

Delaware Connected and Autonomous Vehicles

November 16, 2017



Delaware Department
of Transportation

Department Wide Look

- Nearly every DeIDOT division will be effected and has a role in the developing CAV conversation
 - Passenger vs. Driver
 - Narrower lanes
 - More capacity
 - ITMS
- DeIDOT formed an internal committee with every division represented
 - Held first meeting in December 2016
 - 1/4ly meetings
 - Purpose, begin the discussion and understand everyone's role within the Department
 - Understand what each division has been working on toward CAV
 - CAV is too big to develop in a silo
 - Identify any barriers to CAV in Delaware
- Ensure we create an environment in DE that opens the door for this quickly evolving...life-changing technology

How is DelDOT Unique?

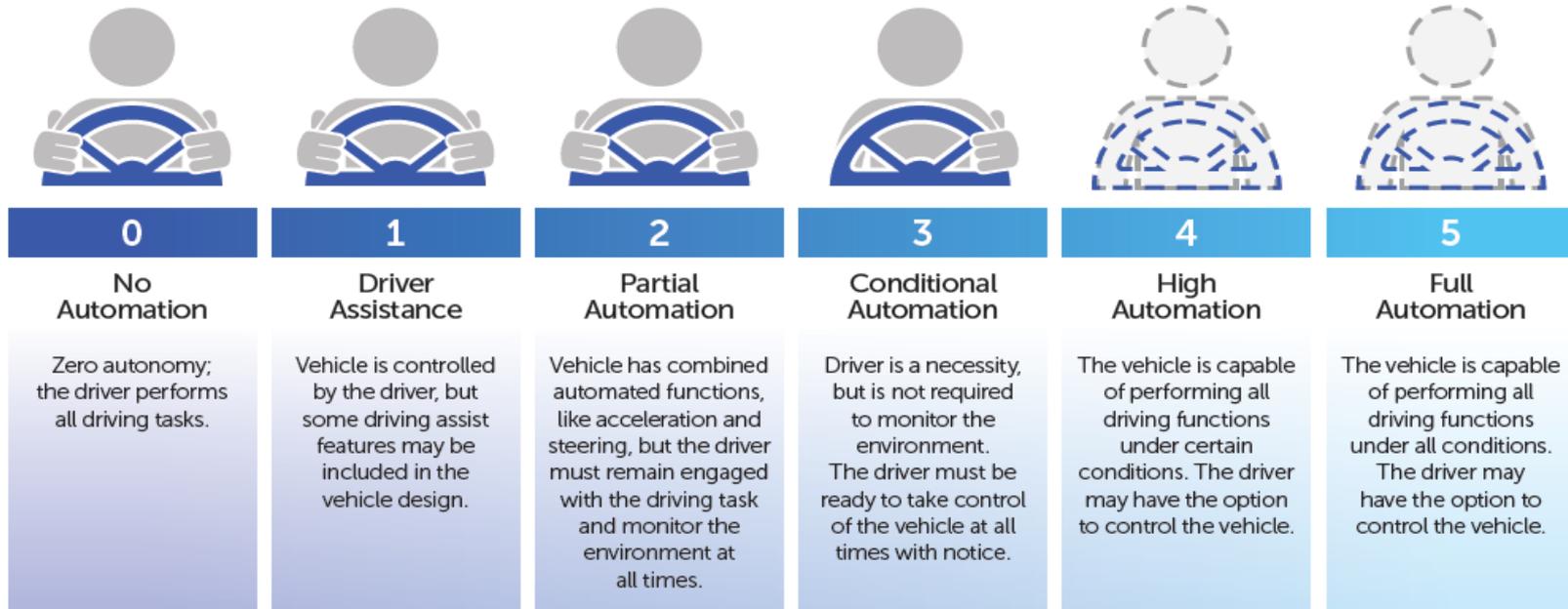
- Owns 90% + of roads
- Owns most traffic signals
- Operates the transit system
- Operates the tolls
- Truly multimodal
- Integration of planning and operations



