MTC – AIR QUALITY CONFORMANCE TASK FORCE MEETING

LAMMPS PROJECT

Laurel Access to Mills, Maxwell Park, and Seminary
(on MacArthur Boulevard from High Street to Richards Road)

Presented by

City of Oakland Public Works Department
Bureau of Engineering and Construction
April 28, 2016

LAMMPS PROJECT DESCRIPTIONS

Project Purpose and Need:

- Discontinuous pedestrian and bicycle paths and conflicting path of travel
- Provide safe access for pedestrians and bicyclists accessing mills College, public transit and nearby destinations of variety of services; beautify the area; and, improve traffic flow for pedestrian, and bicyclists at MacArthur Blvd.
- Total project length between High St. to Richards Rd. is approximately 0.6 miles.
- The project will not include additional traffic lanes and not require any additional right-of-way.

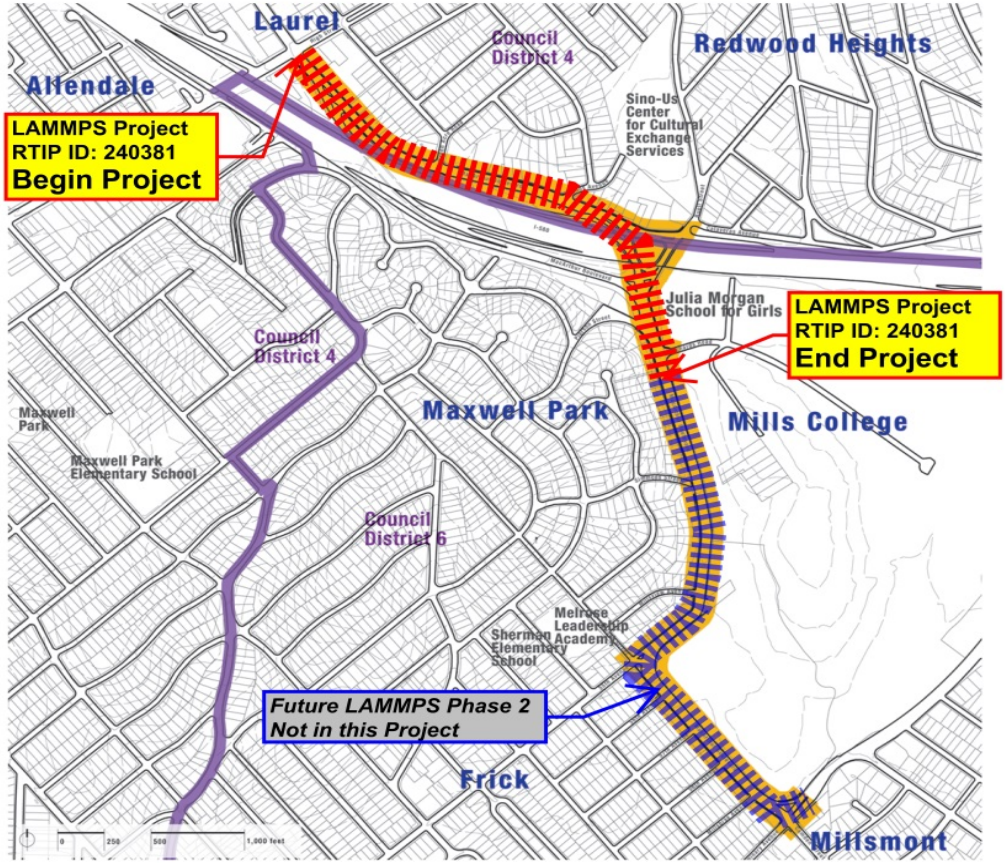
Project Scope:

- Class I Bicycle and Pedestrian Path Along Macarthur Blvd from Green Acre Road to Richards Road
- Class II Bicycle path along Macarthur from High Street to Buell Street
- Pedestrian scale path lighting and landscaping improvements, ADA curb ramps and crosswalks.
- New traffic signals at MacArthur/Calaveras and at Pierson Street
- Traffic lanes realignment at MacArthur Blvd. at various locations (between High St. to Richards Rd.)
- Traffic signal intersection reconfiguration at the I-580 eastbound off-ramp
- Traffic signals timing optimization (Interconnect)
- Future Improvements: Improvements on the north side sidewalk, the park beneath the I-580 freeway bridge, and AC bus Shelters at MacArthur blvd. from High St. to Seminary Ave. and on Seminary Ave. to I-580. These improvements will be part of future phases.

