TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE

May 8, 2017
9:00 A.M.
651 Pine Street, Room 101, Martinez

Agenda

Supervisor Diane Burgis, District III, Chair
Supervisor Karen Mitchoff, District IV, Vice Chair

Agenda Items:	Items may be taken out of order based on the business of the day and preference of the Committee

1. Introductions

2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to three minutes).

3. **Administrative Items, if applicable.** (John Cunningham, Department of Conservation and Development)

4. **REVIEW record of meeting for April 10, 2017, Transportation, Water and infrastructure Committee Meeting.** This record was prepared pursuant to the Better Government Ordinance 95-6, Article 25-205 (d) of the Contra Costa County Ordinance Code. Any handouts or printed copies of testimony distributed at the meeting will be attached to this meeting record. (John Cunningham, Department of Conservation and Development).

5. **ACCEPT the Feasibility Report for the San Pablo Avenue Complete Streets Study between Rodeo and Crockett and RECOMMEND the Board of Supervisors accept the Feasibility Report at a future Board meeting. (Study funded by 88.53% Federal Priority Development Area (PDA) Planning grant funds and 11.47% Local Road funds)**(Angela Villar, Department of Public Works)
The Feasibility Report and Study documents are included in the packet. Study appendices are available here:
www.cccounty.us/SanPabloCSappendices

6. **CONSIDER report on Local, State, and Federal Transportation Related Legislative Issues and take ACTION as appropriate.** (John Cunningham, Department of Conservation and Development)

7. **COMMUNICATION/News Clippings.** (John Cunningham, Department of Conservation and Development)

8. The next meeting is currently scheduled for June 12, 2017, 9:00 a.m. to 10:00 a.m.

9. Adjourn

The Transportation, Water & Infrastructure Committee (TWIC) will provide reasonable accommodations for persons with disabilities planning to attend TWIC meetings. Contact the staff person listed below at least 72 hours before the meeting.

Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the TWIC less than 96 hours prior to that meeting are available for public inspection at the County Department of Conservation and Development, 30 Muir Road, Martinez during normal business hours.

Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.

For Additional Information Contact:

John Cunningham, Committee Staff
Phone (925) 674-7833, Fax (925) 674-7250
john.cunningham@dcd.cccounty.us

Glossary of Acronyms, Abbreviations, and other Terms (in alphabetical order): Contra Costa County has a policy of making limited use of acronyms, abbreviations, and industry-specific language in meetings of its Board of Supervisors and Committees. Following is a list of commonly used abbreviations that may appear in presentations and written materials at meetings of the Transportation, Water and Infrastructure Committee:

AB Assembly Bill
ABAG Association of Bay Area Governments
ACA Assembly Constitutional Amendment
ADA Americans with Disabilities Act of 1990
ALUC Airport Land Use Commission
AOB Area of Benefit
BAAQMD Bay Area Air Quality Management District
BART Bay Area Rapid Transit District
BATA Bay Area Toll Authority
BCDC Bay Conservation & Development Commission
BDCP Bay-Delta Conservation Plan
BGO Better Government Ordinance (Contra Costa County)
BOS Board of Supervisors
CALTRANS California Department of Transportation
CalWIN California Works Information Network
CalWORKS California Work Opportunity and Responsibility to Kids
CAER Community Awareness Emergency Response
CAO County Administrative Officer or Office
CCTA Contra Costa Transportation Authority
CCWD Contra Costa Water District
CDBG Community Development Block Grant
CEQA California Environmental Quality Act
CFS Cubic Feet per Second (of water)
CPI Consumer Price Index
CSA County Service Area
CSAC California State Association of Counties
CTC California Transportation Commission
DCC Delta Counties Coalition
DCD Contra Costa County Dept. of Conservation & Development
DPC Delta Protection Commission
DSC Delta Stewardship Council
DWR California Department of Water Resources
EBMUD East Bay Municipal Utility District
EIR Environmental Impact Report (a state requirement)
EIS Environmental Impact Statement (a federal requirement)
EPA Environmental Protection Agency
FAA Federal Aviation Administration
FEMA Federal Emergency Management Agency
FTE Full Time Equivalent
FY Fiscal Year
GHAD Geologic Hazard Abatement District
GIS Geographic Information System
HBRR Highway Bridge Replacement and Rehabilitation
HOT High-Occupancy/Toll
HOV High-Occupancy-Vehicle
HSD Contra Costa County Health Services Department
HUD United States Department of Housing and Urban Development
IPM Integrated Pest Management
ISO Industrial Safety Ordinance
JPA/JEPA Joint (Exercise of) Powers Authority or Agreement
Lamorinda Lafayette-Moraga-Orinda Area
LAFCo Local Agency Formation Commission
LCC League of California Cities
LTMS Long-Term Management Strategy
MAC Municipal Advisory Council
MAF Million Acre Feet (of water)
MBE Minority Business Enterprise
MOA Memorandum of Agreement
MOE Maintenance of Effort
MOU Memorandum of Understanding
MTC Metropolitan Transportation Commission
NACo National Association of Counties
NEPA National Environmental Protection Act
OES-EOC Office of Emergency Services-Emergency Operations Center
PDA Priority Development Area
PWD Contra Costa County Public Works Department
RCRC Regional Council of Rural Counties
RDA Redevelopment Agency or Area
RFI Request For Information
RFP Request For Proposals
RFQ Request For Qualifications
SB Senate Bill
SBE Small Business Enterprise
SR2S Safe Routes to Schools
STIP State Transportation Improvement Program
SWAT Southwest Area Transportation Committee
TRANSPAC Transportation Partnership & Cooperation (Central)
TRANSPLAN Transportation Planning Committee (East County)
TWIC Transportation, Water and Infrastructure Committee
USACE United States Army Corps of Engineers
WBE Women-Owned Business Enterprise
WCCTAC West Contra Costa Transportation Advisory Committee
WETA Water Emergency Transportation Authority
WRDA Water Resources Development Act

Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE **3.**

Meeting Date: 05/08/2017

Subject: Administrative Items, if applicable.

Submitted For: TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE,

Department: Conservation & Development

Referral No.: N/A

Referral Name: N/A

Presenter: John Cunningham, DCD **Contact:** John Cunningham (925)674-7833

Referral History:

This is an Administrative Item of the Committee.

Referral Update:

Staff will review any items related to the conduct of Committee business.

Recommendation(s)/Next Step(s):

CONSIDER Administrative items and Take ACTION as appropriate.

Fiscal Impact (if any):

N/A

Attachments

No file(s) attached.

Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE **4.**

Meeting Date: 05/08/2017

Subject: REVIEW record of meeting for April 10, 2017, Transportation, Water and Infrastructure Meeting.

Submitted For: TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE,

Department: Conservation & Development

Referral No.: N/A

Referral Name: N/A

Presenter: John Cunningham, DCD **Contact:** John Cunningham (925)674-7833

Referral History:

County Ordinance (Better Government Ordinance 95-6, Article 25-205, [d]) requires that each County Body keep a record of its meetings. Though the record need not be verbatim, it must accurately reflect the agenda and the decisions made in the meeting.

Referral Update:

Any handouts or printed copies of testimony distributed at the meeting will be attached to this meeting record. Links to the agenda and minutes will be available at the TWI Committee web page: http://www.cccounty.us/4327/Transportation-Water-Infrastructure

Recommendation(s)/Next Step(s):

Staff recommends approval of the attached Record of Action for the April 10, 2017, Committee Meeting with any necessary corrections.

Fiscal Impact (if any):

N/A

Attachments

04-10-17 TWIC Sign-In Sheet
04-10-17 TWIC Meeting Minutes.pdf
SB1 04-06-17 Memo FINAL - TWIC 04-10-17
MRP - TWIC 04-10-17 v2.0

Transportation, Water and Infrastructure Committee Meeting
April 10, 2017

SIGN-IN SHEET

Signing in is voluntary. You may attend this meeting without signing in. (If front is filled, please use back.)

Name	Representing	Phone
Maureen Toms	DCD	674-7878
Stephen Kowalewski	PWD	313-2225
John Burgh	CCWD	688-8024
Ryan Hernandez	DCD	674-7824
Mark Seedorf	CCWD	686-8119
Cece Sellgren	PWD	313-2296
Jody Lenden	DCD	674-7871
Debbie Toth	Choice in Aging	687-6330
Mike Carlson	PWD	313-2321
John Deere	PWD	313-2281

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE

April 10, 2017
9:00 A.M.
651 Pine Street, Room 101, Martinez

Agenda

Supervisor Diane Burgis, Chair
Supervisor Karen Mitchoff, Vice Chair

Agenda Items:	Items may be taken out of order based on the business of the day and preference of the Committee

Present: Diane Burgis, Chair
Karen Mitchoff, Vice Chair

Attendees: Debbie Toth, Choice in Aging
Maureen Toms, DCD Policy Planning
Ryan Hernandez, DCD Water Agency
Jody London, DCD Sustainability Coordinator
Stephen Kowalewski, PWD
Cece Sellgren, PWD
Mike Carlson, PWD
John Steere, PWD
Mark Seedall, CCWD
John Burgh, CCWD

1. Introductions

2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to three minutes).

3. CONSIDER Administrative items and Take ACTION as appropriate.

Administrative Items: Maureen Toms noted that a memo from Mark Watts describing the Final Action of Senate Bill 1 (Transportation Funding) was provided to the Committee and copies were available for the audience.

4. Staff recommends approval of the attached Record of Action for the February 13, 2017, Committee Meeting with any necessary corrections.

The committee unanimously approved the meeting record.

5. DISCUSS report on the formation of a Contra Costa County Groundwater Sustainability Agency to undertake sustainable groundwater management in the portion of the Tracy Subbasin within Contra Costa County and CONSIDER recommending the Board conduct a public hearing on April 25, 2017 to consider Contra Costa County's decision to become a Groundwater Sustainability Agency for a portion of the Tracy Subbasin within Contra Costa County excluding the areas of the Cities of Antioch and Brentwood, Byron Bethany Irrigation District, Diablo Water District, Discovery Bay Community Services District and East Contra Costa Irrigation District and AUTHORIZE the Conservation and Development Director, or designee, to execute the Memorandum of Understanding and enter into an agreement with East Contra Costa County member agencies that will develop a Groundwater Sustainability Plan for the portion of the Tracy Subbasin within Contra Costa County.

The Committee unanimously approved the staff recommendation.

Discussion included Ryan Hernandez (DCD) providing an overview of the proposed Contra Costa County Groundwater Sustainability Agency (GSA) including the draft Memorandum of Understanding (MOU) between east county entities. Also discussed was the fact that Contra Costa Water District (CCWD) is not becoming a GSA, but is party to the MOU, as shown on Exhibit B in the staff report. Mr. Hernandez responded that there might be groundwater recharge opportunities with CCWD. John Burgh, CCWD also made positive comments about the participation of CCWD.

6. ACCEPT report on implementing the new Municipal Regional Permit 2.0, CONSIDER staff's recommendations, PROVIDE direction on which budget to pursue, and FORWARD this report to the full Board for consideration and approval.

The Committee received the report and considered the recommendations. The committee indicated that there would not be general fund revenue for the program and that staff would need to determine how to comply with the permit requirements with currently available revenue.

Discussion included Mike Carlson (PWD) and Cece Selgren (PWD) providing an overview of the requirements of the Regional Permit. There were three budget proposals presented, the baseline budget includes current revenue only, the second budget includes a proposed increase from the County General Fund which would fund the program to the level of compliance requiring the removal of all trash from the waterways, and the third budget showed the cost to remove all trash, plus all Mercury and PCB's, which is a requirement of the permit. The third budget was presented to show the shortfall the program faces. (please see ATTACHMENT)

7. No action is necessary; submitted to the TWI Committee for its information. There was not sufficient time between the formulation of the project in early January 2017 to submit the draft proposal to the TWI Committee for its review. Please note that the Coastal Conservancy released the San Francisco Bay Urban Greening Grant Request for Proposals in late December 2016.

The Committee directed staff to forward the application for the "North Richmond Watershed Connections Project" (Watershed Connections) grant to the BOS requesting authorization (on consent).

Discussion included Cece Sellgren reporting on the Prop 1 Grant for the North Richmond Watershed Connections Project to State Coastal Conservancy.

Related Discussion: The Committee had concerns and questions regarding the protocol for the submission of grants. TWIC staff will research the original grant review referral and any related policies and bring them to a future TWIC meeting for review.

8. CONSIDER report on Local, State, and Federal Transportation Related Issues and take ACTION as appropriate.

Local Issues:
ACCESSIBLE TRANSIT: County staff has been communicating with CCTA staff regarding the possibility of a an accessible transit study. There is support at the staff level and with some Board members to conduct the study in the short term. Additional detail will be provided at future meetings.

State Issues:
Steve Kowalewski provided an update on the the passage of SB1.
Mark Watts was not in attendance, a more comprehensive legislative update will be provided at the next Committee meeting.

Public Testimony:
Debbie Toth, Executive Director, Choice in Aging: Testified in support of the accessible transit study further commenting that the study should be comprehensive and review the structure of the agencies and the arbitrary service area borders which create accessibility issues.

9. RECEIVE communication and DIRECT staff as appropriate.

The Committee received the communication.

10. The next meeting is currently scheduled for Monday, May 8, 2017, 9:00 am.

11. Adjourn

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For Additional Information Contact:

John Cunningham, Committee Staff

MEMO

DATE: APRIL 6, 2017

TO: RUSTY AREIAS

FROM: MARK WATTS

SUBJECT: SB 1 – FINAL ACTION

The State Senate adjourned at 8pm tonight after passing SB 1 (Beall) and the companion revenue protections act, ACA 5 (Frazier).

The Senate vote on SB 1 was 27-11, with Senator Glazer joining Republicans voting No and Senator Cannella joining Democrats voting Aye. Senators Anderson and Berryhill abstained. The Senate vote for ACA 5 was 28-10, with Senator Glazer voting Aye and the others remaining the same as they voted on SB 1.

After lengthy debates in the Assembly, they wrapped up two years of hard work at 10:37 pm by passing SB 1, on a vote of 54-26. Together, the passage of both measures is a testament to the collaboration of many stakeholders, caring legislators, and especially, the tireless legislative leaders, Transportation Committee Chairs, Senator Beall and Assemblymember Frazier, in this extraordinary effort to address the state's crumbling roads,

The Governor is expected to sign the bills soon. A special appropriations bill, SB 132, was also amended.

Bill Package Details

Although there has been a wave of ongoing information provided and distributed on the components of these measures, it is fitting to capture the scope of this funding and program plan here.

SB 1 enacts a number of new taxes and fees to generate revenue for transportation projects. SB 1 is the largest infusion of transportation funding for California since the 2006 Proposition 1B bond act.

ACA 5 places a measure before California voters in November 2018 to constitutionally protect all revenues from SB 1 from diversion or borrowing for other purposes.

SB 1 Revenue Sources –

- 12 cent gasoline excise tax increase and annual adjustment for inflation (starting Nov. 2017)
- Resets price-based excise tax on gasoline and annual adjustment for inflation (starting July 2019)
- Transportation improvement fee on registered vehicles (ranges from $25 - $175 depending on vehicle value) (starting Spring 2018)
- 20 cent diesel excise tax increase and annual adjustment for inflation (starting November 2017)
- 4 percent increase on diesel excise tax (starting November 2017)
- $100 vehicle registration fee on zero emission vehicles (starting July 2020)
- $706 million Transportation Congestion Relief Program (TCRP) loan repayments

SB 1 Reforms

- Creates a Transportation Inspector General within a new Caltrans Office of Audits and Investigations to provide greater oversight and accountability.
- Provides for $100 million in efficiencies at Caltrans.
- Gives the California Transportation Commission (CTC) additional oversight of the state highway maintenance program.
- Creates an Advance Mitigation Program at Caltrans to mitigate the impacts of transportation projects on habitat and the environment.

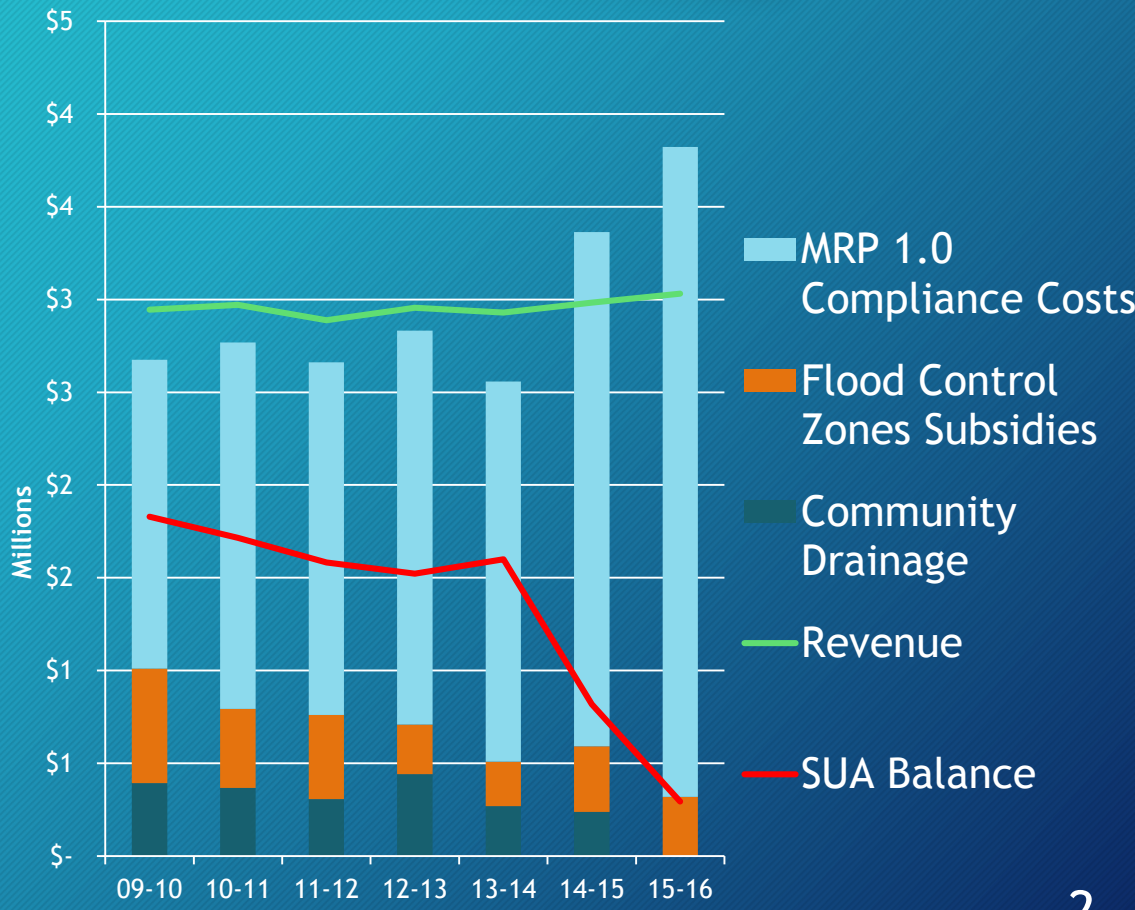
Implementing the Municipal Regional Permit 2.0

Transportation, Water, and Infrastructure Committee

April 10, 2017

Stormwater Permit Financial History

- MRP 1.0 2009 – 2015
- MRP 1.0 cost $3 million in 2014/15
- Reserves depleted in FY 2015/16
- MRP 2.0 = MRP 1.0 plus 4 additional provisions



MRP 2.0 Additional Provisions

Trash reduction

70%

by June 2017

80%

by June 2019

MRP 2.0 Additional Provisions

Green Infrastructure:

Building stormwater treatment infrastructure

MRP 2.0 Additional Provisions

PCBs:

Remove molecules through stormwater treatment and source control

MRP 2.0 Additional Provisions

Mercury:

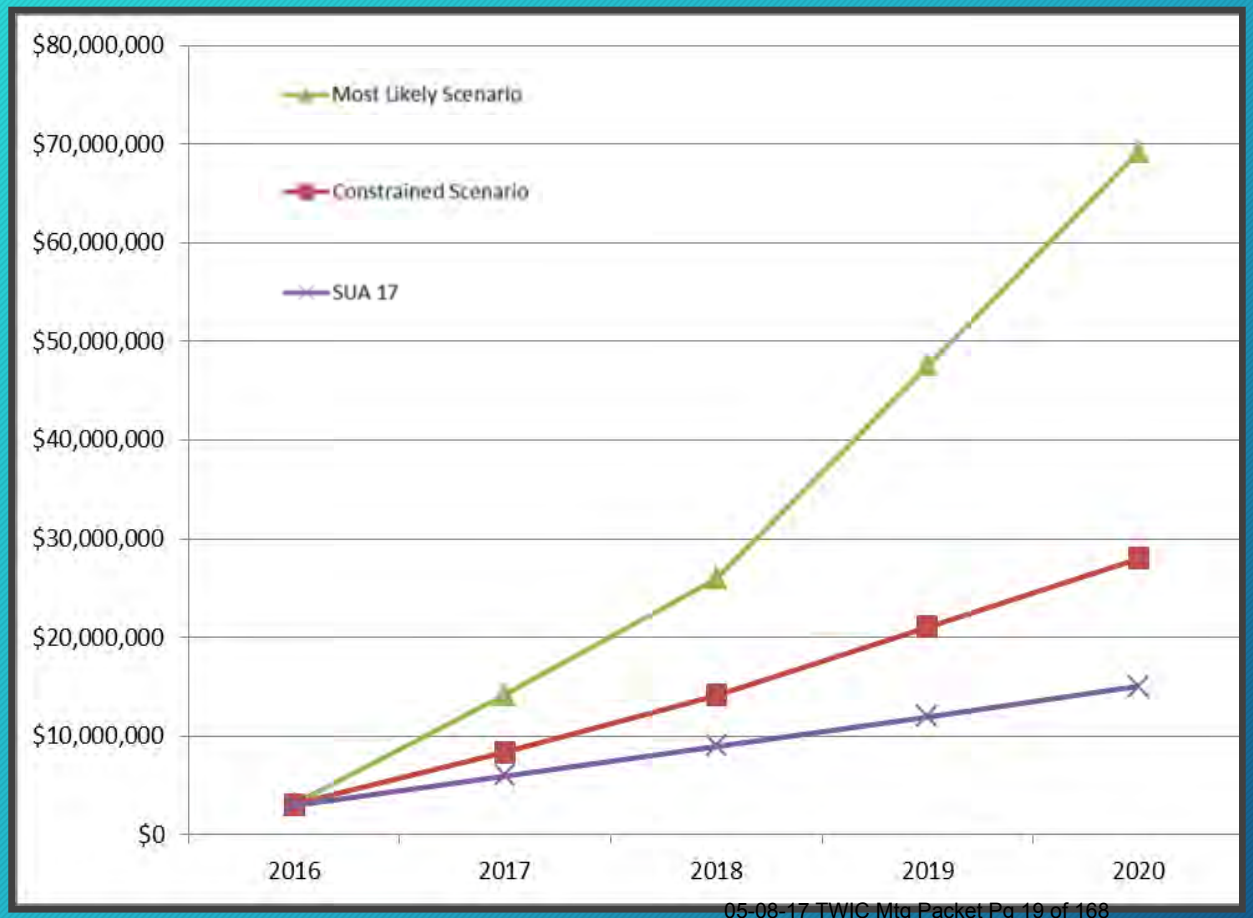
Remove molecules through stormwater treatment and source control

October TWIC Financial Report

- Outlined worse case cost scenario
- $200 million five-year total permit cost
- PCBs (and Mercury) requirements were 92% of total costs
- Staff subsequently met with Regional Board staff to discuss process, requirements, and costs:
  - December 7, 2016
  - February 7, 2017

Two Budget Proposals

Cumulative MRP 2.0 Costs and Revenue



Most Likely Scenario

- Based on compliance
- $69 million five-year total cost
- PCBs 64% total cost

Constrained Scenario

- Based on existing revenue ($3M SUA)
- $28 million five-year total cost
- PCBs 10% total cost

FY 2017/18 Constrained Budget

- Sensitive to County budget constraints
- Demonstrates commitment to MRP objectives
- Adds to community value where possible
- May not meet MRP 2.0 permit targets
- Requires funding "realignments"
  - Impacts other County Department budgets
    - Department of Conservation and Development
    - Environmental Health Division
    - Hazardous Materials Division
  - Impacts County General Fund

FY 2017/18 Details

Trash: $2.5 million
- Trash capture
- On-land cleanup
- Homeless camps

Street Sweeping: $325,000

Green Infrastructure: $92,000

PCBs: $690,000
- Green infrastructure
- Source properties

Other: $1.3 million
- 18 other control measures

Total Budget $4,901,000

MRP 2.0 Constrained Budget

MRP Provision	Description	MRP 1.0 2017-2018	MRP 2.0 Additional Provisions	MRP 2.0 2017-18 Budget	Funding Source for 2017-18 Budget				Total Funds
					SUA 17	Road Fund	Other Depts	General Fund	
C2	Municipal Operations	$32,000		$32,000		$32,000			$32,000
C2	Street Sweeping	$200,000	$125,000	$325,000	$125,000			$200,000	$325,000
C3	Development/LID	$123,000		$123,000	$123,000				$123,000
C3.j	GI Planning		$92,000	$92,000	$92,000				$92,000
C4	Industrial/Commercial Site Controls	$225,000		$225,000	$50,000		$175,000		$225,000
C5	Illicit Discharges	$143,000		$143,000	$43,000		$100,000		$143,000
C6	Construction Controls	$8,000		$8,000	$8,000				$8,000
C7	Public Outreach	$210,000		$210,000	$210,000				$210,000
C8	Monitoring	$30,000		$30,000	$30,000				$30,000
C9	Pesticide Controls	$25,000		$25,000	$25,000				$25,000
C10	Trash (Note 1, 2, 4, 5)	$1,216,000	$1,301,000	$2,517,000	$1,990,000	$352,000	$140,000	$35,000	$2,517,000
C11	Mercury Controls	$15,000		$15,000	$15,000				$15,000
C12	PCB Controls (Note 1, 3)	$40,000	$651,000	$691,000	$191,000	$250,000		$250,000	$691,000
C15	Annual Report	$70,000	$20,000	$90,000	$90,000				$90,000
	RWQCB Fees	$45,000		$45,000	$45,000				$45,000
	BIMID Cost Share	$30,000		$30,000	$15,000	$15,000			$30,000
	Drainage Inventory	$50,000		$50,000		$50,000			$50,000
	Marina Program	$10,000		$10,000	$10,000				$10,000
	Program Admin.	$230,000		$230,000	$230,000				$230,000
	Knightsen Biofilter	$10,000		$10,000			$10,000		$10,000
	Totals	$2,712,000	$2,189,000	$4,901,000	$3,292,000	$699,000	$425,000	$485,000	$4,901,000

Table 10.A MRP 2.0 Implementation Budget Overview Resource Based (Constrained)

FY 2017/18 Budget Recommendations

- Initiate one Green Infrastructure project
- Integrate GI into County road and building programs
- Install full trash capture devices
- Increase on-land cleanup
- Initiate Adopt-a-Spot program
- Develop ban on polystyrene food containers
- Reduce trash in creeks (homeless camps and illegal dumping)

Consequences of Non-Compliance

- Up to $10,000 per day per violation (RWQCB)
- Up to $37,500 per day per violation (EPA)
- Each outfall may be a separate violation
- Local government subject to third party lawsuits
- City of San Jose settles lawsuit with Baykeeper for $101 million, June 2016

Next Steps

- Direction on proposed budgets
- Forward to the Board
- Work with other County Departments
- Analyze street sweeping
- Prepare report on Flood Control District
- Work with BIMID
- Develop a Resource Plan
- Report back with a mid-year budget review
- Continue to meet with the Regional Board

Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE **5.**

Meeting Date:	05/08/2017
Subject:	San Pablo Avenue Complete Streets Study
Submitted For:	Julia R. Bueren, Public Works Director/Chief Engineer
Department:	Public Works
Referral No.:	12
Referral Name:	Monitor the implementation of the County Complete Streets Policy
Presenter:	Angela Villar, Public Works Dept. **Contact:** Angela Villar (925)313-2016

Referral History:

On April 4, 2013, the TWIC reviewed and approved submittal of grant applications that included the San Pablo Avenue Complete Streets Project as part of the Federal Planning Funds for the Local Priority Development Area (PDA) Planning and Implementation Grant.

On July 8, 2014, the Board of Supervisors approved submittal of a PDA Planning grant application for the San Pablo Avenue Complete Streets Project.

Referral Update:

Study appendices are available at this link:
www.cccounty.us/SanPabloCSappendices

In September 2014, the Contra Costa Transportation Authority (CCTA) approved the recommended list of projects for the PDA Planning Grant Program along with a list of on-call consultant teams to perform the work. The San Pablo Avenue Complete Streets Project was awarded $300,000 in grant funds and Contra Costa County selected ARUP as the consultant to conduct the planning study.

The goal of the planning study is to determine the feasibility of incorporating complete street improvements along San Pablo Avenue between Rodeo and Crockett. This segment is approximately 3 miles and could provide connection to existing bicycle and pedestrian facilities on either end of the project, Lone Tree Point on the west end and the Alfred Zampa Bridge on the east end, and also serve as a segment of the San Francisco Bay Trail alignment.

In July 2016, the County adopted a Complete Streets Policy directing staff to incorporate Complete Streets infrastructure into existing streets to improve the safety and convenience for all users and to maximize opportunities for Complete Streets, connectivity, and cooperation. In accordance with the County's Complete Streets Policy, this study aims to improve safety along a

segment of San Pablo Avenue for all users.

The existing 4-lane roadway has little to no shoulders, no separation between opposing travel lanes, and approximately 10% of the entire corridor has pedestrian or bicycle facilities. Existing traffic volumes along the corridor are only approximately 25% of the total capacity and are not expected to increase significantly in the future. This provides an opportunity to reduce the travel lanes and reconfigure the roadway to provide space for bicycle and pedestrian facilities and create an interchangeable middle lane that could be utilized for left turn pockets, center turn lanes, medians, or truck climbing lanes.

The study is intended to identify a preferred alternative for implementation. Three alternatives were developed as part of the study: 1) Bike Lanes Alternative, 2) Share Use Path Alternative, and 3) Widened Shared Use Path Alternative. The alternatives were assessed using a range of evaluation criteria that included safety and experience for all modes of travel (pedestrians, bicyclists, vehicles, trucks, transit); traffic impacts; right-of-way impacts; utility impacts, environmental impacts, and estimated costs.

The study incorporated a series of technical studies, field work, public outreach, and engineering analysis which provided the basis for the recommended alternative. The recommended alternative incorporates Alternative 2 – Shared Use Path with some modifications to maintain the existing on-street bike lanes between Lone Tree Point and California Street and implement a shared bicycle/pedestrian path on the north side of the roadway for the remainder of the corridor.

The study included a community outreach process consisting of community workshops, online surveys, project website, stakeholder meetings, and formation of a Technical Advisory Committee. In March 2017, the Draft Report was made available for public comment. A wide range of comments has been received about the study and response to these comments can be found in the appendix of the Feasibility Report.

In summary, the recommended alternative provides the best overall complete streets performance by incorporating a range of safety benefits for all modes of travel while minimizing project impacts. The estimated cost for the recommended alternative is $8.2 million.

