



Multimodal
Systems
Research
& Analysis

Safety
Management
Systems

Environmental
& Energy
Systems

Freight
Logistics &
Transportation

Physical
Infrastructure
Systems

CNS &
Traffic
Management
Systems

Human
Factors
Research &
System
Applications

Advanced
Vehicle &
Information
Network
Systems

Volpe National Transportation Systems Center

Centers of Innovation – An Overview

U.S. Department of Transportation
Research and Innovative Technology Administration

Innovation for a Nation on the Move

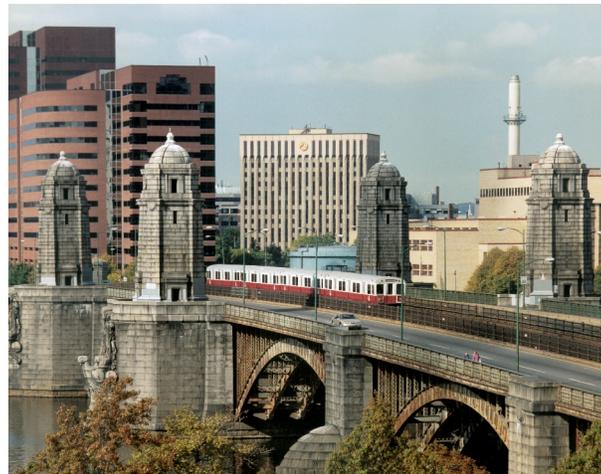
About the Volpe Center

An innovative Federal fee-for-service organization, the Volpe National Transportation Systems Center (Volpe Center), part of the U.S. DOT's Research and Innovative Technology Administration (RITA), is an internationally recognized center of transportation and logistics expertise. The Volpe team represents a world class transportation resource with multi-disciplinary capabilities in all modes of transportation. The Volpe Center plays a unique role in looking across the transportation enterprise to anticipate future transportation issues and challenges. The Center also has a highly skilled team of acquisition professionals. For nearly 40 years, the Volpe Center has provided critical support to all of U.S. DOT's modal administrations and offices, other Federal agencies, state and local governments and organizations, foreign governments and entities, and the private sector.

The Volpe Center is organized into eight Centers of Innovation (COI). Each COI applies its technical capabilities to U.S. DOT strategic goals and national transportation priorities. The COIs expand U.S. DOT's multimodal horizons and demonstrate how innovation can arise from creative and collaborative use of internal and external assets.

Workforce

The strength of the Volpe Center is its people—their knowledge, experience, enterprise, perspective, and commitment. The Volpe Center team represents a world-class transportation resource, with broad technical and institutional expertise not replicated elsewhere. Nearly two-thirds of our approximately 550-member Federal workforce is comprised of technical professionals, many of whom have advanced degrees in disciplines such as engineering, physical and social science, economics, and information systems.



Volpe Center

The Volpe Center also assembled a highly skilled, responsive, and responsible team of acquisition professionals with extensive experience in executing and managing large, multifaceted procurements to fulfill technical requirements across a wide spectrum using a variety of procurement methodologies and business process innovations.

Centers of Innovation

The Volpe Center's eight Centers of Innovation complement the intent and spirit of the Norman Y. Mineta Research and Special Programs Improvement Act with their focus on cross cutting transportation, research, education, innovation, and other multimodal issues. The Centers of Innovation increase the opportunity for research technology synergy both within and outside of U.S. DOT and the effectiveness of the Volpe Center's crossmodal and multimodal capabilities. They also clarify, reinforce, and strengthen the Volpe Center's role in applying its technical capabilities to U.S. DOT strategic goals and national transportation priorities. The Centers of Innovation institutionalize and strengthen the Volpe Center's ability to anticipate future transportation challenges. They expand U.S. DOT's horizon and show how innovation can arise from creative and collaborative use of internal and external assets.

A Local Resource

The Volpe Center is located in the midst of a U.S. technology hub in the Kendall Square area of Cambridge, across the street from the Massachusetts Institute of Technology (MIT), and two subway stops from Harvard University. This dynamic atmosphere of intellectual excitement and professional ingenuity enriches our staff and infuses our work. The Volpe Center has long been a good neighbor and stable contributor to the Massachusetts economy and hundreds of charities. It is one of the 200 largest businesses in the state, the 11th largest in the City of Cambridge.



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The Centers of Innovation:

Multimodal Systems Research and Analysis: Undertakes transportation policy analysis and research that contributes to a compelling vision of the 21st Century transportation enterprise and supports decision making in the development, management, operation and financing of an integrated multimodal national transportation system that meets today's and tomorrow's mobility needs for goods and people.

Safety Management Systems: Acquires, maintains, distributes, and analyzes transportation safety data to enable the Federal government, the states, municipalities, non-government organizations, and industry to take effective actions to reduce the number and severity of transportation-related deaths, injuries, and property damage.

Environmental and Energy Systems: Provides technical and analytical support for decision making at all levels of government and industry on: a.) transportation-related environmental policies including those pertaining to climate variability, air, noise, environmental compliance, engineering and remediation, and hazardous materials, and b.) transportation's role in achieving energy independence both as a consumer of energy and as a critical element in the energy supply chain.

Freight Logistics and Transportation Systems: Maintains overall cognizance of the policy implications of shifting global and logistics infrastructure including consideration of safety, security, economic, environmental stewardship, and energy issues. Provides the technical expertise to oversee the deployment of next-generation global supply chains.

Physical Infrastructure Systems: Maintains cognizance in the face of ever-increasing demand and accumulated loads on the existing and future transportation infrastructures, and provides technical support in inspection, maintenance, and rehabilitation, including vehicles, guideways, and intermodal facilities.

Communication, Navigation and Surveillance (CNS) and Traffic Management Systems: Maintains and applies internationally recognized capabilities in communications, navigation, surveillance operations management, and associated Information Technology disciplines to enhance the capacity, safety, and security of next-generation transportation systems.

Human Factors Research and System Applications: Provides internationally recognized human factors research and development capabilities supporting all modes of transportation. Studies new relationships between humans and current automation technologies to improve transportation safety, security, and productivity with due concern for unintended consequences.

Advanced Vehicle and Information Network Systems: Provides systems engineering and analysis, operations research and related capabilities to identify, assess, and deploy advanced technologies and new operational strategies to enhance transportation system performance.

About the Research and Innovative Technology Administration

The Research and Innovative Technology Administration (RITA) coordinates U.S. DOT's research programs and is charged with advancing the deployment of cutting-edge technologies to improve our Nation's transportation system. RITA was established as a U.S. DOT Operating Administration by the Norman Y. Mineta Research and Special Programs Improvement Act of 2004.

For more information

<http://www.rita.dot.gov>

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