PROJECT AREA AND FUTURE PHASES

1.01 Project Area

Many neighborhoods will benefit from the proposed improvements.



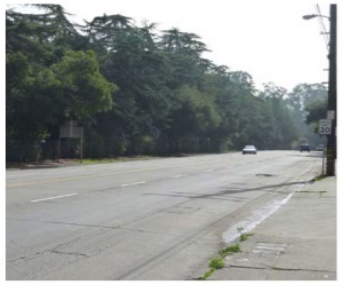
Legend

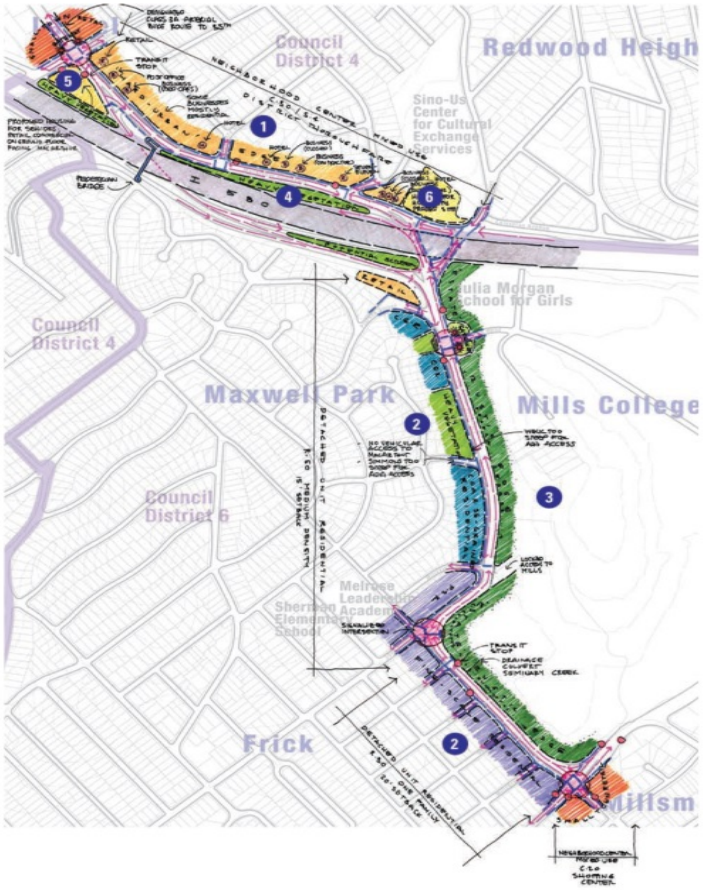
Project Area

Laurel Access to Mills, Maxwell Park, & Seminary (LAMMPS) Streetscape Project - City of Oakland, CA

Figure 2 - Project Site/Surrounding Land Use

PROJECT SURROUNDING LAND USE





2.04 Commercial Residential

(1) *A mix of commercial and residential uses borders the eastern edge of the corridor north of the freeway.*

2.05 Residential

(2) *Residential uses of varying densities frame the west edge of the corridor south of the freeway.*

2.06 Mills College

(3) *South of the freeway, the rustic landscape of Mills College dominates the eastern edge of MacArthur Boulevard.*

