**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Date: \_September 31, 2017\_\_\_\_\_\_\_\_

Lead Agency (FHWA or State DOT): Texas Department of Transportation (TxDOT)\_\_\_\_\_\_\_\_\_\_\_

**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.*

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| **Transportation Pooled Fund Program Federal Project #** SPR TPF5 (198) \*Previously SPR-3(049) | **Transportation Pooled Fund Program - Report Period:**□Quarter 1 (January 1 – March 31, 2017)□Quarter 2 (April 1 – June 30, 2017)XQuarter 3 (July 1 – September 30, 2017)□Quarter 4 (October 1 – December 31, 2017) |
| **Project Title:**Mobility Measurement in Urban Transportation (MMUT) FYs 2016-2017 |
| **Name of Project Manager(s):**Casey Dusza | **Phone Number:**(512) 486-5149 | **E-Mail**Casey.Dusza@txdot.gov  |
| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):**TxDOT contract 50-0XXIA00120000007568 *(starting 9/1/15)* | **Project Start Date:**9/8/08 |
| **Original Project End Date:**8/31/13 | **Current Project End Date:**8/31/19 | **Number of Extensions:** |

Project schedule status:

x On schedule □ On revised schedule □ Ahead of schedule □ Behind schedule

Overall Project Statistics:

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|  **Total Project Budget** |  **Total Cost to Date for Project** |  **Percentage of Work**  **Completed to Date** |
| $3,435,000 | $2,964,146 | % |

***Quarterly*** Project Statistics:

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|  **Total Project Expenses**  **and Percentage This Quarter** |  **Total Amount of Funds**  **Expended This Quarter** |  **Total Percentage of**  **Time Used to Date** |
|  | $0 |  |

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| **Project Description**:

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| **Background:**This study will be a continuation of existing project SPR-3(049) – now SPR TPF5 (198) – with the same scope, objectives, and contractor (TTI).  |
| **Objectives:**1) Investigation of new and emerging datasets for mobility analyses; conduct evaluations of datasets for new and traditional uses. Continued analysis of the NPMRDS.2) Investigation of arterial route reliability estimation, estimating reference speed, and bottleneck identification in the arterial environment. Documentation of current and evolving practices related to arterial performance monitoring andreliability estimation.3) Demonstrations of the target setting practices; provide additional support for MAP‐21/NPRM performance measure estimation.4) Conduct syntheses on key topic areas of interest to the pooled fund sponsors.5) Assistance to sponsoring agencies in the application of products in their operations, planning and performance measurement activities within their agency. Respond to requests for mobility data. 6) Develop and demonstrate data integration framework by illustrating how data integration can inform investment decisions and project prioritization.7) Implementation of an annual mobility performance report that describes all the steps and processes necessary to develop a yearly performance report. |

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| **Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):** Work is underway on all tasks for FY 2018. MMUT FY 2018 scope includes topics from 2017 and new topics as listed in the “Objectives” above. Task 1: Finalized updates to recalculation processes and mapping methods to compute the PM3 Final Rule measures. Coordinating with UMD CATT Lab staff regarding their NPMRDS RITIS-based calculations, and work toward validating these RITIS-based calculations with TTI's calculations. Began downloading and processing travel time data for MMUT states and calculating MAP-21 measures with updated code/analytics for comparison with UMD CATT Lab RITIS for MAP-21 measure results.Task 2: Finalized a methodology to generate reference speeds to accompany a given speed dataset regardless of functional classification of roadway. Distributed the methodology to the MMUT states. Completed preliminary investigation of the effects of this methodology on delay (non-Federal measures). Began detailed review of NPMRDS federal measure requirements and calculation procedures for measure sensitivity analysis for a given reference speed calculation method. Began accessibility measure review and data source investigation. Task 3: Finalized follow-up work on factors impacting target results and sensitivity using available speed datasets. Updated draft report (previously sent in January) based on sponsor comments and delivered it to sponsoring states. TTI began to geospatially identify MPO regions in an existing roadway network to break down performance measure calculations by MPO and non-MPO areas for sponsoring state DOTs. Task 4: Began gathering information for the visualization tools synthesis and the update to the Keys to Estimating Mobility Report.Task 5: Completed assembly of packet of FY2017 deliverables for distribution to sponsors. Sponsor communication and support via telephone calls and email correspondence. Task 6: Additional travel reimbursements for project sponsors were processed. Final hotel bill was processed for annual meeting.Task 7: Meeting minutes for task kickoff meeting (held in Baltimore, MD) were developed and distributed to all pooled fund sponsors. Developed data integration framework and distributed framework for data integration process to all pooled fund sponsors. Began investigating database layers (pavement, bridge, AADT, % trucks) to compute additional layers, including truck volumes. Performed quality assurance/quality control steps in data manipulation.Task 8: Performed review of datasets received from Colorado Department of Transportation. Began conflation process of Colorado volume and speed data. Began work on framework for the Colorado Mobility Performance Report. |
| **Anticipated work next quarter**: Work will continue on the tasks under the contract for FY 2018.Task 1: Continue downloading and processing travel time data for MMUT states.Task 2: Continue to review of NPMRDS federal measure requirements and calculation procedures for measure sensitivity analysis for a given reference speed calculation method.Task 3: Continue to geospatially identify MPO regions in an existing roadway network to break down performance measure calculations by MPO and non-MPO areas for sponsoring state DOTs. Task 4: Continue to work on updates to the Keys to Estimating Mobility Report.Task 5: Continue to support sponsors via telephone and email. Task 6: Planning for annual meeting in 2019. Task 7: Continue investigation of database layers to compute additional layers, including truck volumes.Task 8: Continue conflation process of Colorado volume and speed data. |

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| **Significant Results:**  See Progress; noted deliverables. |
| **Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that** **might affect the completion of the project within the time, scope and fiscal constraints set forth in the** **Agreement, along with recommended solutions to those problems).**None during this quarter or expected during the next quarter. |

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| **Potential Implementation:** Work this quarter will have positive impacts (research and guidance) for all participating states with regard to evaluating datasets, arterial performance monitoring, performance measures and target setting under MAP-21 and FAST Act for system performance and freight.  |