HUMAN FACTORS

U.S. Department of Transportation
Federal Highway Administration

Turner-Fairbank Highway Research Center

Virtual Reality Laboratory

Highway Driving Simulator

Sign Laboratory

Articulated Pedestrian Dummies

Field Research Vehicles

All images source: FHWA.

What Is Human Factors?

Human factors is an interdisciplinary area of research that applies what researchers know about people's capabilities to better design environments in which people can function. Human factors research focuses on real-world applications, such as product design, workplace safety, ergonomics, human-machine interfaces, and transportation. The goal of human factors research is to maximize performance and safety by creating products, equipment, machines, and environments that complement human capabilities.

Human Factors and Transportation Safety

With the Human Factors Laboratory, located at the Federal Highway Administration's (FHWA's) Turner-Fairbank Highway Research Center in McLean, VA, the Human Factors Team aims to improve transportation safety by strengthening the understanding of user needs and making transportation-related recommendations for roadway design, signage, and advanced transportation technology. The team's work supports the U.S. Department of Transportation's and FHWA's goal of reducing transportation-related fatalities and serious injuries across the transportation system.

Research Topics Explored by the Human Factors Laboratory

- Human factors issues related to driving automation.
- Driver comprehension of roadway infrastructure.
- Human factors issues related to heavy-vehicle operations.
- Vulnerable road-user safety.

Contact Us

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Scan the QR code for more information:

https://highways.dot.gov/turner-fairbank-highway-research-center/labs/human-factors

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