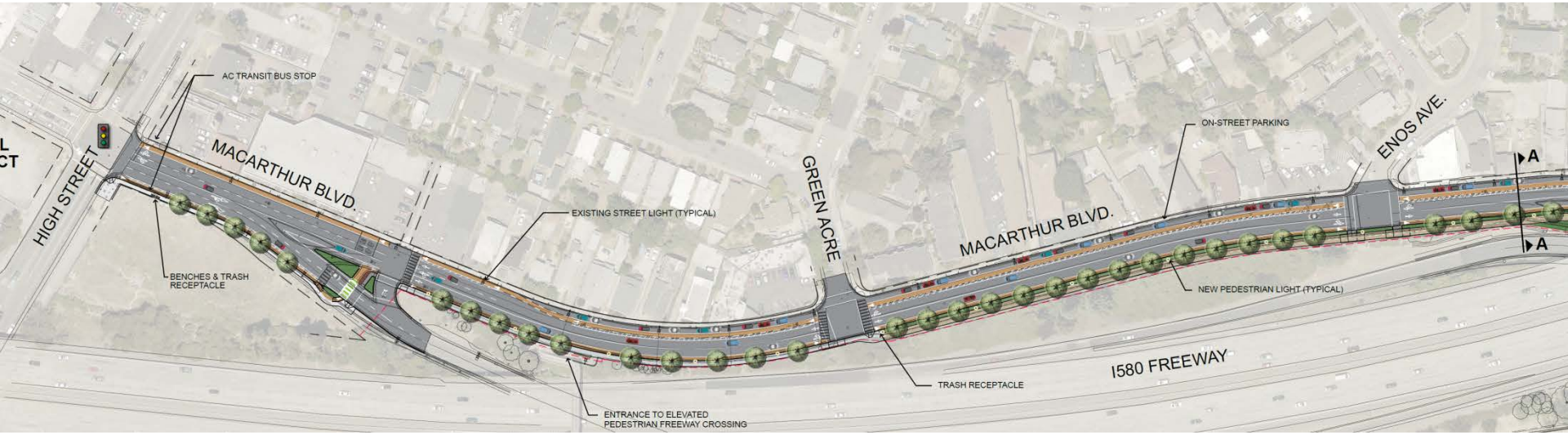
2.07 Planning Context

Four land uses border the corridor:

(1) *commercial-residential mix,*
(2) *residential of varying densities,*
(3) *institutional (Mills College), and*
(4) *freeway (Caltrans) supporting the recommendation of proposed mixed developed and "rustic" aesthetic. Several parcels are proposed for development projects:*
(5) *housing for seniors with ground floor commercial space, and*
(6) *housing by Habitat for Humanity.*

Laurel Access to Mills, Maxwell Park, & Seminary (LAMMPS) Streetscape Project - City of Oakland, CA
Figure 3 - Surrounding Land Use

PROJECT LAYOUT – NORTH



MTC – AQ CONFORMANCE
4/28/16 MEETING OAKLAND
LAMMPS PROJECT

PROJECT LAYOUT – SOUTH

LEVEL OF SERVICE ANALYSIS – 2018

- **Benefits under Build conditions:**
  - Overall all intersection improve LOS, due to improve geometry or new signals. MacArthur and Enos, as well as MacArthur and Green Acre Road experience acceptable decreases in their level of service due to the road diet.

Opening Year 2018			
Condition	AADT	Trucks (#)	Trucks (%)
No Build	20,832	790	4%
Build	No Change		

AM Peak Hour							
#	Intersection	No Build Control	Build Control	No Build		Build	
				Delay	LOS	Delay	LOS
1	MacArthur Boulevard & Richards Road	Signalized	Signalized	35.4	D	36.0	D
2	MacArthur Boulevard & Pierson Street	Two-way stop	Signalized	339.3	F	8.9	A
3	MacArthur Boulevard & I-580 EB Ramp	Signalized	Signalized	37.2	D	18.8	B
4	Buell Street & Calaveras Avenue	All-way stop	All-way stop	35.6	E	24.3	C
5	MacArthur Boulevard & Calaveras Avenue	Two-way stop	Signalized	17.2	C	9.7	A
6	MacArthur Boulevard & Enos Avenue	Two-way stop	Two-way stop	14.6	B	13.5	B
7	MacArthur Boulevard & Green Acre Road	Two-way stop	Two-way stop	9.0	A	14.5	B
PM Peak Hour							
#	Intersection	No Build Control	Build Control	No Build		Build	
				Delay	LOS	Delay	LOS
1	MacArthur Boulevard & Richards Road	Signalized	Signalized	21.7	C	9.5	A
2	MacArthur Boulevard & Pierson Street	Two-way stop	Signalized	1421.5	F	7.7	A
3	MacArthur Boulevard & I-580 EB Ramp	Signalized	Signalized	22.1	C	14.5	B
4	Buell Street & Calaveras Avenue	All-way stop	All-way stop	25.1	D	18.6	C
5	MacArthur Boulevard & Calaveras Avenue	Two-way stop	Signalized	16.4	C	12.3	B
6	MacArthur Boulevard & Enos Avenue	Two-way stop	Two-way stop	9.8	A	13.1	B
7	MacArthur Boulevard & Green Acre Road	Two-way stop	Two-way stop	7.7	A	19.2	C

LEVEL OF SERVICE ANALYSIS – 2040

- **The horizon year 2040 conditions are shown in the Tables below.**
  - Project benefits are still apparent in 2040. The majority of intersections still experience improve LOS compared to current conditions.

