



Interstate 5 North Stockton Corridor Interstate 5 North Stockton Corridor

PROPOSED EIGHT MILE RD. INTERCHANGE MODIFICATIONS



NO BUILD CONDITION AT EIGHT MILE ROAD



PROPOSED MODIFICATIONS AT EIGHT MILE ROAD



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PROPOSED NEW NORTH GATEWAY BLVD. INTERCHANGE



NO BUILD CONDITION AT NORTH GATEWAY (looking northwest toward I-5)



PROPOSED INTERCHANGE AT NORTH GATEWAY (looking northwest toward I-5)



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ENVIRONMENTAL PROCESS

Scoping

Preliminary Studies to identify Project Alternatives

Alternative Analysis

Scoping Documents

Alternative Development

Engineering and Environmental

Public/Agency Review & Comment – January 23, 2008

Analysis for Both Alternatives

Biological	Water Quality/Hydrology
Cultural	Land Use
Community	Visual
Air Quality	Traffic
Noise	

Draft Environmental Document

Preliminary Results of Environmental Analysis

Preliminary Mitigation Measures

Public/Agency Review & Comment

Circulation of Draft Environmental Document

Public/Agency Review and Comment Period

Comment Period

Public Hearing



State/Federal Review & Approval

Formal Response to Comments

Selection of Recommended Alternative

Presentation of Findings

Final Environmental Document

Project Approval Anticipated Winter 2009/2010

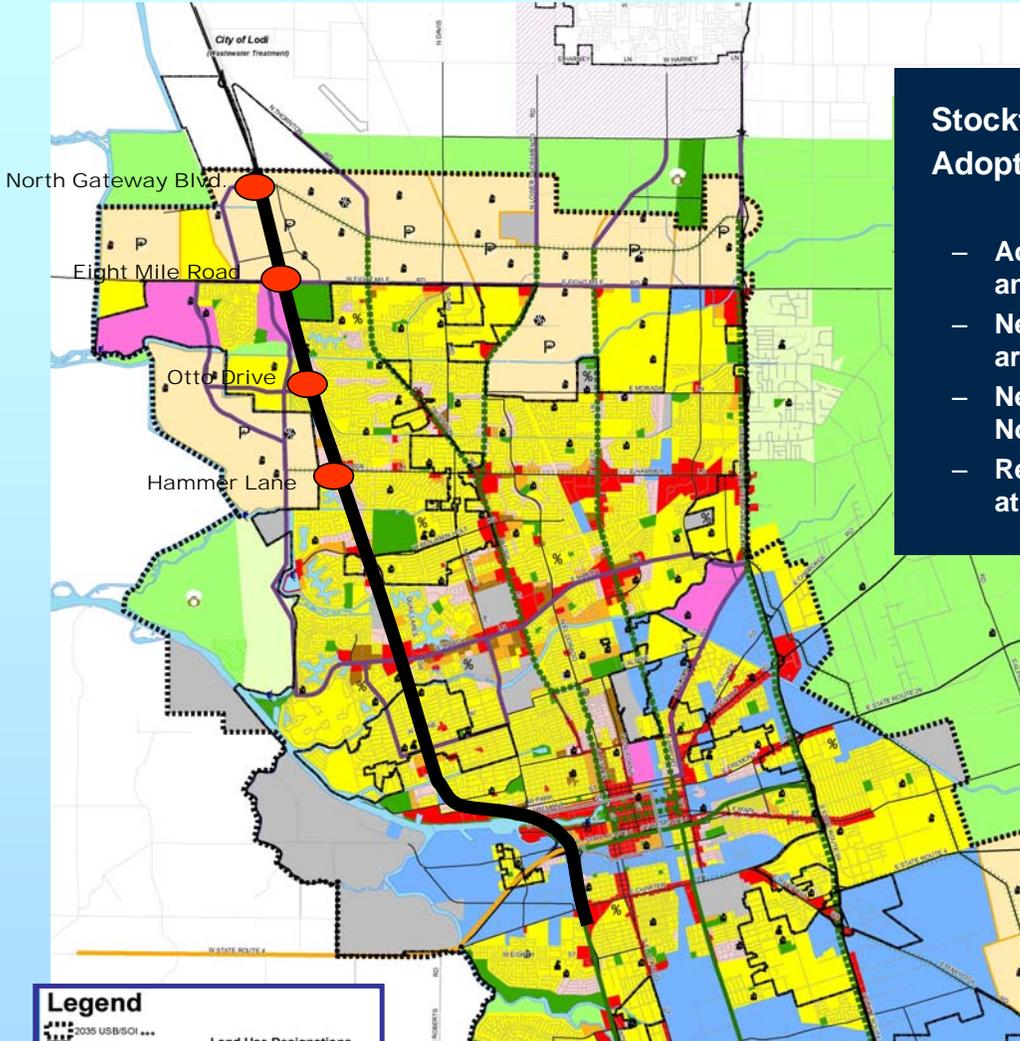
Updates available at: <http://www.dot.ca.gov/dist10/>





