

ICM Concept



Project Fact Sheet
Integrated Corridor Mobility (ICM) Project

Traffic Surveillance and Monitoring System

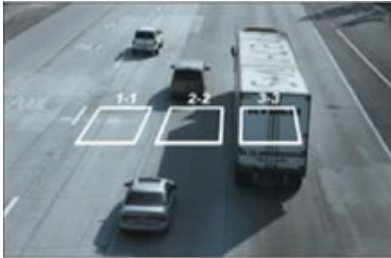
Feature Description and Concept:

The Traffic Surveillance and Monitoring System (TSMS) will complete the ITS installation and integration along the freeway and arterials to allow monitoring and performance measurement of the roadway system for all ICM activities. Additional detection systems will be installed throughout the corridor, including freeway, ramps, local intersections, and arterials for continuous performance monitoring of the system. Other ITS devices, such as Closed Circuit TVs and communication systems will be installed. The information collected by the system may be used for freeway management, incident management, arterial management, and transit management to coordinate and implement system-wide response plans. The objective of this feature is to upgrade the existing detection monitoring and verification systems to allow for much faster response to both recurrent and non-recurrent congestion.



Key Features:

- Vehicle detectors detect vehicle presence, volume, and speed to provide input to a process that can initiate appropriate procedures to resolve congestion or signal timing issues
- CCTV cameras provide the ability to visually confirm incidents and disabled vehicles on shoulders and to monitor general traffic conditions, including ramps and ramp termini
- Communication system for information delivery to the Transportation Management Centers



Benefits:

- Complete system monitoring to allow Active Traffic Management across the entire I-80 network
- Monitoring and response delivery for the entire system
- Performance monitoring consistent with Caltrans and regional requirements to measure system enhancements
- Provides capability for 24/7 operation at the Caltrans TMC and other agencies if desired

Challenges:

- Integration of various I-80 ICM subsystems
- Communication costs associated with entire system implementation
- Multiple systems and strategies working collectively

ICM SubSystem

Freeway Management System

Arterial Management System

Transit Management System

Traveler Information System

Incident Management System

Traffic Surveillance & Control System

Commercial Vehicle Operations

