




**Metropolitan Transportation
Commission -
Freeway Performance
Initiative/Ramp Metering
Implementation in Alameda
County**

*Presented to Programs and Projects Committee
September 9, 2013*



Presentation Overview

- Description of MTC's Freeway Performance Initiative (FPI) and Ramp Metering
- Status of Ramp Metering in the Bay Area and in Alameda County
- Location of Ramp Metering installation in Alameda County on SR 92, I-880/SR 84 and I-580 between Crow Canyon Road and the I-580/I-680 interchange
- Review of Ramp Metering Implementation Plans and schedule for SR 92 and I-880/SR 84

MTC's Freeway Performance Initiative (FPI): Maximize System Performance Through Technology

Goals

- Deploy current technology to better manage the congestion on our freeway system
- Address recurrent congestion (bottlenecks) and non-recurrent congestion (incidents)



Key FPI Elements

- Traffic Operations System
- Ramp Metering
- Arterial Management
- Incident Management
- Traveler Information
- Performance Monitoring

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FPI - Ramp Metering

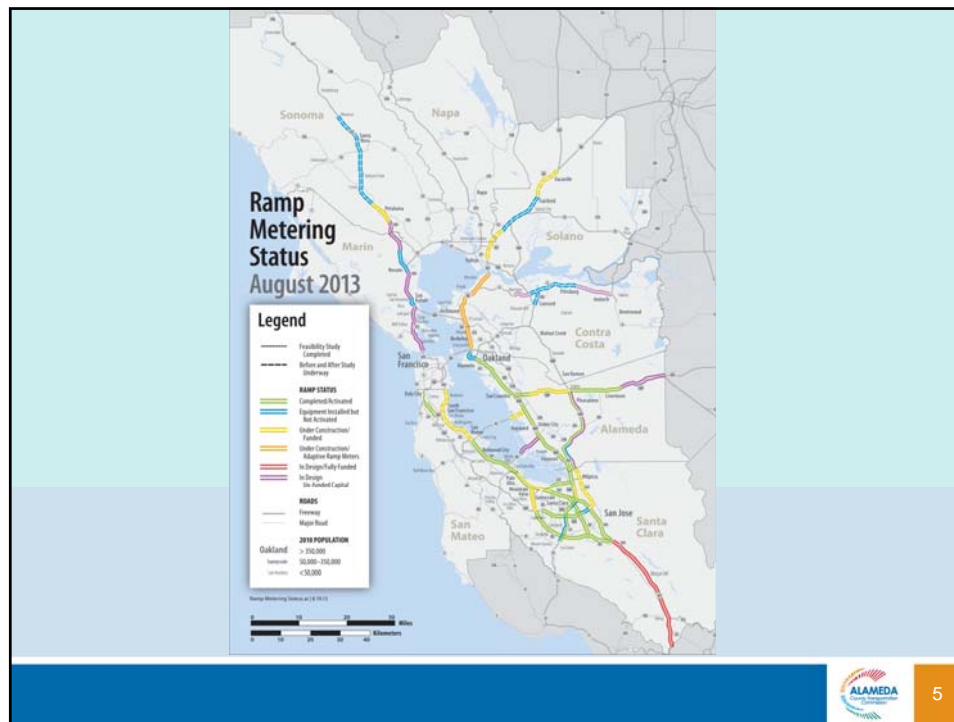
- Managing the rate at which vehicles enter a freeway facility through the use of traffic signals (i.e., meters)
- Ramp metering is intended to help ensure that the freeway is able to carry all the traffic it should be able to carry