Recommendation(s)/Next Step(s):

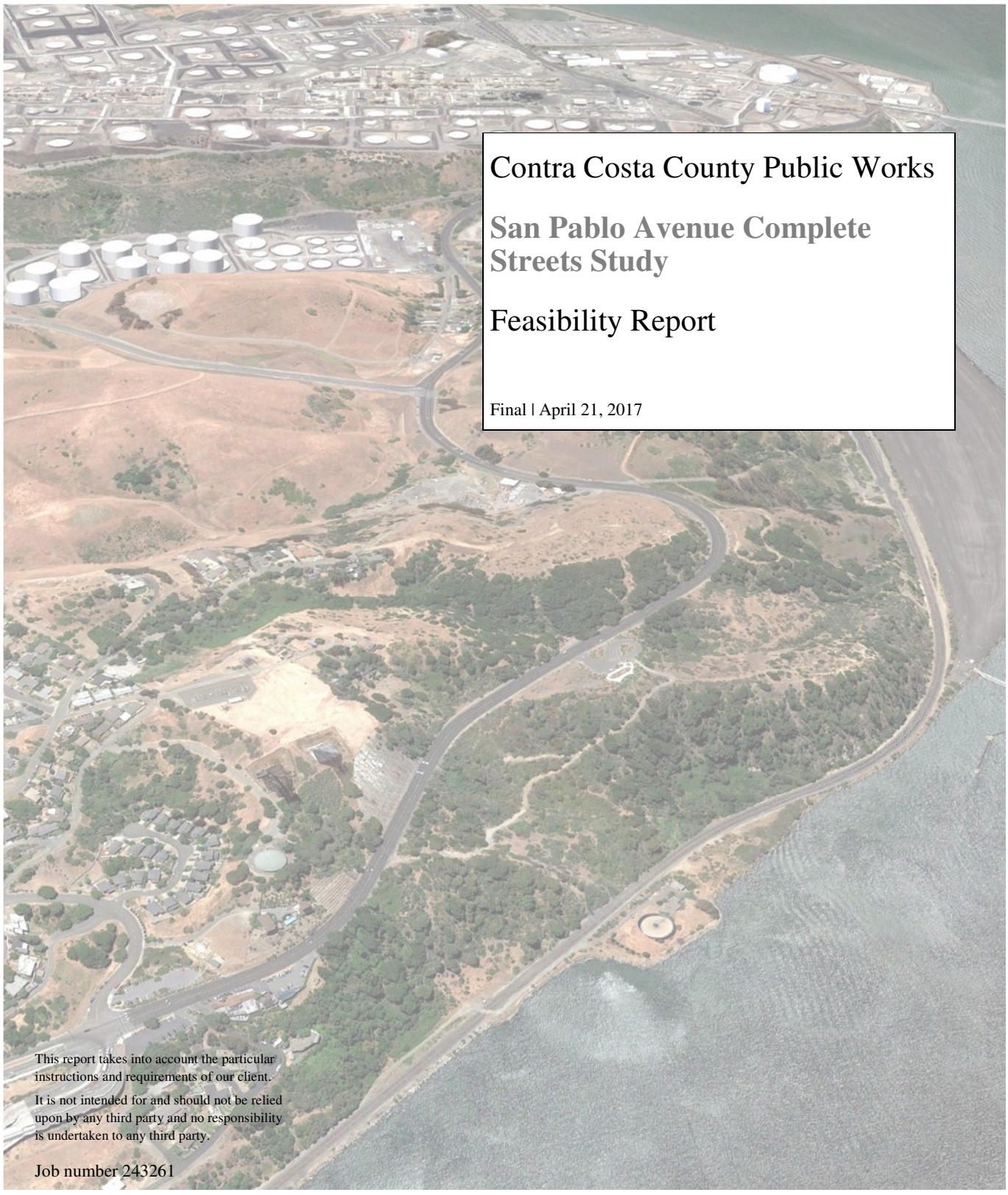
ACCEPT the Feasibility Report for the San Pablo Avenue Complete Streets Study between Rodeo and Crockett and RECOMMEND the Board of Supervisors approve the Feasibility Report at a future Board meeting. (District V)

Fiscal Impact (if any):

Study funded by 88.53% Federal Priority Development Area (PDA) Planning grant funds and 11.47% Local Road funds.

Attachments

04-21-17 San Pablo Feasibility Report
05-08-17 San Pablo Ave Study TWIC



Contra Costa County Public Works

San Pablo Avenue Complete Streets Study

Feasibility Report

Final | April 21, 2017

Job number 243261

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San Francisco 94105
United States of America
www.arup.com

Contra Costa County Public Works Department

ARUP

Contents

1 Executive Summary

This report assesses the feasibility of implementing a Complete Street design to improve safety on a three-mile segment of San Pablo Avenue between the communities of Rodeo and Crockett in unincorporated Contra Costa County. Complete Streets are a transportation policy and design approach that strives for streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel for all users (including pedestrians, cyclists, motorists, and transit riders). Both the State of California and Contra Costa County have adopted Complete Streets Policies that require jurisdictions to integrate the needs of all users into street design. In addition to improving bicycle and pedestrian access and safety, a Complete Street design along this segment of San Pablo Avenue would fill a gap in the San Francisco Bay Trail network. Contra Costa County initiated this study through a Priority Development Area (PDA) grant from the Contra Costa County Transportation Authority (CCTA). Throughout the development of the project, the local community has been involved through activities including public meetings, workshops, and internet surveys.

The study has the three primary objectives:

- **Assess alternatives for implementing a "Complete Street" that provides bicycle, pedestrian and transit facilities and enhances safety for all users along a three-mile segment of San Pablo Avenue from Lone Tree Point to the Alfred Zampa Bridge.** The Alfred Zampa Bridge is the suspension bridge that carries the westbound I-80 travel lanes from Vallejo to Crockett over the Carquinez Strait. Currently, this segment of San Pablo Avenue has very limited sidewalks and bicycle lanes on approximately 10% of the segment. Three alternatives for improving facilities, in addition to the existing condition, were evaluated. A Complete Street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, trucks, and motorists.

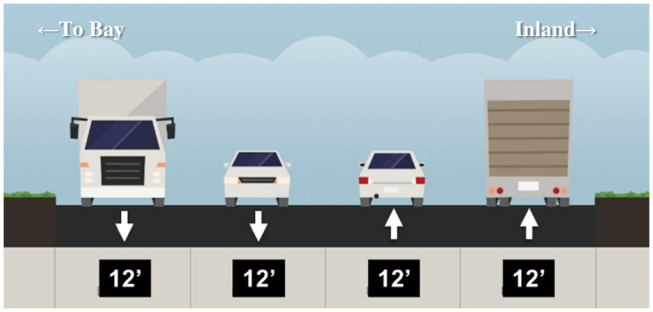
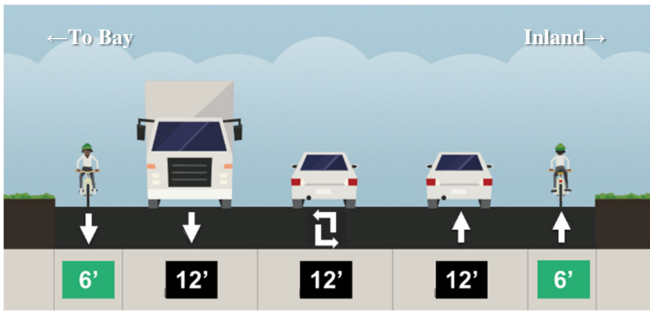
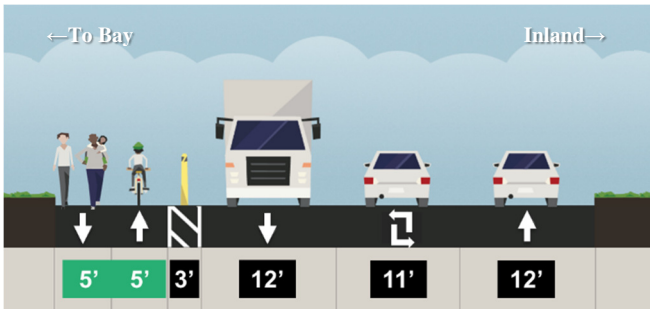
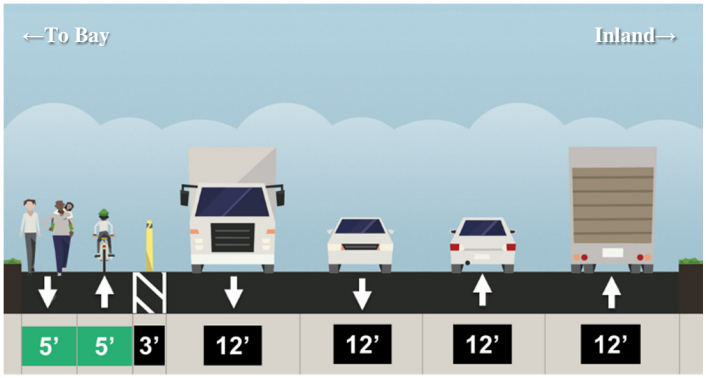
- **Close an existing gap in the Bay Trail.** The Bay Trail is a 500-mile regional walking and cycling trail that is planned around the perimeter of San Francisco and San Pablo Bays. The three-mile study segment represents the largest gap in the Bay Trail between Oakland and Vallejo. This segment would link the shared pedestrian/bicycle ("shared-use") path on the Alfred Zampa Bridge with a proposed segment in Hercules.

- **Identify a preferred alternative and the ultimate set of improvements desired for its implementation on the roadway.** The analysis evaluated the three alternatives and the existing condition against a range of criteria, including: consistency with Complete Street design "best practices," qualification as a Bay Trail segment, enhanced safety and experience for all users, maintenance of acceptable traffic operations, physical and environmental impacts, and cost-effectiveness.

This feasibility study incorporated a series of technical studies, field work, public outreach, and engineering design. The following are some of the primary findings used to develop the alternatives:

- The observed and forecasted traffic volumes on San Pablo Avenue represent approximately 25% of the roadway capacity for the four lane undivided arterial. Therefore, there is an opportunity to implement a "road diet," which is a low-cost way to enhance safety and mobility for all road users that involves removing a vehicle travel lane by re-striping the roadway and re-allocating the space saved for bicycle and pedestrian users. A road diet is typically achieved staying within the existing roadway right-of-way. In the case of San Pablo Avenue, this would result in one travel lane in each direction with a center lane for left turns and truck climbing lanes.
- While traffic volumes are generally low, there are a higher than typical percentage of trucks (approximately 25%) on the road segment between Cummings Skyway and Refinery Road that serve the Phillips 66 refinery and NuStar Energy. There are several sections with steep grades and tight curves, which will require solutions to allow for passing lanes and physical barriers to provide separation between pedestrians and cyclists and traffic. Separating road users and accommodating passing lanes for slower moving traffic will improve safety for vehicles, cyclists, and pedestrians alike.
- The technical studies indicate that the road diet concept can be implemented without any adverse effects on existing or future traffic operations.
- Public outreach, which included community meetings and online surveys, indicated a wide range of existing usage of the roadway and a diversity of opinions toward any potential changes such as the road diet and the continuous pedestrian and bicycle facilities.
- There are several significant engineering challenges along the corridor: narrow roadway shoulders, steep hillsides, steep grades, and refinery infrastructure in close proximity to the road.

The figure below presents the typical roadway cross-sections for the existing configuration and the three study alternatives.

Existing Conditions The existing roadway consists of four 12' travel lanes with minimal shoulders, no bike lanes, sidewalks, or truck climbing lanes. The existing condition represents the "No Build" alternative.	
Alternative 1: **Bike Lanes** Implement a "road diet," removing one travel lane and adding two 6' striped on-street bike lanes. Convert the center lane to a two-way left-turn lane, median, or truck climbing lane as necessary at different points along the roadway. This alternative does not add new sidewalks or pedestrian facilities.	
Alternative 2: **Shared Use Path** Implement a "road diet," removing one travel lane and adding a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated by vehicle traffic by a physical barrier. Convert the center lane to a two-way left-turn lane, median, or truck climbing lane as necessary at different points along the roadway.	
Alternative 3: **Widened Shared Use Path** Widen the existing roadway to add a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated by vehicle traffic by a buffer. The vehicle lane configuration will remain the same as the existing roadway (two-lanes in each direction) from Lone Tree Point to Cummings Skyway. From Cummings Skyway to the Alfred Zampa Bridge, implement the same road diet configuration with shared use path as presented in Alternative 2.	

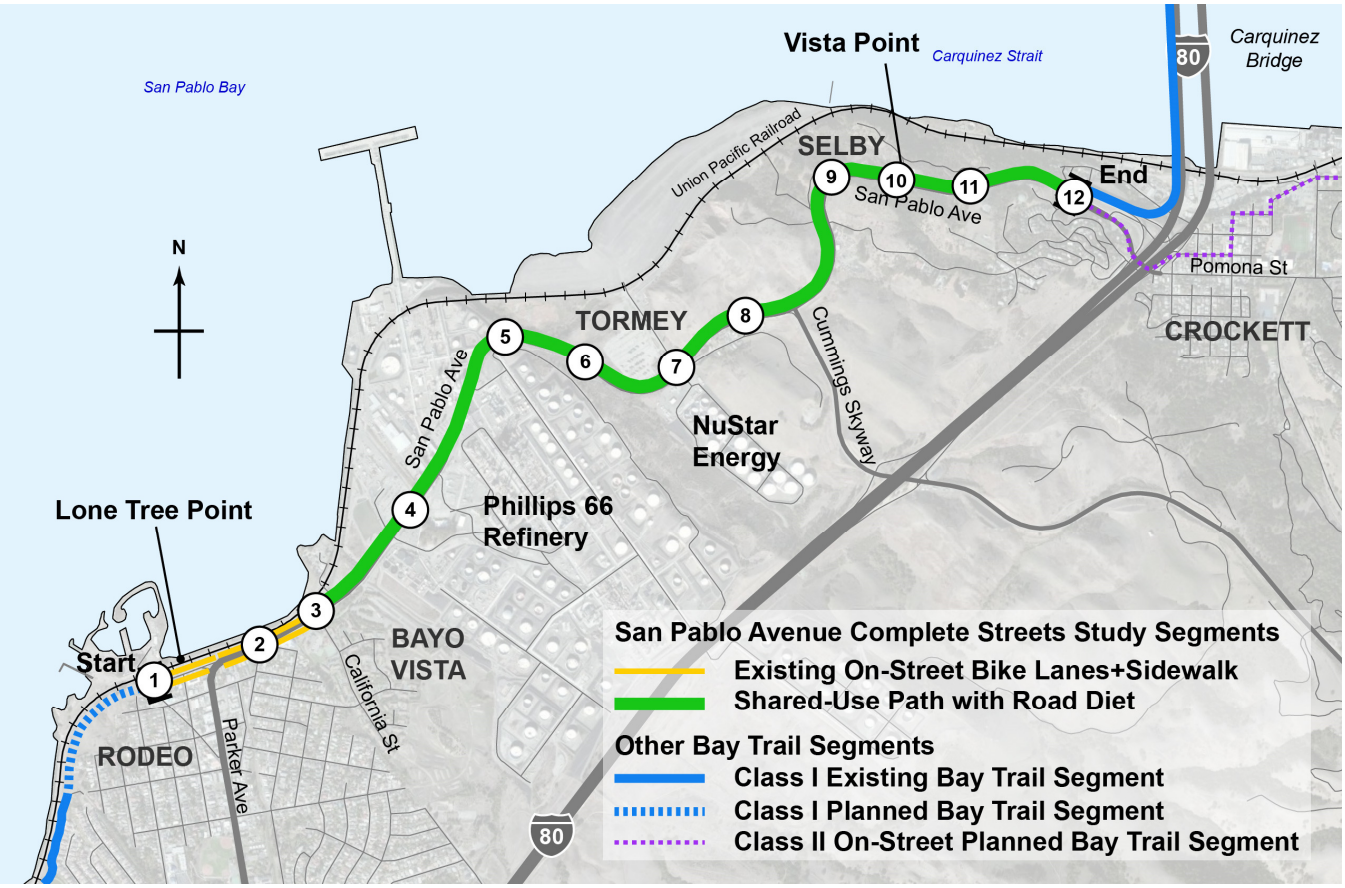
When assessed using the study evaluation criteria, the alternatives provide a range of results:

- The **Existing ("No Build")** condition does not provide continuous dedicated facilities for cyclists or pedestrians along the entire segment. It also does not qualify as part of the Bay Trail.
- The **Bike Lanes** alternative (Alternative 1) implements bike lanes only, therefore it does not qualify as a Bay Trail segment and does not meet several key goals of the study. The bike lanes provide a more comfortable experience compared to the existing condition. However, only selected portions of the roadway have space to accommodate minimal barriers to separate the bike lanes from the travel lanes. Therefore, the improvement in bicycle safety is only moderate. It is the least expensive and the easiest to implement.
- The **Shared Use Path** alternative (Alternative 2) has the best overall performance as it provides a way to accommodate pedestrians and cyclists safely along the entire corridor, provides a range of safety benefits for all other modes, and qualifies as part of the Bay Trail. Alternative 2 is more expensive than the Bike Lanes alternative, however, it offers significant additional benefits to users with minimal impacts.
- The **Widened Shared Use Path** alternative (Alternative 3) provides similar performance to Alternative 2, but has a very high cost and the potential for significant environmental and private property impacts as the result of widening the roadway to accommodate the path.

Recommended Alternative

The technical studies, outreach, and alternatives analysis provided the basis for selecting a modified Alternative 2 as the recommended set of improvements (see Figure 1). The Recommended Alternative retains the shared use path design from Alternative 2 east of California Street. This design removes one travel lane and adds a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated from vehicle traffic by a physical barrier. The physical barrier included in the design and cost estimates includes a modular concrete barrier often referred to as "jersey barrier" or "K-rail". These barriers would prevent vehicles from crossing over into the shared use path. The type of concrete physical barrier will need to be evaluated further in the detailed design stage if the project moves forward. West of California Street, in order to minimize impacts to local business owners, the Recommended Alternative retains the existing roadway layout, which includes on-street parking, bicycle lanes, and one travel lane in each direction. However, by providing continuous sidewalks and bicycle lanes, the alternative would meet the study's Complete Streets goal.

Figure 1: San Pablo Complete Streets Study Recommended Improvements



Locating the shared use path on the north side reduces the number of major intersections it crosses. West of California Street, the Recommended Alternative reflects the design of Alternative 1, which adds bicycle lanes and sidewalks—where needed—between California Street and Lone Tree Point where it would connect to the planned Bay Trail segment.

The Recommended Alternative is expected to cost $8.2 million. To phase delivery of the project, the cost estimate is divided into three segments, as follows:

- Alfred Zampa Bridge to Cummings Skyway ($1.8 million)
- Cummings Skyway to California Street ($4.3 million)
- California Street to Lone Tree Point ($2.1 million)

While the Recommended Alternative proposes a conceptual complete streets solution, detailed design work must be completed before any alternative is implemented. Key points along the corridor (keyed to numbered items in Figure 1) include:

1. Study area start. Construct bike lanes plus a sidewalk through Lone Tree Point from Pacific Avenue to Parker Avenue. Connect this to the proposed Bay Trail segment to Hercules.

2. Utilize the existing on-street bike lanes and sidewalk on San Pablo Avenue from Parker Avenue to California Street.
3. Provide a high visibility crossing for pedestrians and cyclists at California Street.
4. Implement the shared-use path (Alternative 2) concept from California Street to the Alfred Zampa Bridge. Utilize a physical barrier to separate the path from the travel lanes.
5. Provide a wide painted buffer between the opposing travel lanes at the summit point east of the refinery to increase the separation between opposing traffic.
6. Provide a truck climbing lane in the westbound direction.
7. Install a HAWK beacon (High-Intensity Activated crossWalK beacon) at the A Street intersection. A HAWK beacon is a traffic control device used to stop road traffic and allow pedestrians to cross safely.
8. Provide a truck climbing lane in the eastbound direction.
9. Provide a wide painted buffer between the opposing travel lanes at the summit point east of Vista Point Road to increase the separation between opposing traffic.
10. Provide a left-turn lane into the Vista Point.
11. Provide a truck climbing lane in the westbound direction.
12. Study area end. Provide pedestrian and bicycle improvements in front of the Dead Fish restaurant and connect to the path on the Alfred Zampa Bridge.

Implementation and Next Steps

This recommended alternative best satisfies the goals of the study, minimizes project impacts, and provides a cost-effective solution. County staff will utilize the findings in this feasibility report to ultimately make a recommendation to the Board of Supervisors about next steps and whether further detailed design should continue.

After public review, if the Board approves a preferred alternative, a number of steps remain to implement the chosen alternative:

1. Complete final design: Select a consultant to prepare final design documents. Funding for this study must be identified.
2. Environmental review process: Select a consultant to complete appropriate environmental review documents to comply with the California Environmental Quality Act (CEQA). Funding for this study must be identified.
3. Construction funding: Explore funding options for construction, such as the county's capital improvement program, regional grants, state and/or federal funding.
4. Construct project, whole or in phases.

2 Introduction

Contra Costa County is evaluating the feasibility of implementing a Complete Street design with improved pedestrian, bicycle, and transit facilities on a three-mile segment of San Pablo Avenue between the communities of Rodeo and Crockett in unincorporated Contra Costa County. Complete Streets are designed to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Both the State of California and Contra Costa County have adopted Complete Streets Policies that require jurisdictions to integrate the needs of all users into street design. This segment of San Pablo Avenue is also identified as a potential portion of the San Francisco Bay Trail.

The San Pablo Avenue study corridor extends from Pacific Avenue and Lone Tree Point in Rodeo to the base of the Alfred Zampa Memorial Bridge (previously known as the Carquinez Bridge) bicycle and pedestrian shared-use path (SUP) in Crockett. Figure 2 presents the San Pablo Avenue study area, the study intersections included in the traffic analysis, and six key segments along the corridor.

Table 1 provides a summary of each of the six segments.

Figure 2: San Pablo Avenue Complete Streets Study Area

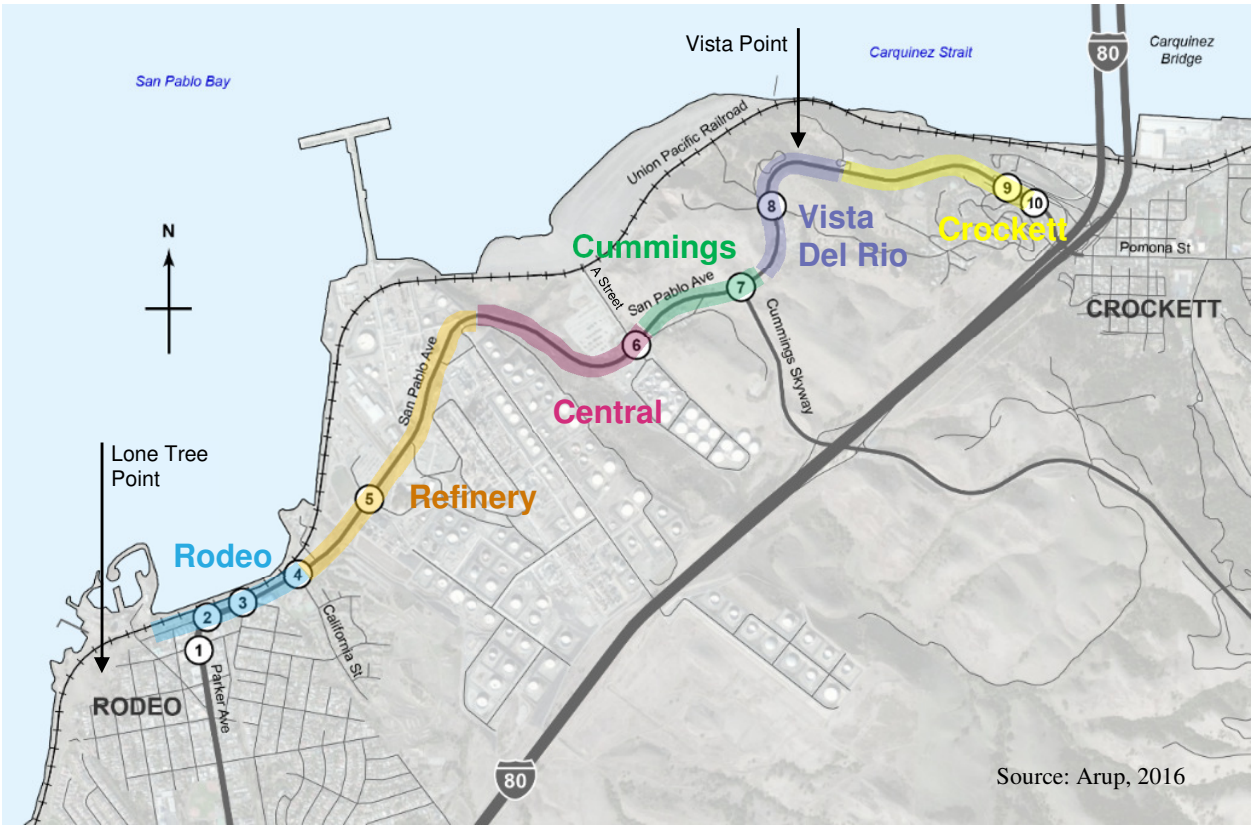


Table 1: Description of Corridor Segments

Segment	Existing Street Description/Land Use Context
Rodeo Lone Tree Point to California St	• Bike lanes on Parker Avenue with sidewalks • Local commercial uses with multiple driveways, on-street parking
Refinery California St to the summit east of Phillips 66	• No bike lanes or sidewalks • Oil refinery and heavy industrial uses Steep grades east of Refinery Rd
Central Summit to east of A St	• No bike lanes or sidewalks • Petroleum storage at A St; some rural residential • Some moderate grades
Cummings A St to Cummings Skwy	• No bike lanes or sidewalks • Long steep sustained grades with moderate truck volumes
Vista Del Rio Cummings Skwy to Vista Point	• No bike lanes or sidewalks • Long steep sustained grades with low truck volumes
Crockett Vista Point to I-80 Ramps/Merchant St	• No bike lanes or sidewalks • Major on and off-ramps serving I-80 • A large restaurant traffic generator near the ramps • Some moderate grades approaching the ramps

Along most of the study corridor, San Pablo Avenue is a four-lane (two lanes each direction) undivided arterial with a 45 mph speed limit and very limited sidewalks and dedicated bicycle facilities. All four travel lanes are 12 feet wide for a total traveled way of 48 feet. The roadway travels parallel to Interstate 80 (I-80) between Oakland and Crockett.

Through the study area, San Pablo Avenue travels through a range of residential, industrial, unincorporated, and rural areas, and has significant topographic features and steep grades. The roadway is a public street and the County is responsible for its maintenance within the study area. The Phillips 66 petroleum refinery and NuStar Energy occupy the largest parcels in the center of the study area, with the residential and commercial areas of Rodeo and Crockett on the west and east ends of the corridor. The roadway also passes by Selby Slag, a former smelting site located on the San Pablo Bay shoreline north of NuStar Energy. The Selby Slag is designated as a California hazardous waste and substances site, and a remediation plan and environmental impact report are under development and expected to be issued for public comment in 2017.

The Contra Costa County Public Works Department and Arup have completed a range of planning and technical studies, conceptual designs, cost estimates, and public outreach as part of the feasibility study. County staff and Arup have developed and evaluated several alternatives using a range of criteria related to design, safety, pedestrian and bicycle access, transit, traffic operations, and cost.

2.1 Study Objectives

The three primary study objectives are:

- **Incorporate a "Complete Street" with bicycle, pedestrian, and transit facilities on San Pablo Avenue between Rodeo and Crockett.** Providing continuous pedestrian and bicycle facilities where they do not currently exist will promote these transportation modes through the study area and will provide enhanced safety for all users.

- **Close an existing gap in the Bay Trail.** The 3-mile study segment is the longest gap in the Bay Trail between Vallejo and Oakland.
- **Identify a preferred alternative and ultimate set of improvements for the roadway.** County staff will use the findings from the feasibility report to make a recommendation for a preferred alternative from a range of alternatives. The preferred alternative will be used to identify a set of improvements for further design and funding.

2.2 Study Context

This study was commissioned by Contra Costa County Public Works through a Priority Development Area (PDA) Planning Grant from the Metropolitan Transportation Commission (MTC) and Contra Costa County Transportation Authority (CCTA). The study also made use of Community-Based Transportation Planning funds from the West Contra Costa Transportation Advisory Committee (WCCTAC) for the community outreach process. The entire length of San Pablo Avenue in Contra Costa County is designated as a PDA. Contra Costa County and Arup began work on the study in May 2015.

The PDA grants are awarded to jurisdictions that:

> *Increase walking, bicycling, carpooling and car-sharing by effectively managing parking and driving while promoting multimodal connections for residents, employees and visitors within the PDA.*

This study's stretch of the San Pablo Avenue corridor has been recognized in numerous previous planning documents as a key route and targeted for multi-modal improvements. The County's General Plan (2005) designates this portion of the corridor as a Scenic Route, given its surrounding landscape and views of San Pablo Bay, the Carquinez Strait, and the Briones Hills. The Countywide Bicycle and Pedestrian Plan (2009) proposes a class II bicycle facility on this portion of San Pablo Avenue, and notes that this facility is part of the county's larger bicycle and pedestrian network. Finally, the West Contra Costa Transportation Advisory Committee (WCCTAC) Action Plan (2014) designates the San Pablo Avenue corridor as a Route of Regional Significance, which means that it has multi-modal transportation service objectives that must be met. The Action Plan calls for bicycle and pedestrian facilities on the three-mile stretch from Rodeo to Crockett.

In 1994, Unocal Corporation owned the refinery parcels adjacent to San Pablo Avenue now owned by Phillips 66. Their land use permit at that time required that they construct a bike trail and walking path along the property frontage and dedicate a portion of an existing security road at the northeastern boundary for the same purpose. In lieu of constructing the improvements, Unocal deposited funds towards the construction of a trail along its property and agreed to work with the County's Public Works Department to implement the trail. A copy of the letter from Unocal is located in Appendix G. The study seeks to implement this trail along San Pablo Avenue.

The study is also informed by adopted local policy and statewide legislation mandating the implementation of Complete Streets. The State of California adopted the Complete Streets Act of 2008 (Assembly Bill No. 1358), which requires the legislative body of each county and city to:

> *"Accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context."*

The Contra Costa County Board of Supervisors adopted in 2008 a General Plan Amendment that incorporated "Complete Streets" principles into the General Plan. In July 2016, the County adopted a specific Complete Streets policy that identifies a set of principles, implementation processes, and exceptions. The County's 2016 policy requires:

> *"All departments and agencies of Contra Costa County shall work towards making Complete Streets practices a routine part of everyday operations, approach every relevant project, program, and practice as an opportunity to improve streets and the transportation network for all categories of users/modes, and work in coordination with other departments, agencies, and jurisdictions to maximize opportunities for Complete Streets, connectivity, and cooperation.*

This policy stipulates that a Complete Street design represents the design standard, and exceptions to providing a Complete Street design require an exemption granted by the Director of Public Works or Director of Conservation and Development and based on findings. The County's policy requires that all plans and projects incorporate complete streets infrastructure, sensitive to local conditions. Contra Costa County's General Plan and Complete Streets Policy establish that streets should be designed to accommodate all users, be sensitive to local context, and balance multiple demands.

2.3 What are Complete Streets?

Complete streets are streets for everyone. While every complete street has a different design and features, each aims to balance the needs of all users, recognizing that public infrastructure should ideally accommodate a diverse range of modes and users. Making room on our streets for pedestrians and cyclists not only enables healthier active lifestyles, but is also safer for these road users and can help reduce vehicle trip making and greenhouse gas emissions. Complete Streets come in various designs and configurations. Figure 3 shows a variety of designs that differ based on their local context (urban, suburban, rural, and industrial) and user demands.

Figure 3: Complete Street Examples

These Complete Street examples illustrate the wide variety of options for integrating pedestrian and cycling facilities into existing roadways. These facilities can be on-street (within the roadway) or off-street, physically separated by a wide buffer or a physical barrier such as a curb, pylons or bollards, and can serve pedestrians and cyclists separately in exclusive facilities (e.g., a sidewalk adjacent to an exclusive bicycle path) or in a shared facility where pedestrians and cyclists share the space.

Figure 4 presents several types of standard bicycle and shared use facilities. Class I, II, and III facilities are specified in Chapter 1000 of the California Highway Design Manual (HDM). California has recently endorsed the National Association of Transportation Officials (NACTO) Urban Street Design Guide and Urban Bikeway Design Guide as resources that Caltrans and local entities can reference when making planning and design decisions, as long as they are thoroughly documented. A Class IV facility, which is an on-street protected bike lane or "cycle-track", is now a common design implemented across California.

Figure 4: Types of Bicycle Facilities

Class I: Off-Street Paths or Trails

These facilities are separate from roadways and are usually shared by both pedestrians and cyclists.

Class II: On-Street Bike Lanes

These facilities are designated on-street bike lanes with no physical barrier or protection. The width of the bike lane varies, but is typically five to six feet in width. If space is available, a wide painted separation buffer is recommended.

Class III: Bicycle Routes

Bicycle routes are "preferred" routes for cyclists, but do not provide any dedicated lanes. They are often marked by signs identifying the route including "sharrows". Sharrows are shared-lane markings that are indicated with a double chevron and bicycle stencil. They are used to designate that vehicles and bicycles should share roadway space.

Class IV: Protected On-Street Bike Lanes

A protected on-street bike lane or "cycle-track" is a facility that is physically separated from the vehicle travel lane by a barrier. Barriers can include flexible pylons, bollards, or permanent concrete barriers. California State Assembly Bill 1193 created this new class of bikeway facilities in 2014. Protected bike lanes provide the most protection and comfort for people on bikes and do the most to encourage a broad range of users.