Interstate 5 North Stockton Corridor

LAND USE AND TRAFFIC



Stockton 2035 General Plan Adopted in December 2007

- Adds development west of I-5 and north of Eight Mile Road.
- New east-west and north-south arterial streets.
- New freeway connection at North Gateway Boulevard.
- Reaffirmed freeway connection at Otto Drive (also on 1990 plan).

Legend

<ul style="list-style-type: none"> 2035 USB/SOI City Limits Downtown Habitat Lathrop SOI Lodi SOI Manteca SOI Waterways Existing Marina Proposed Marina Potential Regional Park High School Middle School Elementary School Proposed High School Proposed Middle School Proposed Elementary School 	<h4>Land Use Designations</h4> <ul style="list-style-type: none"> Residential Estate Low Density Residential Medium Density Residential High Density Residential Commercial Administrative Professional Industrial Institutional Parks and Recreation Open Space/Agriculture Mixed Use Village*
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Proposed Circulation**

Proposed Roadways

- Arterial
- Expressway
- Freeway

Proposed Bus Routes

- BRT Low
- BRT Medium
- BRT High
- Express Service
- Major Local/Feeder Service

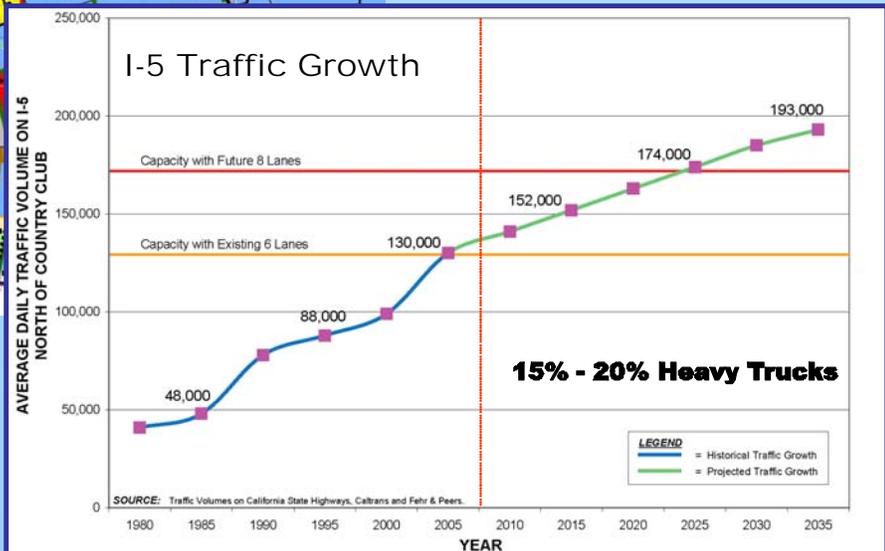
**See Chapter 7 of the General Plan for the policies, development criteria, and standards for each Village.

***The proposed routes are shown for planning purposes only and are subject to change as more detailed studies are conducted.

