

Overview of State AV Taskforce

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

USDOT

NC Broadband

ITRE

USDOT Activities in Automation

Event	Date
USDOT releases Automated Driving Systems (ADS) 2.0: A Vision for Safety	September 12, 2017
Roundtable on Data for Automated Vehicle Safety	December 7, 2017
Public Listening Summit on Automated Vehicle Policy	March 1, 2018
Automated Vehicles 3.0 announced	Late Summer 2018
Various Research	Ongoing
National Dialogue	Ongoing
Work Zone Data Exchange Project	Ongoing
V2X Mapping Stakeholder Input	Ongoing

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
- <https://www.congress.gov/bill/115th-congress/house-bill/1625>

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



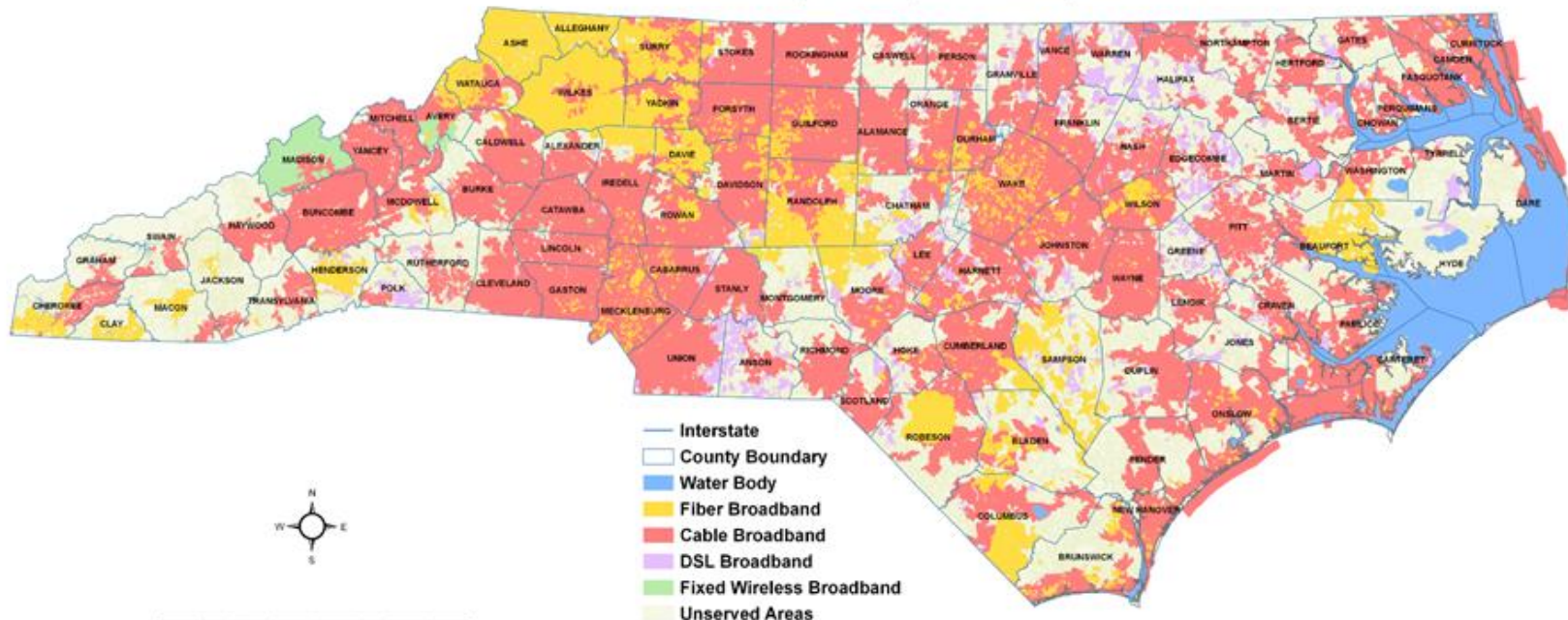
Working Group Member Communities

Broadband Service Inventory

Advertised Speeds of at Least 25 Mbps Download and 3 Mbps Upload

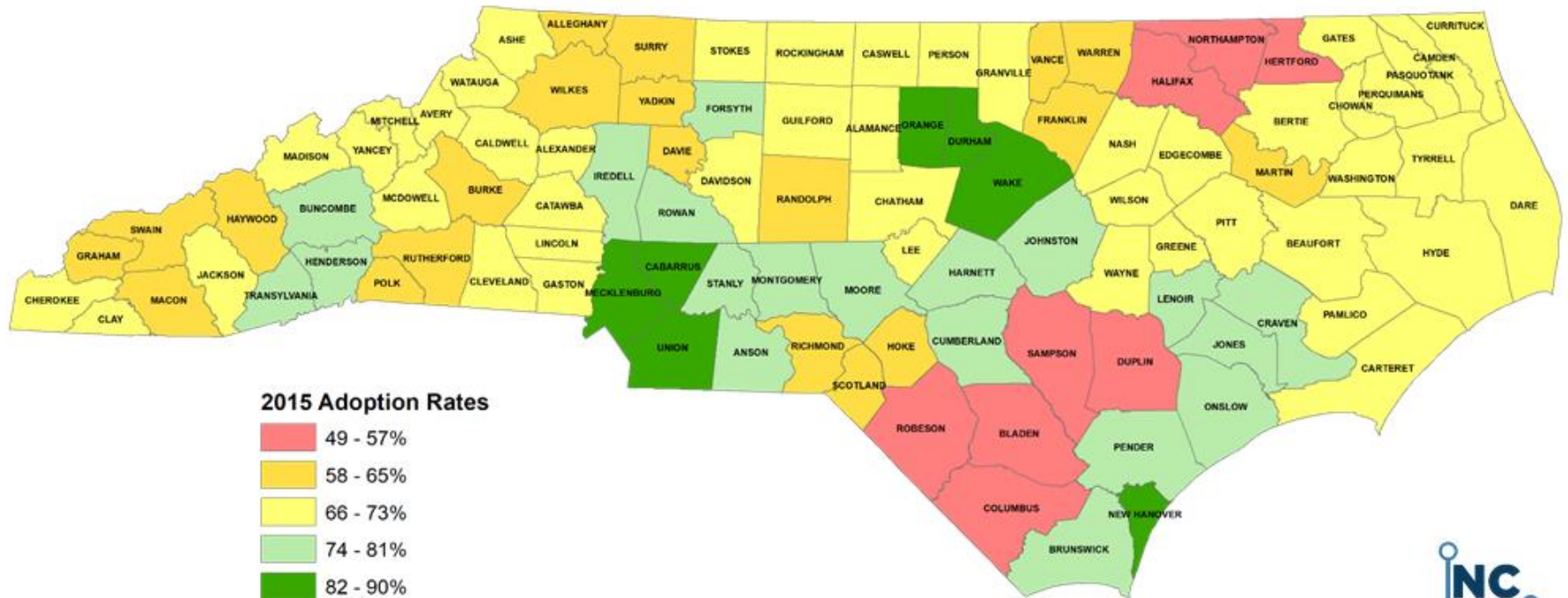
Data derived from U.S. Federal Communications Commission Form 477 Data Release Dec. 2016.

Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block.



In areas where multiple service options are available this map shows the coverage layers in the order presented above.

2015 Broadband Adoption Rates



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 17-91 [Anticipated] Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
- 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



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