Source: Silicon Valley Bicycle Coalition

2.4 The Bay Trail

The San Francisco Bay Trail is a 500-mile regional walking and cycling path that is planned around the perimeter of San Francisco and San Pablo Bays. California Senate Bill 100 (1989) mandated the creation of the Bay Trail to provide connections to recreational opportunities and to serve as a regional transportation link. The Bay Trail is managed and planned by the Association of Bay Area Governments (ABAG). The Bay Trail Plan proposes a trail system consisting of three components:

1. The spine trail is the main alignment, intended as a continuous recreational corridor encircling the Bay and linking the shoreline of all nine Bay Area counties. In some areas, constraints force the spine trail inland.
2. Where the spine trail does not follow the shoreline, spur trails provide access from the spine to points of natural, historic and cultural interest along the waterfront.
3. Connector trails link the Bay Trail to inland recreation sites, residential neighborhoods and employment centers, or provide restricted access to environmentally sensitive areas. Some connector trails link the Bay Trail and the Ridge Trail, another regional trail network, which travels inland, mostly along the ridges of the Bay Area's hills. The spine trails, encircling the Bay and creating a continuous recreational corridor which links all nine Bay Area counties.

Figure 5 shows the entire Bay Trail with existing and planned facilities.

Figure 6 presents the Bay Trail alignment within the vicinity of the study area. This alignment was included in the original Bay Trail plan of 1989 and in the more recent *San Francisco Bay Trail Project Gap Analysis Study* (ABAG, 2005), which provides a detailed inventory of gaps in the Bay Trail system. ABAG identified the on-street alignment on San Pablo Avenue between Lone Tree Point and the Alfred Zampa Bridge as the planned Bay Trail segment. The San Pablo Avenue segment will eventually connect with the planned segment to Shoreline Park in Hercules.

Figure 5: San Francisco Bay Trail (Source: ABAG)

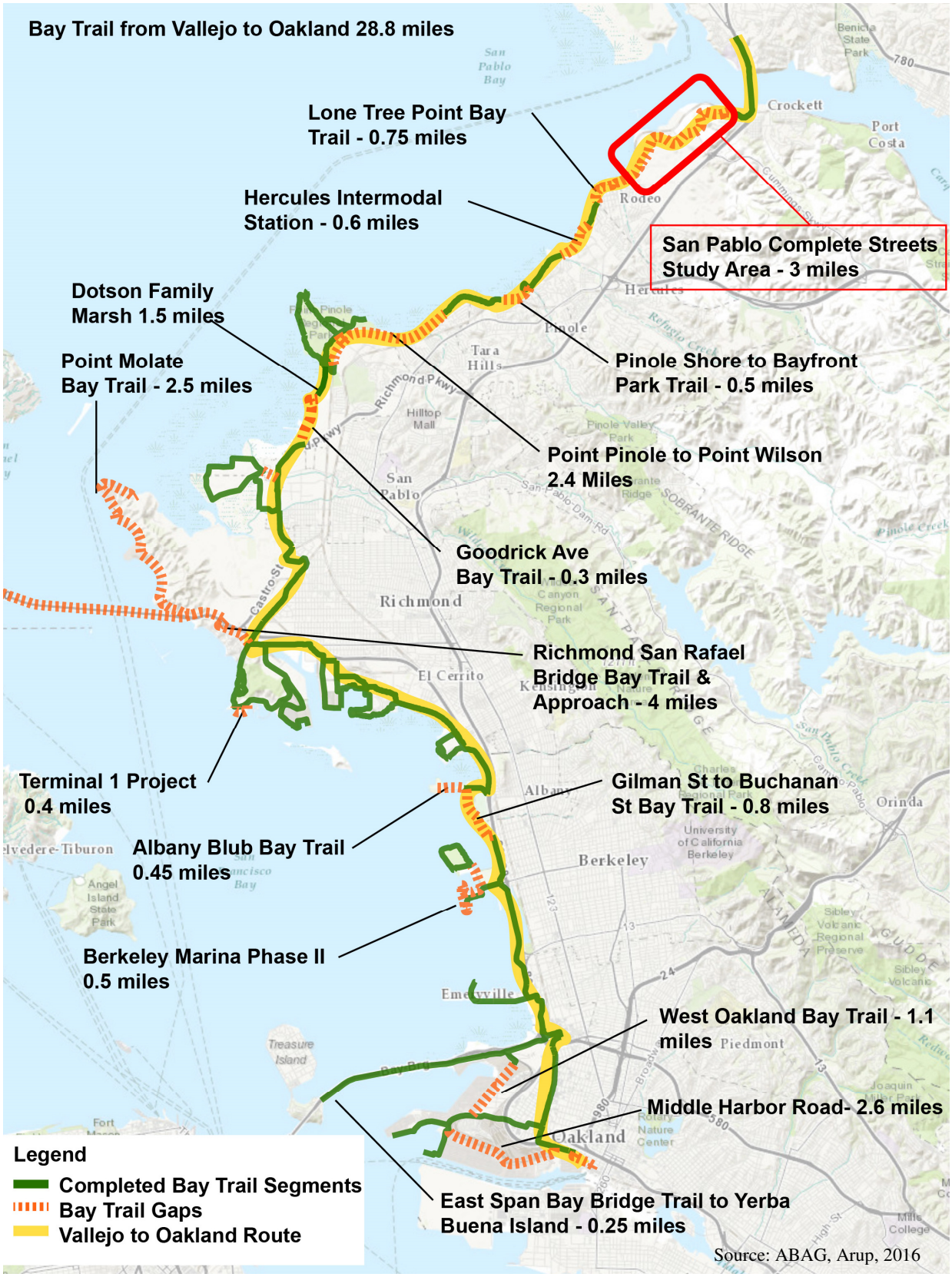
Source: ABAG, 2016

Figure 6: Bay Trail Segments within the Study Area

Source: ABAG, 2016

Figure 7 shows the location of planned and proposed Bay Trail projects between Oakland and Vallejo. The 3-mile San Pablo Avenue study corridor represents the longest missing gap in the Bay Trail between Vallejo and Oakland – a distance of approximately 30 miles. Currently, there are 14 active projects between Vallejo and Oakland totaling over 15 miles of new Bay Trail facilities. When completed, there will be over 77 miles of continuous Bay Trail in the East Bay.

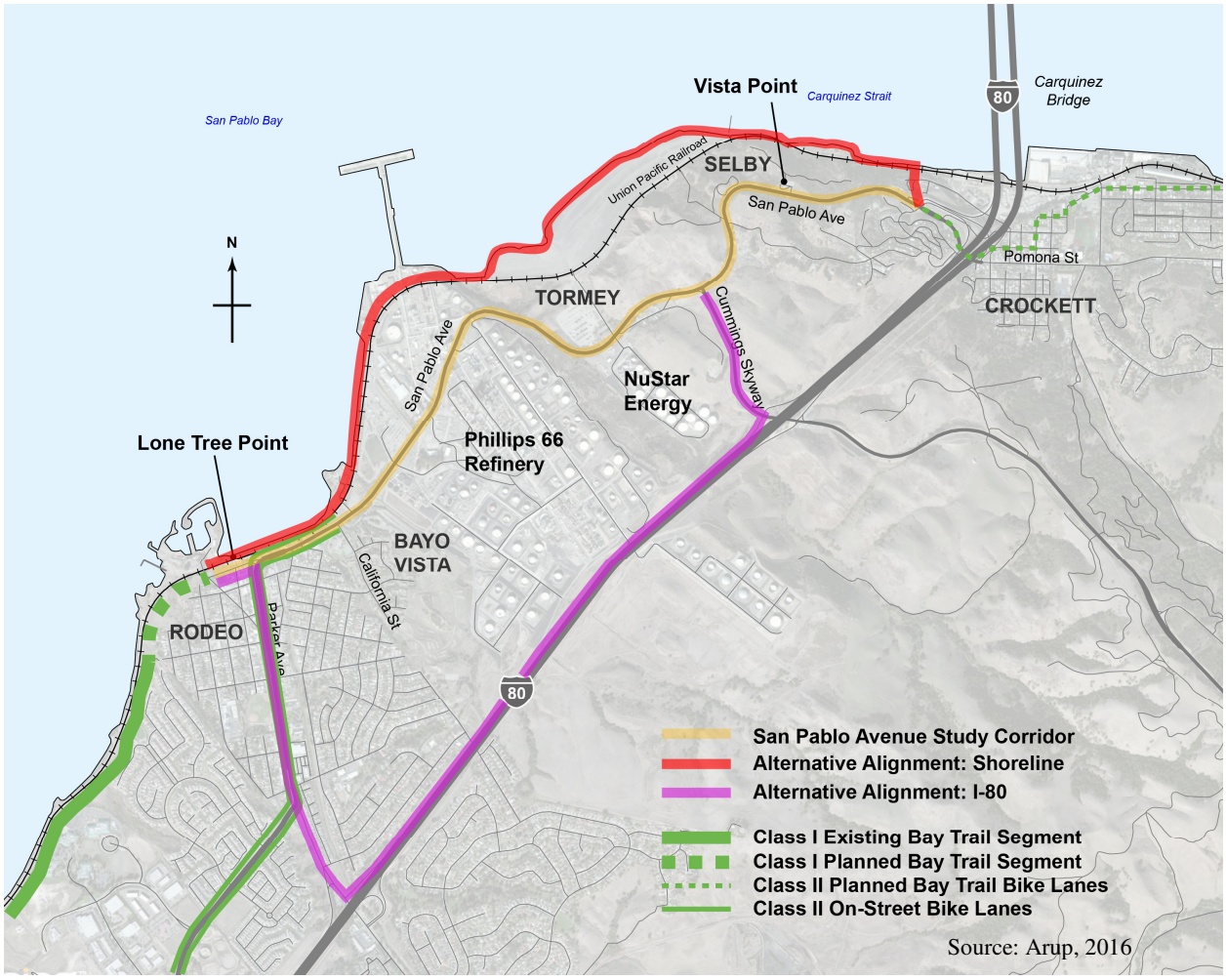
Figure 7: Planned/Proposed Bay Trail Projects Between Oakland and Vallejo



2.5 Alternative Bay Trail/Study Corridor Alignments

Alternative alignments for this segment of the Bay Trail through the study area have been raised by the public as part of this study. Figure 8 illustrates the two alternative alignments, which are described below:

Figure 8: Alternative Bay Trail Alignments



- **I-80 Alignment (Cummings Skyway to Willow Avenue):** This alignment would route the Bay Trail along Cummings Skyway to I-80, where it would follow an alignment along the freeway between Cummings Skyway and Willow Avenue. The I-80 alignment from Cummings Skyway to Lone Tree Point, where it would connect up with future Bay Trail segments, is approximately 3.6 miles, which is almost twice as long as the 1.9 miles along the San Pablo Avenue route.

This alignment has several constraints, including: the route is considerably longer than the San Pablo Avenue route; designing a bike and pedestrian path along I-80 would require widening into hillsides and retaining walls at several locations to maintain the number of travel lanes and shoulders on the freeway; steep grades on Cummings Skyway; the ramps at Cummings Skyway and Willow Avenue would need to be widened to allow pedestrians and cyclists to exit the freeway alignment; and Willow Avenue under I-80 would need to be widened to accommodate bike lanes and additional sidewalks between the freeway and Parker Avenue. The I-80 freeway and ramps are under Caltrans jurisdiction and a freeway alignment would need to be analyzed by Caltrans to determine feasibility.

- **Shoreline Alignment (Lone Tree Point to Alfred Zampa Bridge path):** This alignment would route the Bay Trail along the Shoreline and parallel to the Union Pacific (UP) railroad tracks, through the Phillips 66 refinery and the Selby site just to the east, and connect up to the Alfred Zampa path in Crockett. The constraints to this alignment include: there is very limited right-of-way adjacent to the UP tracks for a path; a significant safety barrier between the tracks and the path would be required; the path would travel directly through the Phillips 66 refinery and very close to active refinery activities; easements and additional security through the refinery and the Selby site would be required; very steep hillsides east of the Selby site would pose an engineering challenge; and routing the path up the steep hillsides to connect to the Alfred Zampa Bridge path would be very challenging and would likely require the path traveling through Crockett.

The scope of this study is to evaluate the feasibility of Complete Streets pedestrian and bicycle improvements along San Pablo Avenue, which was the alignment identified in ABAG's 2005 Gap Analysis Study. Evaluating other alignments is not a part of this study. The Bay Trail's goal is to develop a shoreline, multi-use separated trail, but where that is not possible, on-street alignments are acceptable. Due to the corridor's shoreline uses and topography, implementing bicycle and pedestrian facilities on San Pablo Avenue is an opportunity that balances Bay Trail objectives with surrounding site constraints and that provides easy connections to the Bay Trail segments at Lone Tree Point and the Alfred Zampa Bridge.

2.6 Feasibility Study Approach

The feasibility study included the following steps:

1. Reviewed previous policies, plans, and technical reports.
2. Analyzed engineering drawings, topographic maps, and aerial photography of the corridor.
3. Conducted field work, which included numerous site visits as well as a bicycle trip of the corridor.
4. Collected traffic, truck, accident data and utility information.
5. Conducted a series of technical studies to evaluate traffic conditions and to identify opportunities and constraints at key locations.

6. Conducted outreach activities, which included public and stakeholder meetings and surveys, before and after the alternatives development process.
7. Developed conceptual designs and cost estimates for three "Build" alternatives, which include a range of pedestrian and bicycle facilities.
8. Performed an alternatives analysis to understand how the three Build alternatives compare to the Existing Conditions (i.e., "No Build") alternative.

This report summarizes the findings of the feasibility study and the alternatives analysis. Additional detail is provided in the appendices.

3 Existing Conditions

San Pablo Avenue today is predominantly a four-lane roadway through a mostly rural area with significant topography. In most cases, the roadway does not have shoulders, guardrails or other infrastructure to enhance automobile safety or support walking or cycling. Along the study area, access to San Pablo Avenue is limited due to a relatively low number of intersections, and street lighting is limited along much of the corridor.

For automobiles, San Pablo Avenue serves as a parallel route for the I-80 freeway. It has a speed limit of 45 mph, but with wide 12' lanes and limited access, speeds along the roadway are typically much higher than the legal limit. Traffic varies along the corridor, highest in the southern portion at Parker Avenue with 4,700 average daily traffic (ADT) and lowest east of Cummings Skyway, with 2,200 ADT. With a four-lane roadway, there is ample room for automobiles to pass trucks and other slow moving vehicles.

Supporting industrial uses along the corridor, a significant amount of truck traffic travels the corridor. For the portion west of Cummings Skyway, 23% of vehicles are trucks, while only 12% are trucks to the east of Cummings Skyway. Truck traffic can make left turns from the center left travel lane, which provides a sufficient turning radius for large vehicles. Right turns are made from dedicated right-turn lanes or the right travel lane. However, turning vehicles can block through-traffic movements on the roadway, as there are no dedicated left-turn lanes.

Conditions for active transportation modes are poor on San Pablo Avenue. Much of the roadway lacks pedestrian infrastructure; sidewalks and bicycle lanes exist only from Parker Avenue to California Street, only approximately 10% of the entire corridor. The remainder of the roadway lacks sidewalks and in many cases the shoulder is insufficient for safe pedestrian use. Crosswalks do exist at all signalized intersections. Similarly, the remainder of the corridor lacks dedicated bicycle facilities and the shoulders are similarly too narrow for safe cycling. Given the high speed limit and the even higher real-world travel speeds on the corridor, the roadway is not a safe place for even avid cyclists.

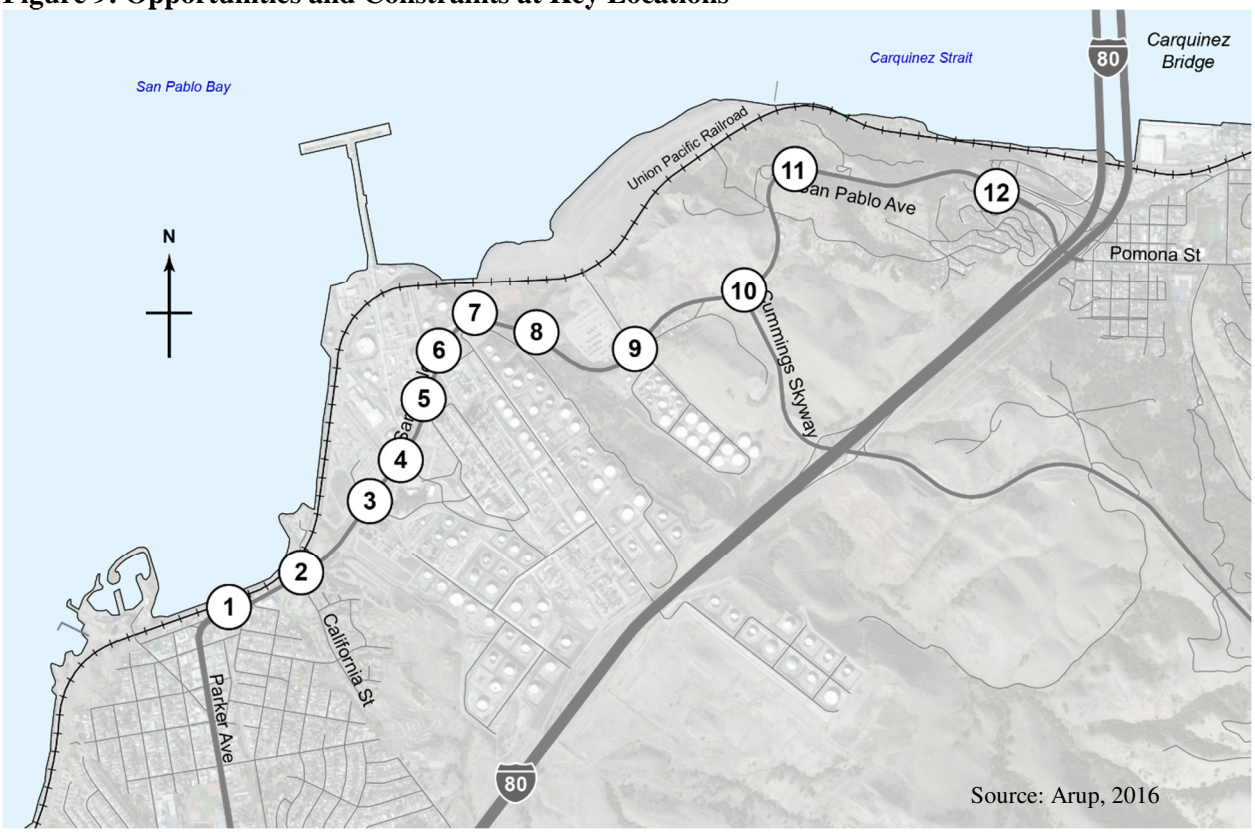
Finally, limited transit service is offered along the corridor. WestCAT has four bus stops along the study corridor, at the following locations: California Street, Road Number 4 at the Phillips 66 refinery, A Street, and the Merchant Street Park and Ride lot. Only one stop includes improvements such as a shelter and bench, while the remainder are simply signed roadside areas. Buses either stop in the right travel lane and block traffic or pull into unpaved shoulders.

Additionally, the John Swett Unified School District busses students along San Pablo Avenue between schools in Rodeo and Crockett. One school bus stop is located along the study corridor at A Street/NuStar Energy.

4 Key Corridor Features

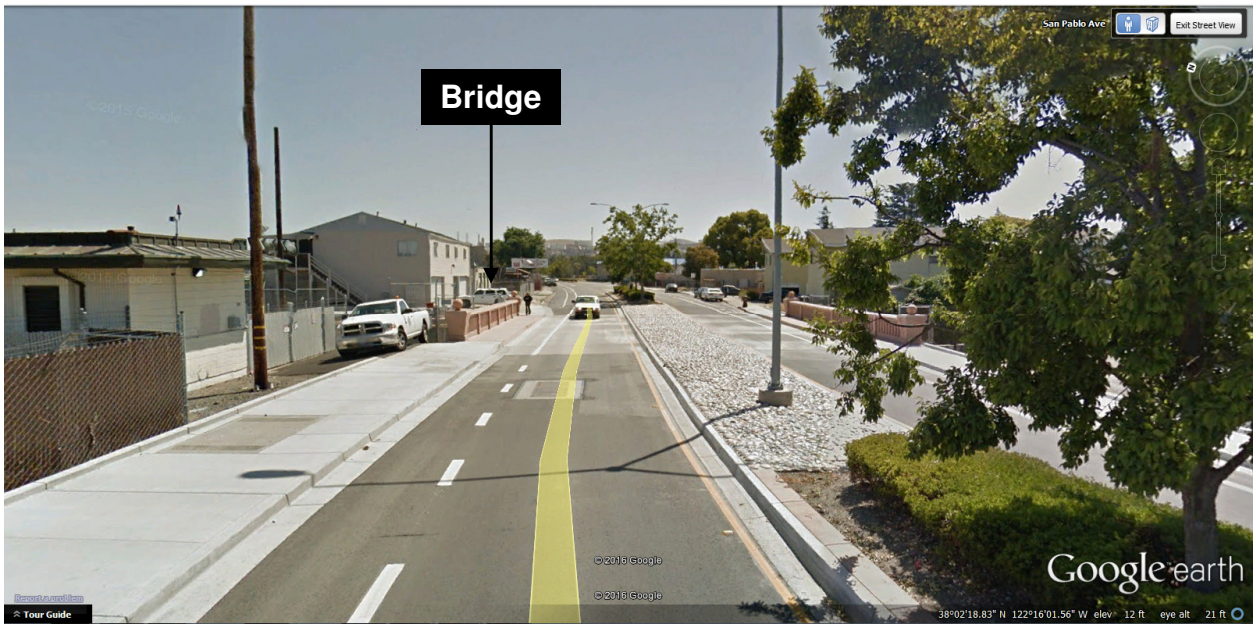
The initial field work and review of existing documents yielded various findings at key locations along the corridor. These were documented and assessed to help understand the key features that the Complete Streets designs would need to respond to. Figure 9 identifies the key locations, which are followed by Google Earth Streetview images detailing the specific opportunities and constraints.

Figure 9: Opportunities and Constraints at Key Locations



1 San Pablo Avenue and Parker Avenue (looking east)

- Opportunity to tie into existing bicycle lanes; sidewalks are incomplete in many areas
- Bridge constrains the right-of-way and was replaced in 2014



2 San Pablo Avenue and California (looking west)

- The roadway cross-section on San Pablo Avenue west of California Street provides on-street bike lanes and dedicated left-turn lanes with on-street parking on both sides

3 San Pablo Avenue and Refinery Road (looking east)

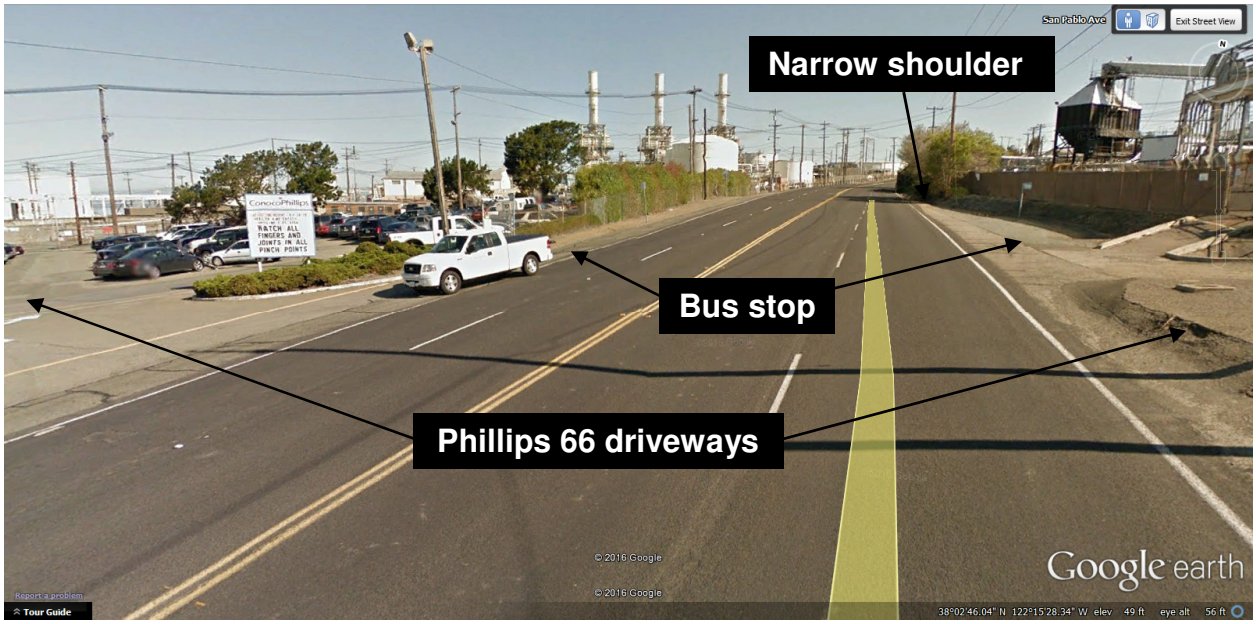
- Minimize impacts to signal equipment and Phillips 66 property
- Maintain large radius turn lanes for trucks

4 San Pablo Avenue east of Refinery Road (looking east)

- Utility poles, pipelines, and other infrastructure present right-of-way constraints
- Narrow cross-section with no shoulder and pipelines crossing under the road

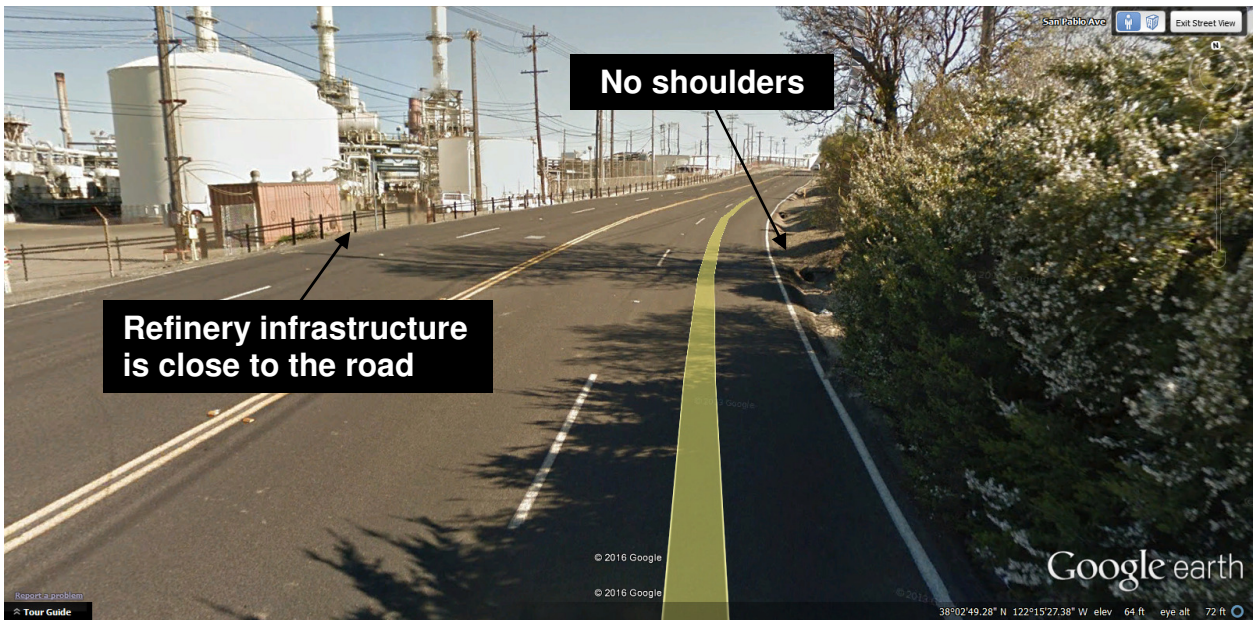
5 San Pablo Avenue at Main Driveway (looking east)

- Driveways and a major truck access point for Phillips 66



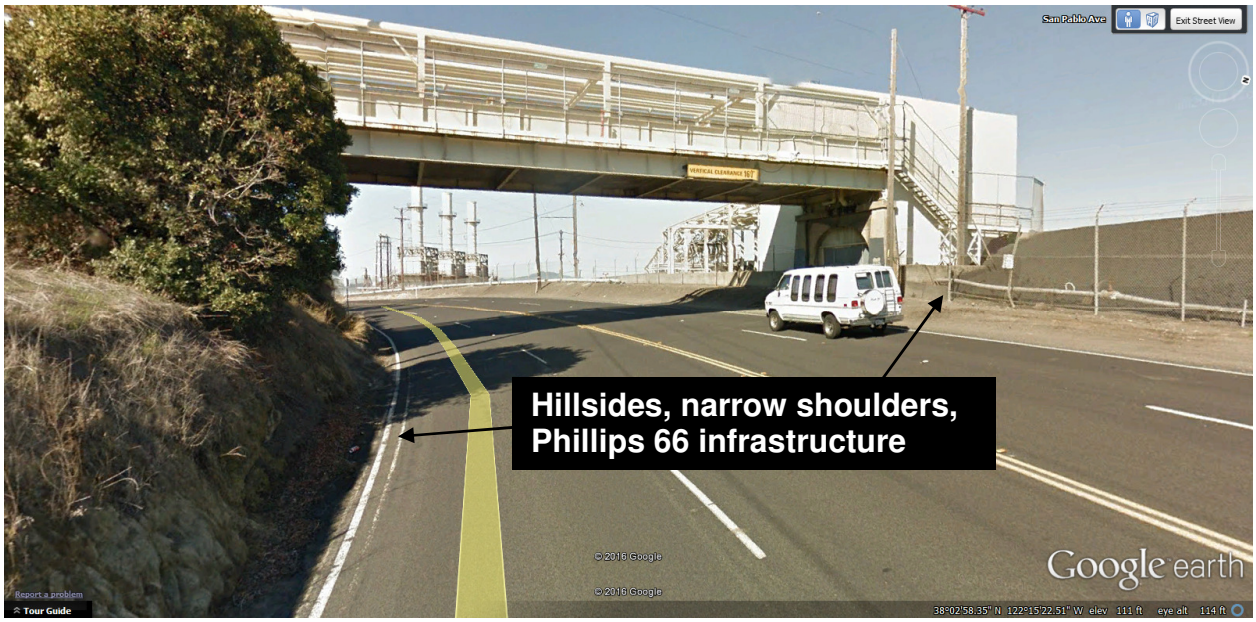
6 San Pablo Avenue at east of driveway (looking east)

- No shoulders
- Adjacent refinery infrastructure



7 San Pablo Avenue at the refinery summit (looking west)

- Narrow section with no shoulder and adjacent hillside
- Overhead utility/pipeline structure

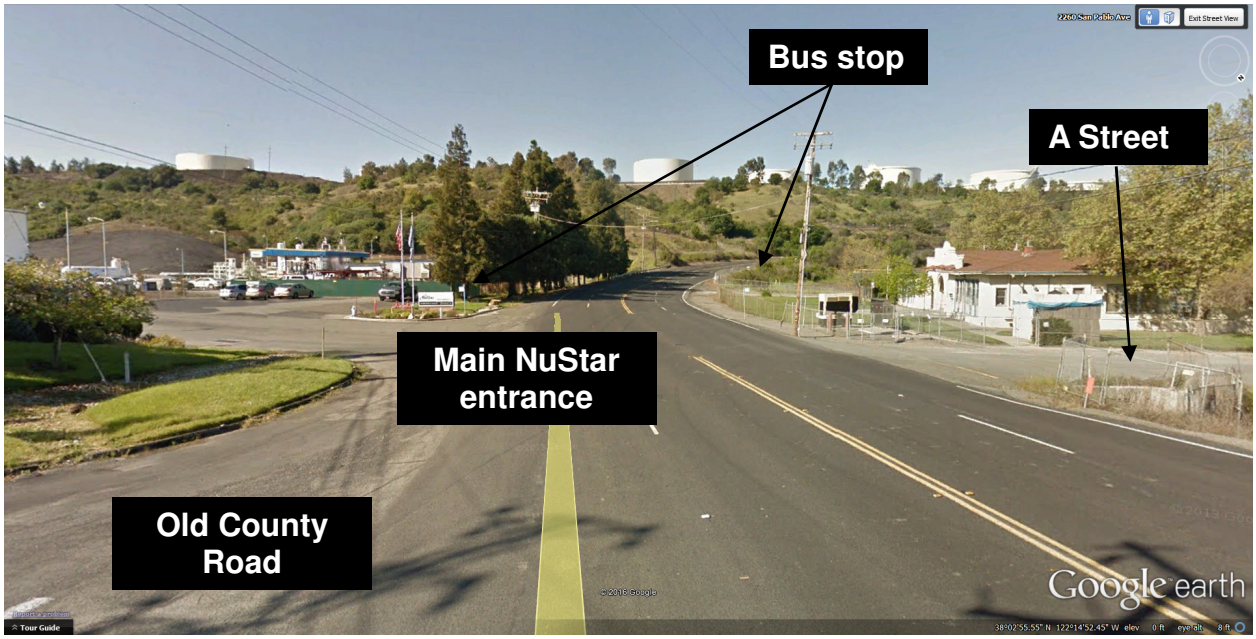


8 San Pablo Avenue approaching Cummings Skyway (looking east)

- Adjacent steep hillside, guardrail with steep drop, no shoulders

9 San Pablo Avenue at A Street (looking west)

- Maintain truck access into NuStar and improve access to bus stops and Old County Road



10 San Pablo Avenue at Cummings Skyway (looking east)

- Avoid impacts to signal poles
- Maintain the large turning radius for trucks heading to/from Cummings Skyway
- Adjacent hillside with narrow shoulders

11 San Pablo Avenue east of Cummings Skyway at second summit (looking west)

- Guardrail with a steep drop and narrow shoulders

12 San Pablo Avenue at Merchant Street (looking west)

- Angled parking for the Dead Fish Restaurant just to the outside of the travel lanes
- Narrow shoulders and limited sidewalks

5 Outreach

The County and Arup developed a range of outreach efforts to obtain strategic direction, technical guidance, and feedback from the public and stakeholders at multiple points during the study. The project team strived to collect a broad range of comments and opinions from the public and key stakeholders using a variety of methods, including comments made at public meetings, email correspondence, and web-based surveys. The following summarizes the outreach process:

- **Technical Advisory Committee (TAC):** A TAC was formed to provide strategic guidance to the study. The TAC has met several times throughout the study. The committee consisted of 19 members from a cross-section of stakeholders, including County staff, representatives from staff of the Contra Costa County District V Supervisor Federal Glover, Contra Costa Health Services, Contra Costa County Employment and Human Services, Western Contra Costa Transit Authority (WestCAT), Caltrans, the West Contra Costa County Transportation Advisory Committee (WCCTAC), the Metropolitan Transportation Commission (MTC), Caltrans, the East Bay Regional Parks District, ABAG, Phillips 66, NuStar, Bike East Bay, and local residents from Rodeo and Crockett.