****SOI Pending Subject to LAFCO Approval

Scale: 0 0.3 0.6 1.2 Miles

Maple Copy Print Date: December 11, 2007

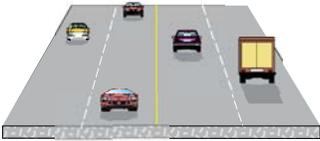




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TRAFFIC LEVEL OF SERVICE DEFINITIONS

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. No delays
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. No delays
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. Minimal delays
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. Minimal delays
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. Significant delays
F		< 53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. Considerable delays

Levels of Service are based primarily on density, not speed.

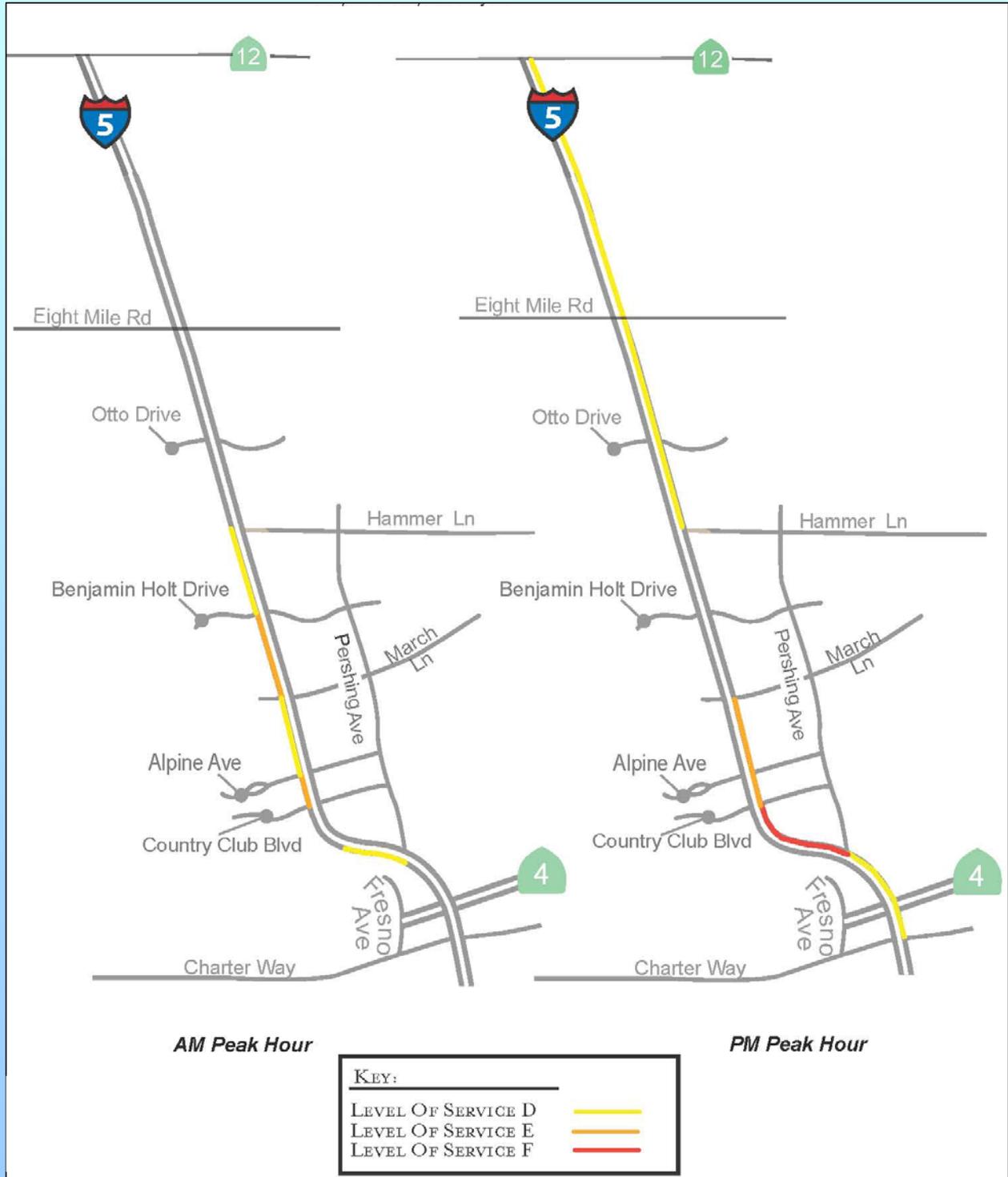
Source: 2000 Highway Capacity Manual, Exhibit 23-3, Speed-Flow Curves and LOS for Basic Freeway Segments



