

***United States Department of Transportation (USDOT)***

***Intelligent Transportation Systems (ITS)  
Research and Standards Programs***

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# USDOT and RITA

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## USDOT is part of the Executive Branch of the US Government

- Secretary of Transportation serves under direction of the President
- Mission: Serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.
- Funding from fuel taxes, fees and general revenue
- Funds transportation safety and infrastructure programs, regulates safety, provides services (including air traffic control)
  - 9 modal agencies – surface & air

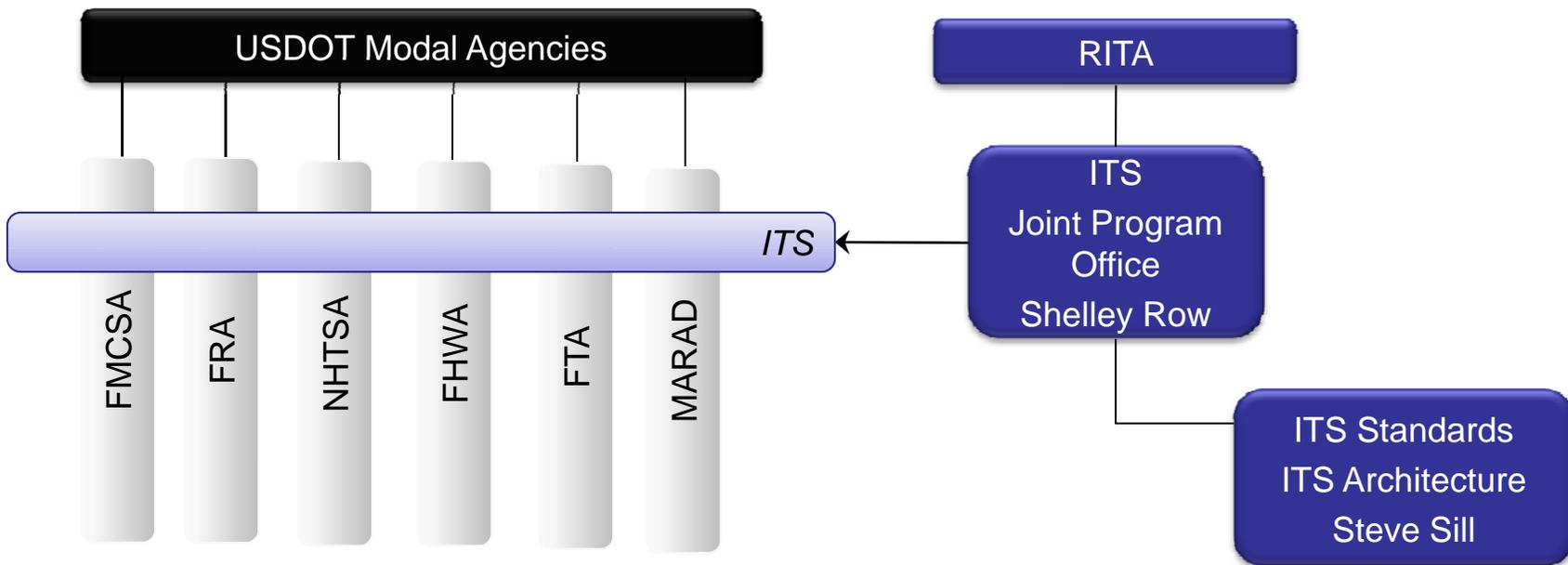
## Research and Innovative Technology Administration (RITA)

- Established in 2004
- Coordinates research and education programs
- Conducts cross-modal research programs – e.g. ITS-JPO
- Operates the Volpe Center, Transportation Safety Institute and Bureau of Transportation Statistics

# ITS Joint Program Office (ITS-JPO)

ITS-JPO cooperates with modal agencies to conduct ITS research

- Programmatically under RITA control
- Administratively under Federal Highway Administration
- Seven of nine USDOT agencies involved in ITS



# Intelligent Transportation Systems Joint Program Office

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## What is ITS?

