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ICM:

- Is the next logical step in congestion management.
- Optimizes existing transportation infrastructure along a corridor, making transportation investments go farther.
- Enables travelers to make informed travel decisions and dynamically shift modes during a trip.
- Reduces travel time, delays, fuel consumption, emissions and incidents.
- Increases travel time reliability and predictability.



Managing Congestion with Integrated Corridor Management (ICM)

Manage Traffic Congestion • Increase Travel Time Reliability • Empower Travelers

In March 2007, the Secretary of the U.S. Department of Transportation (USDOT) affirmed the department’s commitment to a national initiative to manage highway, freight and aviation congestion, calling congestion one of the greatest threats to the nation’s economy. The Secretary noted that businesses lose an estimated \$200 billion per year due to freight bottlenecks; and drivers waste nearly 4 billion hours of time, and more than 2 billion gallons of fuel, in traffic jams each year. The greatest concentration of congestion is often along critical transportation corridors that link residential areas with business centers, sports arenas and shopping areas. New road construction alone will not solve the growing problem of congestion—travel demand on our nation’s roadways is outpacing new freeway capacity by a factor of five.

Integrated Corridor Management (ICM) is a promising tool in the congestion management toolbox that seeks to optimize the use of existing infrastructure assets and leverage unused capacity along our nation’s urban corridors. With ICM, transportation professionals manage the transportation corridor as a multimodal system—rather than taking the more traditional approach of managing individual assets.

What Is ICM?

Transportation corridors often contain unused capacity in the form of parallel routes, the nonpeak direction on freeways and arterials, single-occupant vehicles and transit services that could be leveraged to help manage congestion. Traffic information today is often fragmented, outdated or not completely useful.

In an ICM corridor, because of proactive multimodal management of infrastructure assets, travelers and shippers could receive information that encompasses the entire transportation network. Travelers could then dynamically shift to alternative transportation options—even during a trip—in response to changing traffic conditions. For example, while driving in a future ICM corridor, a traveler could be informed in advance of congestion ahead on that route and be informed of alternative transportation options such as a nearby transit facility’s location, timing and parking availability.

The USDOT’s ICM Initiative

The USDOT is partnering with eight “Pioneer Sites” in an initiative to develop, deploy and evaluate ICM concepts in eight of our nation’s busiest corridors. The USDOT ICM Initiative aims to advance the state of the practice in transportation corridor operations to manage congestion. This initiative is providing the institutional guidance, operational capabilities, Intelligent Transportation Systems (ITS) technology and technical methods needed to develop, implement and maintain effective ICM systems.

The USDOT ICM Initiative Has the Following Objectives:

1. Demonstrate how operations strategies and ITS technologies can be used to efficiently and proactively manage the movement of people and goods in major transportation corridors through integration of the management of all transportation networks in a corridor.
2. Develop a toolbox of operational policies, cross-network operational strategies, integration requirements and methods, and analysis methodologies needed to implement effective ICM systems.

For more information on the USDOT’s ICM Initiative, please visit:

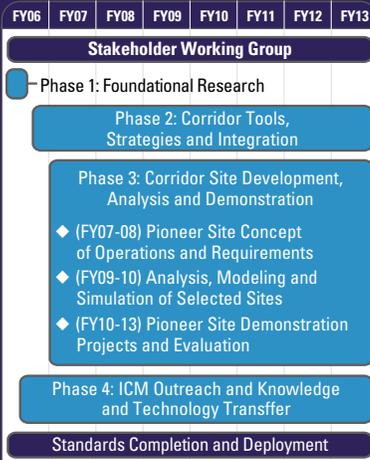
www.its.dot.gov/icms/index.htm





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USDOT ICM Initiative Timeline



3. Demonstrate how proven and emerging ITS technologies can be used to coordinate the operations between separate corridor networks to increase the effective use of the total transportation capacity of the corridor.

Pioneer Sites—Innovators and Leaders in Congestion Management

As part of this ICM Initiative, the USDOT selected eight Pioneer Sites to plan, design, model and demonstrate the benefits of ICM. These Pioneer Sites have distinguished themselves as innovators and leaders in the area of congestion management:

- Dallas, Texas
- Houston, Texas
- Minneapolis, Minnesota
- Montgomery County, Maryland
- Oakland, California
- San Antonio, Texas
- San Diego, California
- Seattle, Washington

These Pioneer Sites are developing, testing and evaluating combinations of new institutional approaches and advanced technologies designed to optimize the existing transportation infrastructure and offer travelers more choices. Their leadership and willingness to try new approaches as part of this groundbreaking initiative is contributing to more efficient and safer urban corridors for the future.

A Phased Approach to the USDOT’s ICM Initiative:

The USDOT’s ICM Initiative is divided into in four phases:

- **Phase 1: Foundational Research**—This phase included research into the current state of corridor management in the United States as well as leading examples of ICM-like practices around the world; initial feasibility research; and the development of technical guidance documents, including the general concept of operations for ICM designed to help sites in the development of their own ICM Concept of Operations (CONOPS).
- **Phase 2: Corridor Tools, Strategies and Integration**—USDOT developed a framework to support the analysis, modeling and simulation (AMS) of ICM strategies. It is working with the Pioneer Sites to deploy and test various ICM components such as standards, interfaces and management schemes.
- **Phase 3: Corridor Site Development, Analysis and Demonstration**—USDOT selected three Pioneer Sites – Dallas, TX, Minneapolis, MN, and San Diego, CA – to analyze and model their ICM strategies. Dallas and San Diego have been selected to demonstrate their ICM systems.
- **Phase 4: Outreach and Knowledge and Technology Transfer (KTT)**—USDOT is packaging the knowledge and materials developed throughout the ICM Initiative into a suite of useful multimedia resources designed to equip transportation practitioners in corridors around the country to implement ICM. KTT resources include a searchable/ browseable Knowledgebase; fact sheets; peer-to-peer training programs; webinars and other knowledge exchange forums; and implementation guidance. Bookmark the Knowledgebase (www.its.dot.gov/icms/knowledgebase.htm) to access the available resources and sign up for the RSS feed to be notified as new resources are added! Follow the Intelligent Transportation Systems Joint Programs Office (ITS JPO) on Twitter for periodic ICM updates at <https://twitter.com/ITSJPO>.

These phases are designed to promote innovation in the development of new approaches for efficiently managing existing assets within a corridor. Ultimately, these four phases will help the USDOT and Pioneer Sites to identify and advance promising ICM approaches that can serve as critical next steps in the nation’s efforts to manage traffic congestion.

For more information on the ICM KTT or the USDOT ICM Initiative, please visit:

www.its.dot.gov/icms/index.htm

Brian Cronin

USDOT/Research and Innovative Technology Administration
202-366-8841
brian.cronin@dot.gov

Steve Mortensen

USDOT/Federal Highway Administration
202-493-0459
steven.mortensen@dot.gov

Bob Sheehan

USDOT/Federal Highway Administration
202-366-6817
robert.sheehan@dot.gov

Dale Thompson

USDOT/Federal Highway Administration
202-493-3420
dale.thompson@dot.gov

