"Living Laboratories" Create Safer and Smoother Corridor Travel

The United States Department of Transportation (U.S. DOT) selected Dallas, TX and San Diego, CA to demonstrate their Integrated Corridor Management Systems (ICMS) as part of its ICM Initiative. These sites will become “living laboratories” in the fight against congestion to show that bumper-to-bumper traffic doesn’t have to be the status quo.

“These communities are leading the way by using state-of-the-art technologies to create a commute that is safer, less congested, and more convenient. America can’t simply build our way to a more modern and efficient transportation infrastructure,” says Ray LaHood, Secretary U.S. DOT. The vision of ICM is that metropolitan areas will realize significant improvements in the efficient movement of people and goods through aggressive and proactive integration and management of major transportation corridors. ICM will result in reduced travel times, delays, fuel consumption, and emissions, as well as increased travel reliability and predictability. During the demonstration the U.S. DOT will conduct an independent evaluation of each site’s ICM to determine if the system delivers the expected benefits. The evaluation will be completed by the end of 2014.

The ICM demonstration will consist of two phases: 1) design and deployment, and 2) operations and maintenance. The San Diego and Dallas ICMS demonstration will “go live” in 2012. San Diego will implement ICM on its I-15 Corridor; Dallas will implement ICM on its US-75 Corridor.

For more information on the ICM KTT or the U.S. DOT ICM Initiative, please contact:

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ICM Hypotheses - ICM will...
• Improve Situational Awareness
• Enhance Response and Control
• Better Inform Travelers
• Improve Corridor Performance

FOR MORE INFORMATION ON THE U.S. DOT’S ICM INITIATIVE, PLEASE VISIT
www.its.dot.gov/icms/index.htm
The San Diego (CA) ICM Vision for I-15

ICM will integrate the regional systems and operations along the I-15 corridor using a decentralized approach. Travelers will have access to real-time information about traffic and travel times, public transit, and parking availability through wireless and web-based alerts as well as dynamic message signs on the roads to help them plan their routes, and make adjustments as needed in response to changing conditions. The ICMS will also support improved incident management along the corridor.

How ICM will accomplish this?
Detectors will collect information on the current travel conditions on freeways, frontage roads, arterial streets, light-rail Red Line, Red Line park-and-ride lots, and High-Occupancy Vehicle (HOV) lanes in the corridor. A decision support system (DSS) will help operators select the appropriate combination of ICM strategies to apply to different operational conditions. A DSS allows transportation managers to evaluate the optimum operational strategies and determine when and how to implement them. Operating agencies will share incident, construction, and special event information with each other through a common web interface. Transportation managers will be able to dynamically change traffic signal timing on arterials and frontage roads as well as direct travelers to faster roadways or transit facilities.

Who’s involved?
The US-75 ICM Demonstration is a collaborative effort led by Dallas Area Rapid Transit (DART) in collaboration with the U.S. DOT, City of Dallas, Town of Highland Park, North Central Texas Council of Governments (NCTCOG), North Texas Tollway Authority (NTTA), City of Plano, City of Richardson, Texas Department of Transportation (TxDOT), and the City of University Park.

The Dallas (TX) ICM Vision for US-75
ICM will integrate the regional systems and operations along the US-75 corridor using a decentralized approach. Travelers will have access to real-time information about traffic and travel times, public transit, and parking availability through wireless and web-based alerts as well as dynamic message signs on the roads to help them plan their routes, and make adjustments as needed in response to changing conditions. The ICMS will also support improved incident management along the corridor.

How ICM will accomplish this?
Detectors will collect information on the current travel conditions on freeways, frontage roads, arterial streets, light-rail Red Line, Red Line park-and-ride lots, and High-Occupancy Vehicle (HOV) lanes in the corridor. A decision support system (DSS) will help operators select the appropriate combination of ICM strategies to apply to different operational conditions. A DSS allows transportation managers to evaluate the optimum operational strategies and determine when and how to implement them. Operating agencies will share incident, construction, and special event information with each other through a common web interface. Transportation managers will be able to dynamically change traffic signal timing on arterials and frontage roads as well as direct travelers to faster roadways or transit facilities.

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For more information about the Dallas, TX, Demonstration Site contact:
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San Diego, CA: I-15

• ICM Corridor covers a 21-mile segment of I-15 and runs from SR-78 in the north to SR-163 interchange in the south.
• Serves commuter, goods, and services movement from northern San Diego to the downtown area.
• Weekday traffic volumes range from 170,000 to 290,000 vehicles on general purpose lanes.
• Managed Lanes and Bus Rapid Transit (BRT) that will operate in the Managed Lanes.
• Dynamic variable pricing in the managed Lanes will help manage traffic flow.

For more information about the San Diego, CA, Demonstration Site contact:
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