

**STATEMENT OF
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U.S. DEPARTMENT OF TRANSPORTATION**

BEFORE THE

**SUBCOMMITTEE ON TECHNOLOGY AND INNOVATION
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES**

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Chairman Wu, Ranking Member Smith, and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss U.S. DOT's multimodal research.

The Research and Innovative Technology Administration (RITA) has a unique role within DOT – we are charged with coordinating collaborative multi-modal research and development. We look across the modes and to our partners to identify synergies and opportunities for collaboration in support of the Department's priorities to help make critical investment and policy decisions based on sound science and rigorous analysis. We do this in a variety of ways.

One way is through the Research, Development and Technology (RD&T) Planning Team, which is chaired by RITA staff and through the RD&T Planning Council, which I chair. The Team consists of the heads of the research organizations of the modes within the Department and meets to discuss ongoing research activities, to convene clusters of researchers in specific science-based disciplines, and to ensure research alignment with DOT priorities.

The Planning Team will work to ensure not just that our research is aligned with our priorities, but that we have a clear strategy to facilitate the adoption of these research results. We need to consult with stakeholders such as state DOTs, transit authorities, private companies, and other key transportation players.

Another way is via the University Transportation Center (UTC) program, which consists of more than 100 universities nationwide conducting multi-modal research and educating the next generation of transportation leaders.

Our National Transportation Library uses new media tools to reach across stakeholder communities. Along with TRB's Research in Progress database, it enhances real-time information sharing, helps identify areas of potential need and collaboration, and makes innovative research products available to those who can implement research results.

Of course, one of the most important components of RITA is the Bureau of Transportation Statistics. Good research relies on good data. BTS' key data program support research and analysis that will be needed to achieve the President's transportation goals. We must and will focus on how to continually improve these programs moving forward.

Assistant Secretary Trottenberg has laid out Secretary LaHood's priorities. Let me give some examples:

Safety:

- The Department recently hosted a Distracted Driving Summit which has led to a wide array of specific actions and a multimodal research agenda.
- The Secretary has recently launched a DOT Safety Council which will prioritize cross-modal safety research.
- The Strategic Highway Research Program 2 (SHRP 2) is performing the largest naturalistic driving study ever conducted, which will evaluate the causes and consequences of crashes and near-crashes, including those where distracted driving was a factor.
- Our Intellidrive initiative is laying the groundwork for a future highly connected and safe environment for vehicles and our infrastructure.

Livable communities:

- Our partnerships with HUD and EPA help us to develop a research agenda and performance metrics for our livable communities efforts. These should also include safety metrics and research to improve pedestrian and bicyclist safety, which are critical to the advancement of livable communities.
- DOT is evaluating a pilot program in four communities to demonstrate the contributions of non-motorized transportation toward achieving health, environmental, and energy goals.

Environmental sustainability:

- The Federal Railroad Administration (FRA) has partnered with industry to launch fuel cell and bio-diesel locomotives, aiming toward zero emissions. The Federal

Transit Administration (FTA) is demonstrating hybrid bus technologies and continues the national Fuel Cell Bus Program.

- ‘Green’ research is being conducted at some of our UTCs. For example, the University of Wisconsin is analyzing consumer adoption and grid impact for plug-in hybrids.
- The FAA is supporting aviation climate research in coordination with NASA and NOAA, and making progress on renewable fuels.

Economic competitiveness:

- The Next Generation Air Transportation System (NextGen) uses 21st century technologies to ensure future safety, capacity and environmental needs are met.
- Through the Small Business Innovation Research (SBIR) program, DOT is stimulating technological innovation. Through topics as varied as crash avoidance monitoring systems for road and rail; green transit; expert systems for traffic signal analysis; and human factors tools for NextGen deployment.
- Economic competitiveness depends on an effective freight transportation system, and data from the Commodity Flow Survey and other BTS programs are important to measuring and advancing that effectiveness.

State of good repair:

- Our expanding research to develop new materials that provide greater durability and reliability, provide enhanced tools for asset condition inspection, and deliver more environmentally-friendly construction techniques.
- The FHWA is sponsoring research on new materials, such as developing high-performance composites to reduce cracking, water penetration, and premature deterioration of structures.

RITA will continue to identify and explore ways to not only enhance research, innovation, and technology but also to pursue rapid and broad dissemination of the knowledge and products being generated as we work collaboratively towards solutions for our transportation system.

Thank you. I look forward to answering your questions.