \$176,284   | 21%                                     |  |

## **Quarterly** Project Statistics:

| Total Project Expenses and Percentage This Quarter | Total Amount of Funds<br>Expended This Quarter | Total Percentage of<br>Time Used to Date |
|--|--|--|
| \$80,927 (12%)                                     | \$80,927                                       | 12%                                      |

<sup>\*</sup>Committed; the actual contracted budget is \$159,981 (VTTI) and \$28,398 (TTI)

## **Project Description:**

Through a regional pooled fund, this program of research focuses on optimizing pavement surface texture characteristics. Phase I of the program demonstrated that a collaborative research program can provide an accessible and efficient way for highway agencies and other organizations to conduct research on pavement surface properties. This second phase focuses on addressing some of the emerging challenges in the evaluation of pavement surface properties and the changes needed to best support the next generation of pavement and asset management systems, including support for MAP21-related initiatives. The program includes the following main broad activities: (1) equipment rodeos, (2) technology transfer, and (3) research on emerging topics.

## Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

- Analyzed the data from the 11<sup>th</sup> Annual Surface Properties Rodeo at the Smart Road in Blacksburg, VA in June 6-10, 2017.
- Held a webinar to summarize and prioritize specific activities moving forward.
- Submitted the following papers related to the consortium activities for the Annual Meeting of the Transportation research Board:
  - o Interconversion of looked-wheel and CFME friction measurements (18-04991)
  - o Impact of surface cleaning on pavement skid resistance inside tunnel (18-05047);
  - Comparison of locked wheel and continuous friction measurement equipment (18-01277).
- Organized the TPF-5(345) mid-year meeting during the RPUG 2017 in Denver, CO.
- Proposed the following abstract for the 2017 road profiler user group Meeting:
  - o TPF-5(345) Pooled Fund Update (McGhee)
  - o Guidance for Predicting and Mitigating Hydroplaning (Flintsch)
  - o Pavement Macrotexture: State of the art and Practice (Bongioanni)
  - o Pavement Friction Management (de León)
- Proposed the following abstract for the 8<sup>th</sup> Symposium on Pavement Surface Characteristics: SURF 2018.
  - o Initial results of the Federal Highway Administration Pavement Friction Management (PFM) Support Program;
  - A simplified method for interconversion of friction measurement equipment;
  - o Mechanistic approach for predicting and mitigating dynamic hydroplaning.

#### Anticipated work next quarter:

- Participate and present at the RPUG 2017in Denver, CO.
- Hold the TPF-5(345) mid-year meeting during the RPUG 2017.
- Decide the location of the 2018 Annual Surface Properties Rodeo.
- Prepare and submit the final versions of the TRB papers.
- Prepare and submit the SURF 2018 papers.

#### Significant Results:

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

No problems were encountered in this quarter.

| Potential Implementation: |  |  |
|---------------------------|--|--|
|                           |  |  |
|                           |  |  |