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EXISTING FREEWAY LEVELS OF SERVICE

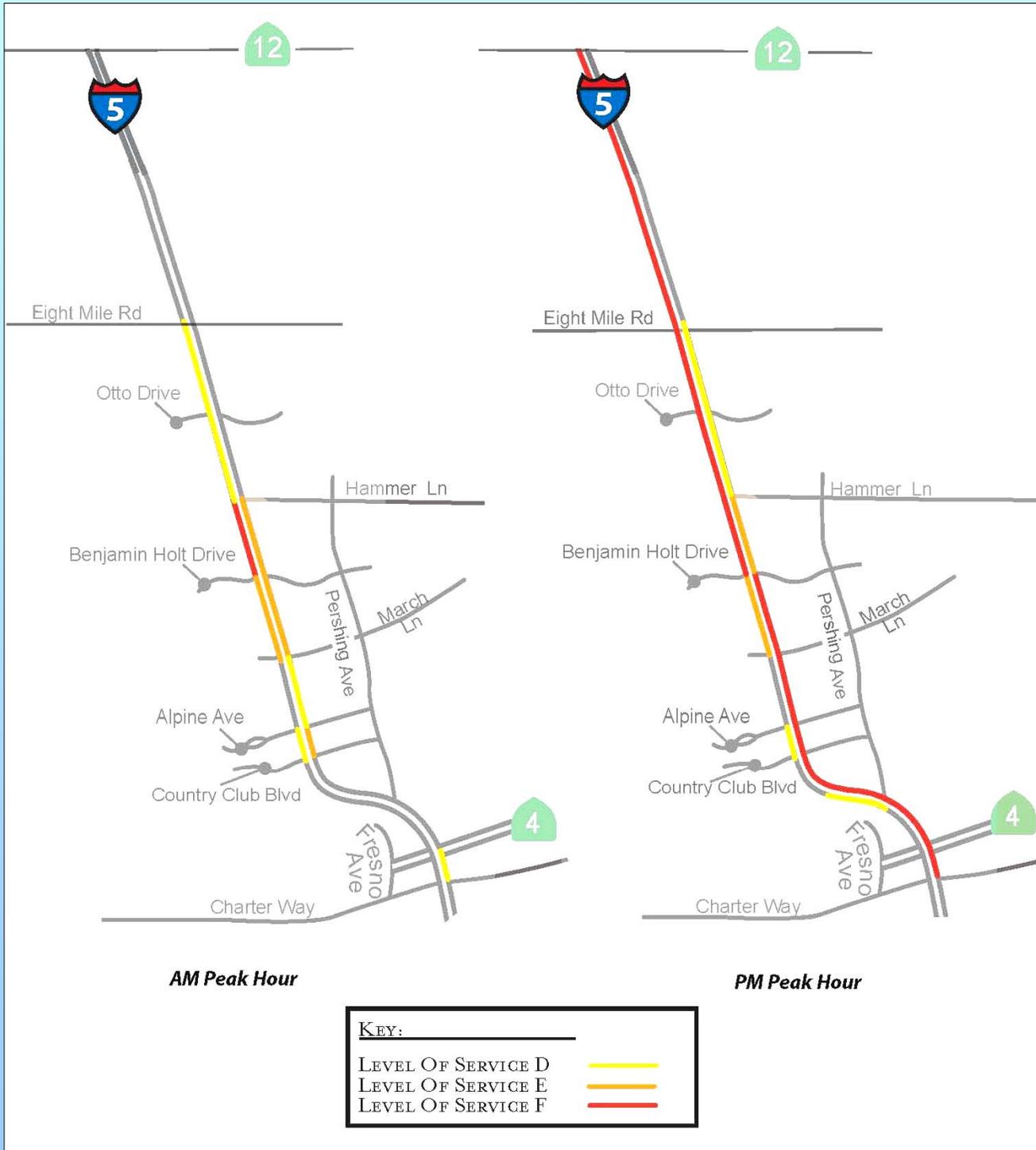




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2035 FREEWAY NO-PROJECT LEVELS OF SERVICE

