Planning and Policy For Connected & Automated Vehicles in Maryland

ITS Maryland Annual Meeting

Sept 22, 2016
PANEL OF EXPERTS

➔ **Nicole Katsikides**
  - Deputy Director, Office of Planning & Preliminary Engineering - MDOT State Highway Administration

➔ **Nanette Schieke**
  - Chief, Driver Safety - MDOT Motor Vehicle Administration

➔ **Tom Jacobs**
  - Director - Center for Advanced Transportation Technology, University of Maryland
OVERVIEW MESSAGES

1. CV and AV together provide more benefits – don’t separate the conversation

2. Can’t wait for all the answers, need to calibrate your mindset and Ready-Fire-Aim
THE RACE TO DRIVERLESS

Source: Morgan Stanley
THE AV “SEES” WITH SENSORS

Source: Google
CV & AV BELONG TOGETHER

→ With CV and AV working together, the other vehicles are “talking” to each other, to the roadside, and with mobile devices
  - Identification of hazards out of the view of sensor systems
  - Traffic signal phase state & change
  - Vehicle platooning
  - Advanced traffic management
CV & AV BELONG TOGETHER

“Connected Vehicles give you further lines of safety that you couldn’t get from an independent, autonomous vehicle”

Mark Rosekind, NHTSA Administrator
February, 2016
Do We Have All The Answers?
FEDERAL REGULATION AND GUIDANCE

→ NHTSA Rulemaking underway for CV technologies in new vehicles
→ NHTSA guidance for AV including model state policies and more coordination nationally
→ FHWA V2I deployment guidance and device standards
NHTSA GUIDANCE ON HIGHLY AUTOMATED VEHICLES

→ Vehicle Performance Guidance for Automated Vehicles
→ Model State Policy
→ NHTSA’s Current Regulatory Tools
→ Modern Regulatory Tools
NATIONAL RESEARCH AND ACTIVITIES

→ CV Pilots – Wyoming, Tampa, and New York City
→ Columbus Smart City Challenge Winner
→ FAST Act grant opportunities (TIGER, ATCMTD)
→ NCHRP 20-102 Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies
ROADX PROGRAM (COLORADO)

- Transportation innovation competition among consultants and vendors
- No pre-defined solutions
- Emphasis on building partnerships to meet near-term goals
UTAH CV TRANSIT SIGNAL PRIORITY

- UDOT and UTA deploying signal priority using DSRC
- MMITSS application suite (University of AZ/PATH) is the foundation for the system
I-69 TRUCK PLATOONING PILOT, MICHIGAN

- MDOT supporting US Army (TARDEC) truck platoon testing in mid-June
- Deploying infrastructure for data capture, and to help support evaluation of CV role in platoon operation
TORONTO

- Established an AV working group
- Engaged with local university for scenario planning
- Established an AV Plan for Toronto
- Established regulations allowing for AV testing
To Be Determined…

- Increased VMT?
- Legal Liability?
- Auto Industry Disruption?
- Insurance Industry Disruption?
- Revenue Impacts?
- Increased Urban Sprawl?
- Acceptance of “Computer Driver”?
Ready, Fire, Aim!

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