Horizon Year 2040			
Condition	AADT	Trucks (#)	Trucks (%)
No Build	27,016	1,062	4%
Build	No Change		

AM Peak Hour							
#	Intersection	No Build Control	Build Control	No Build		Build	
				Delay	LOS	Delay	LOS
1	MacArthur Boulevard & Richards Road	Signalized	Signalized	33.2	C	34.8	C
2	MacArthur Boulevard & Pierson Street	Two-way stop	Signalized	475.2	F	12.9	B
3	MacArthur Boulevard & I-580 EB Ramp	Signalized	Signalized	58.6	E	62.5	E
4	Buell Street & Calaveras Avenue	All-way stop	All-way stop	66.8	F	44.6	E
5	MacArthur Boulevard & Calaveras Avenue	Two-way stop	Signalized	17.0	C	10.6	B
6	MacArthur Boulevard & Enos Avenue	Two-way stop	Two-way stop	21.1	C	14.4	B
7	MacArthur Boulevard & Green Acre Road	Two-way stop	Two-way stop	7.8	A	14.0	B
PM Peak Hour							
#	Intersection	No Build Control	Build Control	No Build		Build	
				Delay	LOS	Delay	LOS
1	MacArthur Boulevard & Richards Road	Signalized	Signalized	33.8	C	31.8	C
2	MacArthur Boulevard & Pierson Street	Two-way stop	Signalized	1521.5	F	8.9	A
3	MacArthur Boulevard & I-580 EB Ramp	Signalized	Signalized	56.9	E	21.6	C
4	Buell Street & Calaveras Avenue	All-way stop	All-way stop	73.4	F	74.4	F
5	MacArthur Boulevard & Calaveras Avenue	Two-way stop	Signalized	34.9	D	9.4	A
6	MacArthur Boulevard & Enos Avenue	Two-way stop	Two-way stop	21.0	C	17.5	C
7	MacArthur Boulevard & Green Acre Road	Two-way stop	Two-way stop	10.8	B	16.3	C

CONCLUSION

- **Project is not a Project of Air Quality Concern (40 CFR 93.123(b)(1)) for the following reasons:**
  - Not a new or expanded highway project
  - AADT (20,832 opening year 2018 and 27,016 horizon year 2040) is well under the 125,000 threshold and truck traffic is relatively low (4%), and will not increase due to the project changes.
  - Diesel vehicles represent less than 4% of intersection traffic volume
  - Intersections at LOS D, E, or F generally improve or remain the same, and overall delays decrease (2040)
  - No project changes to land use that would affect diesel traffic percentage
  - No state implementation plan for $PM_{2.5}$, therefore, not identified in plan as an area of potential violation

LAMMPS PROJECT SUMMARY

- **Project Schedule:**
  - **Current Status:** The project is under design working on 65% PS&E by BKF Engineers
  - NEPA documents are anticipated to complete by May 2016.
  - **Start Design:** December 2015
  - **Complete Design:** September 2016
  - **Start Construction:** Summer 2017
  - **Complete Construction**: Summer 2018

US 101/University Avenue Interchange Improvements

Air Quality Conformity Task Force Presentation

April 28, 2016

Caltrans

SAN MATEO COUNTY Transportation Authority

Project Location

- US101/University Avenue Interchange
- East Palo Alto
- San Mateo County

Project Purpose and Need

The purpose of the project is to:

- Reduce pedestrian-bicycle/vehicle conflicts
- Improve safety and pedestrian/bicycle connectivity across US-101
- Improve traffic operations