- Application of information technology to surface transportation
- Broad range of wireless/wire-line communications/information technologies

## ITS-JPO Major Initiatives

<b><u>IntelliDrive<sup>SM</sup>*</u></b>	Clarus
Next Generation 9-1-1	Mobility Services for All Americans
Cooperative Intersection Collision Avoidance Systems	Electronic Freight Manifest
Integrated Vehicle-Based Safety Systems	ITS Operational Testing for Congestion Mitigation
Integrated Corridor Management Systems	Emergency Transportation Operations

***National ITS Architecture and ITS Standards are cross-cutting***

\* IntelliDrive is a service mark of the U.S. Department of Transportation.

# Major IntelliDrive Objectives

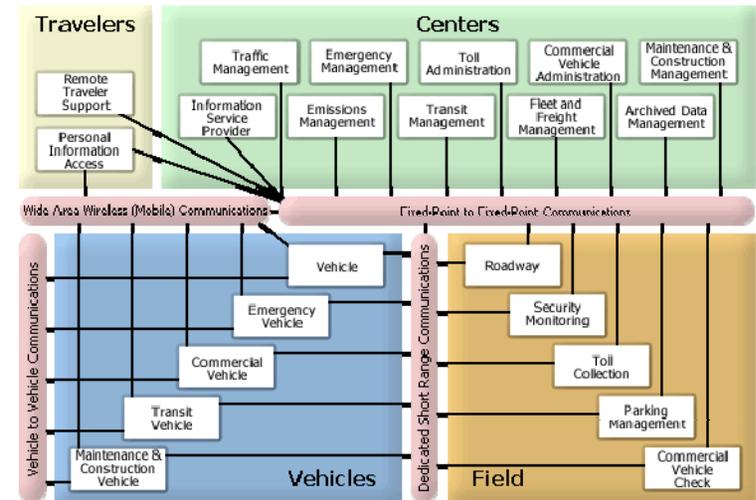
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- Rapidly advance V2V communications technology
  - Potential NHTSA regulatory decision on In-Vehicle Equipment by 2013
- Accelerate in-vehicle technology
  - “Here I Am” messages
  - Enables safety and active traffic management
- Accelerate infrastructure communications capability
  - Signal Phase and Timing (SPaT) initial focus
  - Enable safety, mobility, and environmental applications
- Develop on-road multi-modal pilot deployments for high-value applications
- Monitor and evaluate driver distraction issues
- Understand benefits and communications needs (DSRC/other) of transformational safety, mobility and environmental applications

# National ITS Architecture & ITS Standards Programs

The National ITS Architecture provides a common framework for planning, defining, and integrating ITS:

- Required functions
  - e.g. gather traffic flow information on a road
- Physical entities or subsystems where functions reside
  - e.g. In the field or the vehicle
- Information flows that connect functions and physical subsystems together into an integrated system



RITA ITS-JPO supports the development of ITS standards

- Essential to enable widespread deployment of interoperable ITS technologies
- Harmonization of cooperative systems standards:
  - Reduces need for unique vehicle hardware/software in different regions
  - Reduces cost and accelerates implementation

# ITS-JPO's Standards Role and Activities

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## **Standards are essential to enable widespread deployment of interoperable ITS**

How does ITS-JPO support development of standards?

- Strategic plan to guide future standards developments and policies
- Financial support to standards development/maintenance efforts
- Encourage systems engineering processes to facilitate complete and correct standards

What does ITS-JPO not do?

- Do not define contents of standards, not prescriptive
- Do not currently mandate use of specific standards in ITS system deployment

Where do ITS standards fit in?

- The National ITS Architecture provides the framework for interoperable ITS systems
- Standards define the interfaces between elements within the National ITS Architecture

# For More Information...

Please visit the following websites:



[www.its.dot.gov](http://www.its.dot.gov)

[http://www.its.dot.gov/strat\\_plan/index.htm](http://www.its.dot.gov/strat_plan/index.htm)



[www.intellidriveusa.org](http://www.intellidriveusa.org)

For more information on USDOT ITS Standards:



<http://www.standards.its.dot.gov/>

Or follow us on:



[http://www.its.dot.gov/rss\\_feed.htm](http://www.its.dot.gov/rss_feed.htm)



<http://www.its.dot.gov/exit/twitter.htm>