



U.S. Department of Transportation



USDOT Research Plenary Slides

Automation in Road Transportation Symposium 2022 (ARTS22)

- Innovation Principles
- Strategic Plan
- Infrastructure Investment and Jobs Act (IIJA) / “Bipartisan Infrastructure Law” (BIL)



USDOT Innovation Principles

- Serve our policy priorities
- Help America win the 21st century
- Support workers
- Allow for experimentation and learn from failure
- Provide opportunities to collaborate
- Be flexible and adapt as technology changes





National Transportation Research Vision

“We envision a people-centered transportation system that provides safe, accessible, reliable, and sustainable transportation for all through purpose-driven research and innovation for this and future generations”

Office of the Assistant Secretary for Research (OST-R) Activities

- University Transportation Centers (UTC) Program
- Strengthening Mobility and Revolutionizing Transportation (SMART)
- Advanced Research Projects Agency–Infrastructure (ARPA-I)
- Highly Automated Systems Safety Center of Excellence (HASS COE)





University Transportation Centers

University Transportation Centers (UTC) Program

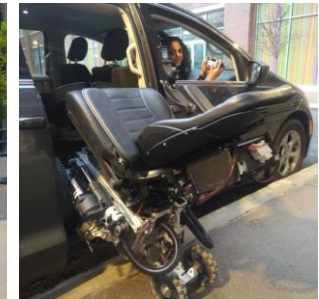
Each UTC is a consortium of two- and four-year colleges;

- Appropriations: \$500M / 5Y
- Notice of Funding Opportunity

UTC Topic Areas

Funding Priorities

- improving mobility of people and goods
- reducing congestion
- promoting safety
- improving the durability and extending the life of transportation infrastructure
- preserving the environment
- preserving the existing transportation system
- reducing transportation cybersecurity risks



SMART Grants Program & Upcoming Webinar

Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

- Will fund demonstration projects focused on **advanced smart city or community technologies and systems.**
- Provides **\$100M annually** from FY22 – 26 to eligible projects in States, political subdivisions of a State, Tribal governments, transit agencies, toll authorities, MPOs, and groups of eligible recipients.

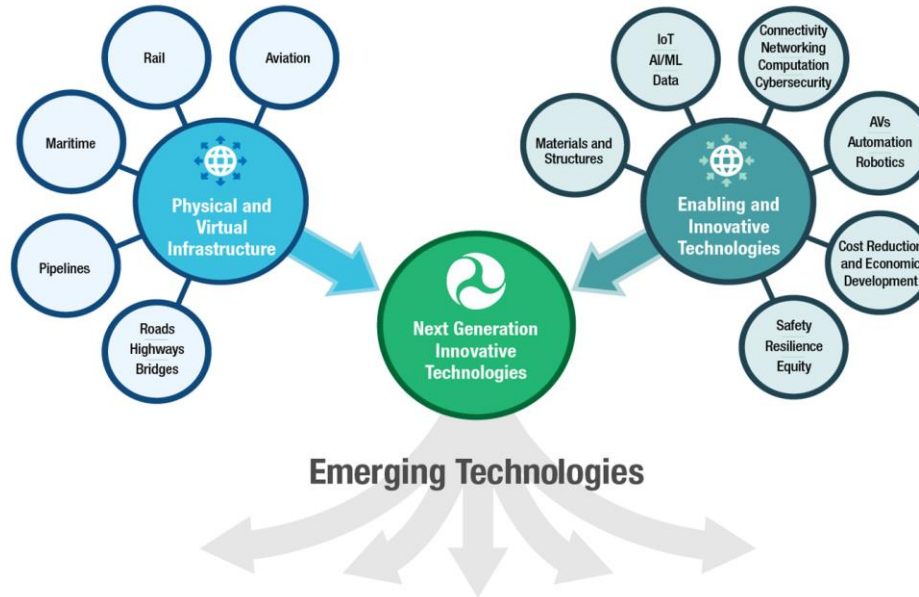


Register for the upcoming webinar on
July 28th at

<https://www.transportation.gov/grants/SMART>

The Goal of Advanced Research Projects Agency–Infrastructure (ARPA-I)

Develop and Deploy Innovative Infrastructure Technologies and Capabilities



to ensure that the United States is a global leader in advanced transportation infrastructure technologies and materials

Highly Automated Systems Safety Center of Excellence (HASS COE)

- We are building **workforce capable of reviewing, assessing, and validating the safety of automated technologies**

We are hiring!



