

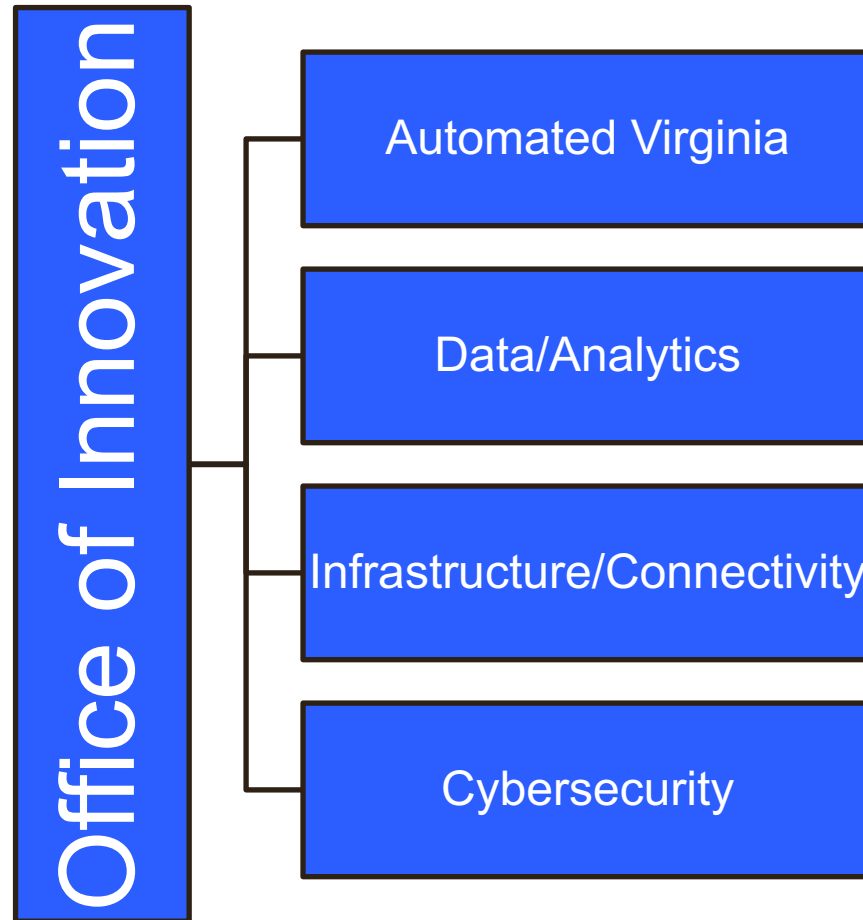


COMMONWEALTH *of* VIRGINIA  
Office of the  
SECRETARY *of* TRANSPORTATION

**Automated Virginia – Activity Update for VACO**

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# Automation – It's not all or nothing

	L0 No Automation	L1 Driver Assistance	L2 Partial Automation	L3 Conditional Automation	L4 High Automation	L5 Full Automation
DRIVER	 In charge of all the driving	 Must do all the driving, but with some basic help in some situations	 Must stay fully alert even when vehicle assumes some basic driving tasks	 Must be always ready to take over within a specified period of time when the self-driving systems are unable to continue	 Can be a passenger who, with notice, can take over driving when the self-driving systems are unable to continue	 No human driver required—steering wheel optional—everyone can be a passenger in an L5 vehicle
VEHICLE	Responds only to inputs from the driver, but can provide warnings about the environment	Can provide basic help, such as automatic emergency braking or lane keep support	Can automatically steer, accelerate, and brake in limited situations	Can take full control over steering, acceleration, and braking under certain conditions	Can assume all driving tasks under nearly all conditions without any driver attention	In charge of all the driving and can operate in all environments without need for human intervention

Sources: Society of Automotive Engineers (SAE); National Highway and Traffic Safety Administration (NHTSA).  
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# Statewide CAV Strategic Plan

## Virginia CAV Strategic Plan Process

### Highway Automation Workshops



Following the **9** Highway Automation Workshops with Virginia's districts, it became clear that a CAV Strategic Plan was needed to organize and structure the Commonwealth's efforts in advancing CAVs.

*Participants included VDOT's agencies, local planning district commissions, town/city/county representatives, county chamber of commerce, public transportation agencies, FHWA, and VTRC.*

### Research



Research was conducted to level set Virginia's agencies on CAV initiatives throughout the Commonwealth on test bed developments, research and outreach efforts, and proof of concept demonstrations; track other CAV efforts across the country at the state and federal level; and centralize federal guidance and recommendations for CAVs.

### Government Stakeholders



Throughout the drafting of the CAV Strategic Plan, Virginia's agencies were consulted to discuss its overall structure and direction. Their active feedback helped develop a collective vision, objectives, and enablers that integrated the agencies' different focus areas and allocated the respective responsibilities for the Plan's tasks. *Participants included DMV, DRPT, MVDB, VDOT, VACO, VML, Port Authority, VSP, and the Office of the Secretary of Transportation.*

Virginia's agencies participated in **3** government workshops to review and agree on draft progress and changes. In addition to these workshops, entities such as *DRPT, VSP, DMV, Port Authority, and VML also participated in 1-on-1 engagements to provide further feedback related to their agencies.*

### Industry Stakeholders



An industry workshop was hosted to allow private sector stakeholders, such as automotive OEMs, tier 1 suppliers, engineering firms, construction firms, universities, and CAV technology operators, a chance to discuss their thoughts on Virginia's attractiveness as a CAV ecosystem and update Virginia's agencies on their current and future developments in Virginia. *Participants included VDOT, KPMG, IIHS, TRI, Kimley-Horn, HNTB, Local Motors, Transurban, UVA, Easy Mile, Volkswagen, AAA, Daimler, VTTI, and Jacobs Engineering.*

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# Automated Virginia











# Unmanned Aerial Systems

- **VDOT continues to implement activities in the 2019 Action Plan**
  - Infrastructure assessment
  - Incident and traffic management
  - Environmental applications
  - Rock slope stability
  - Surveying/Construction monitoring





# Virginia Flight Information Exchange

- **Information hub focused on providing authoritative state and local data**
  - Data shared between state and local agencies and entities
  - Data shared with UAS Service Providers
- **Publically available platform for publishing zoning, operational, emergency, safety, and quality of life advisory information**







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