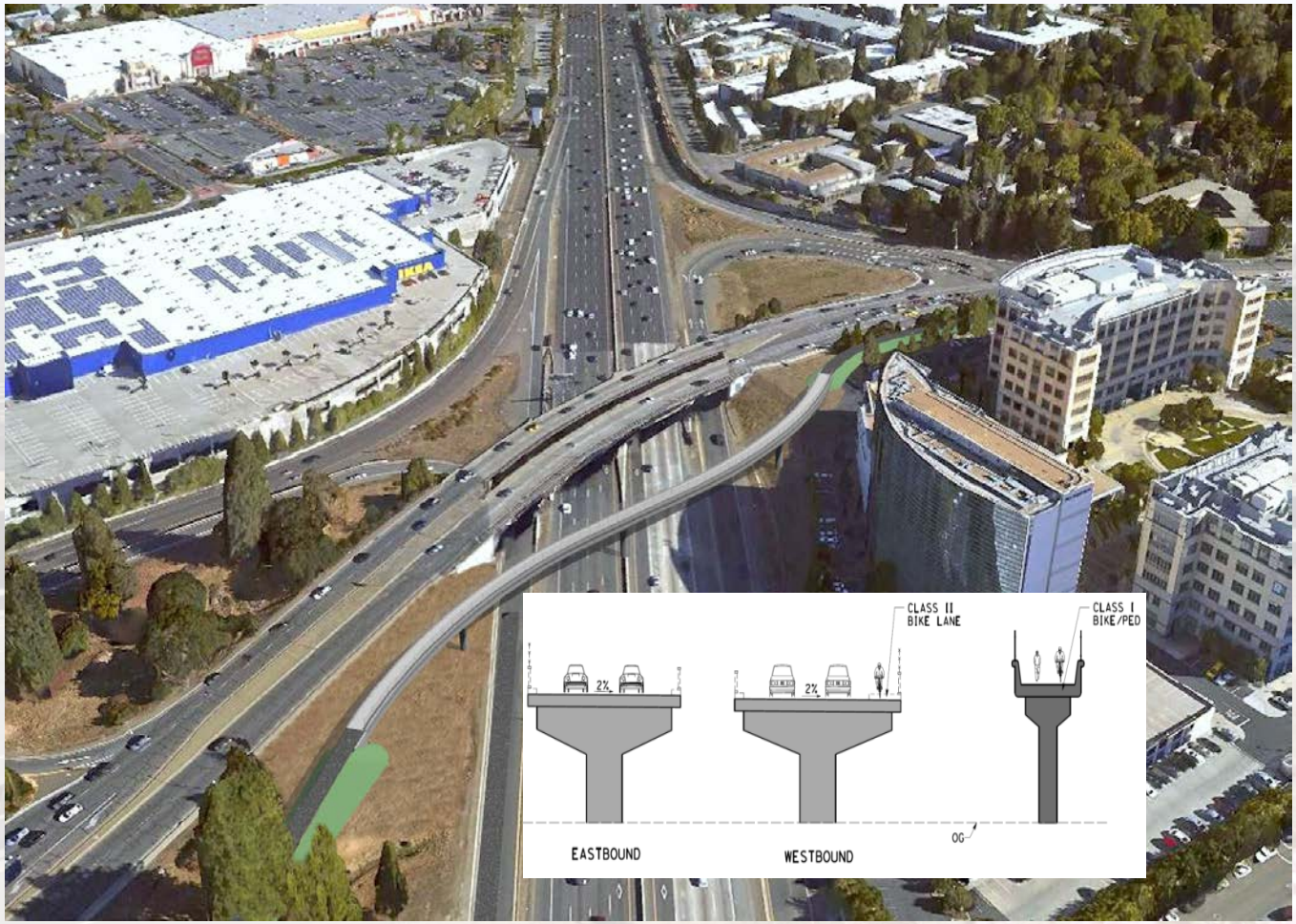
The project is needed to address:

- Lack of safe bicycle and pedestrian access
- SB off-ramp LT traffic often blocks EPA-bound traffic

Project Description

The project would:

