

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

Meeting Minutes

September 27, 2016 at 9:00 a.m.

Virginia Tech Transportation Institute (VTTI) Site Visit  
3500 Transportation Research Drive  
Blacksburg, Virginia

### **CTB Members present:**

Hap Connors, Jr.  
Scott Kasprowicz  
Alison DeTuncq  
Court Rosen  
Shannon Valentine  
William Fralin  
Mary Hynes Hughes

Mr. Connors called the meeting to order at 9:19 a.m. and made brief introductory remarks about the role of the CTB Subcommittee and the goals for the meeting. Introductory remarks were also made by Mr. Rosen, Mr. Fralin, Mr. Kasprowicz, Ms. DeTuncq, Ms. Valentine and Ms. Hughes. All meeting participants introduced themselves at the invitation of Mr. Connors.

### **1. Presentations**

#### ***A Broad Partnership to Place Virginia (and Virginia Tech) as a Global Destination for Intelligent Infrastructure and Smart Cities***

Dr. Thanassis Rikakis, Executive Vice President and Provost, Virginia Tech

Dr. Rikakis provided an overview of the Virginia Tech framework to advance Intelligent Infrastructure and Smart Cities. Emphasis areas include automated vehicle systems, smart design and construction, integrate energy systems, decision systems and infrastructure as CPS (cyber physical system). Current and proposed research facilities were shown regarding researching and testing related technologies and strategies. The needs for resources and a consortium were discussed.

#### ***Advancing Transportation Through Innovation: VTTI and Our Role in the Intelligent Infrastructure Initiative***

Dr. Tom Dingus, Director, Virginia Tech Transportation Institute

Dr. Dignus reviewed the growth and capabilities of the Virginia Tech Transportation Institute (VTTI). An overview of the Smart Road, Automated Vehicle System study, and

the Virginia Automated Corridor was provided. A discussion of the Smart Road expansion project was discussed.

***Acceleganza! Launching an Accelerator for:  
Smart Cities, Transportation, Community Resilience***

Mr. David Ihrle, Chief Technology Officer, Center for Innovative Technology

Mr. Ihrle discussed the role and growth of the Center for Innovative Technology (CIT) as business accelerators. The CIT has one of the top accelerator counts in the country. The return on investment of efforts is significant. The CIT will launch a Northern Virginia Smart City accelerator with a pilot cohort in early 2017. The Smart City will include transportation as a component.

***Transportation Operations Data Portal***

Mr. Dean Gustafson, PE, PTOE, State Operations Engineer, Virginia Department of Transportation

Mr. Murali Rao, Chief Information Officer, Virginia Department of Transportation

Mr. Gustafson and Mr. Rao provided an update on VDOT's efforts to accelerate the connected and automated vehicle programs through development of a transportation data portal. Mr. Gustafson discussed the top data needs to develop vehicle to infrastructure applications. Many of these needs can be met by automating existing data sources. Mr. Rao discussed the impacts of Executive Directives #6 (Cyber Security Requirements) and #7 (Data Sharing Requirements) on this effort. A review of the project schedule and project risks was provided.

***Virginia Automated 20XX***

Ms. Ronique Day, Policy Analyst, Office of the Secretary of Transportation

Ms. Day discussed the effort to provide a framework for transitioning automated vehicles into the transportation network. The effort will identify the Commonwealth's responsibilities and legislative needs. The USDOT issued policy for safe testing and development of automated vehicles will be incorporated. The effort is scheduled for completion in June 2017. It will become part of the VTrans document for CTB approval.

**2. Open Discussion**

Mr. Connors asked Ms. Nanci Hardwick, Chief Executive Officer of Aeroprobe, to give a brief overview of her company.

Mr. Connors then opened the discussion to all meeting participants; seeking thoughts on the Virginia Tech smart infrastructure proposal.

A briefing at the December 2016 CTB meeting was proposed to update the entire Committee on the proposed activities.

Mr. Connors wanted assurance that Virginia's community colleges would be included in the effort. Dr. Dingus discussed the current efforts between Virginia Tech and several local community colleges.

Mr. Connors volunteered to take the lead on the first draft of a position paper on how Virginia is unique and should lead the revolution in smart infrastructure.

A Working Group was formed to take the initial steps toward a joint smart infrastructure initiative for Virginia. Membership includes: Mr. Hap Connors, Mr. Quintin Elliott, Ms. Ronique Day, Mr. David Ihrle, Ms. Cathy McGhee, and Dr. Tom Dingus.

Mr. Connors concluded the meeting at 2:13 p.m.

Dr. Tom Dingus invited all meeting participants to tour the Smart Road facility.

## *Meeting Participants*

### **Office of the Secretary**

Ms. Ronique Day

### **Virginia Department of Transportation**

Mr. Charlie Kilpatrick

Mr. Quintin Elliot

Mr. Garrett Moore

Mr. Dean Gustafson

Mr. Murali Rao

Ms. Marshall Herman

Ms. Cathy McGhee

Mr. Paul Szatkowski

Mr. Hari Shripathi

Mr. Ken King

### **Virginia Tech**

Dr. Thanassis Rikakis

Mr. Dwight Shelton

Dr. Tom Dingus

Mr. Sherwood Wilson

Mr. Steve McKnight

Dr. Theresa Mayer

Ms. Elizabeth Hooper

Ms. D'Elia Chandler

### **Private Industry**

Mr. David Ihrle, Center for Innovative Technology

Ms. Nanci Hardwick, Aeroprobe

Mr. Eric Finkbeiner, Cornerstone

Greg Sauder