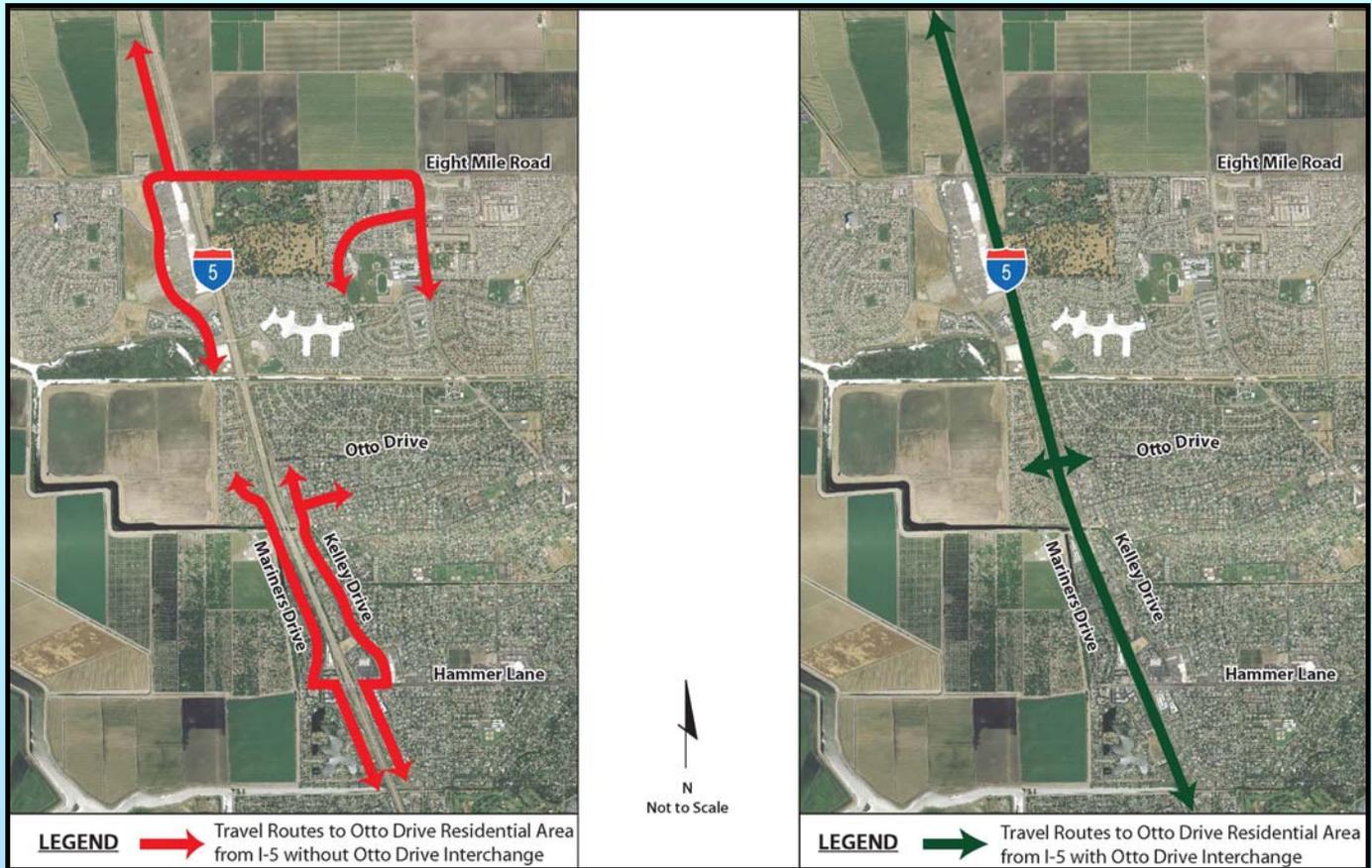




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OTTO DRIVE TRAFFIC



Anticipated Changes in Local Traffic Patterns

Roadway Segment	Year 2035 No Project		Year 2035 With Project		% Volume Change	Change in VPM ¹
	ADT	LOS	ADT	LOS		
1. Mariners Drive south of Sturgeon Road	12,800	E	2,100	A	-84%	-18
2. Kelley Drive south of Stanfield Drive	8,300	C	4,700	A	-43%	-6
3. Kelley Drive north of Hammer Lane	12,600	E	9,800	D	-22%	-5
4. Estate Drive between Otto Drive and Thornton Road	5,500	A	8,200	C	49%	+5
5. Otto Drive between Estate Drive and Thornton Road	3,200	A	10,900	D	241%	+13