- **Community Workshops:** Two public meetings were held to inform residents and stakeholders on the study. The first was held on February 8, 2016 at the Rodeo Senior Center. The project team presented an overview of the project, presented initial concepts for two alternatives (bike lanes and shared-use path), presented the traffic study findings, received public comments, and responded to questions from the public. At the second meeting, on September 29, 2016 at the Crockett Community Center, the project team presented the alternatives and received input and feedback on the preliminary layouts.

- **Stakeholder Meetings:** Stakeholder meetings were conducted with representatives from Phillips 66, NuStar Energy, and the office of Federal Glover, Supervisor for Contra Costa County. The study team also conducted additional stakeholder outreach to obtain information and feedback from the Crockett-Carquinez Fire Department, Rodeo-Hercules Fire District, John Swett Unified School District, WestCAT, and the Dead Fish restaurant.

- **Website:** County staff established a website for the project at the following URL: http://www.co.contra-costa.ca.us/6006/San-Pablo-Avenue-Complete-Streets-Project. All documents, presentations, meeting information, and surveys (more details below) are being posted to this website for the public.
- **Collaborative Map**: Arup also set up a "Collaborative Map" for the corridor that allows users to drop pins on problem areas and provide comments. The Collaborative Map URL is https://www.collaborativemap.com/SanPabloAve/.
- **Web surveys**: Arup developed a web survey for the study that was launched at the February 8th public meeting.. The County has a link to the website at this URL: http://arup.polldaddy.com/s/san-pablo-avenue-complete-streets-project-survey.
- **Comment cards:** County staff developed comment cards for each public meeting. The cards were printed on postcards and distributed at the public meetings to obtain feedback and allow attendees to provide written comments.

5.1 Survey Results

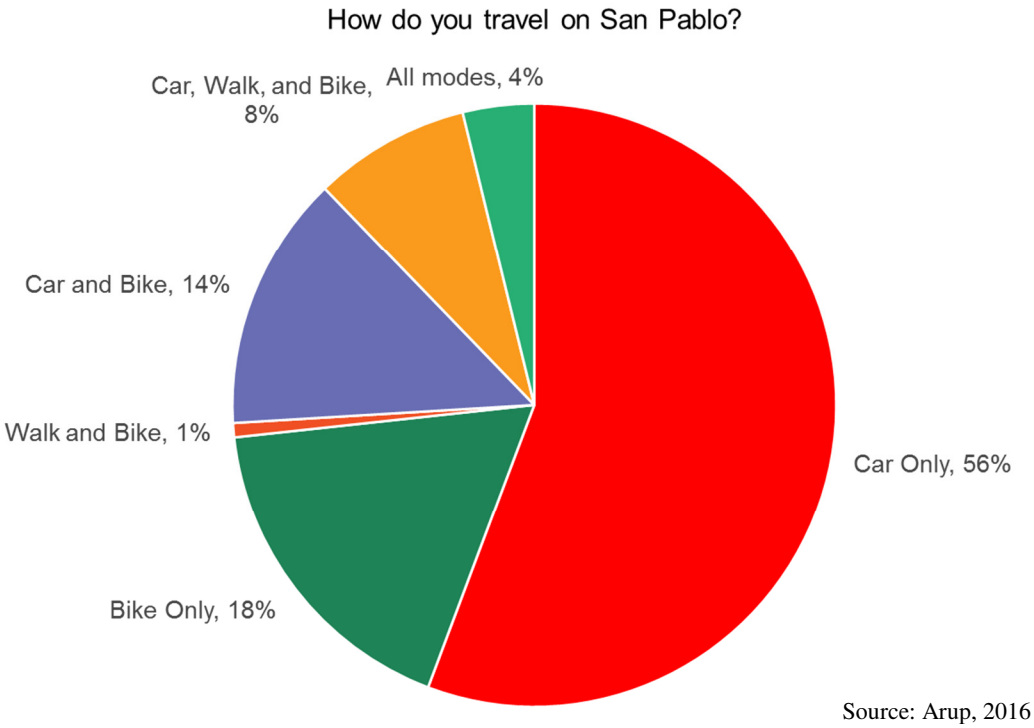
The web surveys are meant to capture the general public sentiment regarding the project and are included in the design process as one of the key inputs alongside the policy priorities, technical findings, and cost estimates. The survey results indicate a broad range of sentiment and usage along the study corridor. The web survey received 143 valid responses from a range of local residents and businesses, regional stakeholders, as well as regular and occasional users. The full survey detail and results are available in the Appendix.

Figure 10 presents the results to the question: "How do you travel on San Pablo Avenue?"

Just over half of the respondents use "Car Only". However, 44% use non-auto modes or a combination of modes to travel along the corridor. Figure 11 presents the results to the question: "Which pedestrian/bicycling facilities would you use along San Pablo Avenue if they were available?"

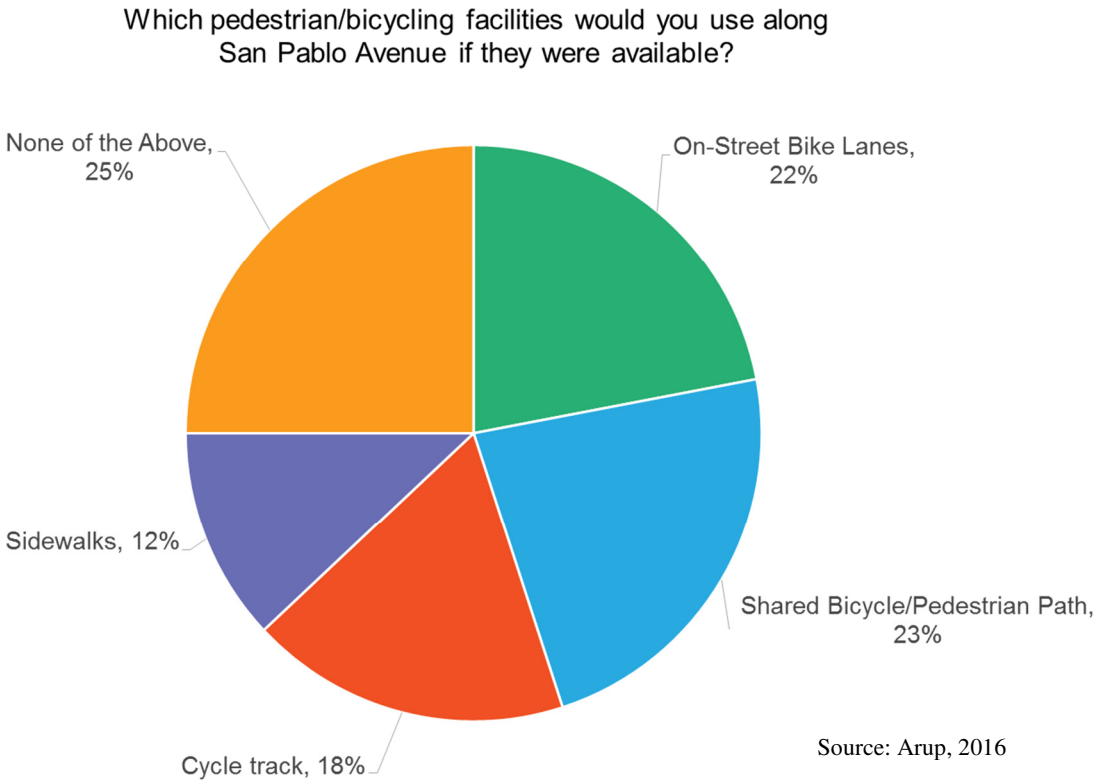
These results indicate a broad range of sentiment related to what type of pedestrian and/or cycling facilities the public and stakeholders would like to see along the corridor. One quarter stated "None", while almost equal percentages were interested in "On-Street Bike Lanes" or a "Shared Bicycle/Pedestrian Path". There was greater support for a cycle track alone than for sidewalks alone.

Figure 10: Travel Along San Pablo Avenue



Source: Arup, 2016

Figure 11: Question Regarding Sentiment on New Pedestrian/Bicycling Facilities



Source: Arup, 2016

6 Traffic and Safety Analysis

This section provides a summary of the traffic and safety analysis conducted for the study. The detailed traffic study is available in the Appendix. The analysis methodologies presented in this report are consistent with best practices and are consistent with relevant analysis guidelines published in *Technical Procedures* (Contra Costa Transportation Authority, 2013).

The initial traffic assessment of the study corridor indicated the following:

- San Pablo Avenue is a four-lane undivided arterial street with very few left-turn lanes, no dedicated bicycle facilities, and sidewalks along approximately 10% of the corridor
- Low traffic volumes, but with higher than normal truck volumes
- A low level of congestion on most days
- Observed speeds higher than the posted 45 mph speed limit

6.1 Existing Traffic Conditions

To identify existing traffic conditions, traffic counts were collected at multiple locations during the week of May 12, 2015. Machine "tube" counts, which record hourly volumes in each direction over a 24-hour period, were collected at three locations in the study corridor:

- Parker Avenue, South of 1st Street (this is outside of the study area, but included as for comparison purposes)
- San Pablo Avenue, West of Cummings Skyway
- San Pablo Avenue, East of Cummings Skyway

Table 2 summarizes the average daily traffic (ADT) volumes for the three count locations.

Table 2: Average Daily Traffic (ADT) at Three Locations Along the Corridor

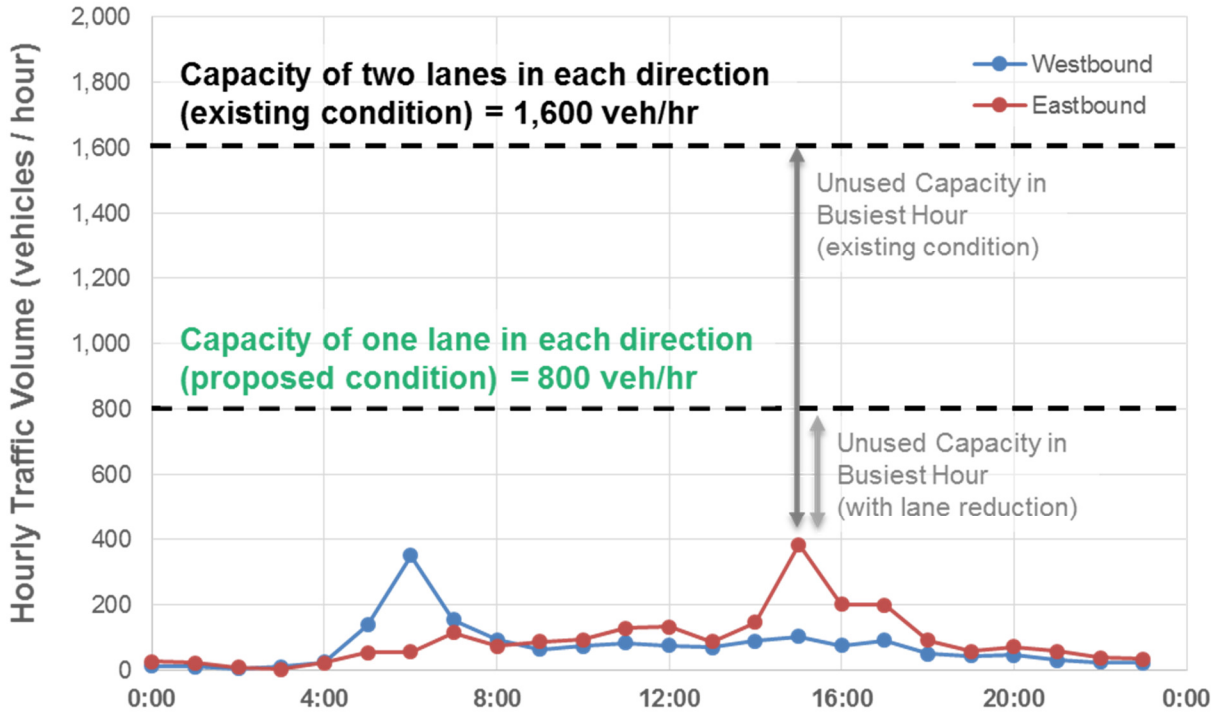
Location	Average Daily Traffic (vehicles)
Parker Ave, South of 1st Ave (one-lane each direction, center left-turn lanes)	4,700
San Pablo Ave., West of Cummings Skyway (two-lanes each direction, no dedicated left-turn lanes)	3,900
San Pablo Ave., East of Cummings Skyway (two-lanes each direction, no dedicated left-turn lanes)	2,200
San Pablo Ave., North of John Muir Parkway (two-lanes each direction, one left-turn lane in each direction)	32,000
Source: Arup, 2016	

Parker Avenue at 1st Avenue has the highest observed daily traffic volumes, although this location is outside of the study corridor. San Pablo Avenue west of Cummings Skyway carries

approximately 75% more traffic and trucks than the segment east of Cummings Skyway. Most trucks use Cummings Skyway to travel between Phillips 66 and NuStar and I-80. The segment east of San Pablo Avenue has significantly lower observed traffic volumes compared to the other two locations. However, the overall observed traffic volumes on all three of these segments are low for a four-lane road, even after accounting for higher truck activity (trucks are approximately 25% of the observed traffic volumes). As a comparison, San Pablo Avenue in Hercules, which is also a four-lane roadway, carries approximately 32,000 vehicles a day.

One high-level measure of traffic capacity is to compare the observed hourly volumes to standard lane capacities. Engineering studies typically utilize lane capacities of 800 vehicles per hour per lane for arterial roadways with the characteristics of San Pablo Avenue. Figure 12 compares the observed hourly volumes in each direction (eastbound and westbound) on San Pablo Avenue to the estimated capacity of the existing roadway (two lanes each direction) and a roadway with a road diet (one travel lane in each direction with left-turn lanes).

Figure 12: Observed Hourly Traffic Volumes and Capacity on San Pablo Avenue West of Cummings Skyway



Source: Arup, 2016

This graph shows how westbound traffic volumes peak at 400 vehicles per hour between 6 and 7 AM, while the eastbound traffic volumes peak at approximately the same hourly volume between 3 and 4 PM. These peaks occur one hour before the typical morning and evening peak hours for the Bay Area, which reflects earlier shift times at the refinery. The capacity for two travel lanes in each direction is approximately 1,600 vehicles per hour and 800 vehicles per hour for one travel in each direction. This graph indicates that approximately 25% of San Pablo Avenue's capacity is used today. Implementing the road diet would still leave approximately 50% available capacity.

6.2 Intersection Traffic Analysis

A Synchro traffic operations model was developed to analyze the ten study area intersections in greater detail and to assess the feasibility of removing a travel lane to provide space for pedestrian and bicycle improvements. To address the various peak periods along the corridor, intersection turning movement counts were collected for eight hours on a typical weekday to capture the "regional" Bay Area peak and the localized "refinery" peak.

For the regional peak, intersection turning movement counts were collected at ten locations in the AM (7 AM – 9 AM) and PM (4 PM – 6 PM) periods during a mid-week day in May 2015. Most locations in the Bay Area experience peak activity during these times. The study intersections in Rodeo and east of Cummings Skyway experience this typical regional peak and the intersection LOS analysis reflects this "worst case" condition.

The refinery peak occurs earlier than the typical Bay Area peak, which reflects when their work shifts change. The refinery peak counts were collected for the "early AM" and "early PM" periods (5 AM – 7 AM and 2 PM – 4 PM, respectively) to coincide with this peak refinery activity. The remainder of the study intersections peak during the refinery period and the intersection LOS analysis reflects this "worst case" condition.

The analysis uses methodologies published in the *2000 Highway Capacity Manual* (Transportation Research Board, 2000) to determine the intersection level-of-service (LOS). The LOS methodologies estimate delay at the intersection and then assign a qualitative LOS rating that characterizes overall traffic operations. Table 3 summarizes the HCM intersection LOS criteria.

Table 3: Intersection LOS Criteria

LOS	Signalized Intersections
A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase and do not stop at all.
B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.
Source: Transportation Research Board	

Three traffic scenarios were analyzed for the "regional" peak hour and the "refinery" peak hours:

- **Existing (2015) Conditions:** observed traffic volumes with existing lane configurations
- **Cumulative No Project (2040):** future traffic volumes with existing lane configurations
- **Cumulative + Reduced Lanes (2040):** future traffic volumes with a "road diet" reduce from two to one travel lane in each direction at each intersection; provide dedicated left-turn lanes at intersections

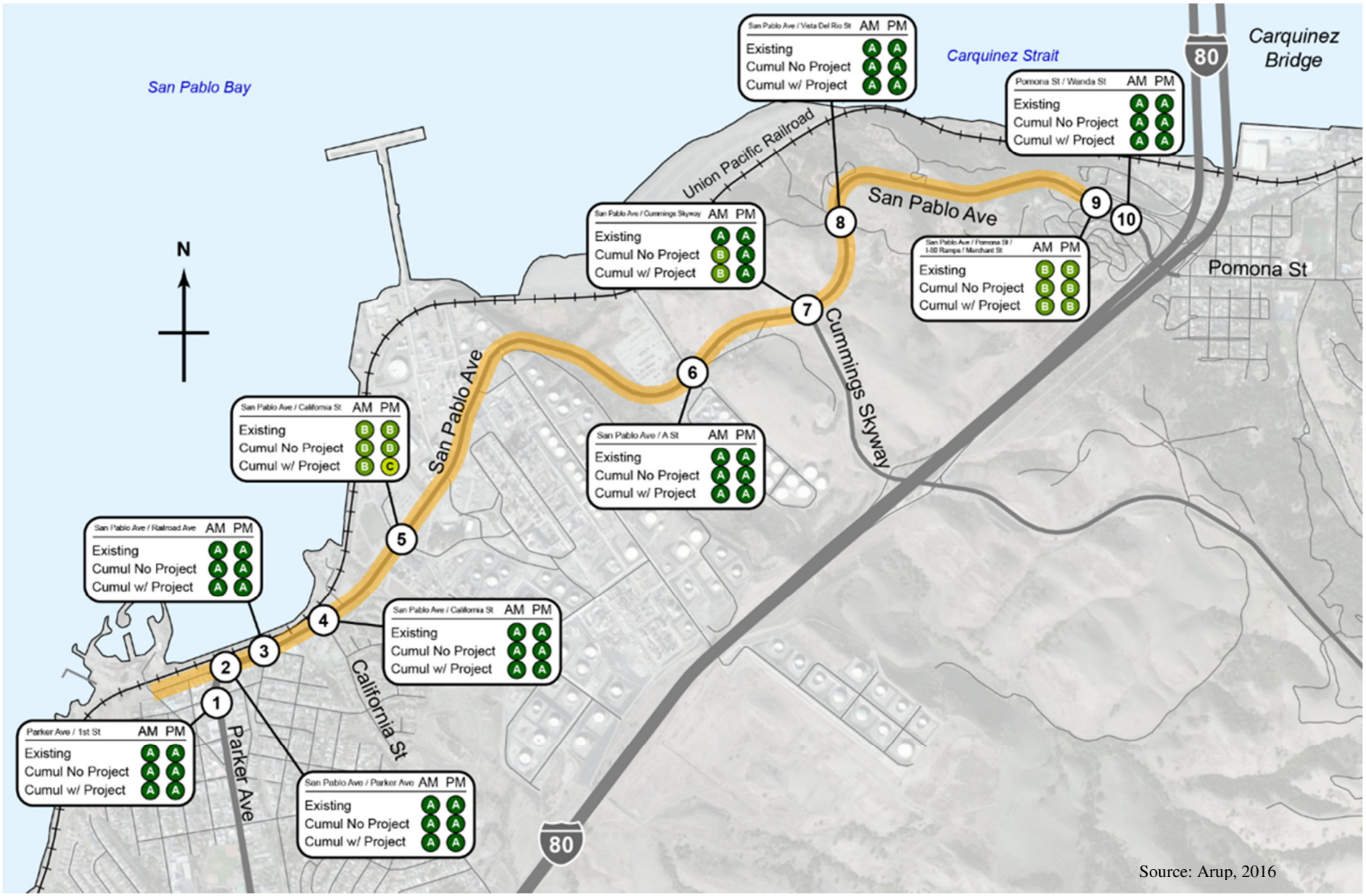
The CCTA Countywide Travel Model (2010) was used to determine forecasted traffic growth in the study corridor. The CCTA model takes into account changes to future land use and the transportation network.

Figure 13 presents the intersection traffic LOS results for the 10 study intersections. The detailed LOS tables and the technical calculations are provided in the Appendix. The figure shows the LOS rating for AM and PM peak hour (regional or refinery, whichever is higher) under existing and the two future Cumulative scenarios (No Project and Reduced Lanes). The County's standard for rural roads is a "high" LOS D.

The major findings of the intersection traffic analysis are:

- All intersections operate at LOS A or B under Existing and Cumulative No Project conditions.
- Under the Cumulative + Reduced Lanes scenario only one intersection, San Pablo Avenue / Refinery Road, goes to LOS C and this would occur in the PM peak hour only. LOS C is well within acceptable operating thresholds.
- The reduction of one travel lane in each direction does not negatively impact traffic operations at any location under any peak hour scenario.

Figure 13: Intersection Traffic LOS Results



6.3 Additional Traffic Considerations

San Pablo Avenue as a Bypass Route for I-80

Additional concerns regarding the usage of San Pablo Avenue as a bypass route to avoid congestion on I-80 between the Alfred Zampa Bridge and Willow Avenue have been raised by the public. Several sources of traffic data have been utilized to understand the level of congestion on both routes and the likelihood of traffic diversion. These sources include Google Maps Traffic service, which can summarize data in real-time or for a "typical" day based on historic data collected from cell phones and other navigation system devices. Also, Caltrans Freeway Performance Management System (PeMS) also provides data collected from in-pavement road sensors. Figure 14 shows typical AM conditions on a Wednesday morning at 8 AM from Google Maps Traffic and typical PM conditions for a Wednesday afternoon at 4 PM.

The figure shows that I-80 operates reasonably well on the segment between Willow Avenue and the Alfred Zampa Bridge during both the AM and PM commutes. Most of the congestion is located south of the State Route 4 (SR 4) interchange in Hercules. The section of I-80 from Willow Avenue to the Alfred Zampa Bridge was recently widened in 2011 from three to four lanes to accommodate a High Occupancy Vehicle (HOV) lane in both directions.

Figure 14: Typical AM Conditions (8 AM) from Google Maps Traffic Application

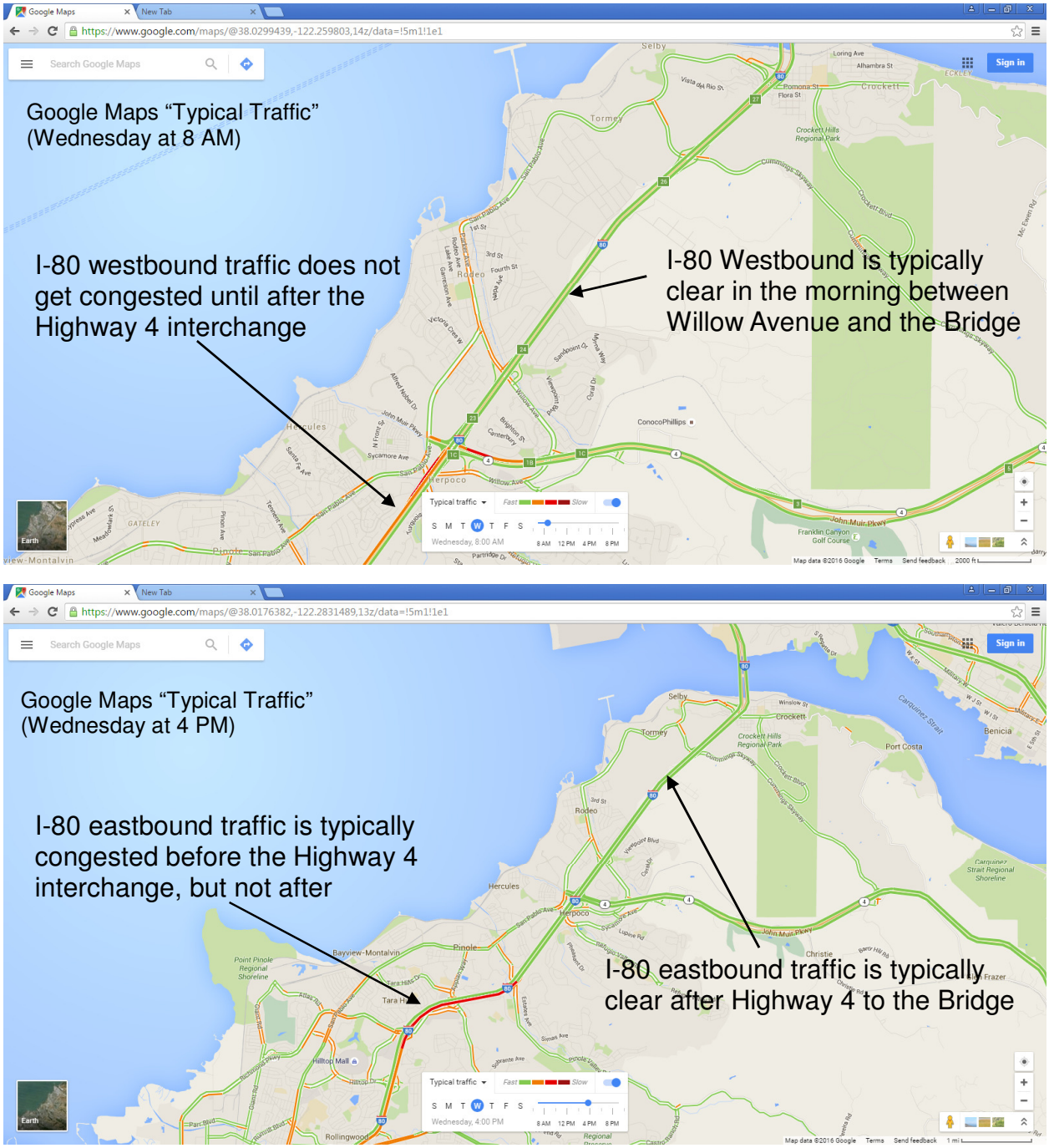
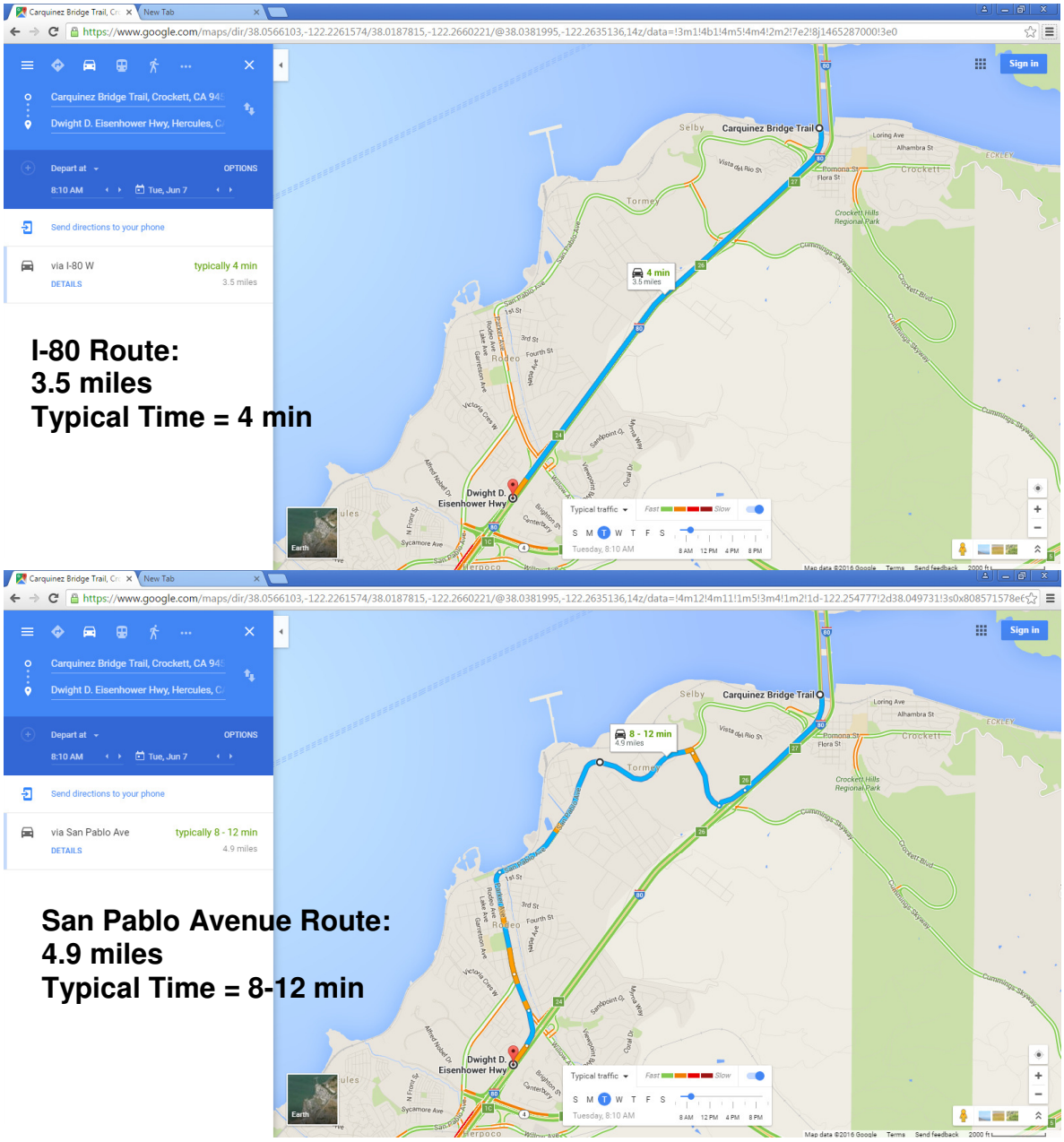


Figure 15 shows the travel distance and typical AM travel times from Google Maps Traffic between the Alfred Zampa Bridge and Willow Avenue using I-80 and San Pablo Avenue. This figure shows that I-80 is the shortest and typically the fastest route.