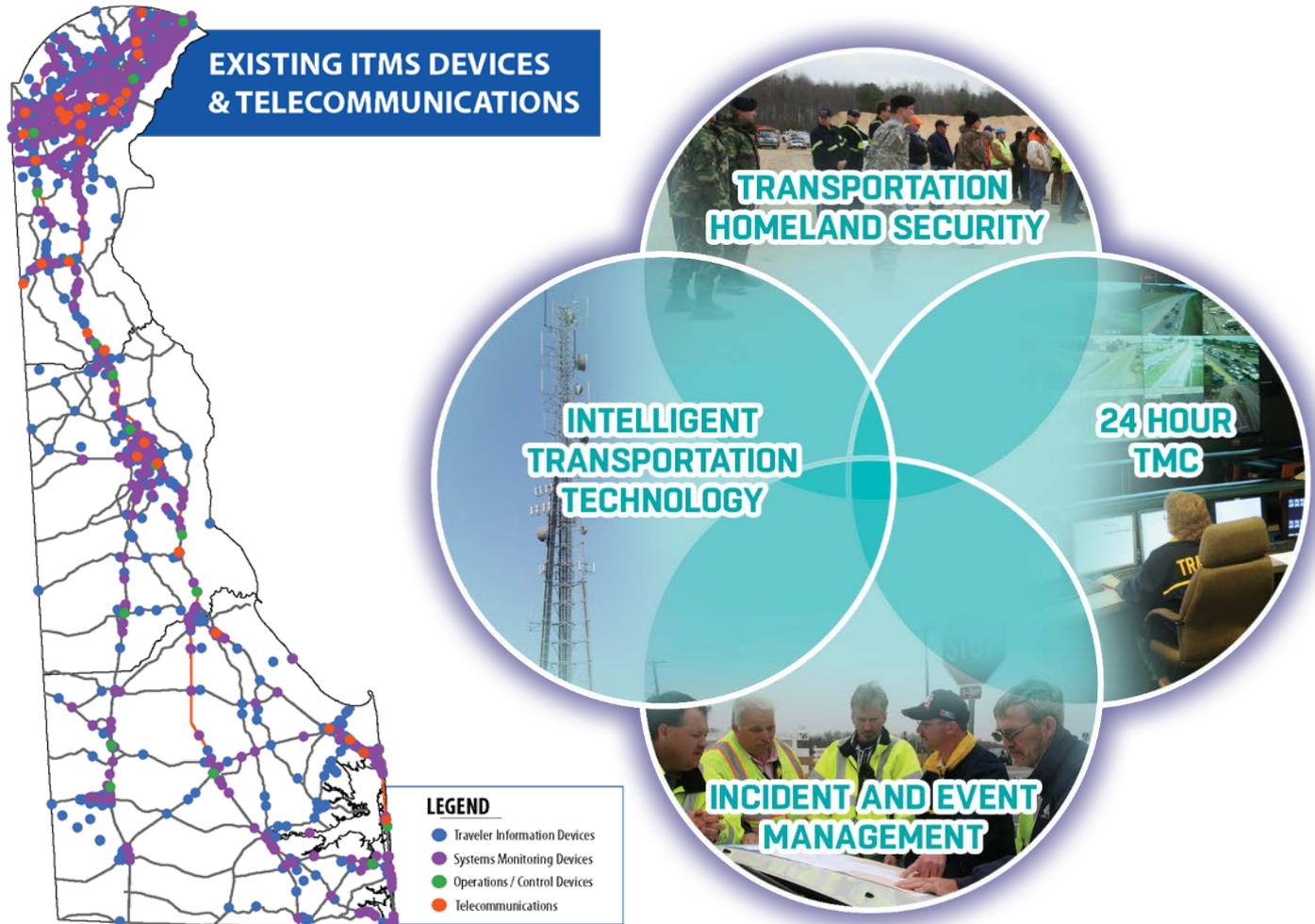
What is an Autonomous Vehicle?