6. Stanfield Drive between Estate Drive and Thornton Road	2,400	A	1,900	A	-21%	-1
7. Stanfield Drive between Kelley Drive and Estate Drive	5,500	A	5,600	A	2%	0
8. Wagner Heights Road between Estate Drive and Thornton Road	3,800	A	2,600	A	-32%	-2
9. Don Avenue south of Wagner Heights Road	7,600	C	5,100	A	-33%	-4
10. Don Avenue north of Hammer Lane	7,600	C	4,600	A	-39%	-5

Notes:

Bold denotes locations that operate at unacceptable service levels.

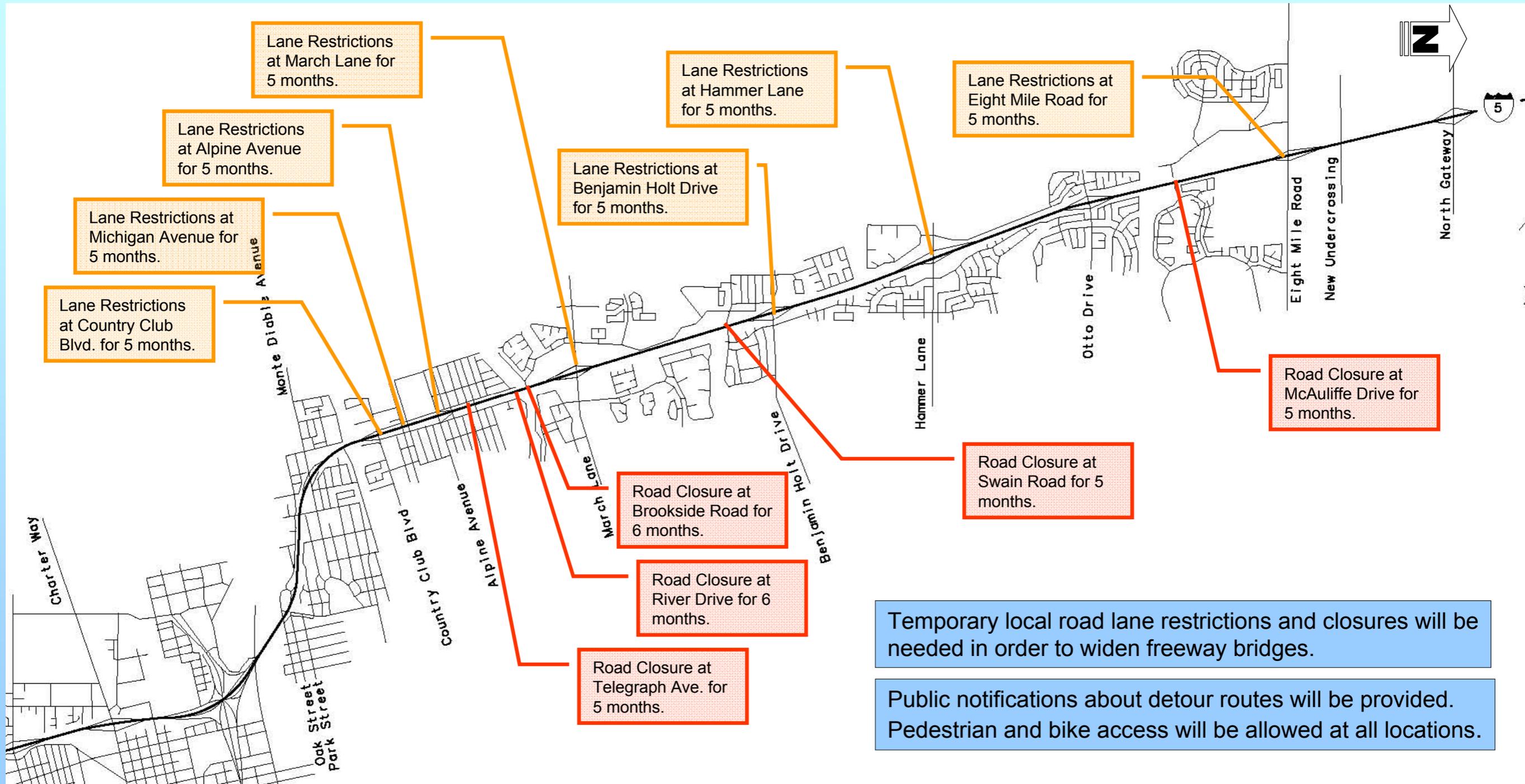
1. This value presents the change in vehicles per minute that are anticipated on the roadway during the peak hours.