Figure 15: Travel Times on I-80 and San Pablo Avenue (AM Morning Commute)



These data indicate the following:

- I-80 between the Bridge and Willow Avenue operates reasonably well during the AM and PM commute periods.
- The addition of the fourth travel lane (HOV) on I-80 has increased capacity and improved travel time reliability.
- The travel times on I-80 between the Bridge and Willow Avenue are typically two to three times faster than San Pablo Avenue.

- This segment of San Pablo Avenue is used very infrequently as a bypass route.

Refinery Operations and Turnarounds

The Phillips 66 refinery employs approximately 650 to 700 people for normal day-to-day operations. In addition to normal operations, the refinery schedules "turnarounds" for major plant upgrades and maintenance several times per year. A typical turnaround occurs four to eight times per year and involves 100 to 400 additional employees per day. The smaller events last two to three weeks, with larger events lasting six weeks or more. Depending on the number of contractors working during the turnaround, the event may have staggered day and night work shifts. The increased traffic window occurs from 5:00 AM to 7:00 AM and 5:00 PM to 7:00 PM.

The refinery operates three larger turnarounds every three to five years that involve 800 to 1,700 additional employees working on staggered shifts. The increased traffic window occurs from 5:00 AM to 9:30 AM and 5:00 PM to 9:30 PM. The larger traffic window better spreads the number of peak period auto trips on the study area roadways. For the larger turnarounds, workers may be transported via bus from the refinery's Selby parking lot to the site.

A traffic analysis of the San Pablo Avenue / Refinery Road intersection under the Cumulative + Reduced Lanes (2040) Refinery Peak scenario (assumes the road diet concept) was performed to assess the potential impacts of a typical turnaround with 400 employees driving to the refinery. This analysis assumed the following:

- Arrival/departure rates: 50% of the employees arrive during the AM and PM peak hour. This is a conservative assumption given the staggered shifts.
- Average vehicle occupancy: 1.2 persons per vehicle. This is the average Bay Area vehicle occupancy and reflects some carpooling activity.
- The number of additional peak direction vehicle trips (inbound AM or outbound PM) is 170 vehicle trips (400 employees * 1.2 persons per vehicle = 170 vehicle trips). In addition, 20 off-peak direction trips (approximately 10%) were also added into the analysis. These trips were added to the San Pablo Avenue / Refinery Road intersection and analyzed under 2040 conditions with the Refinery Peak.

The additional vehicles associated with a 400 person turnaround would result in LOS C operations with 24.7 seconds of delay for the PM Refinery peak hour under the Cumulative + Reduced Lanes scenario. The turnaround trips do not negatively impact LOS and cause only a small increase in delay compared to the traffic analysis results presented in section 6.2 above. Without the additional turnaround trips, the intersection LOS at San Pablo Avenue / Refinery Road is LOS C with 21.5 seconds of delay.

The larger turnarounds were not analyzed because they are so infrequent.

Truck Routes

Caltrans has determined that large STAA trucks will not be permitted to use the eastbound I-80 on-ramp from Pomona Street because of the ramp's design. The other I-80 ramps at Pomona Street are unaffected. Therefore, STAA trucks from the C&H refinery heading east on I-80 will need to use San Pablo Avenue and the eastbound on-ramp at Cummings Skyway to access I-80. Trucks traveling to C&H from the west can still use the eastbound off-ramp to Pomona Street. Based on conversations with C&H, the number of eastbound STAA trucks that would need to use San Pablo Avenue and southbound Cummings Skyway to access eastbound I-80 is approximately 100 trucks per day. This equates to a peak hour truck volume of approximately 10 trucks, or one truck every six minutes and would not have a significant impact to traffic along San Pablo Avenue under any of the traffic scenarios analyzed.

Emergency Response and Evacuation

Concerns have also been raised regarding emergency response and evacuation plans. For emergency response, the road diets will not have a negative impact on the response time for police and fire. While the road diet will result in slower speeds for automobiles, the difference in drive times as a result of speeds slowing from 45 to 35 mph is only one minute over the entire 3 mile segment. The analysis indicates that there is sufficient excess capacity, so access to key locations along the corridor would still be maintained even with an unusually severe traffic event.

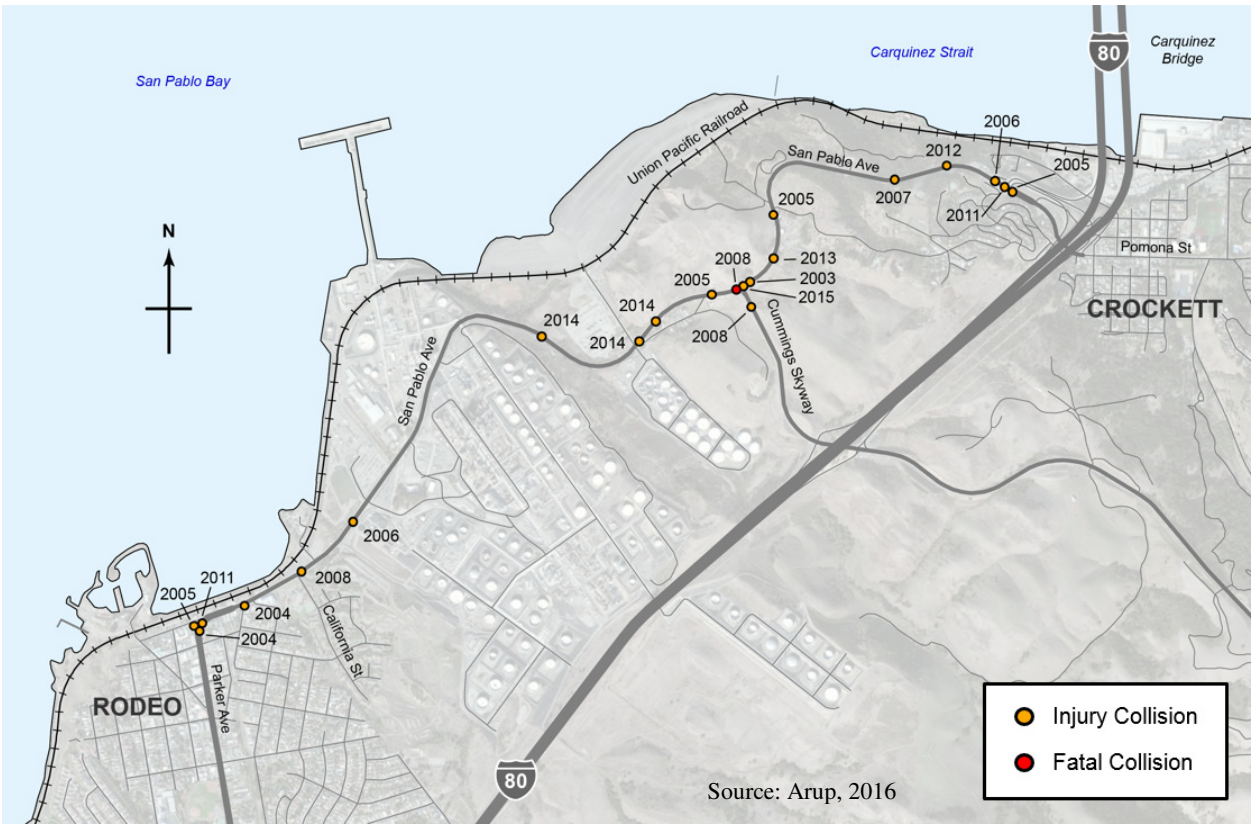
I-80 Integrated Corridor Management Project

San Pablo Avenue is slated to receive improvements as part of the I-80 Integrated Corridor Management (ICM) Project, which will make improvements to both the freeway and local arterials. On I-80, the project includes ramp metering, incident management, and other improvements from the Alfred Zampa Bridge to the Bay Bridge in Oakland. On San Pablo Avenue, the project includes upgraded traffic signal hardware, software and interconnect enhancements, and installation of arterial management components such as closed-circuit television (CCTV) cameras, trailblazer signs, changeable message signs (CMS) and communication and detection equipment from MacArthur Boulevard in Oakland to Cummings Skyway in Contra Costa County. These signal improvements on San Pablo Avenue will help manage queuing and traffic flow when incidents cause a partial or full shutdown of I-80 through Crockett, Rodeo, and Hercules. These systems will help maintain safe traffic operations and ensure that emergency response or evacuation plans are not affected.

6.4 Collision Analysis

To assess the safety of the study corridor, the frequency of injury and fatality collisions along San Pablo Avenue were assessed. Incident data was obtained from County staff and the Statewide Integrated Traffic Records System (SWITRS). Collisions include incidents involving vehicles with other vehicles or with pedestrians and cyclists. The incident results were mapped and collision rates were generated using methodologies published by Caltrans. Collision rates are normalized for traffic volumes and are reported as "incidents per million vehicle-miles". These rates were compared to other roadways with similar characteristics (e.g., lanes, grade, curvature, etc.). Figure 16 plots the injury and fatal collisions in the vicinity of the study area from 2003 through 2015 using the SWITRS data. The total number of injury and fatal collisions in this period totaled 23.

Figure 16: Study Corridor Injury and Fatality Collisions, 2003-2015



Source: Arup, 2016

Over two-thirds of the collisions did not involve other vehicles. These collisions included vehicles hitting objects or they overturned. Only three of the incidents involved head-on collisions. Over half of the collisions involved unsafe turning movements and unsafe speed and one-quarter of the collisions involved driving under the influence (DUI). The majority of the collisions involve unsafe driver behavior and most involve hitting other objects along the road (e.g., utility poles, trees, etc.).

Table 4 provides the calculated accident rates for fatal accidents and fatality and injury accidents for San Pablo Avenue, comparable roadways in the region, and California overall. The analysis indicates that the accident rates for the San Pablo Avenue study corridor are higher than the California average for a rural, 4-lane undivided road. Improving the safety for road users is another factor in considering the implementation of a road diet along the study corridor.

Table 4: Collision Analysis (2003-2015)

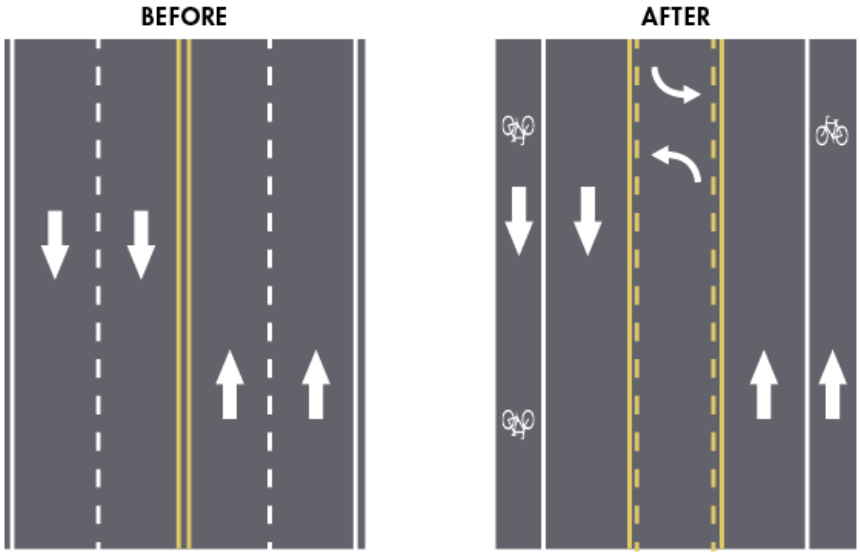
	Collision Rate (collisions per million vehicle-miles)	
Corridor	**Fatality**	**Fatality + Injury**
San Pablo Avenue (Rodeo to Crockett)	**0.020**	**0.56**
SR 12 in Solano County (4-lane, divided)	0.004	0.50
Richmond Parkway (Castro St to Giant Rd)	0.006	0.19
California Average (rural, 4-lane undivided roads)	0.018	0.35
I-80 Freeway (SR 4 to Alfred Zampa Bridge)	0.005	0.24
Source: CHP SWITRS, Caltrans, Arup, 2016		

Due to the nature of the collisions along the study corridor, road diets and enhanced safety and design measures that slow travel speed should help reduce the number and severity of traffic accidents. Improving safety for all users (motorists, trucks, pedestrians, and cyclists) is a key objective of the study.

6.5 Addressing Safety via a Road Diet

One way to incorporate pedestrian and bicycle facilities along existing roadways is to remove one of the travel lanes and reconfigure the roadway to accommodate the sidewalks, bike lanes, or shared use facilities. This process of removing a travel lane and reconfiguring the roadway to stay within the same is known as a “road diet”. Figure 17 presents one type of road diet conversion. This figure shows how a four-lane undivided street with two travel lanes in each direction and no left-turn lanes or bicycle facilities (San Pablo Avenue’s configuration) can be converted to a three-lane roadway with one travel lane in each direction, a center two-way left-turn lane, plus bike lanes.

Figure 17: Typical Before and After for a Road Diet



Source: FHWA Road Diet Informational Guide

The following summarizes the benefits of road diets:

- Four-lane undivided arterials typically have higher crash rates than other roadway configurations because of higher speeds.
- Road diets help to slow speeds, which reduce collision severity.
- The separation with a two-way left-turn lane, center medians, and/or other physical barriers keeps opposing through traffic further apart.
- The two-way left-turn lane or dedicated left-turn pockets at intersections provide a safer place for left turning vehicles to queue that is separated from the predominant traffic stream.
- The Federal Highway Administration (FHWA) has identified road diets as a proven safety measure and shown them to be more effective on rural than urban roads[1].
- The FHWA studies indicate that crashes are reduced by 29% and vehicles traveling over the speed limit are reduced by 30%[1].

A road diet would provide a number of opportunities to reconfigure the roadway to accommodate pedestrian and bicycle improvements without widening the roadway.

[1] *Evaluation of Lane Reduction "Road Diet" Measures on Crashes* (FHWA, 2010)

In 2006, the County implemented a road diet along Parker Avenue in Rodeo, transforming it from a four-lane undivided arterial to a two-lane roadway with median islands, bike lanes, and sidewalks. Construction began in 2006 and was completed in 2008. With implementation of the Parker Avenue Reconstruction Project, this segment of Parker Avenue experienced a 20% to 40% decrease in traffic volumes and a 56% decrease in the total number of collisions (see Table 5). The project study area lies just north of Parker Avenue and has lower existing average daily traffic volumes compared to Parker Avenue.

Table 5: Parker Avenue Reconstruction Project Traffic and Injury Results

Parker Avenue	Average Daily Traffic (vehicles)	Total Collisions over 3-year period	Total # Injured	Total # Killed
Before Road Diet	6,500 – 12,000	34 (2003-2005)	16	0
After Road Diet	5,000 – 9,500	15 (2009-2011)	3	0

7 Alternatives Development

Based on the policy analysis, field work, and technical studies, a series of design principles were created to guide the development of alternatives for providing bicycle and pedestrian facilities along the San Pablo Avenue study corridor.

The principles include:

1. Implement a Complete Street design to balance the needs of all users
2. Qualify for the Bay Trail to fill a key gap between Oakland and Vallejo
3. Enhance pedestrian safety and experience
4. Enhance bicycle safety and experience
5. Enhance automobile safety and experience
6. Enhance truck safety and experience
7. Enhance transit safety and experience
8. Maintain acceptable traffic operations
9. Minimize physical and environmental impacts
10. Provide a cost effective solution

The objective was to develop alternative concepts that satisfy as many of these design principles as possible. The alternatives analysis section uses these principles as a way to evaluate the designs.

7.1 Basis of Design

A number of guidelines and standards were used to develop the preliminary design of the alternatives and to insure that best practices were applied. The following documents are the basis of the design criteria used in this study:

- Bay Trail Guidelines, 2016
- Caltrans Class IV Bikeway guidance, 2015
- Caltrans Highway Design Manual, 2015
- Caltrans Traffic Manual, Chapter 7 Traffic Safety Systems, 2012
- Contra Costa County Standard Plans
- AASHTO Geometrics Design of Highways and Streets, 2011
- FHWA Separated Bike Lane Planning and Design Guide, 2015
- FHWA Designing Sidewalks and Trails for Access, 1999
- NACTO Urban Bikeways Design Guide, 2013
- NACTO Transit Street Design Guide, 2016

Shared Use Path Width

Both the NACTO Urban Bikeways Design Guide and the FHWA Designing Sidewalks and Trails for Access recommends a desired minimum of 12 feet for shared use paths and two way cycle tracks, with an 8 foot width used in constrained situations.

Roadway Separation Width

Both the NACTO Urban Bikeways Design Guide and the Caltrans Class IV Bikeway Guidance recommends a minimum of 3 feet of separation between moving vehicles and the shared use paths and two way cycle tracks. The Caltrans Class IV Bikeways guidance also recognizes that 2 feet of separation can be used in constrained situations.

Median Improvements

The Caltrans Traffic Manual provides guidance on design standards for the implementation of physical median barriers and other devices and treatments to minimize the likelihood of cross-median collisions by vehicles traveling in opposite directions. Physical barriers include an array of solutions from rigid concrete barriers to flexible cable barriers. Section 7-04.4 provides a list of improvements other than barriers that should be considered due to environmental considerations, right-of-way purchases, and impacts to adjacent properties. These include painted median buffer zones, rumble strips, and surface mounted channelizers (see Figure 18).

Figure 18: Wide Striped Median Buffer Zone with Rumble Strips

Source: FHWA

Path-Roadway Separations

Caltrans Class IV Bikeway Guidance specifies that separated bike facilities are required to have at least one of the following treatments: grade separation, flexible posts, inflexible physical barriers such as jersey barriers of K-rail, on-street parking, or raised islands. The use of on-street parking as a roadway separation is not appropriate for this design.

Figure 19 presents a range of separation options that could be deployed between the travel lanes and the shared use path. Jersey barriers have been included in the design alternatives and cost estimates. These concrete barriers would prevent vehicles from crossing over into the shared use path. The physical barrier will be evaluated further in the detailed design if the project moves forward.

Figure 19: Examples of Path-Roadway Separation Options

Clockwise from top left: flexible pylons and striping; curb and gutter island; Jersey barrier ("K-Rail"); and inflexible bollards

Bike Lane Width

Caltrans Class II Bikeways (bike lanes) design standards were obtained from the Caltrans Highway Design Manual. Caltrans standards specify that the width of a bike lane on a roadway where posted speeds are greater than 40 mph shall be 6 feet. The minimum legal minimum width for a bicycle lane is 4 feet.

Bus Stop Design

The FHWA and the NACTO Transit street design guidelines both recommend routing bicycles behind the bus platform. This type of design avoids conflicts with transit vehicles but doesn't create conflicts with pedestrians who must cross the bike lane/shared use path to access the transit stop. 8 feet is the recommended minimum for a bus boarding islands, but in constrained circumstances 5 feet wide by 8 feet long of clear space may be used to accommodate deployment of an accessible ramp from equipped buses.

Vehicle Lane Width

Contra Costa County Standard Plans requires vehicle lane widths on rural roads with an ADT greater than 400 to be 12' wide.

Turning Truck Movements

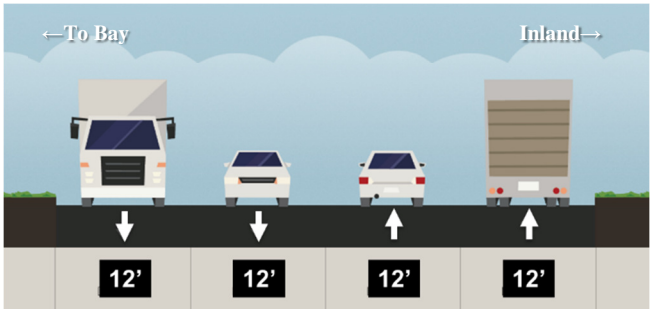
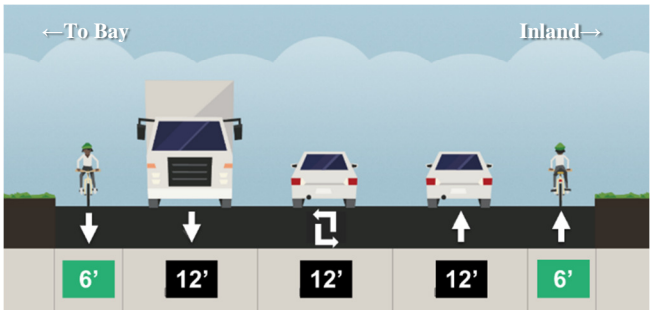
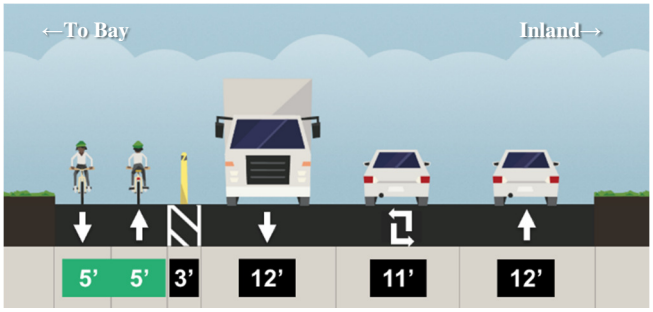
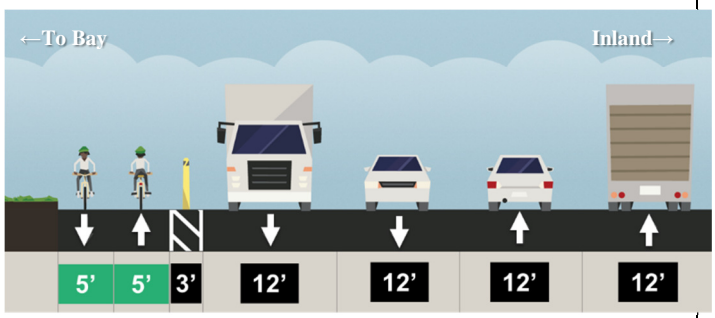
The San Pablo Avenue corridor has a high percentage of truck traffic that require large turning radii at intersections and driveways. A swept path analysis was conducted along the corridor with special consideration taken at the major intersections to ensure that trucks, as well as large emergency response vehicles, could be accommodated in the design. The swept path analysis utilized AASHTO 2011vehicle standards and was conducted with the design vehicle: WB-67, which has a width of 8.5 feet, a length of 73.5 feet, a minimum turning radius of 45 feet and a centerline turning radius of 41 feet. See Appendix B for more information.

7.2 Alternative Complete Streets Concepts

Three alternative concepts were developed to provide a Complete Street with enhanced pedestrian and bicycle facilities for the San Pablo Avenue study corridor.

Figure 20 presents a comparison of street cross-sections and a description for the three alternatives, along with the existing or “No Build” alternative. Detailed drawing sets for the three alternatives are provided in Appendix A.

Figure 20: Complete Street Alternatives for San Pablo Avenue

Existing Conditions The existing roadway consists of four 12' travel lanes with minimal shoulders, no bike lanes, sidewalks, or truck climbing lanes. The existing condition represents the "No Build" alternative.	
Alternative 1: **Bike Lanes** Implement a "road diet," removing one travel lane and adding two 6' striped on-street bike lanes. Convert the center lane to a two-way left-turn lane, median, or truck climbing lane as necessary at different points along the roadway. This alternative does not add new sidewalks or pedestrian facilities.	
Alternative 2: **Shared Use Path** Implement a "road diet," removing one travel lane and adding a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated by vehicle traffic by a physical barrier. Convert the center lane to a two-way left-turn lane, median, or truck climbing lane as necessary at different points along the roadway.	
Alternative 3: **Widened Shared Use Path** Widen the existing roadway to add a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated by vehicle traffic by a buffer. The vehicle lane configuration will remain the same as the existing roadway (two-lanes in each direction) from Lone Tree Point to Cummings Skyway. From Cummings Skyway to the Alfred Zampa Bridge, implement the same road diet configuration with shared use path as presented in Alternative 2.	

A summary of the alternatives is presented below.

No Build Alternative

The No Build alternative would make no changes to the existing roadway.

Alternative 1 – Bike Lanes

Alternative 1 provides continuous bike lanes by implementing the road diet and removing one travel lane to make space for the bike lanes. However, it does not provide any additional sidewalks, therefore it would not qualify as a Bay Trail segment. It takes advantage of existing on-street (Class II) bike lanes along San Pablo Avenue in Rodeo. The bike lanes improve bicycle safety by creating a dedicated space for cyclists to ride, separating them from vehicle traffic. This design also provides truck climbing lanes on three of the steepest sections, a two-way center left-turn lane and left-turn pockets. The addition of the two-way left turn lane provides increased separation between opposing traffic and provides a safe place for left turning vehicles to queue that is separate from the main travel lane. At several locations a wide striped median is possible, which would further separate oncoming traffic and provide additional safety for drivers. This alternative requires the least amount of construction as it consists of mostly restriping the roadway.

Alternative 2 – Shared Use Path

Alternative 2 also implements the road diet, which provides a continuous 10 foot shared use path for pedestrians and cyclists along the entire corridor with a three foot buffer. The path is planned for the north side of San Pablo Avenue. Both sides were considered. However, the north side provides the best connections to the Alfred Zampa Bridge, Vista Point, and Lone Tree Point; has the best views of the Carquinez Strait; and would provide easier crossings at Cummings Skyway and A Street. Alternative 2 would qualify for the Bay Trail, as it provides for both pedestrians and cyclists. The path is separated from the outside travel lane by a three foot striped buffer and will require a significant physical barrier to protect cyclists and pedestrians from oncoming traffic.

This alternative also incorporates enhanced bus stops and improved pedestrian facilities to access the bus stops. Truck climbing lanes are also incorporated along three of the steepest uphill sections of roadway to allow passenger vehicles to pass trucks. A two-way left-turn lane is also included in this alternative, along with left-turn pockets at intersections. Typical barriers used for cycle tracks are being considered along with other forms of more permanent barriers. At several locations a wide striped median between the opposing travel lanes is possible, which would further separate oncoming traffic and provide additional safety for drivers. Physical barriers between the travel lanes at key locations are also under consideration.

Alternative 3 – Widened Shared Use Path

Alternative 3 does not incorporate a road diet, but would include the same path described in Alternative 2 and maintain a four-lane undivided roadway by widening San Pablo Avenue 10 to 11 feet from Refinery Road to Cummings Skyway. East of Cummings Skyway, this alternative will implement a three-lane road diet configuration. The shared use path would provide the same

pedestrian and bicycling amenities and bus stop improvements as Alternative 2. This alternative would require acquiring additional right-of-way from the refinery and private property owners, relocating utilities and refinery equipment, rebuilding bridges, and constructing new retaining walls along sections with steep hillsides. This alternative requires a significant amount of construction due to the widening of the roadway and will have significant impacts.

8 Alternatives Evaluation

The three alternative concepts were evaluated for how well they achieve the study's goals and the design principles described in the previous section. The alternatives evaluation uses a series of quantitative and qualitative measures to evaluate the design principles.

Table 6 describes the criteria and the scoring ranges used to evaluate each of the alternatives.

Table 6: Alternative Evaluation Criteria

Metric	Description	Score Range		
Overall Complete Streets assessment	To what degree does the alternative accommodate all road users?	**POOR** Does not accommodate all users	**MODERATE** Accommodates some users	**GOOD** Accommodates all road users
Bay Trail qualification	Does the alternative meet the criteria to be part of the Bay Trail?	**NO** Does not provide both pedestrian and bicycle facilities		**YES** Provides both pedestrian and bicycle facilities
Safety and experience for major road users (pedestrian, cyclist, auto, truck, transit)	To what degree does the alternative provide safe and comfortable facilities for a given road user?	**POOR** Lacks adequate safety provisions and does not improve the user experience	**MODERATE** Provides adequate safety features and creates an improved user experience	**GOOD** Provides substantial safety features and creates an excellent user experience
Traffic Level of Service (LOS)	What is the expected future traffic level of service?	**POOR** Level of service exceeding County standards (LOS D) at many intersections	**MODERATE** Level of service at or above County standard (LOS D) at most intersections	**GOOD** LOS A, B, or C at most intersections
Property and right-of-way impacts	To what degree will the alternative impact adjacent property and/or require additional roadway right-of-way?	**SIGNIFICANT** Significant roadway widening and property rights required	**MODERATE** Moderate amount of roadway widening required	**MINIMAL** Little or no roadway widening required
Utilities Infrastructure impacts	To what extent will the alternative impact existing utilities infrastructure?	**SIGNIFICANT** Substantial impact on utility and signal poles, adjacent pipeline, stormwater/drainage	**MODERATE** Limited impacts to utility and signal poles, stormwater/drainage	**MINIMAL** Little or no impact on existing utilities, stormwater/drainage
Environmental impacts	To what extent will the alternative lead to significant environmental impacts (e.g. biological, cultural, and other impacts)?	**SIGNIFICANT IMPACTS LIKELY** Numerous significant impacts requiring additional study and/or mitigation measures expected	**SIGNIFICANT IMPACTS POSSIBLE** Few significant impacts expected	**SIGNIFICANT IMPACTS UNLIKELY** No significant impacts expected.
Estimated Cost	Includes capital costs, construction costs, and soft costs.	**$ Millions (2016)**		

8.1 Alternatives Matrix

Figure 21: Alternatives Matrix

San Pablo Avenue Complete Streets Study: Alternatives Matrix				
Metric	**Existing Condition / No Build** **Existing (4 vehicle lanes)**	**Alternative 1** **Bike Lanes (3 vehicle lanes with bike lanes)**	**Alternative 2** **Shared Use Path (3 vehicle lanes with path)**	**Alternative 3** **Widened Shared Use Path (4 vehicle lanes with path)**
Project Components	• 48' existing pavement • Four 12' travel lanes • Minimal shoulders • No bike lanes and very limited sidewalks • No truck climbing lane	• 48' existing pavement • Two 12' travel lanes (one each direction) • Center lane for left turns, median, or truck climbing lane • Two 6' bike lanes • Barrier or curb separating bike lanes from vehicles along much of the corridor • Road diet, reducing the number of vehicle lanes from four to two with a center turn/climbing lane	• 48' existing pavement • Two 12' travel lanes (one each direction) • Center lane for left turns, median, or truck climbing lane • 10' (minimum) shared use path (north or south side) • 3' barrier or curb separating shared use path from vehicles • Road diet, reducing the number of vehicle lanes from four to two with a center turn/climbing lane	• Four 12' travel lanes (two each direction) • 10' (minimum) shared use path (north or south side) • 3' barrier or curb separating shared use path from vehicles • Road diet (partial): reduce to three lanes east of Cummings Skyway (same as Shared Use Path alternative)
Overall Complete Streets Assessment	**POOR**	**MODERATE**	**GOOD**	**GOOD**
Bay Trail qualification	**NO** **No existing bicycle facilities and very limited pedestrian facilities.**	**NO** **Does not provide continuous pedestrian facilities along the entire corridor.**	**YES** **Provides bicycle and pedestrian facilities along the entire corridor.** • This design is coordinated with the proposed East Bay Regional Parks District (EBRPD) off-street shared use path at Lone Tree Point (from Pacific Avenue to Parker Avenue) • The path was designed for a seamless transition to the Alfred Zampa Bridge Trail	**YES** **Provides bicycle and pedestrian facilities along the entire corridor.** • This design is coordinated with the proposed East Bay Regional Parks District (EBRPD) off-street shared use path at Lone Tree Point (from Pacific Avenue to Parker Avenue) • The path was designed for a seamless transition to the Alfred Zampa Bridge Trail
Pedestrian safety and experience	**POOR** • Sidewalks exist from Parker Avenue to California Street only (approximately 0.3 miles of the entire 3.0 mile corridor) • Crosswalks exist at all signalized intersections on San Pablo Avenue	**POOR** • Pedestrian improvements limited to selected portions of the north side of the street between Pacific Avenue and California Street. • Significant portions of the roadway will continue to lack pedestrian facilities.	**GOOD** • Provides continuous sidewalks on the north side of the street between Pacific Avenue and California Street. • Provides a two-way shared use path on the north side of the street, separated from vehicle traffic. • Separated, buffered path provides the greatest safety benefit for cyclists and pedestrians. • By separating cyclists and pedestrians from vehicular traffic and implementing a barrier, there will be fewer chances for conflicts and collisions. • Path is shared with bicycle traffic. • Path would connect to the proposed EBRPD off-street shared use path at Lone Tree Point and the Alfred Zampa Bridge path.	**GOOD** • Provides continuous sidewalks on the north side of the street between Pacific Avenue and California Street. • Provides a two-way shared use path on the north side of the street, separated from vehicle traffic. • Separated, buffered path provides the greatest safety benefit for cyclists and pedestrians. • By separating cyclists and pedestrians from vehicular traffic and implementing a barrier, there will be fewer chances for conflicts and collisions. • Path is shared with bicycle traffic. • Path would connect to the proposed EBRPD off-street shared use path at Lone Tree Point and the Alfred Zampa Bridge path.

