**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

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

**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 #**  SPR TPF-5(440)  \*Previously SPR TPF-5(198) | | **Transportation Pooled Fund Program - Report Period:**  x Quarter 1 (January 1 – March 31)  □ Quarter 2 (April 1 – June 30)  □ Quarter 3 (July 1 – September 30)  □ Quarter 4 (October 1 – December 31) | |
| **Project Title:**  Support for Urban Mobility Analyses (SUMA) | | | |
| **Name of Project Manager(s):**  Casey Wells | **Phone Number:**  (512) 423-8986 | | **E-Mail**  Casey.Wells@txdot.gov |
| **Lead Agency Project ID:**  22203 | **Other Project ID (i.e., contract #):**  SPR TPF 1505 | | **Project Start Date:**  09/01/21 |
| **Original Project End Date:**  8/31/23 | **Current Project End Date:**  08/31/23 | | **Number of Extensions:**  0 |

Project schedule status:

X On schedule □ On revised schedule □ Ahead of schedule □ Behind schedule

Overall Project Statistics:

|  |  |  |
| --- | --- | --- |
| **Total Project Budget** | **Total Cost to Date for Project** | **Percentage of Work**  **Completed to Date** |
| $900,000 | $604,972 | 68% |

***Quarterly*** Project Statistics:

|  |  |  |
| --- | --- | --- |
| **Total Project Expenses**  **and Percentage This Quarter** | **Total Amount of Funds**  **Expended This Quarter** | **Total Percentage of**  **Time Used to Date** |
| $90,638.03 | **$90,638.03** | % |

|  |
| --- |
| **Project Description**:  **Background:**  This study is a continuation of project SPR TPF-5(198), now TPF-5(440), with the same scope, objectives and contractor  (Texas A&M Transportation Institute – TTI).  **Objectives:**  The PFS scope focuses on urban mobility and reliability performance measures, data and issues. New emphasis areas  include emerging data sources, freight movement, arterial street mobility issues, reliability performance measures, and addressing the agency challenges for FAST Act requirements. These objectives are satisfied through work in the  following 6 Task areas:  Task 1: Evaluate Mobility Datasets – investigating new and emerging datasets for mobility and origin-destination analyses.  Task 2:Understanding Traffic Reduction Impacts on Key Performance Measures – evaluate the relationships between reductions in traffic and standard mobility and reliability performance measures.  Task 3: Develop Performance Assessment and Evaluation Analytical Tools – expand the performance measures included in the Future Improvement Examination Implementation Tool (FIXiT).  Task 4: Syntheses Development – developing syntheses on key topic areas related to urban mobility at sponsor direction.  Task 5: Support Sponsoring Agencies – provide assistance to sponsors on application of products in their planning,  operations and performance measurement activities and provide contract project management functions.  Task 6: Meeting Support – plan, develop and implement a peer exchange for sponsors to discuss work task accomplishments, develop the future work plan and peer exchange with each other. |

|  |
| --- |
| **Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**  Information is provided below for each task (as defined in section above):  Task 1: Prepared and delivered a presentation on Evaluate Mobility Datasets and Emerging Tools on January 31st and gathered feedback and to kick-off the peer exchange effort. Worked on the design and development of the peer exchange website and the collection of passive data and analysis code to populate the website.  Task 2: TTI attended meeting sessions on transportation equity planning and evaluation at this year’s TRB meeting. Began obtaining social-economic and Google mobility data for 2021 and 2022. Continued research on statistical measures for incorporating dispersion in variables to inform the performance measurement process. Started documenting current approaches and initiatives in the US for transportation equity monitoring from online resources and the literature. Collected and analyzed 2021 population, employment, and personal income data (still waiting on the 2022 data). Analyzed 2021 Google mobility data.  Task 3: Tested the new features (inputs for fuel consumption, value of time, treatment type0 and deployed them to the production site. Fixed bugs identified in the testing process. Worked on the methodology to add level-of-service to FIXiT. Developed draft one-page for two (2) mobility improvement treatments. Compared formulas to Excel tool and corrected any inconsistencies. Tested tool by running multiple analyses with minor changes in settings and evaluating results. Redesigned the layout of the FIXiT tool for improved user experience. Completed the metric conversion function.  Task 4: Began coordinating with TTI Communications to create a visually appealing and easy-to-understand roadmap document. Refined and finalized a draft version of the Equity Roadmap to distribute among internal experts within TTI for review and feedback. Began internal review process of the updated equity roadmap concept and prepared for additional charettes on the topic (with TTI internal experts).  Task 5: Conducted sponsor communication and support via telephone calls and email correspondence.  Began agenda preparations for this year’s annual meeting. Began collecting preliminary ideas for the next scope.  Task 6: No salary charged this quarter. |
| **Anticipated work next quarter**:  Task 1: Continue development of the peer exchange website to populate with passive data applications and/or analysis code to assist in evaluating mobility datasets.  Task 2: Continue evaluating performance metric improvements as it relates to traffic reduction and transportation mobility.  Task 3: Continue working on updates to the FIXiT tool based on input identified by users during the development and testing phase of the tool.  Task 4: Continue investigating and defining best practice in transportation equity.  Task 5: Continue working on annual meeting preparations and providing communication support via telephone, email, or virtual meetings.  Task 6: Annual meeting support anticipated in the next quarter. |

|  |
| --- |
| **Significant Results:**  See “Progress this Quarter,” and noted deliverables in that section. |
| **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. |

|  |
| --- |
| **Potential Implementation:**  Work this quarter has numerous positive impacts on sponsoring-agency decision-making, including:   * Evaluating (and understanding) mobility datasets, particularly origin-destination data (Task 1) * Recognizing impacts of the COVID-19 pandemic on travel behavior (Task 2) * Describing the methodology and updates to the FIXiT Tool that will also serve as a User Guide (Task 3) * Defining transportation equity and the assessment impact on planning, policy, and processes (Task 4) |