

San Francisco Freeway Corridor Management Update

Plans and Programs Committee
Agenda Item 8



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

October 11, 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
<p>Move people to support economic competitiveness</p>	<p>Improve freeway corridor productivity, utilization, & efficiency Increase vehicle occupancy levels Reduce recurrent delay</p>
<p>Travel reliability</p>	<p>Reduce non-recurrent delay Improve travel time predictability</p>
<p>Travel choices</p>	<p>Increase transit competitiveness Provide better information</p>
<p>Coordination across jurisdictions</p>	<p>Coordinate recommendations with other citywide and regional projects & programs</p>
<p>Reduce traveler emissions</p>	<p>Reduce per capita vehicle tripmaking Reduce per capita vehicle emissions</p>
<p>Balanced effects: Avoid disparities, minimize impacts on neighborhoods</p>	<p>Mitigate the impact of through-trips on local streets Ensure equitable access Avoid disparities in distribution of benefits / impacts</p>

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

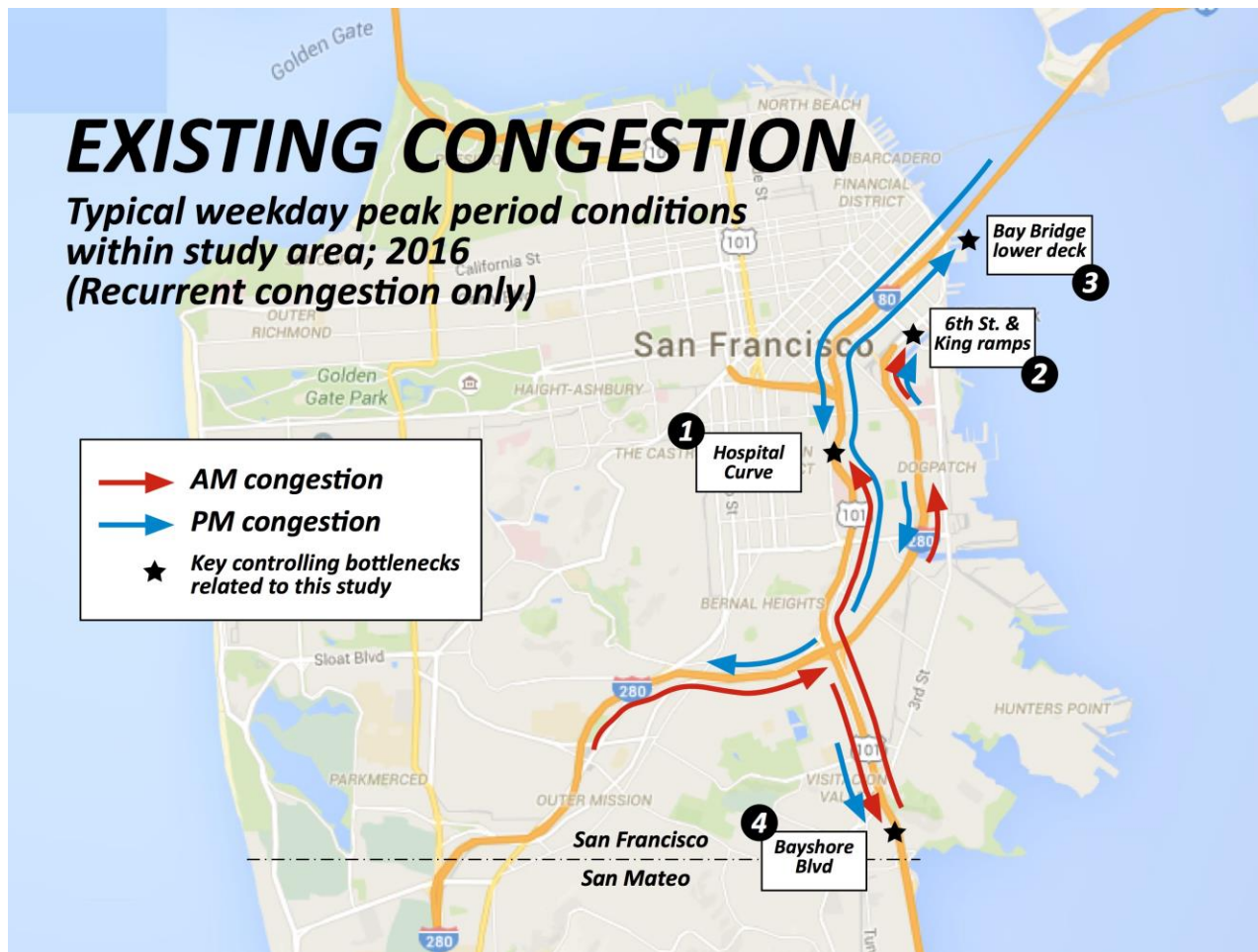


Existing Conditions



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 th & King	5,604	24% (1,339)	6% (354)
NB Off Ramp @ 6 th & Brannan	7,289	25% (1,823)	8% (565)
SB On Ramp @ 5 th & King	3,523	26% (903)	11% (393)
SB On Ramp @ 6 th & 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 th & King	6,216	28% (1,763)	8% (482)
NB Off Ramp @ 6 th & Brannan	7,458	33% (2,435)	10% (758)
SB On Ramp @ 5 th & King	4,955	30% (1,498)	11% (523)
SB On Ramp @ 6 th & Brannan	9,964	23% (2,294)	5% (527)

Source: Field
Observation, May 2016

Technical Feasibility Analysis

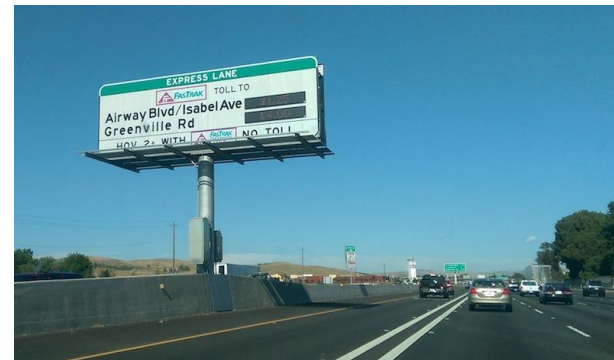


FCMS STATUS UPDATE > TECHNICAL FEASIBILITY ANALYSIS

► 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, including transit, 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



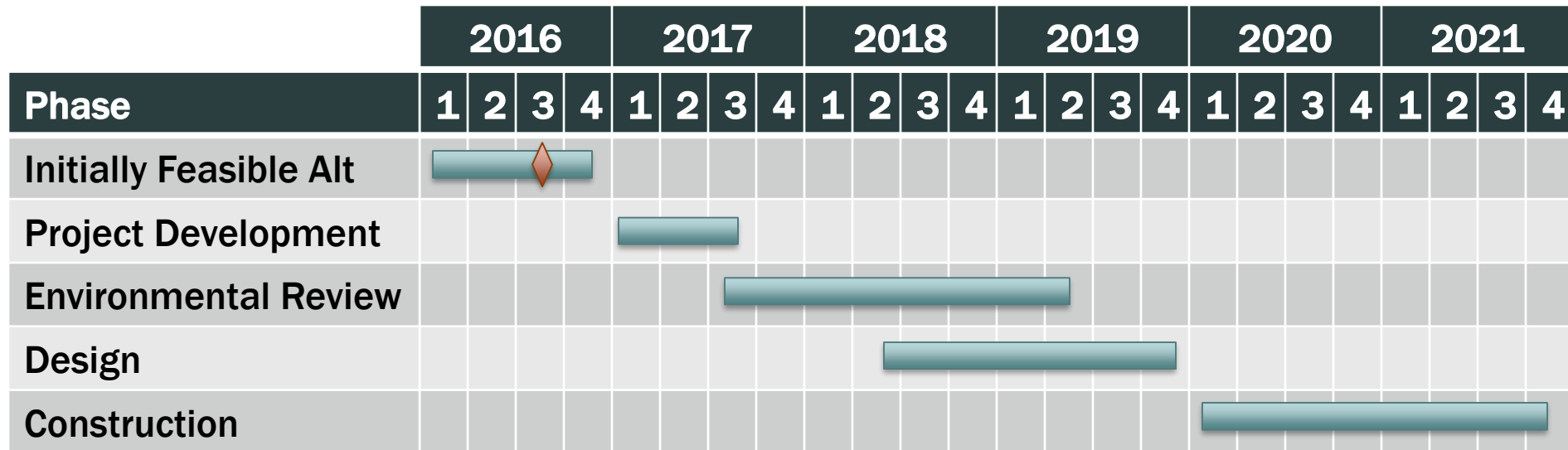
NEXT STEPS >

- ▶ **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



Questions?



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY