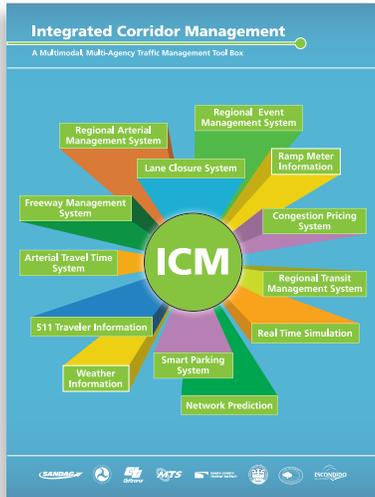


INTEGRATED CORRIDOR MANAGEMENT (ICM) FACT SHEET



PARTNERS:

- Caltrans
- Metropolitan Transit System
- North County Transit District
- City of San Diego
- City of Poway
- City of Escondido
- U.S. Department of Transportation



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Overview

Traffic information can be fragmented because different agencies are responsible for freeways, surface streets, and transit systems. This fragmentation makes it difficult to proactively manage congestion and improve mobility. To address this problem, SANDAG and its partners are participating in a demonstration project to develop and implement

an Integrated Corridor Management (ICM) system under a framework established by the U.S. Department of Transportation (USDOT).

In 2010, the Interstate 15 (I-15) corridor was selected as one of two pilot sites in the nation to test the ICM concept. As part of this project, a unified traffic management system has been created for the corridor, enabling an unprecedented level of multi-agency and multimodal coordination to achieve smooth traffic flow. The project covers a 20-mile section of I-15 from just north of State Route 52 (SR 52) in the City of San Diego to State Route 78 (SR 78) in the City of Escondido, including the state-of-the-art Express Lanes facility within the freeway median and major arterial routes within a few miles to the east and west of I-15. The deployment of the I-15 ICM system demonstrates that corridor performance can be improved by enhancing situational awareness, delivering improved response and



I-15 corridor and surrounding multimodal transportation system.

control, and better informing travelers about traffic conditions.

The project leverages the region's extensive Intelligent Transportation System (ITS) investments to measure and manage corridor performance. Existing assets include the Intermodal Transportation Management System (IMTMS), Regional Arterial Management System (RAMS), Advanced Freeway Traffic Management System (ATMS), Regional Transit Management System (RTMS), 511 advanced traveler information system, and FasTrak®.

Key Project Elements

The I-15 ICM project:

- » Capitalizes on existing ITS investments that have been implemented for freeway, transit, and signal management systems to measure and manage corridor performance

(Continued on reverse)

Project Area



Example of an ICM alternate route sign.

- » Enhances ramp metering, including analysis of overall freeway throughput and integration with traffic signals to better manage traffic entering and exiting the freeway
- » Improves data collection for transit, highways, and arterials to monitor corridor performance, enhance traveler information, and support incident management
- » Delivers a first-of-its-kind Decision Support System (DSS) capable of real-time traffic forecasting and making system recommendations to avoid and minimize congestion impacts
- » Adopts proactive multimodal operational strategies and agreements that prioritize overall corridor performance

Benefits

While there is a history of intergovernmental cooperation in the San Diego region, many real-time decisions are made independently by agencies. Each facility is managed by the agency responsible for that asset: MTS and NCTD operate buses; Caltrans manages the freeways, Express Lanes, and ramp meters; and the cities of San Diego, Poway, and Escondido each operate traffic signals on local streets. The DSS component of the ICM system provides the technical platform that allows these assets to work together, collect, analyze, and share data, and implement response plans in real-time.

Similar to earthquake or tsunami prediction systems, the DSS uses predictive algorithms and modeling tools to forecast corridor performance problems and recommend response plans. Predictions and

recommendations are generated in 15-, 30-, and 60-minute horizons based on real-time and historical performance data. As a result, systems managers are able to coordinate their response, including synchronizing freeway ramp meters with traffic signals and providing advanced traveler information via electronic message signs and 511 web and phone services. This includes information about different travel options and modes to avoid gridlock, instead of simply defaulting to using arterial routes based on past experience and knowledge of typical arterial travel times.

The I-15 ICM project augments the region's longstanding commitment to collaboration and demonstrates the region's ability to develop and implement innovative solutions for addressing congestion.

Implementation Schedule

The ICM system was developed in 2013, and initiated operations in early 2014. Alternate route signs on local streets were installed winter 2015 and began operation in spring 2016.

Funding

The project is funded by an \$8.7 million grant from the U.S. Department of Transportation and \$2.1 million in in-kind contribution from California's Proposition 1B.

For More Information

Visit sandag.org/icm to view the project video and 511sd.com/app to learn more about the app. For more information about the federal ICM initiative, visit its.dot.gov/icms/index.htm.