1. **Construct Class I Pedestrian and Bicycle facility across US-101**

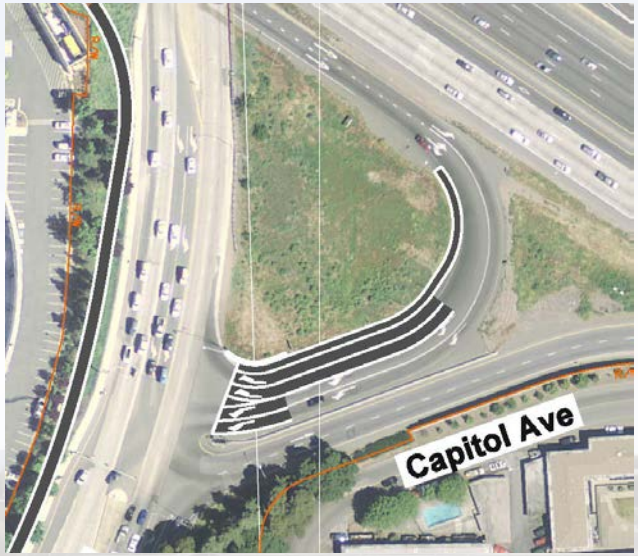


Project Description

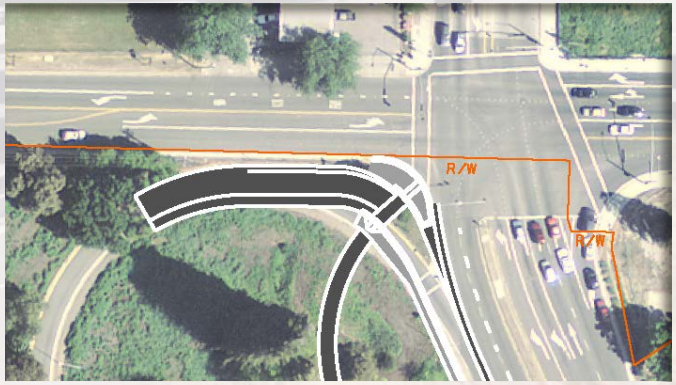
2. Widen the SB off-ramp shoulder to improve traffic operations and access to the east side of US- 101

