

Transportation Equity: Ensuring the U.S. Transportation System Meets the Needs of All

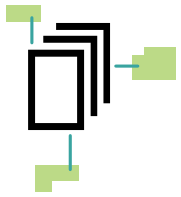


The equity of our transportation system impacts everyone's quality of life.

Advancing transportation equity is pivotal to achieving the strategic goals of the U.S. DOT—and at the heart of the U.S. DOT Volpe Center's mission to transform transportation for all.

- Since opening its doors in 1970, the U.S. DOT Volpe Center's multidisciplinary team of experts have worked together at the intersection of equity and multimodal transportation.
- In fact, some of its earliest research work included pioneering research to explore equitable transit access.
- Through its vibrant communities of practice, the U.S. DOT Volpe Center regularly brings together staff from across disciplines and teams to share knowledge, experience, and best practices on a variety of topics and skills, including transportation equity.

Transportation Equity Expertise and Examples of Recent Work



Economic and Policy Analysis

- Identifying and analyzing economic and societal impacts of proposed rule-making
- Incorporating equity considerations into grant reviews and regulatory evaluations
- Supporting expansion of demographic diversity in the transportation workforce
- Implementing equity analysis and policy remediation measures
- Assessing economic equity in capital investment grants for new transit projects

Examples

[A Transportation Research Assessment of North Carolina Historically Black Colleges and Universities/Minority Serving Institutions](#)

[Baseline Trends Report on Minorities in Transportation Technology](#)

[Benefits Estimation Model for Automated Vehicle Operations](#)

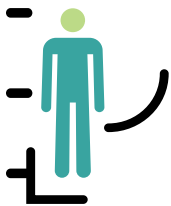
[Beyond Traffic 2045 Economic Opportunity Chapter](#)

[Highway Construction Workforce Development Pilot Program](#)

[Recommendations for Developing a School to Workforce Pipeline in North Carolina](#)

[System Dynamics Perspective for Automated Vehicle Impact Assessment](#)

[U.S. DOT Notice of Proposed Rulemaking on Accessible Lavatories on Single-aisle Aircraft](#)



Human Factors Research and Design

- Measuring and addressing safety and risk factors associated with vulnerable road users
- Performing safety simulations to inform policy decisions
- Evaluating proposed technological solutions for safety for vulnerable road and transit users

Examples

[Fleet Vehicle Safety for Vulnerable Road Users](#)

[Vehicle Blind Spot Measurement App](#)

[Vehicle Blind Zone Calculator](#)

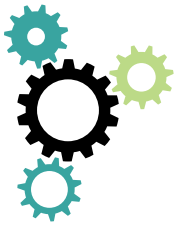


Applied Data Science

- Using advanced data, Geographic Information System applications, dynamic image analysis, and spatial visualization tools to map economic opportunity
- Identifying and addressing equity deficiencies during design reviews and site assessments
- Conducting analyses on fare equity and reviewing alternative fuel models

Examples

[Alternative Fuel Lifecycle Environmental and Economic Transportation Tool](#)



New and Emerging Technology Deployment and Engineering

- Incorporating equity into engineering and safety analyses for future transportation systems
- Testing emerging technologies, such as pedestrian mapping and shared micro-mobility services
- Leveraging innovative design solutions to expand accessibility of automated vehicles
- Developing electric vehicle safety standards for pedestrians

Examples

[Access and Mobility for All Summit](#)
[Angeles National Forest Corridor Analysis](#)
[Aviation Environmental Design Tool](#)
[Emerging Mobility and Automated Shuttles at National Park Service](#)
[Every Day Counts 4 Community Connections](#)
[Every Day Counts-5/6 Virtual Public Involvement](#)
[Every Place Counts Leadership Academy](#)
[Environmental Justice Advancement and Coordination](#)
[Exploratory Advanced Research in Pedestrian Mapping and Navigation](#)
[Federal Motor Vehicle Safety Standard 141, Minimum Sound Requirements for Hybrid and Electric Vehicles](#)
[Foundational Research on Low-Speed Automated Shuttles](#)
[Inclusive Design Challenge](#)
[Office of Human Environment – Research on Micro-mobility](#)
[Quieter Car Pedestrian Safety and Environmental Assessment](#)
[Section 106 Tribal Consultation and Programmatic Agreements](#)
[Technical Assistance to the Millennium Challenge Corporation](#)



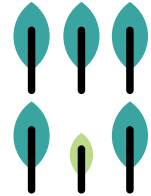
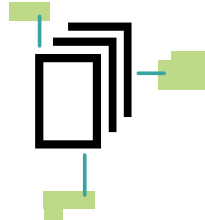
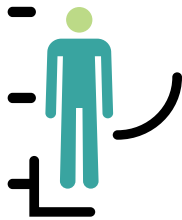
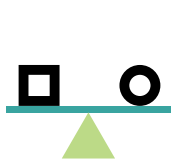
Environmental Analysis, Science, and Engineering

- Expanding accessibility options to disadvantaged and underserved communities
- Engaging disadvantaged and underserved communities in transportation planning and decision-making
- Including environmental justice considerations in reconnection efforts in neighborhoods split during original interstate development in the 1960s
- Measuring automated vehicle impacts on disadvantaged and underserved communities
- Conducting noise modeling and assessing community and environmental impacts

Examples

[Americans with Disabilities Act FRA and Amtrak Stations Program](#)
[Assessing the Environmental Justice Effects of Toll Implementation or Rate Changes](#)
[CAR-LESS California](#)
[Federal Highway Administration Bicycle and Pedestrian Program](#)
[Federal Transit Administration Capital Investment Grants](#)
[Federal Transit Administration Economic Development Assessments](#)
[Fostering Multimodal Connectivity Newsletter](#)
[Human Environment Digest](#)
[Interstate 5 Rose Quarter Improvement Project Environmental Assessment](#)
[Making Transportation Planning Applicable in Tribal Communities](#)
[Noise Abatement and Control—HUD Exchange Regional Alternative Transportation Evaluation](#)
[Transportation Planning Oversight](#)
[Tribal Trails Research](#)
[Tribal Transportation Training Materials](#)
[U.S. DOT Health in Transportation Working Group](#)

Our Partners in Transportation Equity



Federal Partners

- U.S. Department of Agriculture
 - U.S. Forest Service
- U.S. Department of the Interior
 - National Park Service
 - U.S. Fish and Wildlife Service
- U.S. Department of Transportation
 - Bureau of Transportation Statistics
 - Federal Aviation Administration
 - Federal Highway Administration
 - Federal Railroad Administration
 - Federal Transit Administration
 - National Highway Traffic Safety Administration
 - Office of the Under Secretary of Transportation for Policy
 - Office of the Assistant Secretary for Research and Technology
 - U.S. Department of Housing and Urban Development
 - U.S. DOT Access Board
- Millennium Challenge Corporation

Other Key Partners

- City of Cambridge, MA
- National Association of City Transportation Officials
- North Carolina Department of Transportation
- Oregon Department of Transportation
- Santos Family Foundation