CONNECTED CORRIDORS
“ICM CALIFORNIA”

DIRECTOR’S
PRESENTATION

8/09/2013
System Management Vision

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<th>Future State</th>
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<td>Separated</td>
<td>Integrated</td>
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<td>Decision &amp; Business Process</td>
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Executive Summary

- Federal/State programs launched to encourage *demonstrable* transportation network *improvements* in safety, performance, reliability and environmental sustainability.
  - USDOT launches 7-year *Integrated Corridor Management (ICM)* initiative
  - CTC requests Corridor System Management Plans
  - MAP-21 – Requires measurement and validation of improvements
  - SHRP2 – Recommends capability maturity model (CMM) for projects

- To meet the requirements set forth in these initiatives, Caltrans sets system management goals including leading the day to day management of major California corridors, in tight integration with MPOs, cities and counties.

- Day to day traffic management includes:
  - *proactive real time* supply management (ramp metering, signal light synchronization, guided rerouting, improved incident response, etc)
  - *proactive* demand management (mode, travel time and re-routing)
Executive Summary

- **Goal:** Caltrans will lead the planning, implementation and ongoing operational support for 50 corridor segments in California – “ICM California”

- “I-210 Pilot” – The first Caltrans-lead ICM effort in California and the first corridor site in the “ICM California” plan. (Not yet official)

- “Connected Corridors” – The multi organizational program tasked with delivering all reusable components of “ICM California.”

- **Next Step:** Connected Corridors–VIP (Vehicles, Information and People) positions Caltrans for autonomous/connected vehicles, social network coordination and ultimately integration with future Smart City initiatives.

- Your support and understanding is key
California Connected Corridors
Vehicles, Information & People (CC-VIP) Pilot

• Enable existing transportation infrastructure and vehicles to work together in a highly coordinated manner

• Deliver improved corridor performance (safety and mobility)

• Improve accountability

• Evolve Caltrans to Real-Time operations and management

• Enhance regional, local, and private sector partnerships
What is Connected Corridors?

- Program comprised of a number of efforts in partnership with various agencies and industry partners

- Tasked with:
  - Developing methods and tools for how transportation corridors will be managed in California (Connected Corridors templates)
  - Advancing and integrating technologies needed for corridor management
  - Planning for Caltrans district level organizational support for ICM
  - Identifying and securing funding
  - Providing strategic and tactical education on corridor management
  - Implementing a pilot showcasing the above elements
  - Facilitating the implementation of ICM in multiple corridors in California

- The key to ICM is integrating existing systems and management efforts with new concepts and relationships to develop a coherent multi-modal, multi-jurisdiction, corridor-wide transportation management system
Selected Corridor – I210 (Not Official!)

Managed Freeway

Supporting Arterials

Extent of Study Area
Institutional Integration

Caltrans District Office

County / Cities
Caltrans Operations
Transit Agencies
Planning Organizations
Emergency Responders

Support
Caltrans HQ Operations
Caltrans HQ Planning
Caltrans HQ DRI
UC Berkeley PATH
Vendors / Consulting Firms
Organizational Members

- **Core Organizational Members**
  - Caltrans D7 – Project Leader assigned and provided with resources
  - LA Metro – Assigned resources
  - LA County, Department of Public Works – Discussions started
  - Cities of Pasadena, Arcadia and Monrovia (possibly others) – Contact in September
  - Metrolink – Contact to be planned
  - Southern California Association of Governments – Contact to be planned

- **Organizational Support Members**
  - Caltrans HQ, Division of Traffic Operations - Resources assigned
  - UC Berkeley/PATH – Resources assigned
  - System Metrics Group – Resources assigned
  - SANDAG – In discussion
  - USDOT – In discussion
Anticipated Timeline

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<th>Year</th>
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- Feasibility/Concept Exploration
- Concept of Operation
- System Requirements
- High Level Design
- Detailed Design
- Software/Hardware Development
- Field Installation
- Testing and Verification
- Operation, and Performance Analysis
- System Validation
- System Deployment