- Add additional RT lane

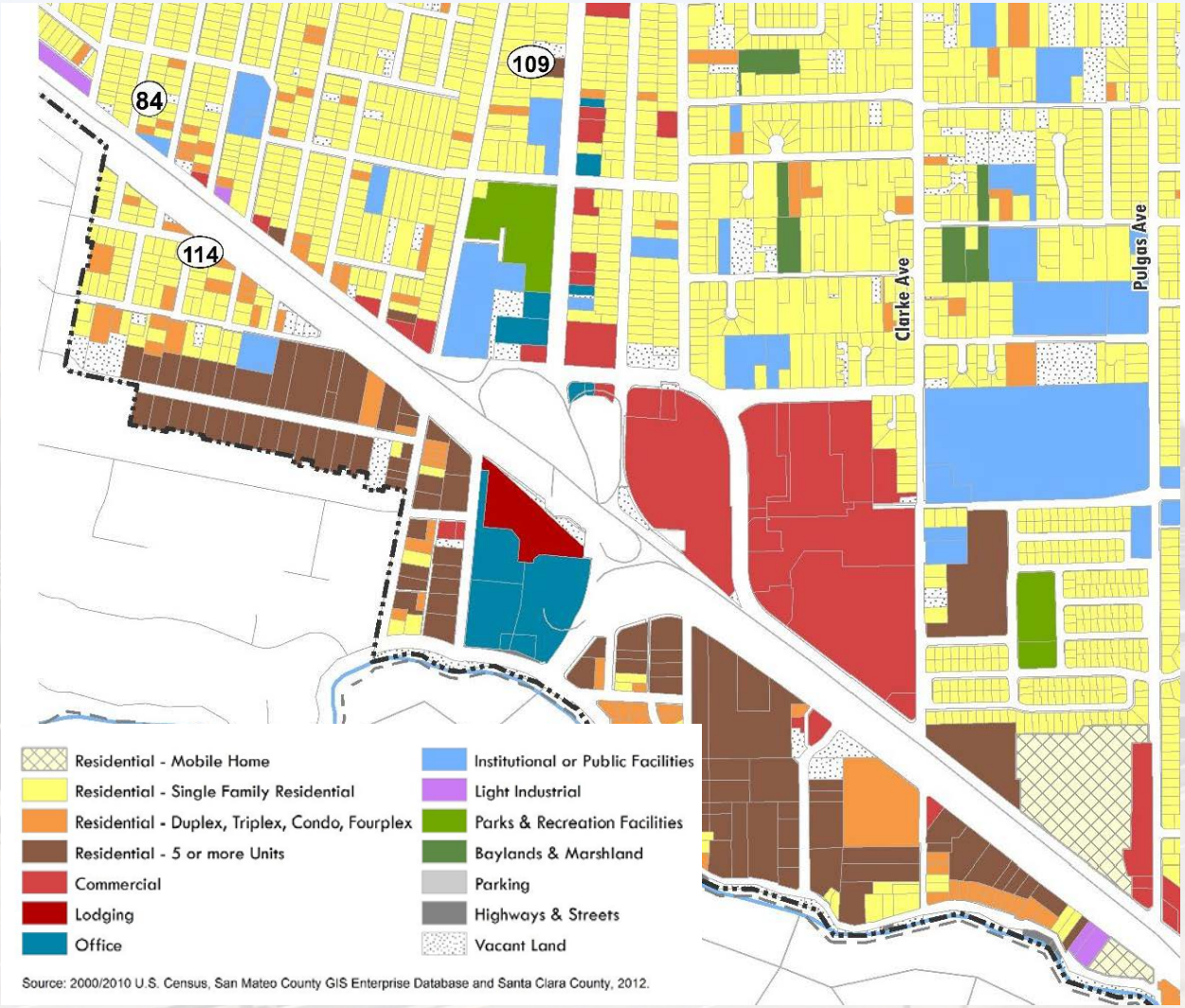
- 2 RT & LT Lanes



3. Realign the NB off-ramp to reduce bicycle/pedestrian and vehicular traffic conflicts



Project Land Uses



- Commercial
- Office
- Medium to High Density Residential
- Public Facilities

Traffic Data

2020 Peak Hour LOS Summary

Alternative	No. Intersection at LOS D, E, F
No Build	3
Build Alternative	3

2040 Peak Hour LOS Summary

Alternative	No. Intersection at LOS D, E, F
No Build	3
Build Alternative	3

Traffic Data

Opening Year (2020) AADT Summary

Segment	AADT	Truck AADT (4.23%)
US 101 Main Line	218,400	9,238
US 101 SB Off-ramp	10,160	430
US 101 NB Loop Off-ramp	4,640	196
University Avenue	40,620	1,718

Opening Year (2040) AADT Summary

Segment	AADT	Truck AADT (4.23%)
US 101 Main Line	253,100	10,706
US 101 SB Off-ramp	13,190	558
US 101 NB Loop Off-ramp	5,100	216
University Avenue	43,390	1,835

Summary

Not a project of Air Quality Concern

- Not a new or expanded highway project
- No additional lanes on US 101
- No added vehicular capacity
- No change in traffic volume or truck percentages on US 101
- Intersection delay would improve compared to No Build
- No project changes to land use that would affect diesel traffic percentage
- No exceedances in federal $PM_{2.5}$ standard in last 5 years

