Overview of State AV Taskforce

https://www.ncav.org/committee/

USDOT
NC Broadband
ITRE
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundtable on Data for Automated Vehicle Safety</td>
<td>December 7, 2017</td>
</tr>
<tr>
<td>Public Listening Summit on Automated Vehicle Policy</td>
<td>March 1, 2018</td>
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<tr>
<td>Automated Vehicles 3.0 announced</td>
<td>Late Summer 2018</td>
</tr>
<tr>
<td>Various Research</td>
<td>Ongoing</td>
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<tr>
<td>National Dialogue</td>
<td>Ongoing</td>
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<tr>
<td>Work Zone Data Exchange Project</td>
<td>Ongoing</td>
</tr>
<tr>
<td>V2X Mapping Stakeholder Input</td>
<td>Ongoing</td>
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</tbody>
</table>
Consolidated Appropriations Act, 2018

- Signed into law on March 23, 2018
- Funds highly automated vehicle research and development
- Reallocates a total of $100 million for automation activities, including:
  - Up to $38 million for direct research
  - Up to $60 million for demonstration grants
  - Up to $1.5 million for analysis of impacts on drivers and operators of commercial motor vehicles, in consultation with Department of Labor
- Additional funding for NHTSA and OST
Automated Low-Speed Shuttles

- **Monitor** development and deployment activity
- **Convene** working group of early deployer communities and other organizations interested in small, automated shuttles.
- **Document Emerging Findings** — including best practices, barriers, and lessons learned from early deployers and technology suppliers.
2015 Broadband Adoption Rates

2015 Adoption Rates

- 49 - 57%
- 58 - 65%
- 66 - 73%
- 74 - 81%
- 82 - 90%
GREAT Grant Program

- Growing Rural Economies with Access to Technology (GREAT)
- New Program
- Tier One Counties
- Areas with less than 10/1 Mbps
- Eligible Applicants are Broadband Providers

To expedite terrestrial deployment of broadband, by encouraging partnerships and competition between private broadband providers and cooperatives...and lease of State and local-government owned properties or facilities
Automation Across Modes
Private FAV Research and Development - Passenger Cars

Start-up
- Lyft
- Tesla
- Uber
- Waymo

Manufacturers
- Audi
- Ford
- GM
- Toyota
Current USDOT Research

Enabling Technologies
- Enabling Technologies: Future Forecast
- Assessment and Guidance for Digital Infrastructure

Safety Assurance
- Functional Safety of Automated Lane Centering Controls
- Cybersecurity Requirements for Automated Vehicles
- Driver Acceptance of Automated Vehicle Systems
- Human Factors Evaluation of Combined Function Automation Concepts

Transportation System Performance
- Automated Speed Harmonization Prototyping and Testing
- Simulation for Research on Automated Longitudinal Vehicle Control
- High Performance Vehicle Streams Simulation
- Partial Automation for Truck Platooning
- Lane Changing/Merge Foundational Research

Testing and Evaluation
- Development of Functional Descriptions, Safety Principles, and Test Methods for emerging system concepts in automated vehicles
- Transportation System Benefit Study of Highly Automated Vehicles

Policy and Planning
- Standards Program Planning for Automated Vehicles
- Automation Policy Foundational Research
National Research Highlights

- National Cooperative Highway Research Program (NCHRP) 20-102 Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies
  - Advancing Automated and Connected Vehicles: Policy and Planning Actions for State and Local Transportation Agencies
  - Impacts of Regulations and Policies on CV and AV Technology Introduction in Transit Operations
  - Challenges to CV and AV Application in Truck Freight Operations
  - Implications of Automation for Motor Vehicle Codes
National Research Highlights

• NCHRP Legal Research Digest 69: A Look at the Legal Environment for Driverless Vehicles


• NCHRP 14-42 [Anticipated] Determining State DOT Maintenance Program Implications of Connected and Automated Vehicles

• NCHRP 20-24(116) [Anticipated] Guidance on Roles and Responsibilities in Operation of Automated Vehicles
North Carolina AV Research