

## **CTB Innovation and Technology Subcommittee Meeting**

Meeting Minutes  
April 17, 2018, 8:30 AM  
VDOT Central Office  
1401 E. Broad Street  
Richmond, VA 23019

### **CTB Members Present:**

Secretary Shannon Valentine  
Hap Connors, Jr.  
Alison De Truncq  
Mary H. Hynes  
Scott Kasprowicz  
Stephen A. Johnsen  
Court G. Rosen

Mr. Connors called the meeting to order at 8:30 AM.

### **Agenda Items**

#### **1. Drone Peer Exchange Overview**

Ms. Catherine McGhee provided an update about the recent peer exchange with multiple state Departments of Transportation regarding Unmanned Aerial System (UAS) technologies. The state members agreed that successful UAS programs have executive support, a dedicated coordinator, and a dedicated funding source. The changing federal regulations regarding UAS are challenging. Attendees agreed that a successful UAS program has a balance of in-house and contracted services. UAS use for incident response should be conducted by in-house resources. Surveying can be done with contracted resources. UAS maintenance issues were also noted.

Mr. Kasprowicz inquired about new applications of UAS. Ms. McGhee stated that one state is using UAS for confined space related inspections. Ms. McGhee stated that Colorado was using the technology for slope monitoring. Several states are using the technology for traffic monitoring and incident management. Also, states use UAS for bridge and paving conditions; such as bridge deck assessments and pavement cracks. It was that UAS can be used for volumetric analysis such as monitoring the amount of on-hand materials.

Ms. McGhee stated that VDOT will hold an internal meeting next week to discuss our program and decide what applications should advance. It was noted that planning for UAS use with highway accident reconstructions are already underway.

Subcommittee members asked if VDOT was working with other agencies and universities. Ms. McGhee stated that VDOT is working with the Department of Aviation and different schools.

## 2. Update on Fiber Study

Ms. Felishia Ballou-Thornton provided a presentation on the fiber study. Ms. Ballou-Thornton revisited the study's Phase 1 objectives and stakeholders. It was noted that the study will be completed on schedule in June 2018. A presentation will then be available to the Board. Secretary Valentine recommended including the Center of Innovative Technology as a project stakeholder.

## 3. Update on Datathons using SmarterRoads data

Ms. Virginia Lingham updated the Subcommittee about upcoming Datathons. The next event is scheduled April 27 through April 28, 2018, at the 1701 Virginia Beach Coworking facility. Ms. Lingham reviewed the agenda of the event and noted that three event sponsors were secured. Prizes for the event will include an opportunity for the winning teams to discuss their ideas further with VDOT management and members of the Center of Innovative Technology.

Ms. Lingham stated that the May 4 through May 5, 2018, event in Roanoke will need to be rescheduled.

Ms. Lingham stated that 20 individuals registered for the upcoming event. The number is expected to increase. The event would like 8 to 12 team submissions.

## 4. Update on Virginia's selection as a Smart Cities Readiness Challenge Grant Winner

Mr. David Ihrie, Chief Technology Officer for the Center of Innovative Technology (CIT), provided a presentation regarding Virginia Smart Communities and VDOT Collaboration. Mr. Ihrie stated that Smart Cities are advancing communities through data analytics. For example, Baltimore reduced medical costs by identifying homeless populations.

Kansas City provided Smart Street Lighting in targeted areas to reduce crime and increase economic opportunities.

There are opportunities to strengthen collaboration and pilot Smart City programs in Virginia.

The CIT is leading several projects across the Commonwealth, including efforts with the first responder communities. A Smart Communities working group has been established. The CIT also supports the Datathons programs. A unified vision regarding Smart Communities is desired for Virginia. Three challenges are

1. Improving government services
2. Data sharing and governance
3. Digital divide to bring benefits to every citizen in the Commonwealth.

Mr. Ihrie recommended to lower barriers for entry for communities to participate, finding a unified privacy/cybersecurity solution, and to create a Chief Data Officer.

Mr. Ihrie discussed the Smart City Council Workshop held in September which included activities with energy, transportation and public safety sectors. The outcomes included identifying community priorities, state capabilities, initial pilot projects, and legislative package. The 2018 schedule of activities include technology showcases, Datathons, and demonstrations.

Secretary Valentine requested Department of Rail and Public Transportation participate with the effort.

Ms. Mary Hynes recommended that the program planners remember to engage localities with an emphasis on identifying the community's needs and the benefits for communities. Secretary Valentine recommended identifying methods to measure the success of the program. Mr. Ihrie stated that the Smart City effort can act like a clearing house for solutions.

Mr. Johnsen asked how the program defines cities to engage smaller cities and rural populations. Mr. Ihrie stated that the program is mean to include all communities. However, the solutions can vary for each community.

## 5. General Discussion

- Rest Area Truck Parking Management System:

- Mr. Ken Earnest updated the Subcommittee about the rest area truck parking management system. Six sites are operational; the I-66 EB rest area in Front Royal, Virginia, and five sites developed by the I-95 Corridor Coalition.
- The bid package for the I-81 and I-95 corridor rest areas is completed and is awaiting final approval for advertisement. The advertisement will occur after reviewing the concerns raised by the private sector regarding the rest area parking management system program. There is a concern that the new system will impact business at nearby private sector facilities. Private sector parking facilities are encouraged to participate in the program which can be expanded to include other non-rest area facilities. Mr. Earnest stated that the bid package may have a line item to include the maintenance cost of the new system as the equipment is non-standard for VDOT to include in existing maintenance contracts. ITTF funding may be considered for this cost to support the pilot effort.
- Mr. Cary stated that funding from the existing ITTF Hard Shoulder Running project may be used for this and other emerging technology projects.
- Advanced Traffic Management System:
  - Mr. Ken Earnest updated the Subcommittee about the Advanced Traffic Management System effort. VDOT briefed the Board about this project award in July 2016. The project has multiple releases to provide a statewide ATMS for advanced data sharing to coordinate agency operation and emergency response.
  - The project will use ITTF funding to complete the effort.

## 6. Overview of DRPT Activities (Jennifer DeBruhl)

Ms. Jennifer DeBruhl updated the Subcommittee on multiple project activities at the Department of Rail & Public Transportation. The DRPT has a pilot project to install driver assistance technology on 50 transit vehicles in Lynchburg. The DRPT was approached by Volpe to evaluate this strategy.

Ms. DeBruhl stated that the DRPT has an active procurement to develop an integrated mobility plan. One of the goals of the program is for the state to take the lead on this initiative.

Ms. DeBruhl also stated that there is a program to develop a statewide ride sharing app. This effort is being planned with the Roanoke MPO.

Hap Connors thanked Ms. DeBruhl and asked requested that the DRPT attend future subcommittee meetings.

Secretary Valentine thanked the presenters and attendees for participating in the subcommittee meeting. At future meetings, a sign-up sheet will be available with an opportunity to provide public comments.

Mr. Connors adjourned the meeting at 9:30 AM.