Implementing ICM: Scan Findings, Updates and Next Steps
California Connected Corridors

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Why ICM?

1955

2013
Caltrans Has Taken an Important Step!

• By applying what we have more effectively!

Caltrans Personnel
Transportation Management System Pilot Corridors

- Traffic Operations - 20 positions to assist in improving the health of ITS equipment and system performance in two corridors:
  - I-210 - South
  - I-80 - North
- Maintenance - Positions to improve efforts to maintain Transportation Management System (TMS) elements statewide.
Caltrans District Reorganization

System Management Principal TE

District Traffic Manager
- TMC Operations
- Incident Mgmt
- Planned Lane Closures
- TMP

System Monitoring & Evaluation
- Managed Lanes Monitoring
- TASAS, Table C

Performance Monitoring
- System Analysis

Corridor Manager
- Operational Investigations
- Safety Investigations
- Ramp Metering
- Signal Ops
- Signing
- PIDs
- Staff from external units where needed

Planning for Operations

Int/Ext Coordination

DDD Operations

ITS Support & Development
- ITS Support & Development

Traffic Design
- Traffic PS&E
- Metering Development

Permits
- Permits
- Project Reports
- Truck Services
- COS Coordination
- Signing
Additional Steps - Integration

Institutional Integration
Coordination to collaboration between various agencies and jurisdictions that transcends institutional boundaries.

Operational Integration
Multi-agency and cross-network operational strategies to manage the total capacity and demand of the corridor.

Technical Integration
Sharing and distribution of information, and system operations and control functions to support the immediate analysis and response.
Incident Management
Using - All Available Capacity
California Connected Corridors

Statewide Program
- 5 Corridors
  - I-210 D7 Los Angeles
  - I-80 D4 SF Bay Area
  - SR-57 D12 Orange County
  - I-110 D7 Los Angeles
  - SR-91 D12 Orange County
- Funding
- Standardization
- HQ Traffic Ops Reorganization

Pilot Projects
- D7 I-210
  - Decision Support System (DSS)
    - Forecasting & Modeling
    - Data Hub
    - Rules Engine
- D4 I-80
  - Overhead Gantries
  - Speed Advisories
- D12 SR-57/Anaheim Triangle
  - Data sharing
  - Special event management
- District Traffic Ops Reorganization
Caltrans’ New Mission, Vision and Goals

MISSION
Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability

VISION
A performance-driven, transparent and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork

GOAL 4
System Performance
Utilize leadership, collaboration and strategic partnerships to develop an integrated transportation system that provides reliable and accessible mobility for travelers
Caltrans Director’s Policy DP-08

- Caltrans is committed to achieving full Transportation System Management and Operations (TSM&O).
- Strategies to optimize the performance of existing infrastructure.
- Coordinate business processes, systems and technology, performance measurement, culture, organization and workforce.
- Collaboration and Partnership with transportation stakeholders to enhance mobility for people and goods on the State’s transportation system.
Transportation System Management and Operations (TSM&O)

- FHWA Lead Adopter Grant
- 3-day Sub-Regional/Corridor Ops/CMM Workshops
  - D12 Irvine - Anaheim Triangle
  - D4 Oakland - East Bay
  - Others to follow - statewide
I-210 Connected Corridor Pilot

Managed Freeway Phase 1

Extent of Study Area

Supporting Arterials

Los Angeles

Monterey Park

Supporting Arterials

NCHRP U.S. Domestic Scan Program

NOCoE National Operations Center of Excellence
210 Update

- Metro Call for Projects - Funding for arterials
- SHOPP Funding - Funding for state highway
- Charter Signed by all Partners!
- ConOps Completed
- System Requirements and User Needs underway
Anaheim Triangle
SR-57 - The First Leg of the Triangle
SR-57 Update

• All ITS Elements on the SR-57 (Signals, Ramp Meters, CCTV, CMS, Traffic Monitoring Stations) upgraded to IP (Internet Protocol) communications this year.
  - Allow for homogenous sharing of data between the Cities/County/Caltrans:
    ▪ Transmission of HD video and traffic data to smartphones/smart cars.
    ▪ Audio Streams of traffic data to smartphones/smart cars.
    ▪ Vehicle to Infrastructure (V2I) applications.
    ▪ Monitoring of Lighting Systems over the network.
CALIFORNIA CONNECTED CORRIDORS

http://connected-corridors.berkeley.edu/

The Wave of the Future is Here

Ride the Wave!

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