



Volpe, The National Transportation Systems Center

# Center for Safety Management Systems

The Center for Safety Management Systems is a national resource for safety management expertise, addressing complex transportation safety issues in all modes of transportation. The information technology (IT) systems that we develop and the data analysis and modeling that we perform, directly contribute to operational safety improvements. These improvements, in turn, are key to a positive safety culture and a reduction in transportation-related injuries and lives lost.



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

John A. Volpe National Transportation Systems Center

## What We Do

### Safety Information Systems

The Safety Information Systems Division provides the full spectrum of IT life cycle support for safety information systems including business process and system requirements, software design and enterprise architecture, IT development, system testing and deployment, infrastructure support, technical help desk, and cyber security.

### Aviation Safety Management

The Aviation Systems Management Division provides systems engineering and analysis, operations research and associated IT disciplines to enhance aviation operational safety.

### Safety Measurement and Analysis

The Safety Measurement and Analysis Division supports U.S. DOT in safety analysis including operations research analysis, business process redesign, performance and program effectiveness measurement, and communications and outreach to support safety management systems.

## Our Capabilities

The Center for Safety Management Systems creates tailored approaches to safety oversight, management and analysis for transportation organizations:

- **Systems Approach** — Tailoring safety management system approaches for transportation organizations
- **Safety and surveillance information management systems** — Integrating and aligning technology to support aviation safety and business/organizational goals
- **Analysis and decision support tools** — Assisting in the effective use of resources, identification of trends, and risk management
- **Safety standards, policy, and directives** — Identifying alternatives, impacts, risks, and existing and proposed solutions
- **Safety studies and regulatory support** — Supporting studies, prototypes, and rulemaking
- **Information Systems Development** — Creating, enhancing and maintaining IT capabilities to support DOT safety mission
- **IT Infrastructure and operations** — Effectively utilizing complex infrastructures
- **Technical Help Desk** — Performing help desk operations to support user queries
- **IT Security** — Providing a full spectrum of cyber-security services
- **Information resource development** — Developing information resources to create knowledge from data
- **Program effectiveness** — Developing models to estimate benefits of safety programs
- **Data quality** — Improving the quality of safety data collected in the field
- **Business Processes** — Designing and implementing new business processes

## Our Sponsors

- Federal Aviation Administration
- National Highway Traffic Safety Administration
- Federal Motor Carrier Safety Administration

## Technical Centers at Volpe

- Transportation Policy and Planning
- Safety Management Systems
- Environmental and Energy Systems
- Transportation Logistics and Security
- Infrastructure Systems and Engineering
- Air Traffic Systems and Operations
- Human Factors Research and System Applications
- Advanced Transportation Technologies

## Contact Us

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