# San Francisco Freeway Corridor Management Update

#### Citizens Advisory Committee Agenda Item 10



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY
October 26, 2016

#### Overview



#### OVERVIEW >

- ► SF Freeway Corridor Management Study (FCMS)
  - ► Goals
  - ► Freeway Management Toolbox
- ► Alameda County's Experience
- ► FCMS Status Update
  - Existing Conditions Summary
  - ► Technical Feasibility Analysis
- Next Steps

### Freeway Corridor Management Study



#### FCMS >

- Recommendation of 2013 SFTP
- ► Funded by \$300,000 Caltrans Planning Grant & \$300,000 Prop K Allocation
- Focus on US-101 & I-280 Corridors
- Need: Over 100,000 new person-trips to and from San Francisco's downtown, southeast, and the South Bay projected through 2040
  - ► Would fill one peak period bus per minute on US-101 or I-280
  - ► Muni Equity Strategy performance gap for this corridor
- Study Partners: Caltrans, SFMTA, MTC, San Mateo C/CAG

## Freeway Corridor Management Study



#### FCMS > GOALS

GOALS	OBJECTIVES
Move people to support economic competitiveness	Improve freeway corridor productivity, utilization, & efficiency Increase vehicle occupancy levels Reduce recurrent delay
Travel reliability	Reduce non-recurrent delay Improve travel time predictability
Travel choices	Increase transit competitiveness Provide better information
Coordination across jurisdictions	Coordinate recommendations with other citywide and regional projects & programs
Reduce traveler emissions	Reduce per capita vehicle tripmaking Reduce per capita vehicle emissions
Balanced effects: Avoid disparities, minimize impacts on neighborhoods	Mitigate the impact of through-trips on local streets Ensure equitable access Avoid disparities in distribution of benefits / impacts

### Freeway Corridor Management Study



FCMS > FREEWAY MANAGEMENT TOOLBOX

- ▶ What's in the Toolbox?
  - Operations Technologies

Adaptive Signal Control
Real-time and Advance Information
Dynamic Speed Advisories

Managed Lanes

Ramp Metering
Weave/Merge Guidance
High Occupancy Vehicle Lanes
Express Lanes







### **Existing Conditions**



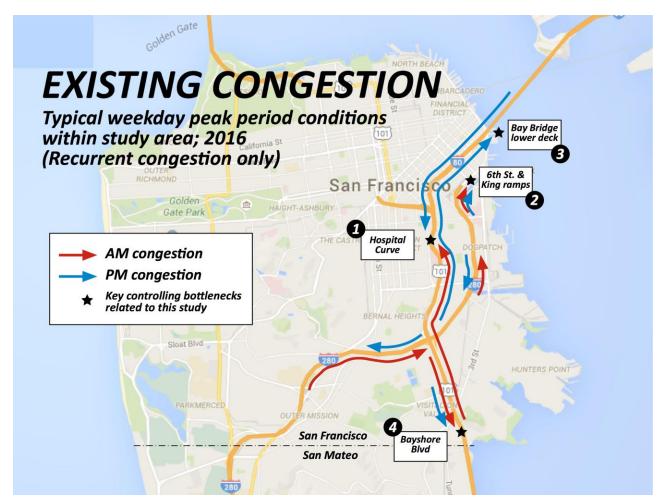
FCMS STATUS UPDATE > EXISTING CONDITIONS SUMMARY

AM
Peak
Period:

7am-9am

PM
Peak
Period:

2pm-6pm



Source: INRIX 4/2014-4/2015,

**Field Observations** 

## **Existing Conditions**



#### FCMS STATUS UPDATE > EXISTING CONDITIONS SUMMARY

I-280 AM (6:00-10:00 AM)	Total Vehicles	2+ HOV%	3+ HOV%					
NB Off Ramp @ 5 <sup>th</sup> & King	5,604	24% (1,339)	6% (354)					
NB Off Ramp @ 6 <sup>th</sup> & Brannan	7,289	25% (1,823)	8% (565)					
SB On Ramp @ 5 <sup>th</sup> & King	3,523	26% (903)	11% (393)					
SB On Ramp @ 6 <sup>th</sup> & Brannan	6,569	24% (1,567)	6% (394)					

I-280 PM (3:00-7:00 PM)	Total Vehicles	2+ HOV%	3+ HOV%					
NB Off Ramp @5 <sup>th</sup> & King	6,216	28% (1,763)	8% (482)					
NB Off Ramp @ 6 <sup>th</sup> & Brannan	7,458	33% (2,435)	10% (758)					
SB On Ramp @ 5 <sup>th</sup> & King	4,955	30% (1,498)	11% (523)					
SB On Ramp @ 6 <sup>th</sup> & Brannan	9,964	23% (2,294)	5% (527)					

Source: Field
Observation, May 2016

### Technical Feasibility Analysis



FCMS STATUS UPDATE > TECHNICAL FEASIBILITY ANALYSIS

- Feasibility Analysis Underway
  - ► Preliminary Feasibility: Managed Lane

**HOV or HOT/Express** 





- Regional Context
- Study underway in San Mateo County to evaluate options for managed lanes on US 101
- SFCTA has begun discussions with officials in San Mateo
  County to explore options to create a seamless managed
  lane experience along the entire US 101 corridor

## **Initial Promising Alternative**



TECHNICAL FEASIBILITY ANALYSIS >

- ► FCMS team currently developing specific alternatives
  - Objectives

Offer managed lane users, <u>including transit</u>, ability to bypass congestion and achieve more reliable travel times

Leverage existing right-of-way or lanes

**Connect to a potential facility in San Mateo County** 

**▶** Limitations

No significant new construction

Minimize impact to general purpose lanes and parallel arterials

Presentation and analysis of alternatives anticipated at January Committee and Board

### **Next Steps**



#### NEXT STEPS >

- Community involvement is key
  - ► SFCTA to conduct direct outreach with neighborhood groups and residents of neighborhoods along freeway corridors
  - ▶ Broad-based outreach anticipated in January with presentation of analysis of alternatives
- Next technical step is analysis of managed lane alternatives
- Coordination and Project Development phase with Caltrans
  - ► Project Development phase would advance initially feasible alternatives, and define the larger technical analysis, including traffic and policy, that would take place in the Environmental Review phase

## **Next Steps**



NEXT STEPS > SCHEDULE

	2016			2017			2018			2019				2020				2021								
Phase	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Initially Feasible Alt			$\Diamond$																							
<b>Project Development</b>																										
<b>Environmental Review</b>																										
Design																										
Construction																										

## Questions?



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