TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Virginia DOT

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-(206)	**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)	
Project Title: Program to Support the Development and Deployment of Cooperative Transportation Systems Applications		
Name of Project Manager(s): Catherine McGhee	**Phone Number:** 434-293-1973	**E-Mail** Cathy.McGhee@VDOT.Virginia.gov
Lead Agency Project ID: 97199/90712	**Other Project ID (i.e., contract #):** 133471-GS10961	**Project Start Date:** July 2009
Original Project End Date: June 2011	**Current Project End Date:** December 2014	**Number of Extensions:** 1

Project schedule status:

☑ 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
$2,340,000	$1,269,192	54%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
N/A	$85,902	N/A

Project Description:

The pooled fund study entitled "Program to Support the Development and Deployment of Cooperative Transportation Systems Applications" was created by a group of state and local transportation agencies and FHWA in order to provide a means to conduct the work necessary for infrastructure providers to play a leading role in advancing the Cooperative Transportation Systems.

Objective:

Through a set of pooled fund studies, the Virginia Department of Transportation (VDOT) is working with federal, state and local departments of transportation, to establish a multi-phase program to facilitate the field demonstration, and deployment of Connected Transportation Systems infrastructure applications. In Phase I, the participants are focused on modeling, development, engineering and planning activities that will aid transportation agencies in justifying and promoting the large scale deployment of Connected Transportation Systems. Phase 2 of the program will continue research and development to prepare agencies to deploy connected vehicle environments.

Scope of Work:

The pooled fund study will focus on the following:
• Development and evaluation of Connected Transportation Systems large-scale system level operations applications
• Independently research and address issues that will affect the deployment of Connected Vehicle systems by state and local transportation agencies
• Support AASHTO's Strategic and Deployment Plans
• Support USDOT's Connected Vehicles Programs and initiatives

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

1. Pooled Fund Study Overall
a. A monthly regular conference call with all pooled fund study members was initiated and the first call was held on February 22nd 1:00-2:00EST.

2. Round 3 Research Program
a. Traffic Management Centers in a Connected Vehicle Environment
i. The contract was established with Kimley-Horn on February 5th and a kickoff call was held on Friday, February 15th:
b. 5.9GHz Dedicated Short Range Communication Vehicle Based Road and Weather Condition Application
i. The contract was established with Synesis on March 25th and a kickoff call will be held on Wednesday, April 3rd.

3. PFS Dynamic Mobility Application Project
a. A no cost extension until May 6 (initially February 28) was granted.
b. Task3. System Requirements - The final system requirement document was delivered on January 28th.

4. PFS DMA Phase II
a. At a PFS monthly conference call on February 22nd, several items for planning the next phase PFS DMA project were discussed. These included:
i. Period: 18 months (July 2013 – December 2014)
ii. Budget: contributions from USDOT, California, Maricopa, and PFS
iii. Procurement method: Extending the existing contract with U of Arizona
iv. Statement of work
b. Based on the results, the PFS management team had a follow-up call with the contractor on February 27th.

Anticipated work next quarter:

1. Pooled Fund Study Overall
a. Next face-to-face meeting planning will be conducted targeting Ann Arbor, Michigan on June 25-27 (Tuesday-Thursday). Tentative agenda items include AASHTO, PFS, and Michigan Testbed demo/tour.

2. Round 3 Research Program
a. The tasks will be performed as planned for the following two projects
i. Traffic Management Centers in a Connected Vehicle Environment
ii. 5.9GHz Dedicated Short Range Communication Vehicle Based Road and Weather Condition Application

3. PFS Dynamic Mobility Application Project
a. Task4. Final System Design – will be completed in April
b. Task5. Final Deployment and Field Test Plan – will be completed in May

4. PFS DMA Phase II
a. The contractor (University of Arizona) will continue to prepare a scope and budget document for the next phase PFS DMA project. This draft document will be discussed at the next PFS monthly call on April 5th.
b. Next Steps
i. Scope/budget finalization
ii. Commitment from USDOT, CalTrans, and Maricopa County by the end of April
iii. Revise contract between UVA and VDOT in May
iv. Revise contract between UVA and U of Arizona in June

Significant Results:

1. Two round 3 projects were initiated.

2. Based on the accomplishments from the current PFS DMA project, the pooled fund study team and US DOT have agreed to pursue the next phase of the PFS DMA project. PFS team initiated a discussion on the scope and budget of the Phase II PFS DMA project.

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).

No problems have been encountered to date.

Potential Implementation:

The Multi-Modal Intelligent Traffic Signal System will be deployed in the selected location in the next phase of the PFS DMA program.