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TEMPORARY LOCAL ROAD CLOSURES AND RESTRICTIONS



Temporary local road lane restrictions and closures will be needed in order to widen freeway bridges.

Public notifications about detour routes will be provided. Pedestrian and bike access will be allowed at all locations.



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RIGHT OF WAY REQUIREMENTS

Implementation of either Alternative 1 or Alternative 2 would require the same acquisition of right of way at Hammer Lane, Otto Drive, Eight Mile Road and North Gateway Boulevard interchanges. Details of the right of way required are as follows:

- 1. I-5 Widening:**
No right of way required.
- 2. Hammer Lane interchange:**
Partial take of 5 industrial/commercial parcels are required.
- 3. Otto Drive interchange:**
Twelve full parcels are required for construction of the interchange and Otto Drive east of I-5.
- 4. Eight Mile Road interchange:**
Seven partial takes will be required including one single family residential, four industrial/commercial parcels and two farm/ agricultural parcels.
- 5. North Gateway interchange:**
Six partial takes are required. The land use designation for the six parcels is rural agricultural.

RIGHT OF WAY ACQUISITION STEPS

- Permits to Enter
 - Appraisal
 - Acquisition
 - Relocation Assistance
 - Utility Relocation
 - Clearance and Demolition
 - Sale of Excess Land
 - Property Management



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NOISE MEASUREMENT

The noise meter is calibrated to a known sound level with a calibrator “tuned” to 94 dBA. The noise meter is placed at 5 feet in height to simulate a normal receptor height. The noise meter is placed at a known distance from the centerline of the near lane of traffic. It is then relatively easy to predict the noise level at any distance from the highway traffic, since noise diminishes (drops off) at 4.5 dBA per distance doubled on a soft site (grass and trees) and at 3 dBA per distance doubled on a hard site (rocks and paving). After the noise level has been recorded, the meter is again checked with the calibrator.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000ft)	110	Rock Band
Gas Lawn Mower at 1 m (3ft)	100	
Diesel Truck at 15 m (50ft), at 80 km (50 mph)	90	Food Blender at 1 m (3ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3ft)
Gas Lawn Mower, 30 m (100ft)	70	Vacuum Cleaner at 3 m (10ft)
Commercial Area	60	Normal Speech at 1 m (3ft)
Heavy Traffic at 90 m (300ft)	50	Large Business Office
Quiet Urban Daytime	40	Dishwasher Next Room
Quiet Urban Nighttime	30	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	20	Library
Quiet Rural Nighttime	10	Bedroom at Night, Concert Hall (Background)
	0	Broadcast/Recording Studio
Lowest Threshold of Human Hearing		Lowest Threshold of Human Hearing

Decibels (dB) is a logarithmic measure of sound. dBA indicates decibels measured on the A scale, calibrated for the human response to sound. On this scale, a level of 70 decibels and a level of 80 would be 4 times as loud.