SAE AUTOMATION LEVELS

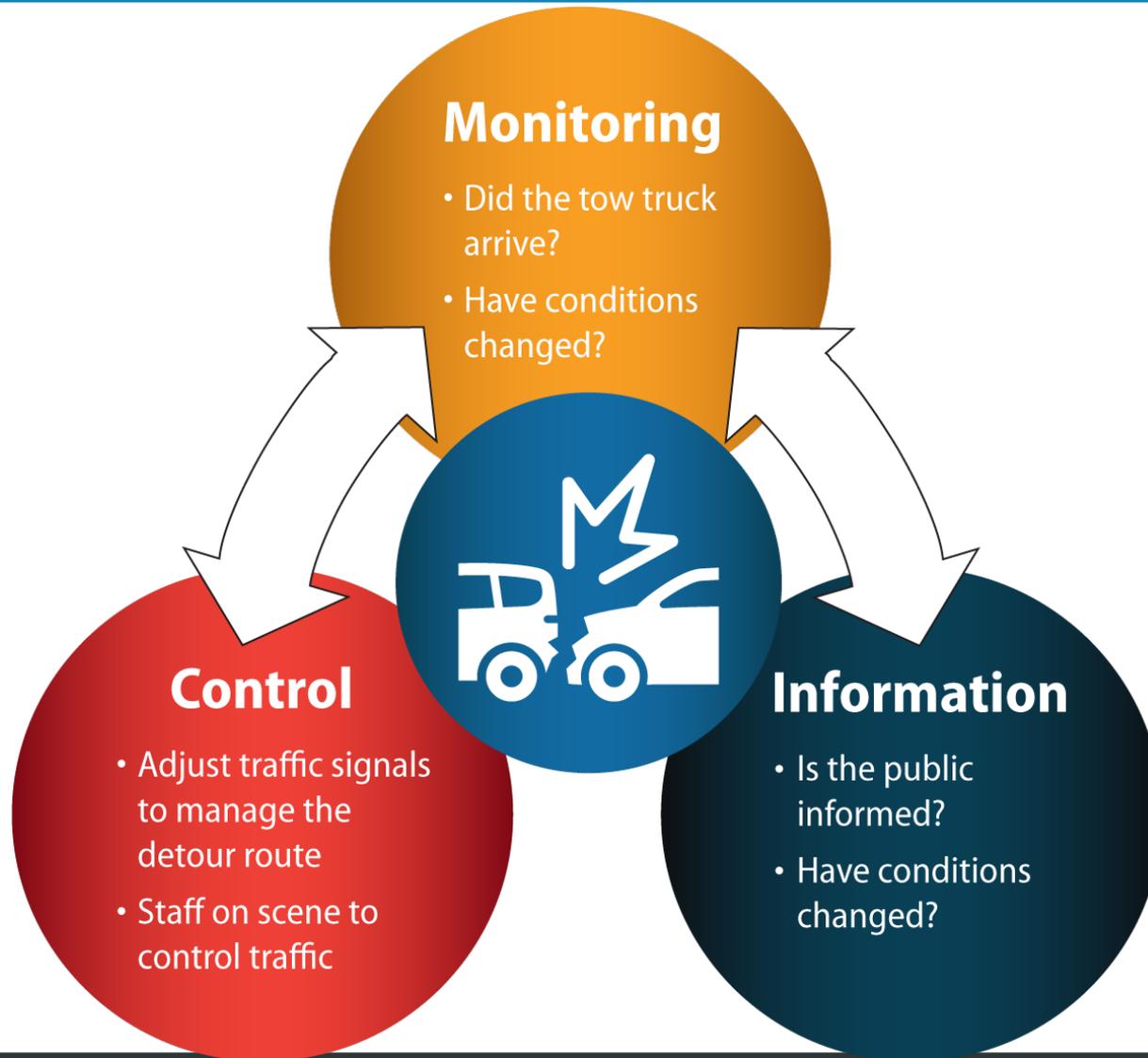
Full Automation



Integrated Transportation Management System



Three Critical Functions of ITMS

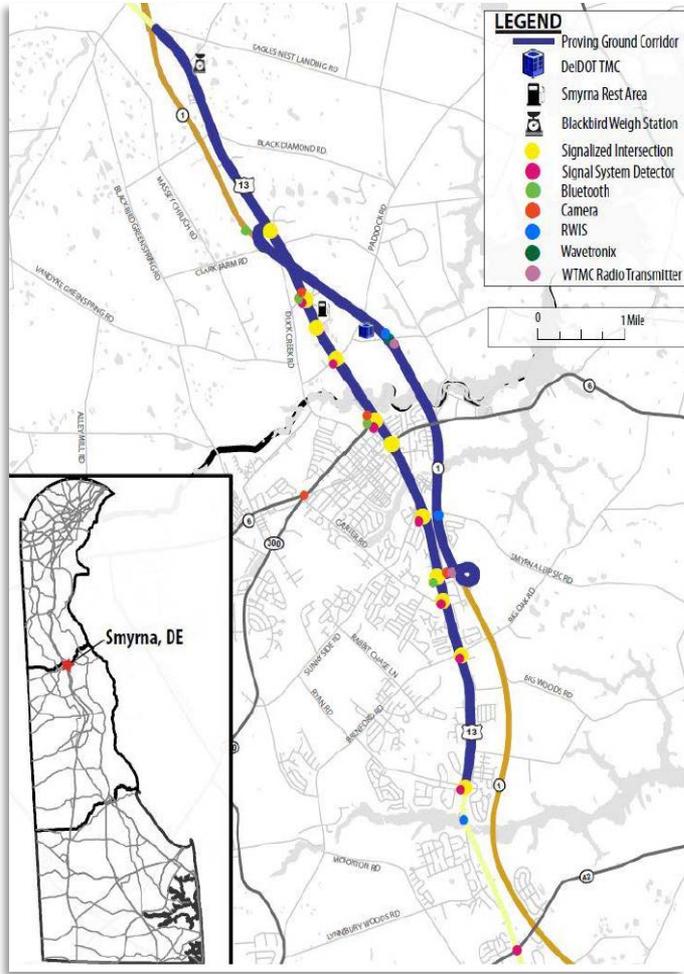


DeIDOT ITMS Strategic Plan

- 2017 update to the ITMS Strategic plan
- Addresses Connected and Autonomous Vehicles

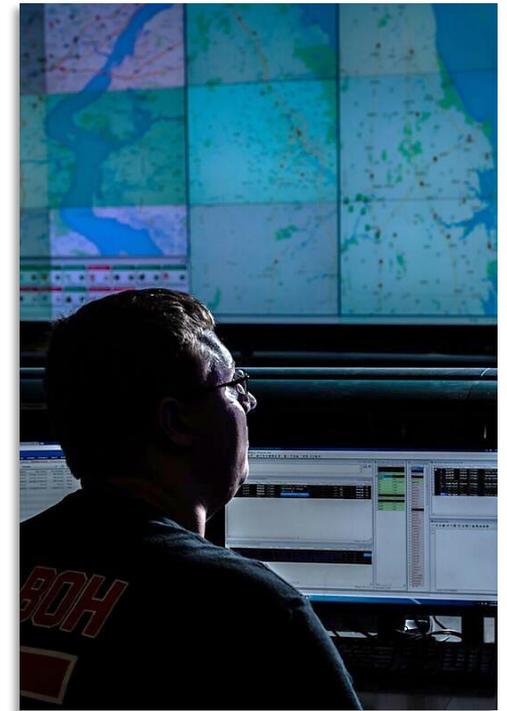


Smart Delaware: The Next Phase of ITMS



Ongoing Projects

- Connected Vehicle Enabled Weather Responsive Traffic Management (CV-WRTM)
- US 13 Technology Proving Ground
- Signal Phasing and Timing (SPaT) Challenge
- Machine Learning/Artificial Intelligence – Automating TMC Operations
- Dilemma Zone



DMV's Role

- Currently no law or regulation to prevent or enable the operation of a CAV in Delaware
 - As we progress through this process, that will be an area of focus
- The CAV conversation is rightfully a **vehicle** centered conversation
 - Historically the federal government has taken the lead a responsibility for regulating vehicle safety at the manufacturer level
 - States focus on the operation of those vehicles and ensuring they continue to operate safely
- Can't lose sight of the **driver** impact of CAVs
 - Will we need new levels of graduated driver licenses?
 - Specialized training?

DMV's Role

- The transition from now to a world where CAVs are common place will be the most challenging
 - Driver skills needs will vary depending on the level of automation
 - Driver trust of CAVs sharing the road will require time and education
 - DMV's regulatory responsibilities will evolve
- We remain engaged in the national conversation
 - Active members of AAMVA
 - Chief of Vehicle Services is a sitting member of the Autonomous Vehicles Information Sharing Group