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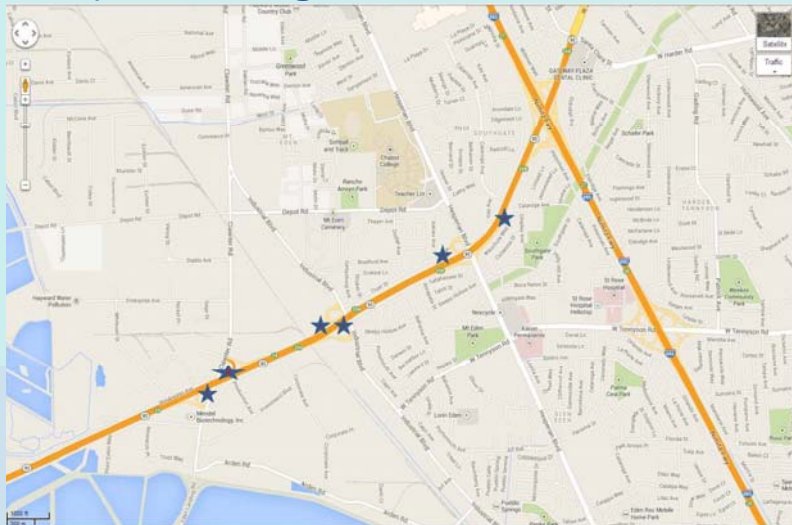
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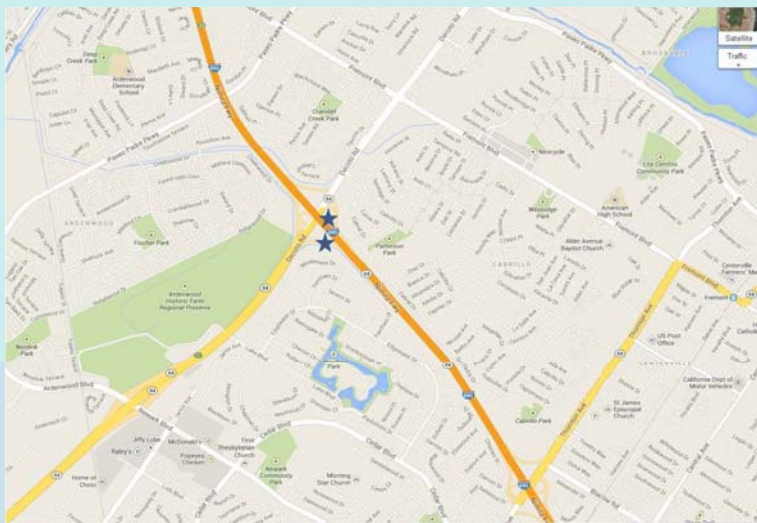
Ramp Metering Installation in Alameda County

- Ramp meters at on-ramps along SR-92 and I-880 at SR 84
 - Six locations on SR-92 – eastbound and westbound on-ramps at Clawiter Road, Industrial Boulevard and Hesperian Boulevard
 - Two locations on I-880 to fill in gaps – northbound I-880 on-ramp from eastbound SR 84 and southbound I-880 on-ramp from eastbound SR 84
 - Construction is scheduled to be completed by December 2013.
- Ramp meters along I-580 between the I-580/I-680 Interchange and Crow Canyon Road.
 - Construction is scheduled to be completed by Fall 2014

Ramp Metering Locations on SR 92



Ramp Metering Locations on I-880/SR 84



Ramp Metering Implementation Plan

- Ramp metering implementation plan will include
 - *data collection and field observations to assess traffic operations before and after ramp metering*
 - *development of optimized ramp metering rates*
 - *identification of benefits or potential diversion impacts*
- MTC generally develops Ramp metering implementation plan in parallel with the installation of the ramp metering equipment so that the meters could be activated soon after completion of installation.



Ramp Metering Implementation Plans for Alameda County

- SR 92 and I-880/SR 84 Ramp Metering Implementation Plan
 - *MTC has initiated the process for development of Ramp Metering Implementation Plan with the stakeholders in coordination with Alameda CTC.*
 - Invited participants - Local Jurisdictions (Hayward, Fremont, Newark), Caltrans, Alameda CTC
 - Also informed Alameda County, San Leandro, and Union City
 - *Kick off meeting was held on August 29, 2013*
- I-580 Ramp Metering Implementation Plan
 - *Kick off meeting is anticipated to occur with the respective stakeholders in February 2014*



SR 92 and I-880/SR 84 Plan Schedule

Task	Schedule
Task 1. Before Metering Data Collection	
Field Data Collection	October – November, 2013
Existing Conditions Memo	November, 2013
Task 2. Calibrate FREQ Model	December, 2013 – January, 2014
Task 3. Develop Ramp Metering Implementation Plan	February, 2014
Task 4. Metering Plan Activation	March, 2014
Task 5. After Ramp Metering Study	
Field Data Collection	May, 2014
Before/After Ramp Metering Report	June – July, 2014

QUESTIONS?