



RESEARCH & TECHNOLOGY SUBCOMMITTEE

HEARING CHARTER

“Accelerating Progress: U.S. Surface Transportation Research”

Wednesday, February 11, 2026

2:00 p.m.

2318 Rayburn House Office Building

Purpose

The purpose of this hearing is to examine the current state of U.S. surface transportation research and to better understand the research and development issues relevant to authorizing surface transportation programs. The hearing will explore the breadth of existing surface transportation research efforts. Reviewing the scope of this work will help inform future legislative actions the Committee may consider to advance surface transportation innovation.

Witnesses

- **Ms. Diana Furchtgott-Roth**, former Deputy Assistant Secretary for Research and Technology at the U.S. Department of Transportation
- **Hon. Greg Winfree**, Agency Director, Texas A&M Transportation Institute
- **Dr. Henry Liu**, Professor of Civil and Environmental Engineering and Director of the Center for Connected and Automated Transportation, Mcity, and the University of Michigan Transportation Research Institute (UMTRI)

Overarching Questions

- What issues in U.S. surface transportation research and technology should the Committee prioritize?
- What surface transportation research efforts are currently underway in the United States?
- What key factors should be considered to strengthen U.S. leadership in surface transportation research and technology?
- What challenges are hindering progress in U.S. surface transportation research and technology?
- What legislative actions should Congress consider to support practical and innovative advances in surface transportation?

Background

Research in U.S. surface transportation spans a wide range of areas aimed at maintaining existing infrastructure while advancing technology and innovation nationwide.¹ Topics include improving highway safety, developing new motor vehicle or pavement technologies, and supporting emerging advancements such as autonomous vehicles.² Private companies, including Tesla and Waymo, are also conducting independent research and development for technologies such as self-driving cars.^{3,4} Outside of the private sector, the Office of the Assistant Secretary for Research and Technology (OST-R) at the U.S. Department of Transportation (DOT) serves as the Department's central research arm across all modes of transportation, including surface transportation research, development, and technology.⁵

Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA), enacted in November 2021, provided funding for infrastructure projects and supported research and development initiatives related to U.S. surface transportation.⁶ Division A of IIJA includes the Surface Transportation Reauthorization Act of 2021, while Division B of IIJA contains the Surface Transportation Investment Act of 2021. The law authorizes research, technology development, and deployment activities, as well as the establishment of new grant programs.⁷ For example, the IIJA reauthorized the University Transportation Centers (UTC) Program.⁸

University Transportation Centers (UTC) Program

Through the University Transportation Centers (UTC) Program, DOT partners with universities across the country to advance state-of-the-art transportation research and technology. DOT awards and administers grants to UTC consortia. There are five National UTCs, each receiving \$4 million: Safety21, managed by Carnegie Mellon University; the National Center for Transportation Cybersecurity and Resiliency, managed by Clemson University; the National Center for Infrastructure Transformation, managed by Prairie View A&M University; the National Center for Sustainable Transportation, managed by the University of California, Davis; and the Center for Understanding Future Travel Behavior and Demand, managed by the University of Texas at Austin.⁹ In addition, there are 10 Regional UTCs, each awarded \$3

¹ Office of the Assistant Secretary for Research and Technology. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/policy/OST-R>.

² New and Emerging Technologies. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/new-and-emerging-technologies>.

³ Full Self-Driving (Supervised). Tesla (January 2026), <https://www.tesla.com/fsd>.

⁴ Research. Waymo (January 2026), <https://waymo.com/research/>.

⁵ Office of the Assistant Secretary for Research and Technology. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/policy/OST-R>.

⁶ H.R. 3684, 117th Cong. (November 2021), <https://www.congress.gov/bill/117th-congress/house-bill/3684>.

⁷ *Ibid.*

⁸ University Transportation Centers. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/content/university-transportation-centers>.

⁹ IIJA Centers and Grantees. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/utc/ijja-centers-and-grantees>.

million.¹⁰ Tier 1 UTCs receive \$2 million each.¹¹ Of the original 20 Tier 1 Centers, 16 remain funded, and four centers' grants have been terminated.¹² For each of the four, the Secretary determined that the grant "no longer effectuates the program goals or agency priorities."¹³

Strengthening Mobility and Revolutionizing Transportation (SMART) Grants

The IJA established the Strengthening Mobility and Revolutionizing Transportation (SMART) discretionary grant program, which provides \$100 million annually for fiscal years 2022 through 2026.¹⁴ SMART grants are directed toward public sector agencies (e.g., Hawaii DOT, Metropolitan Transportation Commission, etc.) and support demonstration projects aimed at improving transportation efficiency and safety, with a focus on smart community technologies.^{15,16} These technologies may include connected vehicles, sensor-based infrastructure, integration of advanced transportation systems, innovative solutions for goods delivery and logistics, and smart traffic signal technologies.¹⁷

Advanced Research Projects Agency – Infrastructure (ARPA-I)

ARPA-I is intended to support high-risk, high-reward, next-generation transportation technologies.¹⁸ A central focus of ARPA-I investments is digital infrastructure, which underpins advanced computing, networking, and communications technologies. In June 2023, OST-R issued a Request for Information (RFI) seeking input on priority research areas for ARPA-I. Responses highlighted transportation electrification, autonomous vehicles, machine learning and artificial intelligence, and initiatives to expand analytics and improve the availability of infrastructure data.¹⁹

NETT Council

The Non-Traditional and Emerging Transportation Technology (NETT) Council was established by DOT Order 1120.34 in December 2018 as an internal DOT body responsible for reviewing new and emerging transportation technologies that may not fit neatly within the Department's existing regulatory framework. The IJA reauthorized and updated the NETT Council's charter in

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ SMART Grants Program. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/grants/SMART>.

¹⁵ Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/sites/dot.gov/files/2025-12/FY24-Stage-1-SMART-Project-Listv2.pdf>.

¹⁶ SMART Grants Program. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/grants/SMART>.

¹⁷ SMART Frequently Asked Questions. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/grants/smart/smart-frequently-asked-questions>.

¹⁸ Advanced Research Projects Agency - Infrastructure (ARPA-I). U.S. Department of Transportation (January 2026), <https://www.transportation.gov/arpa-i>.

¹⁹ Summary Report on ARPA-I RFI. U.S. DOT Volpe National Transportation Systems Center (January 2024), <https://www.transportation.gov/sites/dot.gov/files/2024-01/Summary%20Report%20on%20ARPA-I%20RFI%20%28Public%20Final%29.pdf>.

November 2021.²⁰ However, records suggest that the Council has convened four times in 2023 only.²¹

²⁰ NETT Council Overview. U.S. Department of Transportation (January 2026), <https://www.transportation.gov/nettcouncil>.

²¹ Nontraditional and Emerging Transportation Technology (NETT) Council Annual Report: December 2024 (December 2024), <https://www.transportation.gov/policy-initiatives/nett/nontraditional-and-emerging-transportation-technology-nett-council-annual-0>