TPF-5(206): Research Program to Support the Research, Development, and Deployment of System Operations Applications of Vehicle Infrastructure Integration (VII)

Final Deliverables

Pooled Fund Objectives

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.

Final Deliverables

The pooled fund study conducted a large program of projects over the course of its life, each of which resulted in multiple deliverables. Given the large number of reports generated during this study, each individual report has not been uploaded to the pooled fund website. Instead, project reports can be accessed at the link below:

https://engineering.virginia.edu/cvpfs-public-access-materials

Specific project reports that were completed using funding from TPF-5(206) that can be found at the website listed above. Projects that were conducted during TPF-5(206) include:

- 5.9 GHz DSRC Vehicle-Based Road and Weather Condition Application
- Basic Infrastructure Message Development and Standards Support
- Surveying/Mapping Roadways and Intersections for CV Applications – Best Practices
- Traffic Management Centers in a Connected Vehicle Environment
- Aftermarket On-Board Equipment for Cooperative Transportation Systems: Enabling Accelerated Installation
- Certification Program for Cooperative Transportation Systems
- Connected Traffic Control System (CTCS): Research Planning and Concept Development
- V2I Queue Advisory/Warning
- Using Third Parties to Deliver I2V
- Multi-Modal Intelligent Traffic Signal System (MMITSS)

More detailed information on each of these projects can be found at the link.