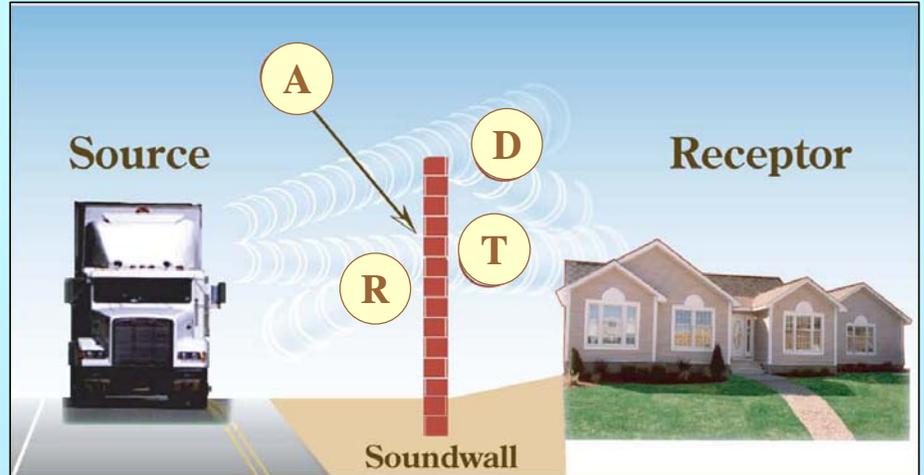
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REFLECTED NOISE PATTERNS

When a soundwall is inserted between a noise source and receiver, the direct noise path is interrupted.

The sound then moves in four ways.



- Some noise can be absorbed **A** by the soundwall.
- Some noise is diffracted **D** over the soundwall.
- Less than 1% is transmitted **T** through the soundwall.
- Some noise is reflected **R** off the soundwall back into traffic.

Many recent studies on the phenomenon of reflected noise recognize that residents may perceive a change in the sound they hear after a soundwall is constructed, but none of the studies show a perceptible (3 decibel) increase in loudness of noise due to reflection. It is important to note that weather conditions (especially wind) can have a relatively large effect on sound levels (up to 10 decibels).



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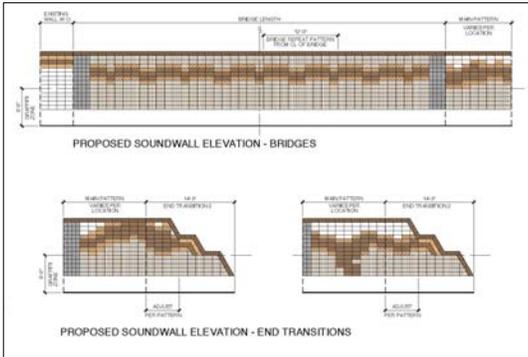
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PROPOSED SOUNDWALLS

LEGEND

- CITY REQUESTED SOUND WALL EXTENSIONS (SUBJECT TO FUNDING AVAILABILITY)
- REQUIRED SOUND WALLS
- MODELED RECEPTOR LOCATIONS





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PROJECT SCHEDULE*

- January 2008 Environmental Studies Started
- September 28, 2009 Draft Environmental Document released
- **October 14, 2009 Public Hearing**
- November 12, 2009 Public Review Period Closes – Comments Due
- Winter 2009/2010 Final Environmental Document Approved
- 2009-2011 Final Design
- 2010-2012 Right of Way Acquisition
- 2010-2012 Construct I-5 Widening Improvements from Charter Way/MLK Blvd. to Hammer Lane
- 2012-2014 Construct I-5 Widening Improvements from Hammer Lane to Eight Mile Road
- 2012-2015 Construct Otto Drive Interchange
- 2013-2016 Construct Hammer Lane, Eight Mile Road and North Gateway Blvd. interchanges, depending on development activity and funding availability

* Project schedule is based on adequate accumulation of Development Impact Fees and other funds.

WHAT'S NEXT

- After public review, Caltrans will issue a Final Environmental Impact Report/ Environmental Assessment and adopt the findings.
- After adoption, City will start right of way acquisition with oversight from Caltrans.
- Final design for the inside widening from Country Club to Hammer Lane will continue through Spring 2010.
- Final design for the inside widening from Hammer Lane to Eight Mile Road will continue through the end of 2010.



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