Dallas Integrated Corridor Management

TSM&O Category: Integrated Corridor Management

Problem: The congested US-75 project corridor plays a critical role in moving people through a region with rapid population growth and major employment centers. Road expansion is not an option.

Solution: Operate the US-75 corridor to incorporate multiple solutions involving ITS applications, travel demand management, enhanced transit options, special use lanes, and pricing strategies.

Project Description: The Dallas ICM project will be implemented in 2013 and will include the following assets and strategies:

- ITS infrastructure including: surveillance cameras, dynamic message signs on arterials and US-75, traffic sensors and vehicle detection, responsive traffic signals, transit signal priority, and data archive
- Transportation Management Center that combines TxDOT, DART and Dallas County Sheriff Department
- HOV/HOT lanes
- Route and mode diversion strategies for incident and crash/mobility assistance patrols
- Smart parking systems at light rail stations
- Expanded traveler, weather, and 511 systems

Results: These results are taken from the Analysis, Modeling, and Simulation Phase of the project:

- Annual travel time savings are approximately 740,000 person-hours
- 3% improvement in travel time reliability
- Nearly 1 million gallons of fuel saved annually
- 9,400 tons of mobile emissions reduced
- Benefit-Cost ratio approximately 20:1

Cost: The ICM program will cost $13.6 million over a 10-year period with funding from the USDOT, local share, DART, and other federal funds

What’s in it for me?

- Improved mobility and travel time reliability
- Reduced fuel consumption and mobile emissions
- ICM benefits accrue faster at higher levels of travel demand and during non-recurrent congestion
- Simulation work has resulted in improvements to analysis tools and modeling methodologies

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Project Team: Dallas Area Rapid Transit (DART), Cities of Dallas, Highland Park, Richardson, Plano, and University Park, North Central Texas Council of Governments, North Texas Tollway Authority, TxDOT

Quote: “The ability of the parallel arterials to handle traffic was confirmed during the analysis, modeling and simulation phase of the ICM project. The modeling assessment showed as much as a 20:1 benefit to cost could be achieved by implementing alternative diversion routes and shifts to transit.”  
Koorosh Olyai, Dallas Area Rapid Transit

Multimedia:
Dallas ICM Initiative Presentation from ITS America 2012

Arterial Street Monitoring

Incident Diversion

SmartNET ITS Device Map

Source: DART

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