San Pablo Avenue Complete Streets Study: Alternatives Matrix

Metric	Existing Condition / No Build Existing (4 vehicle lanes)	Alternative 1 Bike Lanes (3 vehicle lanes with bike lanes)	Alternative 2 Shared Use Path (3 vehicle lanes with path)	Alternative 3 Widened Shared Use Path (4 vehicle lanes with path)
Bicycle safety and experience	**POOR** • Predominantly lacking exclusive bicycle facilities; On-street bike lanes exist on San Pablo Avenue from Parker Avenue to California Street (0.3 miles of the 3.0 mile corridor). • Cyclists share the travel lanes with autos and trucks • San Pablo Avenue has very narrow shoulders that provide limited riding space for cyclists	**MODERATE** • Provides bicycle lanes on both sides of the street, offering dedicated space for cyclists apart from vehicle traffic within existing pavement. • Retains eastbound bicycle lane from Parker Avenue to California Street. • Areas with steep uphill grades and fast-moving adjacent vehicles present a safety concern for cyclists. The dedicated roadway space will enhance safety. • Pavement markings across intersections with side roads helps raise drivers' awareness of the bicycle lanes.	**GOOD** • Provides a two-way shared use path on the north side of the street, separated from vehicle traffic. • A separated, buffered path will reduce the chances for conflicts and collisions. • Locating the path on the north side rather than the south side provides better access to Lone Tree Point and the Alfred Zampa Bridge as well as better views of the bay. • Path is shared with pedestrian traffic • Path would connect to the proposed EBRPD off-street shared use path at Lone Tree Point and the Alfred Zampa Bridge path. • Retains eastbound bicycle lane from Parker Avenue to California Street. • Pavement markings across intersections with side roads helps raise drivers' awareness of the shared use path.	**GOOD** • Provides a two-way shared use path on the north side of the street, separated from vehicle traffic. • A separated, buffered path will reduce the chances for conflicts and collisions. • Locating the path on the north side rather than the south side provides better access to Lone Tree Point and the Alfred Zampa Bridge as well as better views of the bay. • Path is shared with pedestrian traffic • Path would connect to the proposed EBRPD off-street shared use path at Lone Tree Point and the Alfred Zampa Bridge path. • Retains eastbound bicycle lane from Parker Avenue to California Street. • Pavement markings across intersections with side roads helps raise drivers' awareness of the shared use path.
Automobile safety and experience	**MODERATE** • Two travel lanes in each direction provides ample room for autos to pass trucks and other slow moving vehicles • Minimal shoulders and guardrails • A collision analysis presented in the Traffic Impact Analysis indicates that this study segment experiences incidents at a rate slightly higher than the California average for four-lane undivided roads.	**GOOD** • Truck climbing lanes are provided on two of the three steepest incline segments between Summit 1/Phillips 66 and Cummings Skyway. These lanes provide ample room for autos to pass slower moving trucks. • Reducing the number of travel lanes from two to one with the road diet eliminates a passing lane for motorists to pass slower moving trucks on uphill and downhill segments. This could tempt drivers to change lanes into oncoming traffic to pass trucks. • This alternative adds turn pockets and acceleration or deceleration lanes for key side streets and driveways. • The center turn lane provides vehicles a safe place outside of the traffic stream to wait before making left-turns. • Wide striped medians in segments with sharp curves provide increased separation and safety from head-on collisions.	**GOOD** • Truck climbing lanes are provided on two of the three steepest incline segments between Summit 1/Phillips 66 and Cummings Skyway. These lanes provide ample room for autos to pass slower moving trucks. • Reducing the number of travel lanes from two to one with the road diet eliminates a passing lane for motorists to pass slower moving trucks on uphill and downhill segments. This could tempt drivers to change lanes into oncoming traffic to pass trucks. • A physically separated shared use path will reduce the number of interactions between motorists and cyclists/pedestrians. • This alternative adds turn pockets, acceleration or deceleration lanes for key side streets and driveways. • The center turn lane provides vehicles a safe place outside of the traffic stream to wait before making left-turns. • Wide striped medians in segments with sharp curves provide increased separation and safety from head-on collisions.	**MODERATE** • The lane configuration between Refinery Road and Cummings Skyway is largely the same as existing (two travel lanes in each direction) but includes the path. Therefore, safety for motorists should remain largely unchanged. • Lane arrangement east of Cummings Skyway are reduced to two travel lanes with a center turn lane for left turns and climbing lanes. • A physically separated shared use path will reduce the number of interactions between motorists and cyclists/pedestrians.

San Pablo Avenue Complete Streets Study: Alternatives Matrix

Metric	Existing Condition / No Build Existing (4 vehicle lanes)	Alternative 1 Bike Lanes (3 vehicle lanes with bike lanes)	Alternative 2 Shared Use Path (3 vehicle lanes with path)	Alternative 3 Widened Shared Use Path (4 vehicle lanes with path)
Truck safety and experience	**MODERATE** • Two travel lanes in each direction provides ample room for autos to pass trucks and other slow moving vehicles • Minimal shoulders and guardrails • Trucks make left turns from the left travel lane, which provides adequate turning radius for large vehicles. Right turns are made from dedicated right-turn lanes or from the right travel lane. • Vehicles turning from travel lanes can block through traffic movements on San Pablo Avenue.	**GOOD** • The project includes climbing lanes on two of the three steepest incline sections, which will provide safe passing distance for vehicles. Downhill sections are less of a concern because the speed differential between autos and trucks is less pronounced. • Turn pockets and acceleration/deceleration lanes are provided for key side streets and driveways to provide enhanced access. • Increased shoulder width for the bike lanes provides area for trucks to stop in case of emergency. • The road diet will tighten the turning radius for left turning trucks	**GOOD** • The project includes climbing lanes on two of the three steepest incline sections, which will provide safe passing distance for vehicles. Downhill sections are less of a concern because the speed differential between autos and trucks is less pronounced. • Turn pockets and acceleration/deceleration lanes are provided for key side streets and driveways to provide enhanced access. • Bicycle and pedestrians are separated from truck traffic • The road diet will tighten the turning radius for left turning trucks	**MODERATE** • No turn pockets, refuges, acceleration or deceleration lanes for left turn movements. Autos and trucks will need to make left turns from the left travel lane, which could block vehicles traveling through on San Pablo Avenue. • Bicycle and pedestrians are separated from truck traffic

Transit safety and experience	**MODERATE**
	• There are four transit stops serving WestCAT bus service within the study area:
	  ○ California Street
	  ○ Road Number 4 at the Phillips 66 refinery
	  ○ A Street
	  ○ Merchant St Park and Ride lot in Crockett
	• There is one school bus stop at A Street/NuStar Energy (Tormey/Selby)
	• The bus stop in the eastbound direction at California Street includes a shelter and bench, while the other stops do not.
	• Buses either stop in the right travel lane and block traffic or pull into the unpaved and narrow shoulder.
		MODERATE
		• Improves bus stops at four locations:
		  ○ California St: extend sidewalk on north side
		  ○ Road Number 4: Add bus stop platforms (both sides)
		  ○ A St: Add bus stop platforms (both sides)
		  ○ Merchant St: No change
		• No physical barriers near bus stops, allowing bus vehicles to pull aside for passengers to board and disembark.
		• Stopped transit vehicles may temporarily block the bicycle lanes if they pull out of the travel lane.
			GOOD
			• Improves bus stops at four locations:
			  ○ California St: extend sidewalk and add floating bus island on north side
			  ○ Road Number 4: Add floating bus islands (both sides)
			  ○ A St: Add floating bus islands (both sides)
			  ○ Merchant St: No change
			• Floating bus islands allow transit passengers to board and disembark without bus vehicles blocking the shared use path of travel.
				GOOD
				• Improves bus stops at four locations:
				  ○ California St: extend sidewalk add floating bus island on north side
				  ○ Road Number 4: Add bus islands (both sides)
				  ○ A St: Add floating bus islands (both sides)
				  ○ Merchant St: No change
				• Floating bus islands allow transit passengers to board and disembark without bus vehicles blocking the shared use path.

San Pablo Avenue Complete Streets Study: Alternatives Matrix

Metric	Existing Condition / No Build Existing (4 vehicle lanes)	Alternative 1 Bike Lanes (3 vehicle lanes with bike lanes)	Alternative 2 Shared Use Path (3 vehicle lanes with path)	Alternative 3 Widened Shared Use Path (4 vehicle lanes with path)
Traffic Level of Service (LOS) under future conditions	**GOOD** • **LOS A/B** at all study intersections. This level of service equates to generally free flow traffic conditions. • Traffic volumes are not expected to increase significantly in the future.	**GOOD** • **LOS B/C** at all study intersections with the road diet and the removal of one travel lane. LOS C is better than the county's rural roadway standard. This level of service equates to stable or reasonably free flow traffic conditions. • San Pablo Avenue at Refinery Road will be reduced from LOS B to LOS C during the "refinery" PM peak only. • San Pablo Avenue at Cummings Skyway will be reduced from LOS A to LOS B in the future, both with and without the project.	**GOOD** • **LOS B/C** at all study intersections with the road diet and the removal of one travel lane. LOS C is better than the county's rural roadway standard. This level of service equates to stable or reasonably free flow traffic conditions. • San Pablo Avenue at Refinery Road will be reduced from LOS B to LOS C during the "refinery" PM peak only. • San Pablo Avenue at Cummings Skyway will be reduced from LOS A to LOS B in the future, both with and without the project.	**GOOD** • **LOS A/B** at all study intersections**.** No lane reductions are included in this alternative. This is above the county's rural roadway standard, and matches today's conditions. This level of service equates to reasonably or fully free flow traffic conditions.
Property and Right-of-Way impacts	**N/A** • Existing right-of-way: 69' to 82'	**MINIMAL** • This alternative will not require widening outside of the existing right-of-way.	**MINIMAL** • This alternative will require approximately 7,000 square feet of additional right-of-way at the intersection with Refinery Road to widen the roadway and construct the shared use path • A modest amount of roadway widening is necessary in order to retain the existing left and right turn pockets. • Adjacent to Lone Tree Point, this alternative includes 15,000-20,000 square feet of new sidewalk and 7,000-12,000 square feet of new pavement. • Angle parking in front of The Dead Fish restaurant will be converted to parallel parking because the shared use path will block direct pull-in vehicle access from the roadway; this results in a net loss of approximately seven parking spaces. The restaurant will still have more than sufficient parking per county code.	**SIGNIFICANT** • This alternative will require approximately 56,000 square feet of additional right-of-way to widen the roadway between Refinery Road and Cummings Skyway to accommodate the shared use path and maintain the existing travel lanes. • Approximately 30,000 square feet of additional right-of-way are needed near Refinery Road • The alternative includes 15,000-20,000 square feet of new sidewalk and 60,000-65,000 square feet of new pavement for the widening as well as the section through Lone Tree Point. This can be accommodated within the existing right-of-way • This alternative will also require 4,000 linear feet of new retaining walls in several locations. • Angle parking in front of The Dead Fish restaurant will be converted to parallel parking because the shared use path will block direct pull-in vehicle access from the roadway; this results in a net loss of approximately seven parking spaces. The restaurant will still have more than sufficient parking per county code.

San Pablo Avenue Complete Streets Study: Alternatives Matrix

Metric	Existing Condition / No Build Existing (4 vehicle lanes)	Alternative 1 Bike Lanes (3 vehicle lanes with bike lanes)	Alternative 2 Shared Use Path (3 vehicle lanes with path)	Alternative 3 Widened Shared Use Path (4 vehicle lanes with path)
Utilities Infrastructure impacts	**N/A** • Utility poles run along much of the portion of the roadway east of Cummings Skyway, and the area east of Vista Point • Limited portions of the roadway in Rodeo have street lights • Pipelines run along portions of the roadway, including near the Phillips 66 refinery • Only limited stormwater infrastructure exists along the roadway today, particularly east of California Street	**MINIMAL** • This alternative will not impact existing utilities.	**MINIMAL** • This alternative is expected to have minimal impact on existing utilities, as only very limited sections will have changes to the roadway pavement.	**SIGNIFICANT** • This alternative will impact approximately 18 to 20 existing utility poles, which will have to be relocated due to roadway widening. • Impacted utility poles are concentrated near the refinery, between California Street and the pipeline overcrossing northeast of the refinery. • The traffic signals at Refinery Road and Cummings Skyway might also have to be reconfigured. This could require relocating signal poles, mast arms, cabinets, and other elements. • Pipelines along approximately 500 feet of roadway will have to be relocated in order to accommodate roadway widening and the shared use path.
Environmental impact likelihood	**N/A** • The environmental assessment will include all potentially affected environmental factors, per the California Environmental Quality Act (CEQA). This analysis is ongoing.	**SIGNIFICANT IMPACTS UNLIKELY** • Significant environmental impacts are not anticipated, since improvements would be within the existing roadway and many impacts would be considered beneficial. • This alternative would likely qualify for a Categorical Exemption under 15304(h), creation of bicycle lanes on existing rights-of-way and a Statutory Exemption under 15282(j), restriping streets.	**SIGNIFICANT IMPACTS UNLIKELY** • Significant environmental impacts are not anticipated, since improvements would be largely within the existing roadway and many impacts would be considered beneficial. • An Initial Study could be completed to assess environmental impacts and determine if significant impacts would occur as a result of this alternative.	**SIGNIFICANT IMPACTS POSSIBLE** • Significant environmental impacts could result from the project due to extensive grading work and retaining wall construction required to widen the roadway, including grading in natural, vegetated areas. Additionally, the project would add new impervious surface. • An EIR could be prepared to determine if significant impacts would occur as a result of the project. An EIR would provide a better standard of review than an Initial Study, lowering risk.
Estimated construction costs	n/a	$3.3 million	$8.8 million	$23.2 million

8.2 Evaluation Summary

Table 7 summarizes the conclusions of the evaluation. The detailed Alternative Analysis table is provided in the Appendix, along with technical detail on traffic, utilities, and environmental (e.g., biological, air, noise, etc.) impacts.

Table 7: Alternative Evaluation Matrix Summary

Metric	Existing / No Build (4 vehicle lanes)	Alternative 1: Bike Lanes (3 lanes+bike lanes)	Alternative 2: Shared Use Path (3 lanes+path)	Alternative 3: Widened Shared Use Path (4 lanes+path)
Overall Complete Streets Assessment	**POOR**	**MODERATE**	**GOOD**	**GOOD**
Bay Trail Qualification	**NO**	**NO**	**YES**	**YES**
Pedestrian Safety and Experience	**POOR**	**POOR**	**GOOD**	**GOOD**
Bicycle Safety and Experience	**POOR**	**MODERATE**	**GOOD**	**GOOD**
Automobile Safety and Experience	**MODERATE**	**GOOD**	**GOOD**	**MODERATE**
Truck Safety and Experience	**MODERATE**	**GOOD**	**GOOD**	**MODERATE**
Transit Safety and Experience	**MODERATE**	**MODERATE**	**GOOD**	**GOOD**
Traffic Level-of-Service (Future Conditions)	**GOOD**	**GOOD**	**GOOD**	**GOOD**
Right-of-Way Impacts	**NONE**	**MINIMAL**	**MINIMAL**	**SIGNIFICANT**
Utilities Infrastructure Impacts	**NONE**	**MINIMAL**	**MINIMAL**	**SIGNIFICANT**
Environmental Impact* Likelihood	**NONE**	**UNLIKELY**	**UNLIKELY**	**POSSIBLE**
Cost	**$0**	**$3.3 million**	**$8.8 million**	**$23.2 million**
Source: Arup, 2016				

The three alternatives provide a range of results:

- The **Existing ("No Build")** condition does not represent a "Complete Streets" design, as it does not provide continuous dedicated facilities for cyclists or pedestrians along the entire segment. It also does not qualify as part of the Bay Trail.
- The **Bike Lanes** alternative (Alternative 1) implements bike lanes only, therefore it does not qualify as a Bay Trail segment and does not meet several key goals of the study. The bike lanes provide a more comfortable experience compared to the existing condition. However, only selected portions of the roadway have space to accommodate minimal barriers to separate the bike lanes from the travel lanes. Therefore, the improvement in bicycle safety is only moderate. It is the least expensive and the easiest to implement.

- The **Shared Use Path** alternative (Alternative 2) has the best overall performance as it provides a way to accommodate pedestrians and cyclists safely along the entire corridor, provides a range of safety benefits for all other modes, and it qualifies as part of the Bay Trail. Alternative 2 is more expensive than the Bike Lanes alternative, however, it offers significant additional benefits to users with minimal impacts.
- The **Widened Shared Use Path** alternative (Alternative 3) provides similar performance to Alternative 2, but has a very high cost and has the potential for significant environmental and private property impacts as the result of widening the roadway to accommodate the path.

9 Recommendations

The technical studies, outreach, and alternatives analysis provided the basis for selecting a modified Alternative 2 as the recommended set of improvements (see Figure 22). The recommended alternative best satisfies the goals of the study, minimizes project impacts, and provides a cost-effective solution. County staff will utilize the findings in the feasibility report to ultimately make a recommendation to the Board of Supervisors about next steps and whether further detailed design should continue.

The recommended alternative:

- Implements the Shared Use Path concept (based on Alternative 2) from California Street to the Alfred Zampa Bridge by converting one of the existing four travel lanes to a ten-foot shared-use path on the north side of San Pablo Avenue, separated from vehicle traffic by a concrete physical barrier. This would result in one lane in each direction with the center lane use for left turns, truck climbing lanes, or painted median buffer zones.
- Incorporates a truck climbing lane on two steep segments between the Phillips 66 refinery and Cummings Skyway.
- Uses wide painted median buffer zones to improve safety in the two “summit” sections, which feature tight curves and steep grades.
- Implements the Bike Lanes concept (based on Alternative 1) from Lone Tree Point to California Street. In order to minimize impacts to local business owners, the on-street parking will be maintained between Parker Avenue and California Street. Given the existing constraints, no change in the street cross-section is proposed and the existing roadway layout will be retained. The only changes would include the construction of a sidewalk through Lone Tree Point and on-street bike lanes from Pacific Avenue to San Pablo Avenue. This section would provide continuous sidewalks and bike lanes and meet the Complete Streets study goal.
- Provides a high visibility crossing at California Street to allow pedestrians and cyclists to cross San Pablo Avenue and to access the shared-use path.
- Jersey barriers have been included in the design and cost estimates. These concrete barriers would prevent vehicles from crossing over into the shared use path.

Figure 22: Recommended Alternative

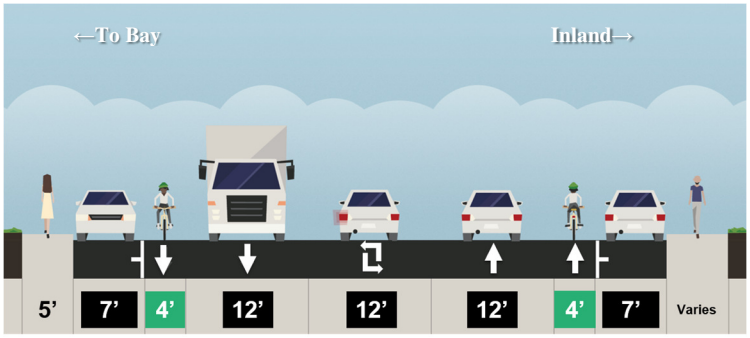
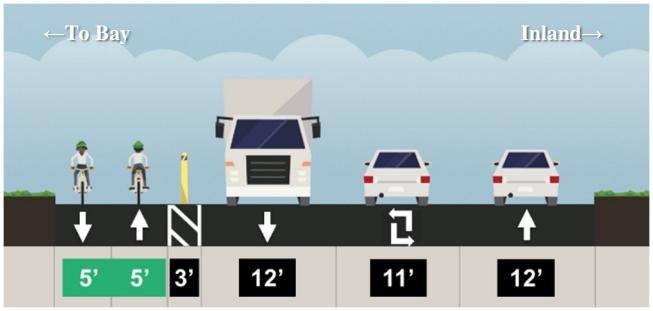
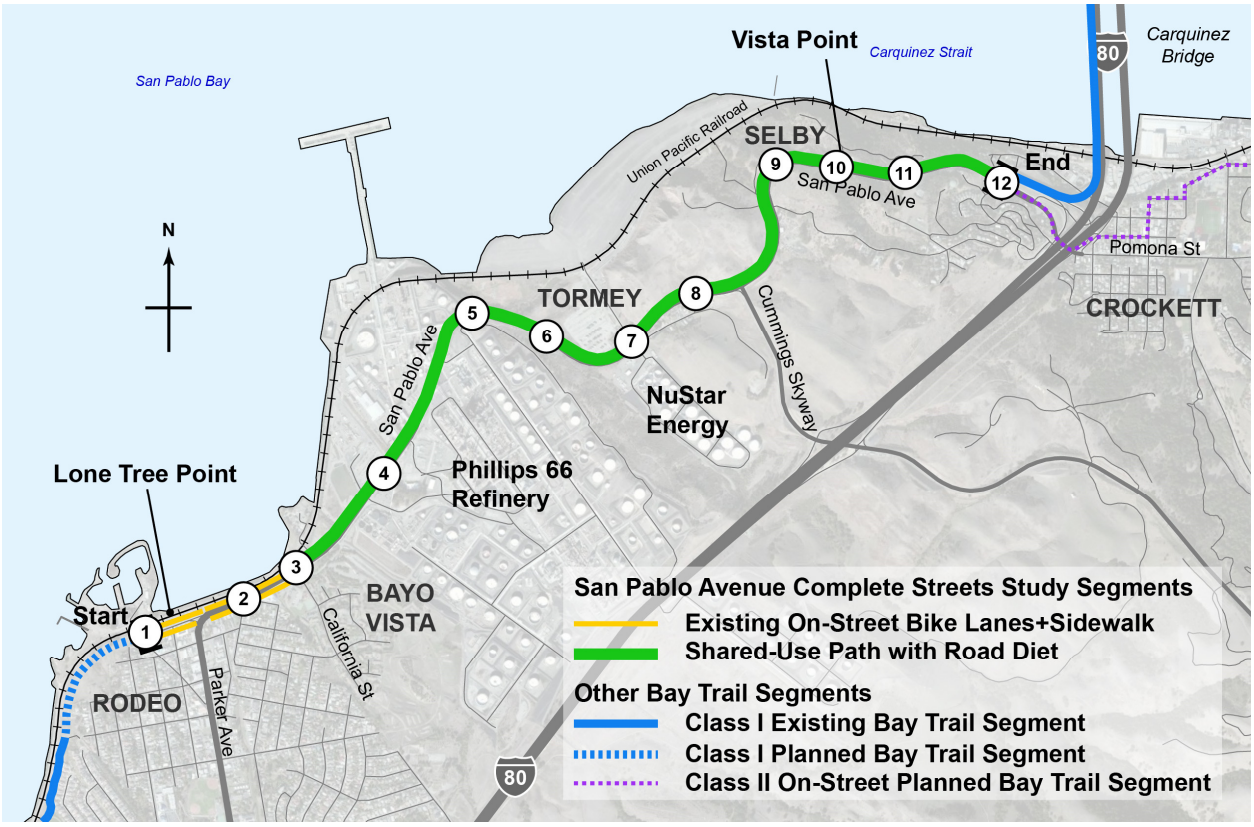
West of California Street: Bike Lanes Implement the bike lanes concept from Alternative 1 from Lone Tree Point to California Street. Add bicycle lanes and sidewalks to close gaps in existing facilities where necessary.	
East of California Street: Shared Use Path Implement the "road diet" concept from Alternative 2. Remove one travel lane and add a 10' two-way shared use path for pedestrians and cyclists on the north side of the roadway, separated by vehicle traffic by a physical barrier. Convert the center lane to a two-way left-turn lane, median, or truck climbing lane as necessary at different points along the roadway.	

Figure 23 illustrates the different segments as proposed along the San Pablo Avenue corridor, and is followed by a description of key points along the corridor.

Figure 23: San Pablo Complete Streets Study Recommended Improvements



1. Study area start. Construct bike lanes plus a sidewalk through Lone Tree Point from Pacific Avenue to Parker Avenue. Connect this to the proposed Bay Trail segment to Hercules.
2. Utilize the existing on-street bike lanes and sidewalk on San Pablo Avenue from Parker Avenue to California Street.
3. Provide a high visibility crossing for pedestrians and cyclists at California Street.
4. Implement the shared-use path (Alternative 2) concept on the north side of San Pablo Avenue from California Street to the Alfred Zampa Bridge. Utilize a physical barrier to separate the path from the travel lanes.
5. Provide a wide painted buffer between the opposing travel lanes at the summit point east of the refinery to increase the separation between opposing traffic.
6. Provide a truck climbing lane in the westbound direction.
7. Install a HAWK beacon (High-Intensity Activated crossWalK beacon) at the A Street intersection. A HAWK beacon is a traffic control device used to stop road traffic and allow pedestrians to cross safely.
8. Provide a truck climbing lane in the eastbound direction.

9. Provide a wide painted buffer between the opposing travel lanes at the summit point east of Vista Point Road to increase the separation between opposing traffic.
10. Provide a left-turn lane into the Vista Point.
11. Provide a truck climbing lane in the westbound direction.
12. Study area end. Provide pedestrian and bicycle improvements in front of the Dead Fish restaurant and connect to the path on the Alfred Zampa Bridge.

Cost and Phasing

The Recommended Alternative is expected to cost $8.2 million (see Appendix C for more detail). To phase delivery of the project, the cost estimate is divided into three segments, as follows:

- Alfred Zampa Bridge to Cummings Skyway ($1.8 million)
- Cummings Skyway to California Street ($4.3 million)
- California Street to Lone Tree Point ($2.1 million)

Implementation and Next Steps

The Recommended Alternative best satisfies the goals of the study, minimizes project impacts, and provides a cost-effective solution. County staff will utilize the findings in this feasibility report to ultimately make a recommendation to the Board of Supervisors about next steps and whether further detailed design should continue.

After public review, if the Board approves a preferred alternative, a number of steps remain to implement the chosen alternative:

1. **Complete final design:** Select a consultant to prepare final design documents. Funding for this study must be identified.
2. **Environmental review process:** Select a consultant to complete appropriate environmental review documents to comply with the California Environmental Quality Act (CEQA). Funding for this study must be identified.
3. **Construction funding:** Explore funding options for construction, such as the county's capital improvement program, regional grants, state and/or federal funding.
4. **Construct project, whole or in phases**.

San Pablo Avenue Complete Streets Study

TWIC Meeting
May 8, 2017

Contra Costa County Public Works Department

ARUP

Agenda

1. **Study Overview**
2. **Developing Alternatives**
3. **Alternatives Overview**
   - Alternative 1: On-Street Bike Path
   - Alternative 2: Shared Use Path
   - Alternative 3: Widened Shared Use Path
4. **Alternatives Evaluation**
5. **Recommended Alternative**
6. **Next Steps**

Study Overview

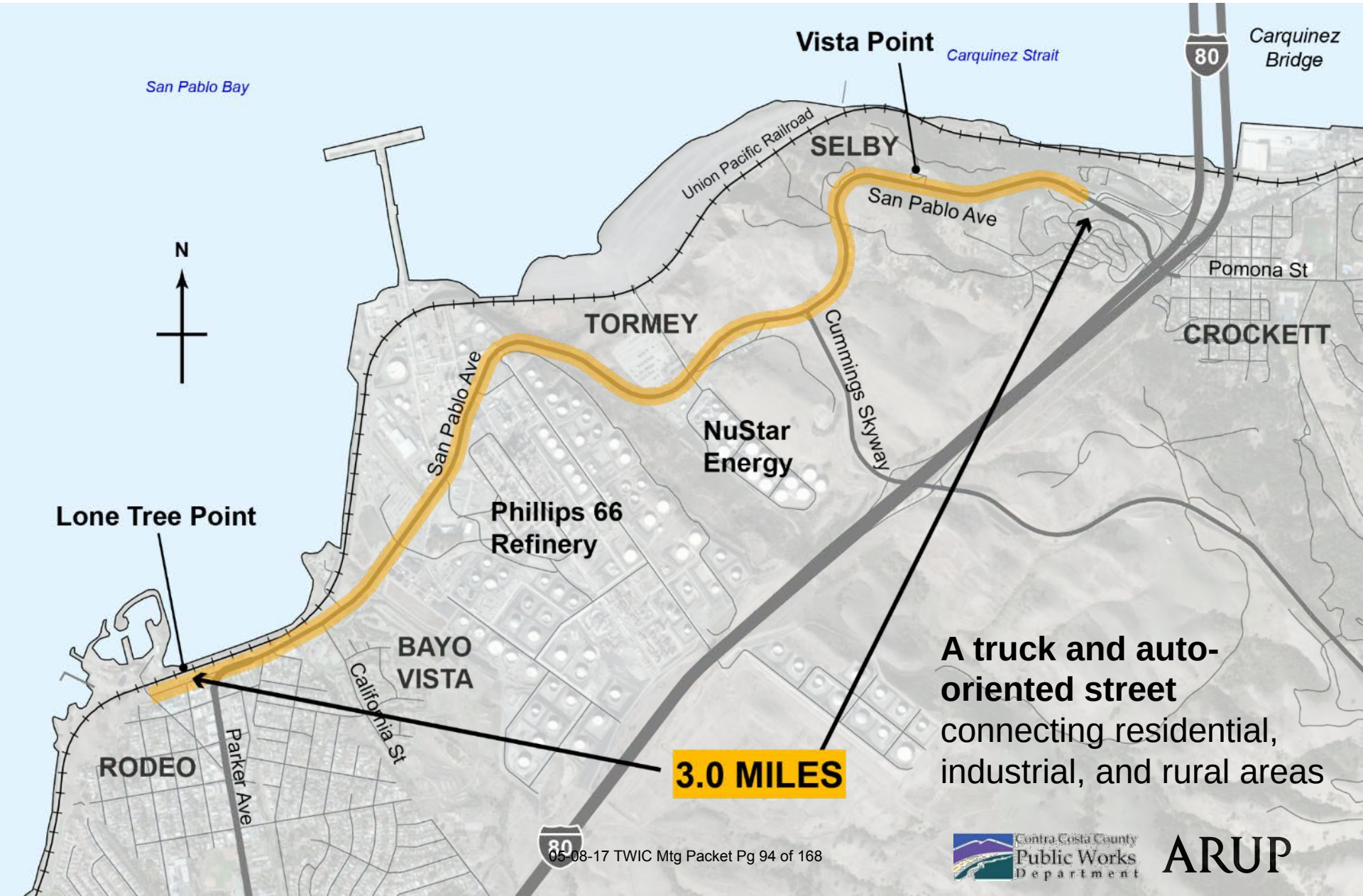
Study Objectives

- Incorporate a "**Complete Street" with bicycle, pedestrian, and transit facilities** on San Pablo Avenue between Rodeo and Crockett.
- Close an **existing gap** in the Bay Trail.
- Identify a **preferred alternative** and ultimate **set of improvements** for the roadway.

