State of the ITS Workforce

Perspectives from the Public Sector

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Draft Competencies

FHWA Operations Discipline Competencies

• Connected / Automated Vehicles
• Manual on Uniform Traffic Control Devices
• Transportation Systems Management and Operations
• Managing Disruptions

Each contains a Competency Definition, Key Behaviors, and Recommended Learning Opportunities – draft provided for reference
**Sample content of draft Competency**

<table>
<thead>
<tr>
<th>Competency</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Connected/Automated Vehicles</td>
<td>Demonstrates, understands and promotes the application of connected/automated vehicle technologies into the roadway network. This includes aspects of cybersecurity related to this technology as well.</td>
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</tbody>
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**Key Behaviors**

- Demonstrates an expert-level of understanding of and uses consistent CAV terminology
- Advances innovative concepts and early adoption of new vehicle technologies and best practices
- Provides expert-level guidance in the development, procurement, implementation, operation, and maintenance of hardware and software used to support transportation operations
- Provides expert-level guidance in the integration of CAV technologies and applications into existing infrastructure
- Interprets use of and partners with states in deploying CAV applications
- Leads or identifies sources for technical assistance in the development, procurement, operation, and maintenance of telecommunication systems including wired and wireless communications
- Interprets and communicates laws, policies, and institutional issues related to the use of C/AV hardware, software and telecommunications (both wired and wireless)
- Maintains situational awareness of and leads technical assistance in responding to cybersecurity threats impacting the transportation system
Key Behaviors (cont.)

- Interprets, provides expert technical guidance, and communicates accepted ITS and C/AV standards (many ITS standards will still apply as C/AV are implemented)
- Provides expert guidance on the Systems Engineering and Agile processes as they pertain to CAV deployment and operations
- Interprets, provides expert-level guidance, and communicates the National ITS Reference Architecture for Cooperative and Intelligent Transportation (Arc-IT)
- Advocates CAV operations strategies designed to achieve established performance goals
### Recommended Learning Opportunities

- See 24/7 Professional Development portal on Sharepoint - [http://our.dot.gov/office/fhwa.dss/operations/Page%20Library/Training.aspx](http://our.dot.gov/office/fhwa.dss/operations/Page%20Library/Training.aspx)
- **2016 and 2018 Operations Boot Camp ITS Technology sessions**
- ITS JPO resources for Connected Vehicles - [https://www.its.dot.gov/deployment_resources.htm](https://www.its.dot.gov/deployment_resources.htm)
- ITS JPO Compendium of resources for Automated Vehicles - [https://www.its.dot.gov/automated_vehicle/index.htm](https://www.its.dot.gov/automated_vehicle/index.htm)
- CAV V2I website
- T3 Webinars on CAV/emerging ITS Technologies- [https://www.pcb.its.dot.gov/t3_archives.aspx](https://www.pcb.its.dot.gov/t3_archives.aspx)
- Contractor information on ARC-IT - [https://local.iteris.com/arc-it/](https://local.iteris.com/arc-it/)
Perspectives from the Public Sector

Emphasis on key knowledge, skills and abilities for the workforce

• Clint Smith – Florida Department of Transportation
• Beth Alden – PLAN Hillsborough
• Shannon Haney – HART
Session Format

• Short Presentation
• Time for immediate questions for each presenter
• 10-15 minutes for panel questions / discussion at the end