Questions & Answers

Caltrans

SAN MATEO COUNTY
Transportation Authority

RICHMOND SAN-RAFAEL BRIDGE ACCESS IMPROVEMENT PROJECT

MARIN AND CONTRA COSTA COUNTIES

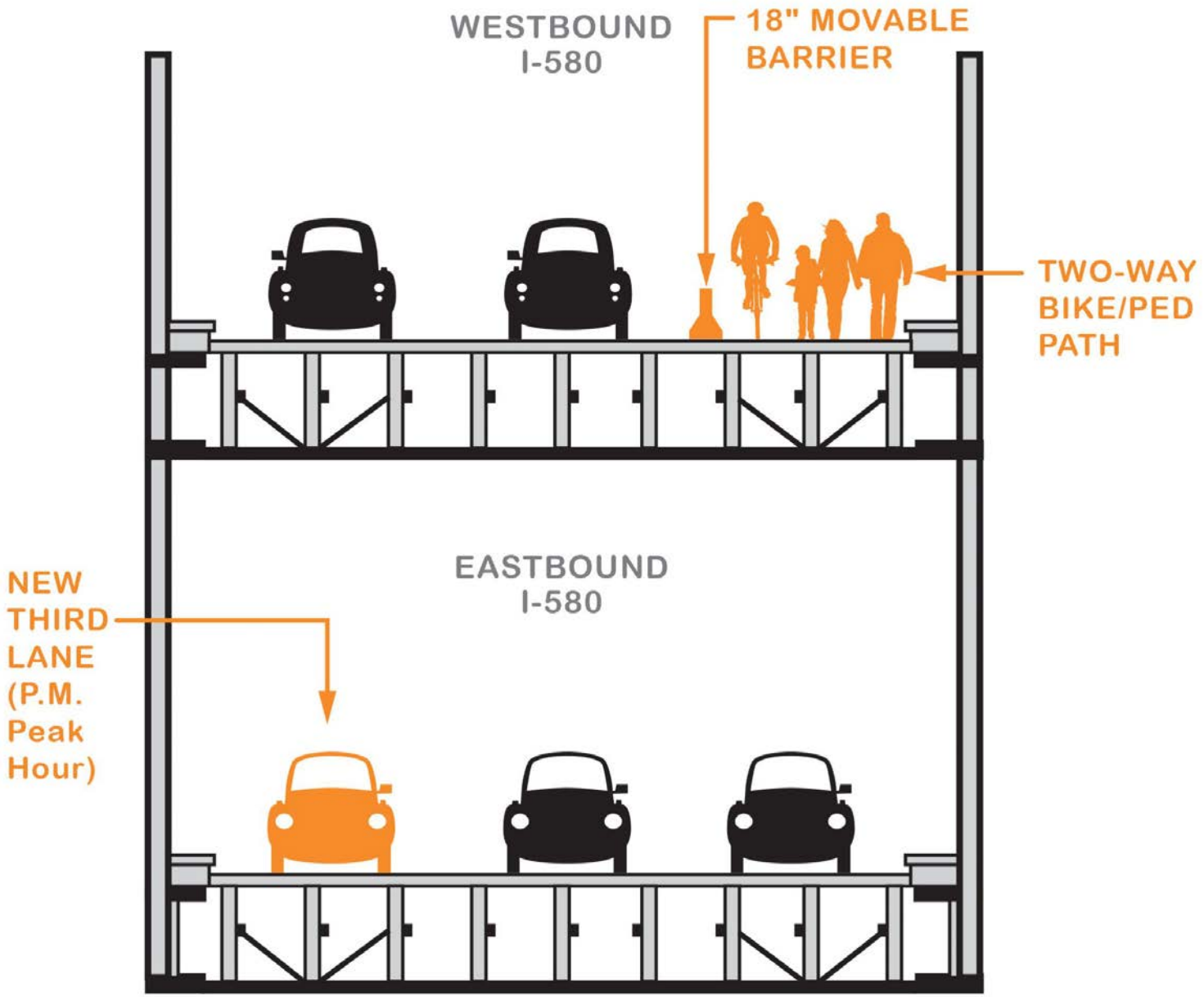
AIR QUALITY CONFORMITY TASK FORCE | FHWA CONCURRENCE
APRIL 28, 2016

Project Location

Project Description

Construct a Peak Period Use Lane (PPUL) on the Richmond-San Rafael Bridge by converting eastbound existing shoulder

Construct a Class I bi-directional bike/ped path on the Richmond-San Rafael Bridge with adjoining segments



Cross Section of the Richmond-San Rafael Bridge after improvement, looking west.

Project Purpose

- Reduce congestion and delay
- Improve evening commute periods
- Provide bike and pedestrian access across the Richmond-San Rafael Bridge
- Provide access to the San Francisco Bay Trail on either side of the Bridge

Background

- Added to the 2015 TIP (September 2015)
- AQCTF determination of not a POAQC received in February 2016
- Seeking FHWA Concurrence with AQCTF determination on or before April 2016
- Categorical Exemption/Categorical Exclusion (CE/CE) to be completed in June 2016
- Anticipated construction start date (September 2016)

	2015	2020		2040 Horizon Year	
	Existing	No Build	Build	No Build	Build
AAADT	76,000	79,792	79,792	90,911	90,911
LOS	F	F	C	F	D
Truck AADT	5,244	5,506	5,506	6,273	6,273
% Trucks	6.9	6.9	6.9	6.9	6.9

Project of Air Quality Concern?

- No significant number/increase in diesel vehicles
- % of diesel vehicles would not increase
- Not a new or expanded bus or rail terminal or transfer point
- Not a $PM_{2.5}$ violation
- Not a CO violation

Questions?

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