# 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 |
|---|---|---|
| $4,360,000 | $2,022,131 | 50% |

***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 | $219,497 | 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. PFS monthly calls were held on February 7th, February 28th and March 28th.
   b. A face-to-face meeting on May 28-29 in Blacksburg, Virginia is being planned.
   c. Pennsylvania DOT presented their activities to PFS members.
   d. Walt Fehr (US DOT) presented the Connected Vehicle Reference Implementation Architecture (CVRIA) to PFS.

2. PFS Dynamic Mobility Application Phase II
   a. A call with the Impact Assessment contractor was held on 1/22.
   b. A two-day meeting for critical design review was held on March 3-4 in Phoenix, AZ.

3. Round 3 Research Program
   a. 5.9GHz Dedicated Short Range Communication Vehicle Based Road and Weather Condition Application
      i. Bi-weekly project status calls were continued.
      ii. Task3: Application Development – on-going as planned
      iii. Task4: Application Installation and Testing – on-going as planned.
      iv. A no-cost-extension until 12/31/2014 was granted.

4. Round 4 Research Program
   a. Based on the discussion at the December 4th meeting in Irvine, the candidate project idea list was prepared.
   b. Finally, two project were selected for the 4th round of the research program.
      i. Surveying/Mapping for CV Applications ($150,000 / 12 months)
      ii. Near Term Deployable V2I Application ($100,000 / 12 months)

**Anticipated work next quarter**:

1. Pooled Fund Study Overall
   a. PFS monthly calls will be held in each month.
   b. A face-to-face meeting will be held on May 28-29 in Blacksburg, Virginia.

2. PFS Dynamic Mobility Application Phase II
   a. On-going as planned.

3. Round 3 Research Program
   a. 5.9GHz Dedicated Short Range Communication Vehicle Based Road and Weather Condition Application
      i. Bi-weekly project status calls will continue.
      ii. Task3: Application Development – on-going as planned.
      iii. Task4: Application Installation and Testing – on-going as planned.

4. Round 4 Research Program
   a. Scoping and a necessary contracting procedure will be initiated for two selected projects.

**Significant Results:**

1. Two round 3 projects have been being conducted as planned.

2. Two projects were selected for the next round of the research program.

**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.