

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Maryland State Highway Administration

### 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.*

<b>Transportation Pooled Fund Program Project #</b>  TPF-5(252)	<b>Transportation Pooled Fund Program - Report Period:</b>  <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> I-95 Corridor Coalition Vehicle Probe Project		
<b>Name of Project Manager(s):</b> Kathleen Frankle	<b>Phone Number:</b> 410-414-2925	<b>E-Mail</b> <a href="mailto:kfrankle@umd.edu">kfrankle@umd.edu</a>
<b>Lead Agency Project ID:</b> TPF-5(252)	<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b> July 1, 2011
<b>Original Project End Date:</b> June 30, 2014	<b>Current Project End Date:</b> June 30, 2014	<b>Number of Extensions:</b>

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
\$605,178	\$311,213.25	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
	\$48,993.88	50 %

**Project Description:**

I-95 Corridor Coalition began an initiative in 2008 called the Vehicle Probe Project with the ambition of providing comprehensive and continuous travel time information on freeways and arterials from Maine to Florida using non-intrusive technologies based on vehicle probe methods. A collaborative effort among the I-95 Corridor Coalition members, the vehicle probe project envisioned a system that provided travel time and speed data for corridors that facilities interstate as well as intra-state movement.

The coverage area of the initial stage of the project was approximately 1,500 centerline freeway miles from New Jersey through North Carolina that began on July 1, 2008. The initial stage emphasized the delivery of quality data on freeways that provided through movement along the I-95 corridor. This included I-95, parallel freeways to I-95, and freeway and arterials that cross-linked these facilities and provided detour routes in the event of heavy congestion or incidents on the primary routes. The first stage has proved effective to monitor freeway travel times and speeds within the accuracy specifications in order to enable a variety of applications, most of which were operations based in nature. Since the initiation of the project, the geographic coverage of the system has been expanded to approximately 4,700 centerline miles of freeway and includes the entire limited access road network in New Jersey, and the entire interstate systems for North Carolina and South Carolina.

Participating I-95 Corridor Coalition member agencies have found numerous uses for the vehicle probe data, including:

- Travel Information for 511 (web and phone) Systems, Dynamic Message Signs, and Kiosks
- Travel Time Calculations for Message Boards
- Performance Measures and Travel Time Reliability Support
- Traffic Pattern Observations (in-state and multi-state)
- Trip Planning ([www.i95travelinfo.net](http://www.i95travelinfo.net))
- Analysis and evaluation of archived data for research on travel behavior

**Objective:** The objective of the second phase of the project is to continue to push forward to realize the entire vision of the Vehicle Probe Project, that of an ubiquitous and high quality source of travel time and speed data creating a seamless traffic monitoring system that spans the entire eastern seaboard using probe technology, and driving a variety of applications. The applications include not only Operations, but also Planning and Engineering, and not only existing applications, but also uses of the data not previously leveraged.

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

The data provided by the VPP continues to be within specification for accuracy. With additional funding, data collection for the purposes of validation continued in the fall of 2012 with data collection in New Jersey in September 2012, Connecticut, October 2012, and Pennsylvania in December 2012. The New Jersey validation report is pending publication after state review and the Connecticut validation report is in draft. Not only were the results from both validations well within quality specifications, the quality scores achieved in the Connecticut validation were the best ever recorded. Work also continues on developing appropriate specifications, validation procedures and pricing for arterial data. Preliminary results were shared in regional ITS and ITE forums, and a briefing to the coalition is scheduled for Jan 10, 2013. The results of the latest analytical efforts are anticipated to be incorporated into the validation process moving forward.

Planning organizations such as MPOs and state planning departments continue to take a heightened interest in the VPP data archive available through the Regional Integrated Transportation Information System. This has resulted in continued development of the VPP suite, a central archive of VPP data and analysis tools. UMD supports this initiative through participation in regional forums to inform operations and planning personnel of available resources and to

solicit feedback on tools to develop to further enhance the VPP suite.

UMD continues to support management team and project team meetings with validation reports, budget reports, and information related to new members accessing the data feed (and signing the data use agreement.) A session was hosted at the Pennsylvania Transportation and Safety Conference in December of 2012 on several aspects of the VPP. It included an overview of the data feed with recent enhancements, a review of the VPP suite in RITIS, and summary of the arterial data quality work. Project and management team meetings for this project included: Nov 1, 2012, Management Team Meeting; Nov 13, 2012, Project Team Meeting; and Nov 28, 2012, Management Team Meeting.

**Anticipated work next quarter:**

Continue to provide data to participating states through the web-based data feed, project monitoring web site and archived data web site.

Coordination between the INRIX (the contractor), the I-95 Corridor Coalition, the University of Maryland, and individual Coalition members.

Validation efforts.

**Significant Results:**

**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).**

N/A

**Potential Implementation:**