



Volpe, The National Transportation Systems Center

# Advanced Transportation Technologies

Our Center for Advanced Transportation Technologies is dedicated to exploring innovative applications of advanced communications, navigation, and information technologies to enhance transportation safety, mobility, and energy/environmental performance.

We focus on vehicle crash avoidance, electronic systems safety and resilience, technology assessment, field test and evaluation, strategic planning, and research program management.

## Our work helps do the following:

- Improve the safety and mobility of the motoring public
- Predict the safety benefits of advanced automotive technologies
- Promote the development and successful deployment of advanced surface transportation technologies
- Develop policy options, strategies, and tools for policy makers
- Identify research needs and seek innovative solutions, with emphasis on leveraging the creativity of small businesses



U.S. Department of Transportation  
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## What We Do

### Advanced Vehicle Technology

Volpe's Advanced Vehicle Technology Division performs engineering analyses to facilitate the deployment and enhance the safety of advanced technologies in motor vehicles.

We focus on advanced-technology crash avoidance and severity mitigation systems, automated vehicle applications, connected vehicle safety, safe reliability of automotive electronic control systems, and safe operation of rechargeable energy storage systems.

### Technology Innovation and Policy

Volpe's Technology Innovation and Policy Division performs the analysis needed to develop policy options, strategies, and tools for the successful deployment of advanced surface transportation system technologies.

We perform policy and institutional research to analyze the safety, mobility, energy/environment, security, and asset management implications of advanced technology concepts. Our work supports the deployment of emerging and advanced transportation technologies, applications, and systems.

We also provide strategic planning and program management support for technology research initiatives, including management of the U.S. Department of Transportation's Small Business Innovation Research (SBIR) program.

## Our Capabilities

- Advanced transportation technology assessment
- Crash countermeasure development
- Institutional issue and technology policy analysis
- Motor vehicle crash analysis
- Policy and implementation procedure development
- Safe reliability evaluation of automotive electronic systems
- Traffic system modeling and simulation

## Our Sponsors

- Federal Highway Administration
- Federal Motor Carrier Safety Administration
- Federal Transit Administration
- Intelligent Transportation System (ITS) Joint Program Office
- National Highway Traffic Safety Administration
- Office of the Secretary of Transportation's Office of Small and Disadvantaged Business Utilization and participating U.S. DOT agencies

## Contact Us

Gary T. Ritter  
Director, Advanced Transportation Technologies  
Volpe, The National Transportation Systems Center  
55 Broadway  
Cambridge, MA 02142

[gary.ritter@dot.gov](mailto:gary.ritter@dot.gov)  
617-494-2716  
[www.volpe.dot.gov](http://www.volpe.dot.gov)

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