Operating Administration Research Activities Overview

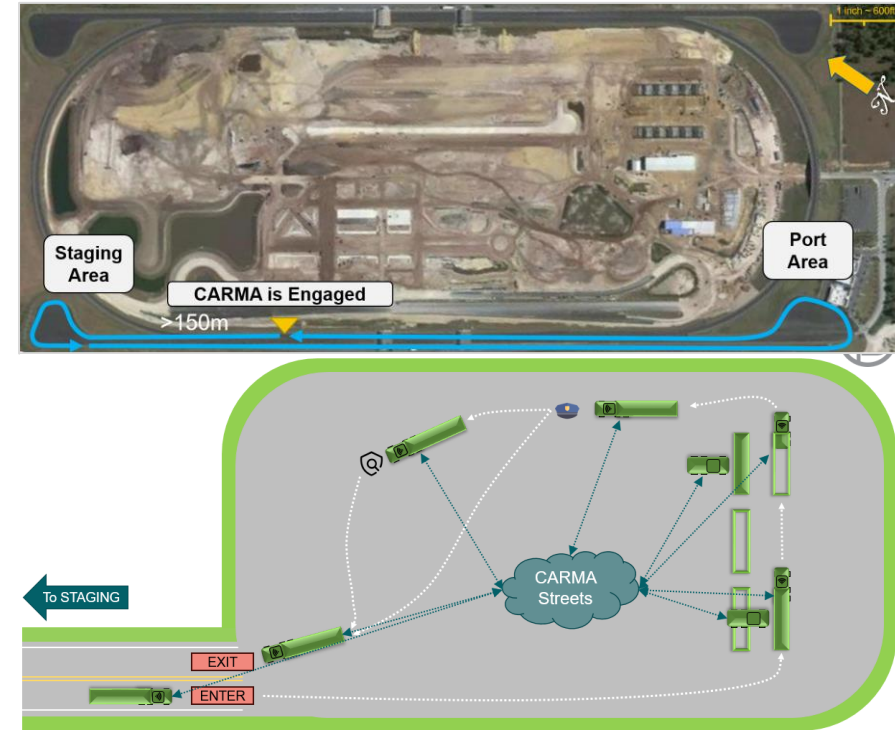
- Federal Highway Administration
- Federal Motor Carrier Safety Administration
- Federal Transit Administration



Cooperative Driving Automation (CDA) Freight: Automated Port Operations and Automated Commercial Motor Vehicle Operations

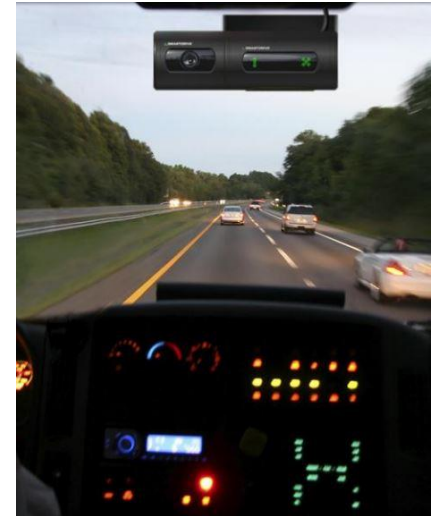
Goal:

- Developing a proof-of-concept application in support of loading and unloading shipping containers, using Commercial Motor Vehicle (CMV) automation.



FMCSA: ADAS Crash Safety Analyses via Onboard Safety Monitoring Data

FMCSA recently awarded a 48-month research project to the Virginia Tech Transportation Institute (VTTI) to develop empirical CMV ADAS safety effectiveness data from over 44K trucks.



FMCSA: Select ACE Research Program Activities

Six Key 2022 AV Projects:

- Electronic inspections
- Human--ADS team driving
- Human factors in ADS-equipped CMVs
- Automated hazard triangle deployment
- Work Zone Safety
- Emergency Response

Ongoing ADS Deployment Grants:

- Trucking Fleet Concept of Operations for Managing Mixed Fleets
- Deploying Automated Technology Anywhere



FTA: Transit Bus Automation - Project Updates

Integrated Mobility Innovation (IMI) Program

Accelerating Innovative Mobility (AIM) Program

ADS Demonstration Grants



Photo credits: May Mobility and University of Iowa

STAR Plan

- FTA is developing “STAR Plan 2.0” (2023-2027).

Request for Information (RFI)

- The RFI is open from June 2nd to August 1st, 2022.
- It is available at: <https://go.usa.gov/xJ9Bz>.





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Thank You