# **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

Today 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

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 will be created for the corridor, enabling an unprecedented level of multiagency 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 stateof-the-art managed Express Lanes facility within the freeway median and major arterial routes within a few miles to the east and west of I-15.



I-15 corridor and surrounding multimodal transportation system.

The deployment of the I-15 ICM system will demonstrate that corridor performance can be improved by enhancing situational awareness, delivering improved response and control, and better informing travelers about traffic conditions.

The project will leverage 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<sup>®</sup>.

(Continued on reverse)











#### **Key Project Elements**

The I-15 ICM project will:

- Capitalize on existing ITS investments that have been implemented for freeway, transit, and signal management systems to measure and manage corridor performance
- Enhance ramp metering to include analysis of overall freeway throughput and integration with traffic signals to better manage traffic entering and exiting the freeway
- Improve data collection for transit, highways, and arterials to monitor corridor performance, enhance traveler information, and support incident management
- Deliver a first-of-its-kind Decision
  Support System (DSS) capable of realtime traffic forecasting and making
   system recommendations to avoid and minimize congestion impacts
- Adopt 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 will provide the technical platform that will allow 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 will be generated in 15-, 30-, and 60-minute horizons based on realtime and historical performance data. As a result, systems managers will be able to carry out a coordinated response, including synchronizing freeway ramp meters with traffic signals and providing advanced traveler information via electronic message signs or the 511 service. The public will receive 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.

Completion of the I-15 ICM project will augment the region's longstanding commitment to collaboration and demonstrate the region's ability to develop and implement innovative solutions for addressing congestion.

#### **Implementation Schedule**

The ICM system is expected to go live in early 2013 and will be in operation through the end of 2014.

### Funding

The project is estimated to cost \$12.3 million. Funding came from the USDOT, as well as California's Proposition 1B.

#### **For More Information**

Visit sandag.org/icm and its.dot.gov/icms/index.htm.







San Diego Region