I-15 Integrated Corridor Management Project Update: Using Intelligent Transportation Systems
USDOT ICM Selected Eight Pilot Sites

- Seattle
- San Diego
- Oakland
- Houston
- Dallas
- San Antonio
- Montgomery County
- Minneapolis
What is Integrated Corridor Management (ICM)?

- Application of advanced tools
- Proactive, joint, multimodal infrastructure management
- Maximize existing infrastructure
- Assets managed together as a corridor

Partners

- USDOT
- Battelle
- SAIC
- Noblis
- The Volpe Center
- SANDAG
- Caltrans
- City of San Diego
- City of Poway
- City of Escondido
- MTS
- NCTD
- California Path
ICM is about management of a corridor. Management implies more than monitoring. Management implies planning for, and responding to, what is happening across all networks.
TSM/ITS Management Tool Box

- **Regional Arterial Mgmt System (RAMS)**
  - Arterial Congestion
  - Intersection status
  - System alarms
  - Local traffic advisories

- **Regional Transit Mgmt System (RTMS)**
  - Bus AVL
  - Schedule Adherence
  - Selected Stop/Route Data
  - Panic alarms

- **Freeway Mgmt System (FMS)**
  - Freeway Congestion
  - Freeway Incidents
  - Travel Times
  - Planned Events
  - CCTV Imagery
  - CMS Status

- **Regional Event Mgmt System (REMS)**
  - Chp
  - Transit
  - Travel Times
  - Events

- **Congestion Pricing System (CPS)**
  - Toll
  - Travel Times
  - Events

- **511**
  - 511 Usage Statistics
  - Alert messages

- **ATTS**
  - Arterial travel times

- **Weather NWS**
  - Weather/NextRad

- **ICM**
  - Signal timing plans
  - Construction/Maint Status

- **RMIS**
  - Ramp Meter Information System
  - Metering Status

- **RMS**
  - CMS plans

- **ELCS Request**

- **Service change request**

- **NPS**
  - Network Prediction System

- **RTSS**
  - Real-Time Simulation System

- **RTMS**
  - Schedule Adherence
  - Selected Stop/Route Data
  - Panic alarms

- **SPS**
  - Smart Parking System

- **DSS control interface**

- **One-way IMTMS interface**

- **Two-way IMTMS interface**

- **= New or Upgraded System**
I-15 ICM Arterial Detection and Signal Systems

Legend
- ICM Signal
- ICM Network

ACTIVE ROUTING ARTERIALS
- Bernardo Center Drive
- Black Mountain Road
- Camino del Norte
- Carmel Mountain Road
- Carmel Valley Road
- Carrol Canyon Road
- Kearny Villa Road
- Miramar Road
- Mir Mesa Road
- Mercy Road
- Pomerado Road
- Poway Road
- Rancho Bernardo Road
- Rancho Carmel Drive
- Rancho Penasquitos Blvd
- Sabre Springs Pkwy
- Scripps-Poway Pkwy
- Ted Williams Pkwy
- West Bernardo Pkwy

I-15 ICM Corridor - Phase III
Traffic Signal Assets

Legend
- ICM Arterial Segments - Active Routing
- ICM Network Segments

City of San Diego
I-15 ICM Project Will Achieve

Integrating highway, arterial, and transit operations for improved corridor performance

• Provide the tools to:
  – Optimize corridor
  – Improve use of existing infrastructure – maximize capacity
  – Minimize congestion – coordinated multi-modal actions
Expected Benefits of the I-15 ICM Project

- Enhanced traveler information
- Improve reliability
- Reduce fuel consumption
  - 325,000 gallons of fuel saved annually
- Reduce emissions
  - 3,057 tons of emissions saved annually
- 10-year benefit of $94 million
- General benefit – costs from 10:1 to 25:1
Current ICM Work Efforts/Progress

- 2010 – 2013 design and build ICM
- ICM system deployment schedule
  - March – May 2013: ICM system assessment
  - June – August 2013: ICM system enhancements
  - Sept. 2013: ICM system automation
  - On-going commuter input
- ICM federal grant through December 2014