San Pablo Ave: looking south towards Refinery Rd

Source: Google Maps

San Pablo Avenue Project Study Area



A truck and auto-oriented street connecting residential, industrial, and rural areas

Contra Costa County Public Works Department

ARUP

Study Schedule

May – September 2015	Data Research/Traffic Analysis
October 2015 – Ongoing	Public Outreach
February 8, 2016	Community Workshop #1
Spring 2016	Develop Alternatives
Summer 2016	Alternative Analysis
September 29, 2016	Community Workshop #2
October 2016 – February 2017	Prepare Feasibility Report
March 2017 – April 4, 2017	Draft Feasibility Report available for review/comments
May 8, 2017	**TWIC**
TBD	**Present Final Report to Board of Supervisors**

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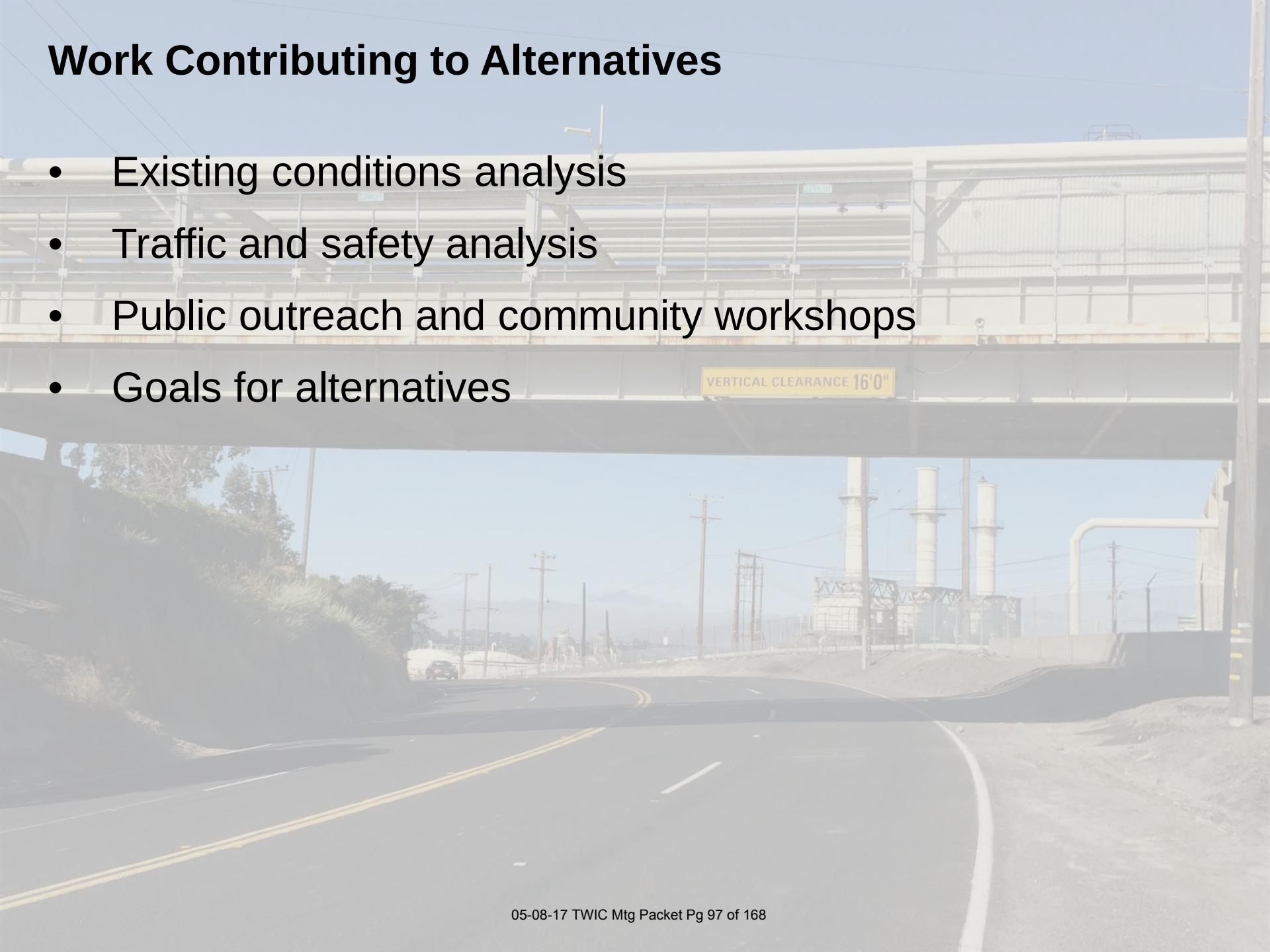
Developing Alternatives

Work Contributing to Alternatives

- Existing conditions analysis
- Traffic and safety analysis
- Public outreach and community workshops
- Goals for alternatives



Goals for Alternatives

1. Implement a Complete Street design
2. Qualify for the Bay Trail
3. Enhance pedestrian safety and experience
4. Enhance bicycle safety and experience
5. Enhance automobile safety and experience
6. Enhance truck safety and experience
7. Enhance transit safety and experience
8. Maintain acceptable traffic operations
9. Minimize physical and environmental impacts
10. Provide a cost effective solution

Goal #1. Implement a Complete Street Design

Provide continuous bicycling and pedestrian facilities

- Widen or convert road space by implementing a “road diet”
- Provide separation between vehicular traffic and cyclists/pedestrians

Improve access to transit facilities

Goal #2. Qualify for the Bay Trail

To qualify as a Bay Trail segment, the corridor must accommodate <u>both</u> pedestrians and cyclists

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Goal #3. Enhance pedestrian safety and experience

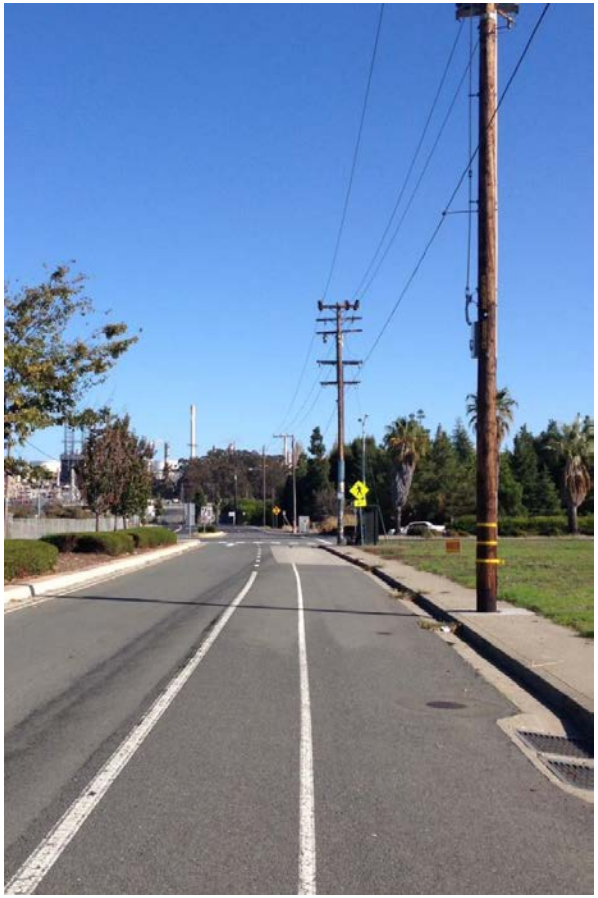
Sidewalks only exist along 10% of the corridor

- Continuous pedestrian facilities provide safe walking paths for all users
- Promotes recreation between Lone Tree Point and the Carquinez Bridge

Goal #4. Enhance bicycle safety and experience

Bike lanes only exist along 10% of the corridor

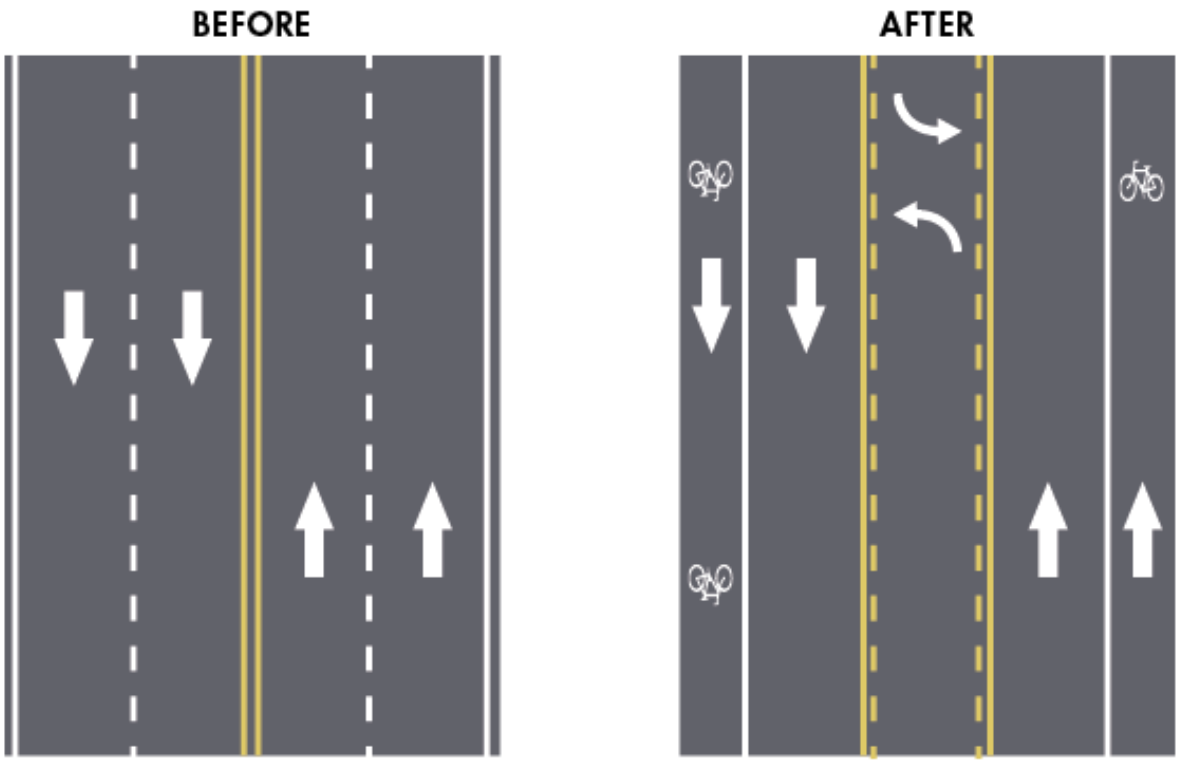
- Important for enhancing the safety and comfort of cyclists
- Narrow shoulders on existing roadway do not provide a sufficient buffer between cyclists and vehicles



Goal #5. Enhance auto safety and experience

"Road Diets" provide safety benefits for all users

- Four-lane undivided arterials have higher crash rates because of higher speeds
- Road diets help to slow speeds, which reduce collision severity
- Providing separated facilities reduces conflicts between autos and pedestrians/cyclists

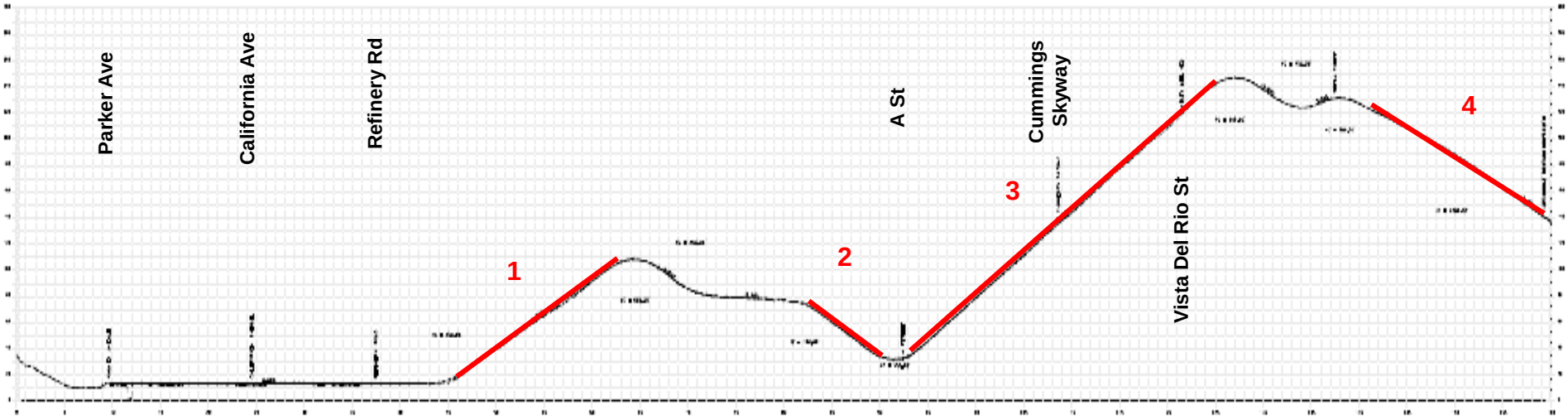


Goal #6. Enhance truck safety and experience

Provide safe access for trucks driving to and from the refineries

- Two-way left-turn lanes and dedicated left-turn pockets provide safe places for trucks to maneuver
- Truck climbing lanes are provided on two of the three key segments to allow safe passing of slow moving vehicles

Sections 1, 2, and 3 have a higher proportion of trucks
Section 4 has very low truck volumes



Goal #7. Enhance transit safety and experience

Provide safe and accessible bus stops

- Provide safe places for buses to stop and passengers to access the stop

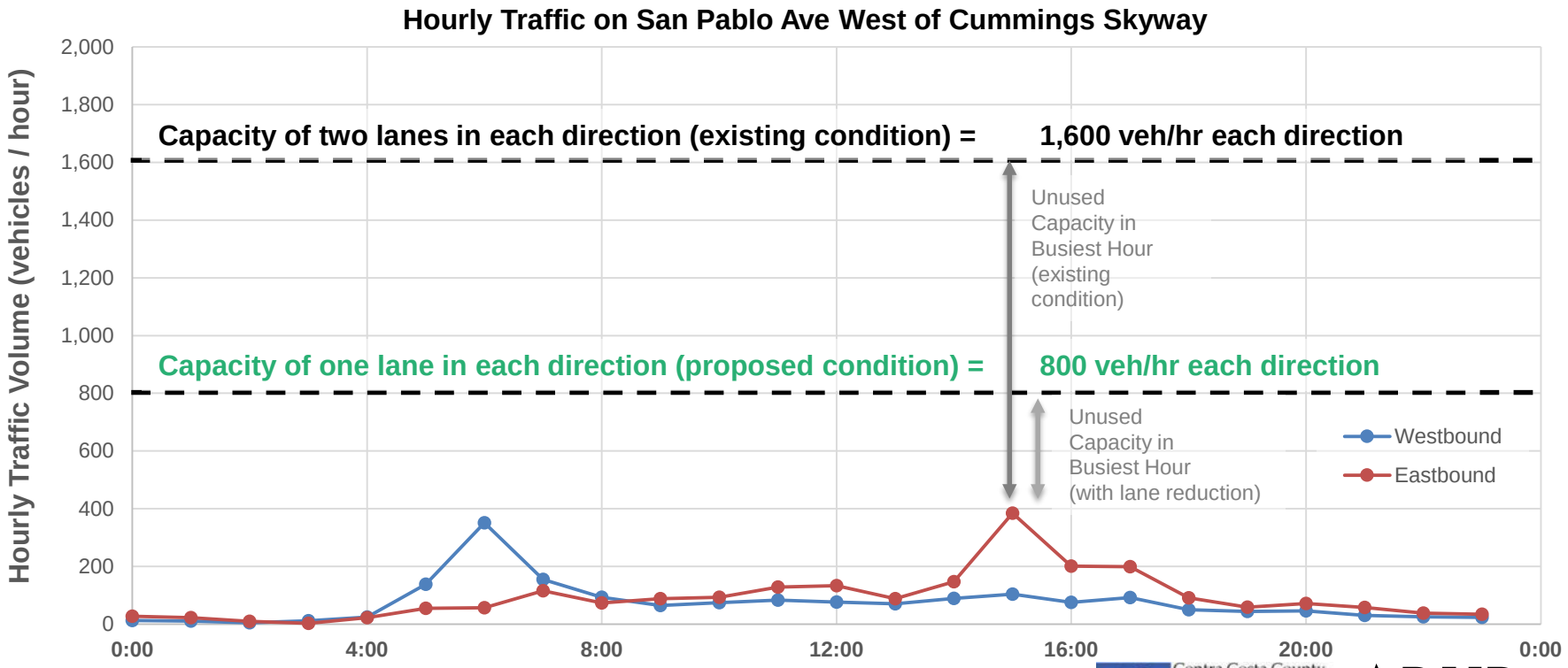
Goal #8. Minimize traffic impacts

There is sufficient traffic capacity in the corridor to reconfigure the roadway

- Very low volumes for a four lane road (two-lanes each direction)
- During the peak hour, only 25% of the road capacity is being used
- Diversion from I-80 and emergency access should not be an issue

Corridor Average Daily Traffic

Segment	Average Daily Traffic (vehicles)
San Pablo Ave, West of Cummings Skyway	3,900
San Pablo Ave, East of Cummings Skyway	2,200
San Pablo Ave, Hercules	***32,000***



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Goal #9. Minimize physical and environmental impacts

Minimize the impact of the design on property owners and utilities, as well as environmental factors such as air, water, noise, biological, etc.

Goal #10. Provide a cost effective solution

Implement a Complete Street concept that is cost effective and consistent with County and State standards

Alternatives and Evaluation

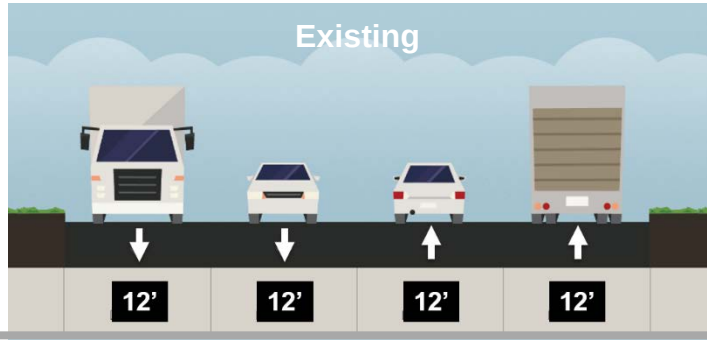
Alternatives

Develop **three** alternatives that meet as many of the goals as possible

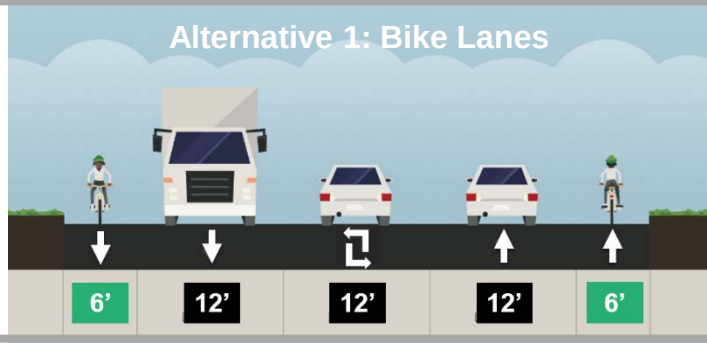
Develop **conceptual designs** and **cost estimates**

Evaluate against a broad **range of criteria**

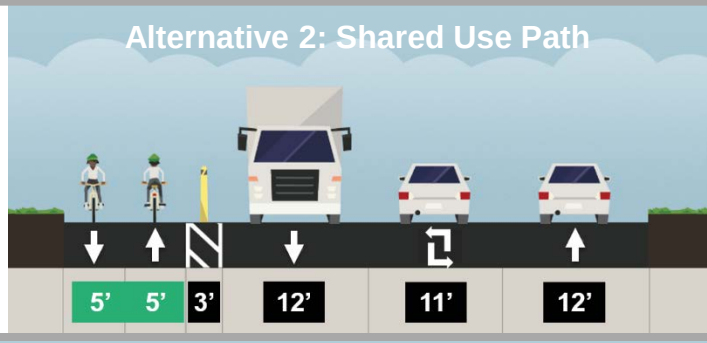
Existing
- No bicycle or pedestrian facilities
- No left-turn lanes



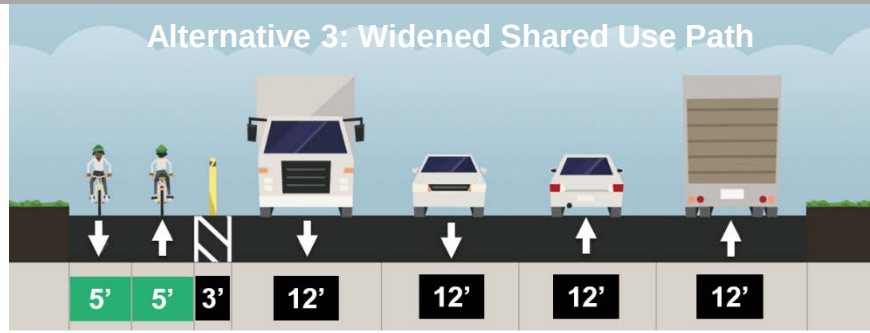
Alternative 1: Bike Lanes
- Build on-street bike lanes
- No sidewalks
- Remove one travel lane in each direction with center left-turn lanes and truck climbing lanes
- Minimal right-of-way / cost impact



Alternative 2: Shared Use Path
- Build a two-way shared use path on the north side
- Remove one travel lane in each direction with center left-turn lanes and truck climbing lanes
- Minimal right-of-way / cost impact



Alternative 3: Widened Shared Use Path
- Build a two-way shared use path on the north side
- No removal of travel lanes
- Significant right-of-way / cost impact



Alternative Evaluation Matrix

Metric	Existing (4 vehicle lanes)	Alternative 1: Bike Lanes (3 lanes+bike lanes)	Alternative 2: Shared Use Path (3 lanes+path)	Alternative 3: Widened Shared Use Path (4 lanes+path)
Overall Complete Streets Assessment	**POOR**	**MODERATE**	**GOOD**	**GOOD**
Bay Trail Qualification	**NO**	**NO**	**YES**	**YES**
Pedestrian Safety and Experience	**POOR**	**POOR**	**GOOD**	**GOOD**
Bicycle Safety and Experience	**POOR**	**MODERATE**	**GOOD**	**GOOD**
Automobile Safety and Experience	**MODERATE**	**GOOD**	**GOOD**	**MODERATE**
Truck Safety and Experience	**MODERATE**	**GOOD**	**GOOD**	**MODERATE**
Transit Safety and Experience	**MODERATE**	**MODERATE**	**GOOD**	**GOOD**
Traffic Level-of-Service (Future Conditions)	**GOOD**	**GOOD**	**GOOD**	**GOOD**
Right-of-Way Impacts	**NONE**	**MINIMAL**	**MINIMAL**	**SIGNIFICANT**
Utilities Impacts	**NONE**	**MINIMAL**	**MINIMAL**	**SIGNIFICANT**
Environmental Impact Likelihood	**NONE**	**UNLIKELY**	**UNLIKELY**	**POSSIBLE**
Cost	**$0**	**$3.3 million**	**$8.8 million**	**$23.2 million**

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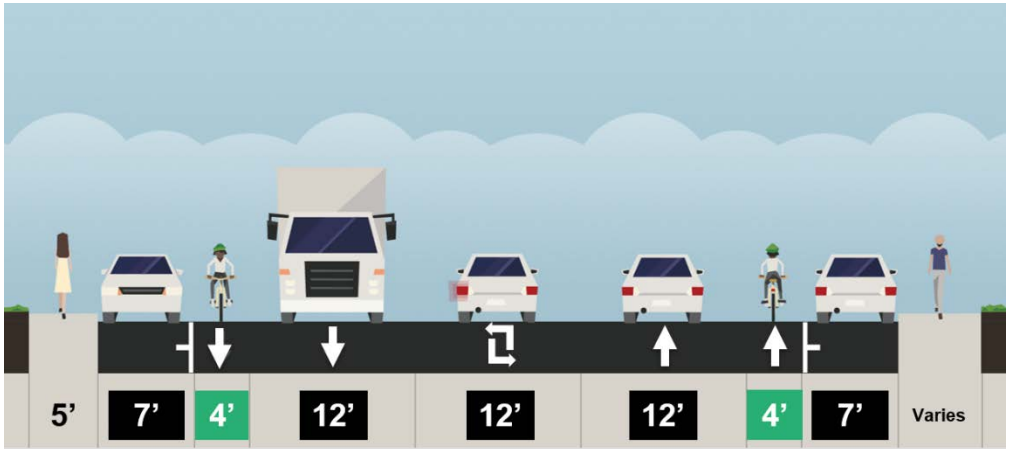
Recommended Alternative

Recommended Alternative: Hybrid

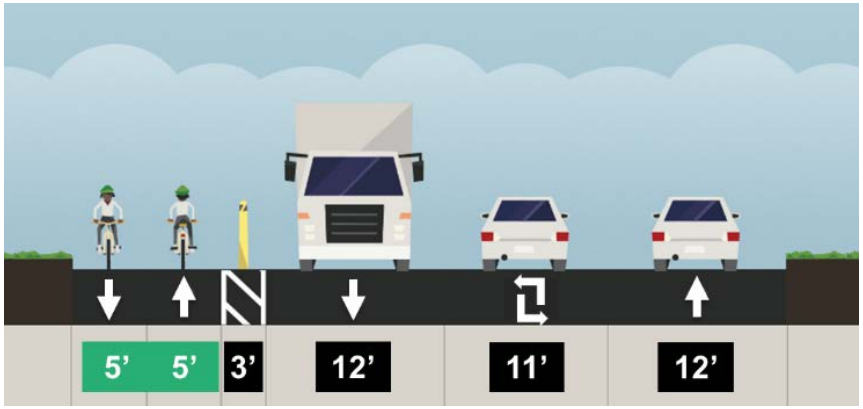
West of California Street: Bike Lanes

- Bike lanes (Alternative 1) through Lone Tree Point
- Add sidewalks to close gaps
- No change to the roadway or parking on San Pablo Avenue

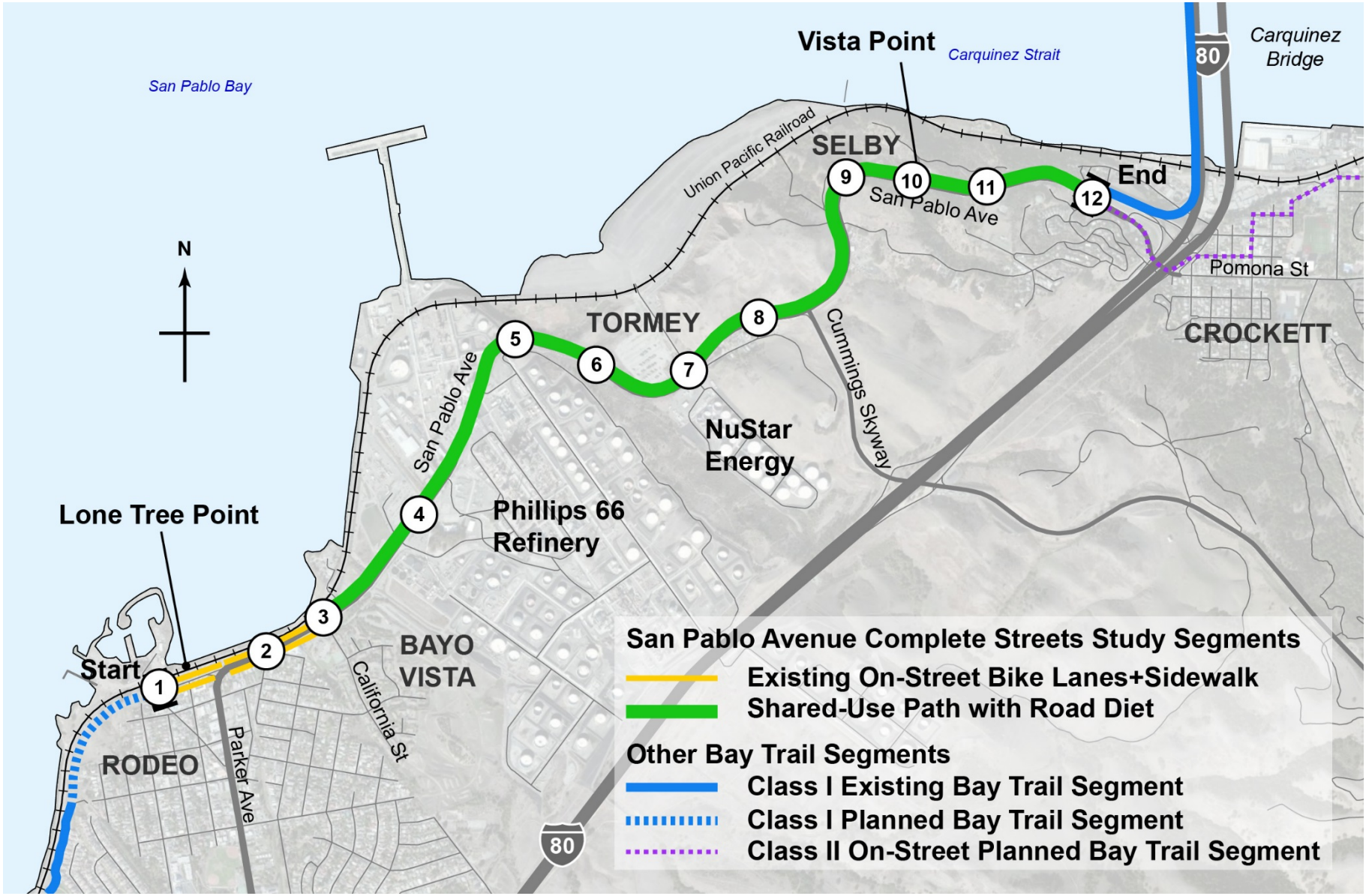


East of California Street: Shared Use Path

- “Shared Use Path” (Alternative 2)
- Remove one travel lane
- Add a 10’ two-way shared use path on north side
- Center lane: two-way left-turn lane, median, truck climbing lane



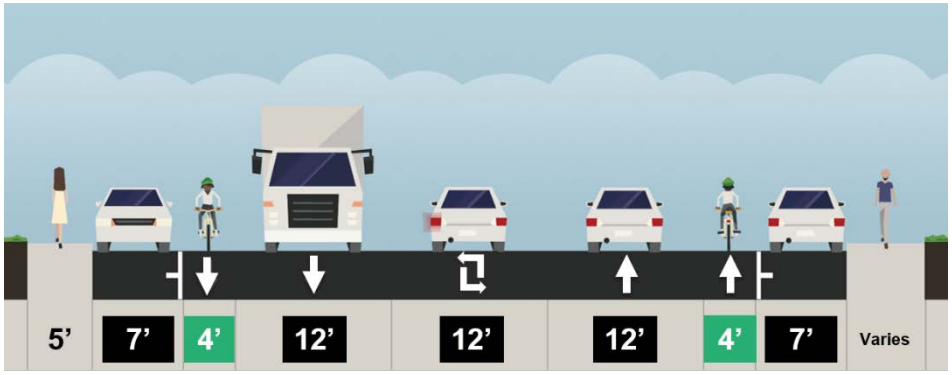
Recommended Alternative: Hybrid



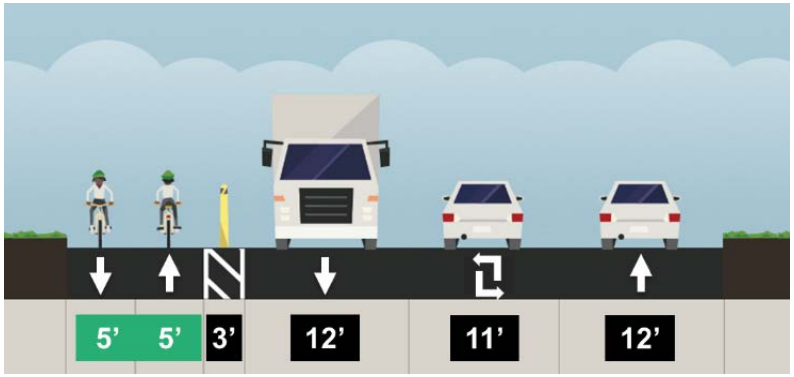
Recommended Alternative: Hybrid

- Creates continuous bicycle and pedestrian facilities
- Upgrades existing facilities west of California St by adding sidewalks, closing bicycle facility gaps, and preserving on-street parking
- Significantly improves safety for all users
- Provides truck climbing lanes, center turn lanes, and turn pockets for much of the corridor
- Minimal right-of-way, utilities, and environmental impacts expected
- $8.2 million cost

West of California St: Bicycle Lanes



East of California St: Shared Use Path



Conclusions/Questions

Conclusions

- Recommend the Hybrid alternative
- Satisfies the majority of study objectives
- Meets the County's adopted Complete Streets policy

Questions?

Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE **6.**

Meeting Date: 05/08/2017

Subject: CONSIDER report on Local, State, and Federal Transportation Related Legislative Issues and take ACTION as appropriate.

Submitted For: TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE,

Department: Conservation & Development

Referral No.: 1

Referral Name: REVIEW legislative matters on transportation, water, and infrastructure.

Presenter: John Cunningham, DCD **Contact:** John Cunningham (925)674-7883

Referral History:

This is a standing item on the Transportation, Water, and Infrastructure Committee referral list and meeting agenda.

Referral Update:

In developing transportation related legislative issues and proposals to bring forward for consideration by TWIC, staff receives input from the Board of Supervisors (BOS), references the County's adopted Legislative Platforms, coordinates with our legislative advocates, partner agencies and organizations, and consults with the Committee itself.

Recommendations are summarized in the Recommendation(s)/Next Step(s) section at the end of this report. Specific recommendations, if provided, are underlined in the report below. This report includes three sections, 1) **LOCAL**, 2) **STATE**, and 3) **FEDERAL**.

1) LOCAL

Accessible Transit Update

Staff will update the Committee on the status of the countywide accessible transit study original proposed in the 2016 Measure X effort. Staff from multiple agencies and organizations continue to discuss how to proceed with the study in the absence of the Measure X revenues.

2) STATE

Legislative Report

The legislative report from the County's legislative advocate, Mark Watts, is attached *(May TWIC State Legislative Report)*. Mr. Watts will be present at the May meeting to discuss issues of interest to the Committee.

Attached is the following information which may be referenced by staff or Mr. Watts during the Committee discussion:

- Senate Bill 1 (Beall) Transportation Funding: A variety of documents from the Metropolitan Transportation Commission (MTC), the California State Association of Counties, and Mark Watts describing how SB1 will function and the revenue estimates (SB 1 Docs.pdf).
- A report from Mark Watts on Autonomous Vehicle Legislation (Mark Watts_AutonomousVeh Legislation.pdf)
- SB 595 Fact Sheet (RM 3 Fact Sheet 2017_April14.pdf): As referred to in Mark Watts legislative report and the TWIC Legislative Tracking List, SB 595 proposes a new increase in bridge tolls to fund improvements in the bridge corridors. Ultimately, the MTC would have to place a measure on the ballot in all nine Bay Area Counties.
- TWIC Legislative Tracking List (TWIC Legislation Tracking.pdf): A comprehensive list of legislation being tracked by staff.

3) FEDERAL

No staff report in May.

Attached is a broad update on federal issues (CSAC FedUpdateApr2017.pdf) provided by the California State Association of Counties.

Recommendation(s)/Next Step(s):

CONSIDER report on Local, State, and Federal Transportation Related Legislative Issues and take ACTION as appropriate.

Fiscal Impact (if any):

There is no fiscal impact.

Attachments

CSAC FedUpdateApr2017.pdf
May TWIC State Legislative Report.pdf
Auto_Veh_Leg
SB 1 Docs.pdf
RM 3 Fact Sheet 2017_April14.pdf
TWIC Legislation Tracking

John Cunningham

From: Lara DeLaney
Sent: Thursday, April 27, 2017 5:45 PM
Subject: Federal Issues Update

Federal Issues Update

Joe Krahn
April 27, 2017

Omnibus Budget Bill

With a little over 24 hours remaining before the expiration of federal spending authority, congressional appropriators had not yet released the text of a massive omnibus budget bill that will be needed to keep the federal government operating through the end of the federal fiscal year. The package – which will contain line-by-line spending for 11 of the 12 unfinished fiscal-year 2017 appropriations measures – also is expected to include supplemental funding for defense programs and various border security measures.

As of this writing, appropriators were reportedly still negotiating the final details of the budget bill, though it was unclear when a finished product would be made public. In the meantime, congressional leaders have filed a seven-day stopgap spending measure to ensure that there is no lapse in federal spending, which is slated to terminate at midnight on Friday.

It should be noted that there had been much speculation this spring about a potential government shutdown due in large part to ongoing disagreements over funding for the administration's proposed border wall. Faced with the seemingly inevitable prospect of a Senate filibuster if the fiscal year 2017 spending package included funding for the wall, President Trump ultimately relented on his demands that Congress address the issue as part of the current-year budget, thus likely quelling the possibility of a federal shutdown.

House Republicans Attempt to Revive ACA Repeal Effort

The conservative House Freedom Caucus, which helped derail the GOP's effort to repeal the *Affordable Care Act* (ACA), has formally endorsed a revised health measure, reviving efforts to overhaul the current system. The proposed new language would give states wide latitude in allowing health insurers to sell plans that do not contain all of the essential health benefits required of ACA plans. Those benefits include maternity care, as well as mental health and prescription drug benefits.

A second amendment would allow states to approve insurance plans that charge higher premiums for those with chronic and costly conditions, such as cancer. The plan also proposes to create a high-risk pool to help pay for sicker individuals. However, it should be noted that high-risk pools have been woefully underfunded in the past, and there are significant concerns that these changes will negatively impact access to care for individuals with preexisting conditions.

Aside from the new language endorsed by the Freedom Caucus, the underlying bill would remain in place, including the proposed elimination of the Medi-Cal expansion in 2020. In addition, the GOP health care bill would place a per-capita cap on federal Medicaid spending and institute a number of other changes that would make it harder to enroll and maintain individuals on Medi-Cal. Consequently, if enacted, the legislation would

shift tens of billions of dollars in costs to counties in California. Furthermore, the Congressional Budget Office has not yet had the opportunity to analyze the potential effect of the new language on the federal budget, nor have they had the time to study the impact these changes will have on the uninsured rate.

Earlier today, CSAC – along with the California Welfare Directors Association and other California county interests – sent a joint letter of opposition to members of the California congressional delegation.

As of this writing, it remains unclear whether the revised bill has enough support within the Republican conference to successfully pass the House. Democrats are still very much opposed to the legislation, and the moderate wing of the GOP party is largely undecided, although weakening protections for those with pre-existing conditions could move some moderates even further away from the bill. If GOP leaders are confident they have the requisite support, a vote could be scheduled in the House as early as Friday.

Trump Releases Tax Reform Plan

President Trump released this week the broad parameters of what would amount to a dramatic overhaul of the U.S. tax code. Among other things, the reform plan – which is embodied in a single page outline – would whittle the current seven income-tax brackets down to three, reduce the 35 percent corporate income tax to 15 percent, and eliminate a number of major taxes currently on the books. The goal of the plan, according to administration officials, is to implement a series of large, accelerated tax cuts in an effort to create economic growth and jobs.

Of particular interest to states and local governments, the Trump plan would eliminate the federal deduction for state and local income taxes (SALT). The proposed abolishment of the SALT deduction would disproportionately impact states with higher tax rates, particularly California, New York, and several other states. According to estimates, eliminating the SALT deduction would result in an additional $1.3 trillion in federal revenue over the 10-year period from 2017 to 2026, which would help offset, in part, some of the proposed tax cuts in the Trump proposal.

Looking ahead, it remains to be seen how tax reform efforts will proceed on Capitol Hill, where key authorizing committees will be responsible for drafting a tax overhaul bill. While the Trump plan was generally warmly received by congressional Republicans, many key Democrats were immediately dismissive of the proposal, vowing to fight the plan throughout the legislative process. Hearings on the Trump proposal are expected to take place in both the House and Senate in the coming weeks.

Sanctuary Jurisdictions

Earlier this week, a U.S. District Court Judge in San Francisco handed down a ruling that temporarily blocks the Trump administration's efforts to cut off federal funding to so-called "sanctuary jurisdictions." The preliminary injunction was issued in response to two lawsuits – one brought by the City and County of San Francisco and the other by Santa Clara County – challenging a particular section of the president's executive order entitled "Enhancing Public Safety in the Interior of the United States." Embodied in the order are instructions to the Departments of Justice and Homeland Security (DOJ & DHS) to withhold federal funding from jurisdictions that are not in compliance with provisions of federal law that prohibit government officials from restricting the maintenance or intergovernmental exchange of information regarding an individual's immigration status (8 U.S.C. § 1373).

It should be noted that while the Court's injunction halts the threat of the administration withholding wholesale federal funding from noncompliant jurisdictions, it appears that agencies would be allowed to restrict certain grant dollars, namely those that bear a meaningful relationship to immigration enforcement. For its part, DOJ

responded to the ruling by indicating that it will continue to move forward with its planned enforcement actions, which the Department believes is within the scope of current law.

Prior to the District Court ruling, DOJ sent correspondence to nine jurisdictions that were identified in a May 2016 Inspector General report as having laws that potentially violate Section 1373. The letter instructs the jurisdictions – one of which is the California Board of State and Community Corrections – to furnish documentation validating that they are in compliance with the aforementioned statute. According to DOJ, failure to comply with the statutory condition could result in withholding of federal grant funding, specifically fiscal year 2016 Byrne/JAG funds, but also potentially "future OJP grants or subgrants."

Trump Directs Interior Secretary to Review National Monuments

On Wednesday, President Trump signed an Executive Order directing the Interior Department to evaluate recent national monument designations. Specifically, the Order requires Interior Secretary Ryan Zinke to review all monument designations of at least 100,000 acres dating back to January 1, 1996. Among other considerations, the secretary will analyze the level of public and official opposition to the current designations. Zinke will have 120 days to complete the review and provide recommendations to the president on whether the monuments should be modified, or possibly rescinded altogether.

At least two dozen monuments nationwide would fall within the criteria identified in the Order, including eight monuments in California: Berryessa Snow Mountain, Giant Sequoia, Cascade-Siskiyou, Carrizo Plain, San Gabriel Mountains, Santa Rosa and San Jacinto Mountains, Sand to Snow, and Mojave Trails.

It should be noted that the Trump administration would face an uphill battle if they do seek to roll back existing designations. For starters, no president has ever revoked a predecessor's action to create a monument under the *Antiquities Act*. Moreover, while the Act grants authority to a president to create monuments, it does not provide explicit authority to abolish them. Therefore, if the administration does attempt to modify an existing monument, it will no doubt be challenged in court. However, congressional Republicans could look to use the legislative process to overturn the designations.

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Smith, Watts &Hartmann, LLC.

Consulting and Governmental Relations

MEMORANDUM

TO: Transportation, Water, and Infrastructure Committee

FROM: Mark Watts

DATE: May 1, 2017

SUBJECT: May Report

Legislature

Senate Bill 1 (Beall): approved by the Governor:

Following the approval of SB 1 on April 6, two companion bills to SB 1 passed the Senate and Assembly On April 24. SB 132 by the Senate Finance Committee includes the appropriation of $427 million for a number of important road projects in Riverside County, $400 million for the extension of the ACE train from Stockton to Ceres and Merced, and $100 million for the construction of UC Merced Campus Parkway Project. SB 496 by Senators Cannella and de Leon includes liability protection for design professionals. This cleared the way for the 3 bills to move to the governor and he approved all three of the measures on April 28th.

In addition, **ACA 5**, the companion constitutional amendment to protect the new revenues was approved by the Legislature and is set to go on the November, 2018 ballot.

The April TWIC report provided a summary of the anticipated funding available within the region and for the County and local cities over the first ten years of the new funding program.

New Bills of Interest

Regional Measure 3 - SB 595 (Beall)

Legislation to establish Regional Measure 3 (RM 3) was heard and approved by the Senate Transportation committee on April 25. The bill requires the nine Bay Area counties to conduct a special election to increase the toll rate (unspecified amount) charged on state-owned bridges within the region to be used to meet the funding obligations associated with an unspecified number of projects and transportation programs.

Working with MTC, local agencies having already begun adopting RM 3 priority project lists, including BART and the Contra Costa Transportation Authority.

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SB 775 (Wieckowski)

The bill is the Senate proposal to deal with the extension of Cap and Trade beyond 2020. It was just amended on May 1. A quick overview of the new bill indicates that the measure would allow the state to charge a fee for carbon emissions that would apply to all industries, with a price floor and ceiling that rises over time to limit volatility in prices while steadily raising the cost of pollution.

The existing cap-and-trade program includes only a price floor and gives pollution permits for free to some industries while others must pay.

Finally, the measure intends to limit the impact of potentially higher gas and energy prices by refunding as much as 90 percent of the revenue to consumers. The rest would be used to pay for infrastructure and research on climate and clean energy.

John Cunningham

From: Mark Watts <mwatts@swmconsult.com>
Sent: Thursday, April 27, 2017 9:54 AM
To: Audra Hartmann; DJ Smith
Subject: Autonomous Vehicle Regulations - Update

Importance: High

Good morning,

With autonomous vehicles (AV) claiming a high degree of legislative interest in this session, I thought it may be useful to bring you up-to-date on the effort by DMV to adopt their second generation of regulations. These new regulations are intended to take the state beyond manufacturer testing into the realm of real-world use of these vehicles.

Yesterday, California Department of Motor Vehicles (DMV) ended its public comment period on the proposed regulations for the testing and deployment of self-driving cars. Thank you to all of the coalition members who weighed in during the DMV comment period. Nineteen of our coalition members submitted written comments to the DMV. We'd also like to give special thanks to Society for the Blind and the Cal Asian Chamber for testifying in person at the hearing

The next step in the rulemaking process will be the DMV reviewing and responding to feedback received in written and oral comments over the past 45 days. If the DMV decides to make substantive changes to the regulations based on the feedback, the DMV will open a 15-day comment period on the revisions.

At the completion of that comment period, the DMV will issue a "Final Statement of Reason" to summarize any changes made to the regulations due to public comments, or why reasons why changes were not made. The final step in the process is sending the rulemaking file to the Office of Administrative Law (OAL) for approval. Once the rules are approved, there will be a 120-day waiting period before the regulations go into effect.

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Estimated County Highway User Tax Account Revenues - FY 2017-18					New Revenues - SB 1		
COUNTY	HUTA 2103	HUTA 2104	HUTA 2105	HUTA 2106	Loan Repayment	RMRA	TOTAL
ALAMEDA	$4,070,514	$13,678,745	$6,326,644	$329,479	$1,163,261	$5,862,836	$31,431,477
ALPINE	$78,317	$229,860	$113,847	$22,216	$22,381	$112,801	$579,422
AMADOR	$373,460	$661,419	$499,104	$157,798	$106,726	$537,901	$2,336,409
BUTTE	$1,332,051	$2,516,405	$1,780,195	$348,568	$380,670	$1,918,578	$8,276,467
CALAVERAS	$570,086	$946,434	$761,881	$256,141	$162,918	$821,106	$3,518,566
COLUSA	$447,283	$608,668	$597,762	$94,250	$127,823	$644,229	$2,520,015
CONTRA COSTA	$3,399,208	$10,980,268	$5,296,466	$746,973	$971,417	$4,895,942	$26,290,275
DEL NORTE	$232,690	$319,754	$310,975	$91,064	$66,498	$335,148	$1,356,128
EL DORADO	$1,200,852	$3,247,052	$1,760,464	$650,904	$343,176	$1,729,609	$8,932,057
FRESNO	$4,080,730	$8,447,557	$5,453,616	$862,327	$1,166,181	$5,877,551	$25,887,961
GLENN	$542,869	$738,269	$725,507	$109,226	$155,140	$781,904	$3,052,914
HUMBOLDT	$1,059,389	$1,714,560	$1,415,801	$329,515	$302,749	$1,525,857	$6,347,872
IMPERIAL	$1,844,092	$2,307,982	$2,464,502	$316,245	$527,000	$2,656,079	$10,115,899
INYO	$654,259	$963,611	$874,372	$97,684	$186,972	$942,341	$3,719,241
KERN	$3,840,448	$7,898,473	$5,132,494	$1,728,421	$1,097,513	$5,531,467	$25,228,816
KINGS	$804,444	$1,199,250	$1,075,084	$167,885	$229,892	$1,158,655	$4,635,211
LAKE	$569,126	$950,770	$760,597	$263,456	$162,643	$819,722	$3,526,314
LASSEN	$553,345	$931,133	$739,507	$104,896	$158,133	$796,993	$3,284,007
LOS ANGELES	$24,594,585	$82,269,792	$38,080,812	$2,047,354	$7,028,577	$35,424,029	$189,445,150
MADERA	$1,166,217	$1,493,603	$1,558,568	$359,663	$333,278	$1,679,723	$6,591,052
MARIN	$924,205	$2,578,978	$1,275,654	$245,529	$264,117	$1,331,149	$6,619,631
MARIPOSA	$364,993	$549,052	$487,789	$109,322	$104,307	$525,707	$2,141,170
MENDOCINO	$852,578	$1,301,069	$1,139,412	$325,074	$243,648	$1,227,984	$5,089,765
MERCED	$1,541,713	$2,373,931	$2,060,394	$431,508	$440,587	$2,220,558	$9,068,690
MODOC	$534,496	$846,905	$714,317	$51,684	$152,747	$769,844	$3,069,993
MONO	$395,834	$754,188	$529,005	$26,477	$113,120	$570,127	$2,388,751
MONTEREY	$1,681,718	$3,818,587	$2,247,500	$644,628	$480,597	$2,422,209	$11,295,238
NAPA	$650,906	$1,549,121	$869,890	$262,708	$186,014	$937,511	$4,456,150
NEVADA	$666,594	$1,654,149	$890,857	$257,856	$190,498	$960,107	$4,620,061
ORANGE	$8,398,147	$29,335,719	$13,479,052	$509,106	$2,400,001	$12,096,005	$66,218,029
PLACER	$1,730,979	$5,258,593	$2,658,248	$627,202	$494,675	$2,493,161	$13,262,858
PLUMAS	$439,711	$1,147,294	$587,643	$123,262	$125,659	$633,324	$3,056,894
RIVERSIDE	$6,750,822	$20,164,152	$9,567,513	$1,019,887	$1,929,232	$9,723,332	$49,154,937

Estimated County Highway User Tax Account Revenues - FY 2017-18					New Revenues - SB 1		
COUNTY	**HUTA 2103**	**HUTA 2104**	**HUTA 2105**	**HUTA 2106**	**Loan Repayment**	**RMRA**	**TOTAL**
SACRAMENTO	$5,020,475	$13,957,953	$7,086,322	$1,732,324	$1,434,738	$7,231,081	$36,462,893
SAN BENITO	$377,374	$683,384	$504,335	$124,917	$107,845	$543,539	$2,341,395
SAN BERNARDINO	$6,535,738	$19,801,451	$9,401,028	$1,013,961	$1,867,766	$9,413,542	$48,033,487
SAN DIEGO	$9,407,835	$30,141,692	$14,272,588	$1,460,153	$2,688,547	$13,550,277	$71,521,093
SAN FRANCISCO	$1,913,589	$5,172,978	$2,557,380	$9,600	$546,861	$2,756,177	$12,956,585
*SF (City Portion)**	$3,428,805	$0	$4,977,556	$1,682,340	$979,875	$4,938,570	$16,007,146
SAN JOAQUIN	$2,715,601	$6,737,278	$3,629,214	$643,366	$776,057	$3,911,330	$18,412,846
SAN LUIS OBISPO	$1,563,585	$3,222,861	$2,089,624	$515,050	$446,837	$2,252,060	$10,090,019
SAN MATEO	$2,285,792	$7,590,134	$3,548,928	$267,772	$653,228	$3,292,268	$17,638,121
SANTA BARBARA	$1,594,862	$4,174,538	$2,202,196	$701,483	$455,776	$2,297,109	$11,425,964
SANTA CLARA	$5,113,806	$17,101,142	$7,830,577	$237,036	$1,461,410	$7,365,507	$39,109,480
SANTA CRUZ	$1,054,437	$2,765,782	$1,488,304	$529,566	$301,334	$1,518,726	$7,658,149
SHASTA	$1,231,014	$2,504,775	$1,645,165	$325,199	$351,796	$1,773,052	$7,831,002
SIERRA	$213,574	$428,053	$285,428	$29,038	$61,035	$307,615	$1,324,743
SISKIYOU	$881,988	$1,636,044	$1,178,717	$165,676	$252,052	$1,270,344	$5,384,822
SOLANO	$1,478,380	$4,251,512	$1,992,297	$159,759	$422,488	$2,129,337	$10,433,772
SONOMA	$2,219,485	$5,505,715	$2,966,190	$760,143	$634,279	$3,196,765	$15,282,577
STANISLAUS	$2,181,844	$5,087,178	$2,915,884	$532,023	$623,522	$3,142,549	$14,482,999
SUTTER	$671,734	$1,075,446	$897,726	$152,968	$191,966	$967,510	$3,957,350
TEHAMA	$764,730	$1,002,726	$1,022,009	$204,025	$218,543	$1,101,454	$4,313,486
TRINITY	$409,514	$767,518	$547,287	$83,577	$117,030	$589,831	$2,514,758
TULARE	$2,647,627	$4,085,378	$3,538,372	$534,596	$756,632	$3,813,426	$15,376,031
TUOLUMNE	$534,987	$1,053,050	$714,973	$259,187	$152,887	$770,551	$3,485,635
VENTURA	$2,579,195	$8,274,607	$3,967,845	$510,852	$737,076	$3,714,862	$19,784,437
YOLO	$941,570	$2,020,410	$1,258,343	$133,958	$269,079	$1,356,160	$5,979,520
YUBA	$535,603	$795,053	$715,797	$216,542	$153,063	$771,439	$3,187,497
TOTALS	**$134,649,805**	**$363,272,000**	**$195,469,556**	**$26,703,422**	**$38,479,875**	**$193,938,570**	**$952,513,227**

* *Add'l City Revenue*	**HUTA 2107**	**HUTA 2107.5**
San Francisco City	$6,506,811	$20,000

How SB 1 Works

- **Overview of New *Road Maintenance and Rehabilitation Program***
- **Gas Tax**
- **Diesel Tax**
- **ZEV Tax**
- **Transportation Improvement Fee**
- **Diesel Sales Tax**
- **Companion Bills: SB 132 and SB 496**
- **ACA 5 (Frazier and Newman)**

Mark Watts
Smith, Watts & Hartmann
April 17, 2017

Road Maintenance and Rehabilitation Program (Est. in SB 1)

Receives $3.24 billion Annually (first ten year estimated annual average).

- **Sources:**
  - Gas Taxes: $1.82 billion
  - Diesel Tax $.365 billion
  - ZEV Tax: $.020 billion
  - Reg. Fee:* $1.03 billion

"Off the Top" Allocations:

- $400 Million - Caltrans Bridges and Culverts
- $200 Million - Local Partnership to Self-Help Counties
- $100 Million - Active Transportation Program (ATP)
- $25 Million - Freeway Service Patrols (FSP)
- $25 Million - Local Planning Grants
- $5 Million - UC Research
- $5 Million - Workforce Development
- $2 Million - CSU Research

Road Maintenance and Rehabilitation Program (Est. in SB 1)

$3.24 billion annually is continuously appropriated as follows:

- 50% for allocation to Caltrans for maintenance of the State Highway System or for purposes of the State Highway Operation and Protection Program (SHOPP);
- 50% to Cities and Counties with allocation by the Controller pursuant to the customary Local Streets and Roads (LSR) formula.

Eligible projects include, but are not limited to, the following:

- Road maintenance and rehabilitation;
- Safety projects;
- Railroad grade separations;
- Complete street components, including active transportation purposes, pedestrian and bicycle safety projects, transit facilities, and drainage and storm water capture projects in conjunction with any other allowable project;
- Traffic control devices.

Gas Tax Increase

Summary:

- Increase in base gas tax of 12 CPG, **effective 11/1/2017**;
- Plus, reset of Tax Swap tax rate after BOE adjustment for 2017-18 and 2018-19 to 17.3 CPG, **effective 1/1/2020**;
- Total estimated gas tax of 19.5 CPG at final implementation.

Where The Funds Flow:

- Road Maintenance and Rehabilitation Program (RMRP) receives estimated $1.182 billion from gas tax;
- This, plus other new tax sources then provide $1.24 billion to each of Local Streets and Roads (LSR) and Caltrans maintenance and rehabilitation;
- $207 million from "setting" PBET at new rate is earmarked for LSR and $110 million for STIP;
- An additional $223 million flows to State highway maintenance and rehabilitation.

Cons. Protection: Art. XIX, Prop 22

Diesel Tax

Summary:

- Increases base diesel fuel tax rate by 20 CPG, **starting 11/1/2017**;
- Generates $730 million, annually (avg. over first 10 years).

Where the Funds Flow:

- $365 million to Road Maintenance and Rehabilitation Program;
- $365 million to Trade Corridors Enhancement Account.

Constitutional Protection: Art. XIX, Prop 22

Zero Emission Vehicle Fee

Summary:

- Imposes new ZEV Fee of $100 per vehicle, **starting in 2020;**
- Requires UC Davis ITS to study and make recommendations on how to make ZEVs contribute their fair share to road maintenance going forward;
- Generates $20 million, annually (avg. over first 10 years);
- Transfers revenues to Road Maintenance and Rehabilitation Program.
- Does not apply to Plug-In Hybrids; pure EVs only

Constitutional Protection: Art. XIX, Prop 22.

Transportation Improvement Fee

(Value-scaled Road User Vehicle Fee)

Summary:

- Generates $1.63 billion, annually (avg. over first 10 years);
- Fee charged varies from $25 per vehicle to $175 per vehicle;
- Indexed;
- $1.03 billion flows to Road Maintenance and Rehabilitation Program;
- $250 million flows to Congested Corridor Program;
- $350 million flows to Transit for capital purposes.

Constitutional Protection: ACA 5

Diesel Sales Tax

Summary:

- Imposes a 4.0% increase in sales tax on diesel fuel, **starting 11/1/2017**.
- Generates $350 million, annually (avg. over first 10 years).
- Of the 4% sales tax rate, 0.5% flows to passenger rail, and amounts to $35-50 million annually.
- The balance of funds generated, estimated to be approximately $300 million, annually, flows to the to STA program.

Constitutional Protection: New increment protected under ACA 5; base increment under Art. XIX (A).

Repay Outstanding General Fund Loans

Requires the outstanding loans made to the General Fund from various transportation special funds, a total of $706 million, to be repaid over three years; allocated as follows:

- ✓ $236 million for the TIRCP (transit capital);
- ✓ Up to $20 million for Planning;
- ✓ $225 million for SHOPP;
- ✓ $225 million for Local Agencies.

Reform Components

- Directs the California Department of Transportation (Caltrans) to generate up to $100 million in department efficiencies. The revenue generated through the efficiencies will be allocated to the RMRA.
- Creates a ***Transportation Inspector General***, subject to Senate confirmation, within the newly created Caltrans Office of Audits and Investigations.
- Requires additional CTC oversight of the development and management of the SHOPP program, including allocating staffing support and project review and approval. CTC will also conduct public hearings on the SHOPP.

Reform Components, Cont.

- Creates and funds an ***Advance Mitigation Program***, administered by Caltrans, to protect natural resources through project mitigation and to accelerate project delivery.
- Creates a "useful life" period where truckers subject to future, undefined regulations can get a return on their investment before being asked to replace or modify the vehicle.

Companion Bills

SB 132 (Budgets), SB 496 (Cannella/de Leon)

SB 132 (Committee on Budget and Fiscal Review)

- ✓ As introduced, adjusted 2016 Budget by adding $5 million for compensation for Employee Unit # 16 (Physicians and Dentists);
- ✓ Amended April 6th to add $977 million in one-time special funds for transportation projects.

Projects/Programs Funded:

- ✓ $50 million from the Trade Corridor Enhancement Account to the Air Resources Board's Zero/Near-Zero Emission Warehouse Program;
- ✓ $100 million from the State Highway Account for the University of California, Merced Campus Parkway Project;
- ✓ $400 million from the Public Transportation Account for the extension of the Altamont Corridor Express to Ceres and Merced.

Companion Bills

SB 132 (Budgets), SB 496 (Cannella/de Leon)

SB 132, Projects/Programs (continued):

- ✓ $427 million from the State Highway Account to the *Riverside County Transportation Efficiency Corridor* for five projects:
  - o $180 million for the 91 Toll Connector to Interstate 15 North project;
  - o $108.4 million for the Jurupa Grade Separation project;
  - o $84.45 million for the McKinley Grade Separation project;
  - o $48 million for the Interstate 15 / Limonite Interchange project;
  - o $6.3 million is for the Hamner Bridge Widening.
- ✓ Requires the Secretary of Transportation to convene a task force of state, local, and private sector experts to accelerate the schedule of delivery for these and other projects in the region;
- ✓ The bill is contingent on Senate Bill 496 being enacted and operative.

Companion Bills

SB 132 (Budgets), SB 496 (Cannella/de Leon)

SB 496 (Cannella): Design Professionals Indemnity

- ✓ This bill is intended to preserve the design professional's uninsurable first-dollar defense indemnity obligation while no longer exposing them to unlimited liability. They would still responsible for their own defense costs
- ✓ The bill limits a design professional duty to defend an indemnitee for claims that arise out of the negligence, recklessness, or willful misconduct of the design professional.
- ✓ A contractual "Duty to Defend" provides that an engineering or architecture firm will pay for attorney's fees and costs incurred by a client when sued.
- ✓ Professional liability insurance is available to architects and engineers, but only for damages that result from their own negligence.
- ✓ SB 132 is contingent on this bill being enacted and operative.

Constitutional Protection

ACA 5 (Frazier and Newman)

Would prohibit the Legislature from borrowing revenues from fees and taxes established in SB 1 that are imposed on vehicles or their use or operation.

- Protects new increment of diesel sales tax in SB 1 from diverting the funds for use other than mass transportation.
- Requires revenues derived from new Transportation Improvement Fee (TIF) in SB 1 to be used solely for transportation purposes.
- Exempts appropriations of revenues generated as part of the SB 1 from counting towards the state appropriation limit (Gann Limit).

John Cunningham

From: Mark Watts <mwatts@swmconsult.com>
Sent: Friday, April 28, 2017 12:28 PM
To: DJ Smith; Audra Hartmann
Subject: Governor to Approve SB 1 (Beall) today!!!

Importance: High

Good Afternoon,

The Governor is now set today to approve the *2017 Transportation Funding Package* and pending companion bills.

Earlier this week, the Assembly took final action on SB 132 and SB 496, clearing the way for the bills to go to the Governor for signature. SB 132 contains funding for the projects in Riverside County as well as funding for extending the ACE train from Stockton to Ceres and Merced and the access to U.C. Merced. In addition, another SB 1 companion measure, SB 496 by Senators Cannella and de Leon, provides indemnity relief to design professionals. These bills have cleared their technical legal review and have moved along with SB 1 to the Govnerors Desk. An additional companion measure, ACA 5, the constitutional amendment to supplement the constitutional protections for the new revenue sources in SB 1, had previously passed by the Legislature and is set to go on the November, 2018 ballot.

Mark Watts

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Estimate of Bay Area Local Street and Road Funding from SB 1 (Beall/Frazier)

(Dollars in millions)

COUNTY TOTALS (includes city and county portions)	Estimate of Current FY 2017 State Funding from Gas Tax Subventions	Estimated Increase from SB 1 (FY 2018-19)
Alameda	52	$ 48
Contra Costa	37	$ 36
Marin	8	$ 8
Napa	5	$ 5
San Francisco	25	$ 24
San Mateo	26	$ 25
Santa Clara	64	$ 60
Solano	15	$ 14
Sonoma	17	$ 17
Regional Total	**$ 250**	**$ 238**
STATE TOTAL	**1,276**	**$ 1,240**

Note: Totals do not sum due to rounding

Assumes $1.2 billion available from SB 1 for local streets and roads in FY 2018-19, actual amount will depend on revenue collected from various sources deposited in the Road Maintenance & Rehabilitation Account and amount deducted for administrative purposes.

Source: Metropolitan Transportation Commissions. Contact: Rebecca Long at rlong@mtc.ca.gov
April 11, 2017

Estimate of Bay Area City and County Funding for Local Streets and Roads from SB 1 (Beall/Frazie

County/City	Estimate of FY 2016-17 Baseline Gas Tax Subvention Funding	Estimated Funding *Increase in FY 2018-19**	Combined Total
ALAMEDA			
ALAMEDA	$ 1,504,098	$ 1,455,822	$ 2,959,920.05
ALBANY	$ 369,740	$ 352,080	$ 721,819.72
BERKELEY	$ 2,325,880	$ 2,198,758	$ 4,524,637.62
DUBLIN	$ 1,098,619	$ 1,056,119	$ 2,154,738.02
EMERYVILLE	$ 213,183	$ 220,474	$ 433,656.55
FREMONT	$ 4,423,329	$ 4,193,066	$ 8,616,394.74
HAYWARD	$ 2,989,712	$ 2,910,926	$ 5,900,638.42
LIVERMORE	$ 1,685,324	$ 1,617,340	$ 3,302,663.31
NEWARK	$ 870,643	$ 824,842	$ 1,695,485.17
OAKLAND	$ 8,005,367	$ 7,720,766	$ 15,726,133.46
PIEDMONT	$ 223,751	$ 211,324	$ 435,074.18
PLEASANTON	$ 1,468,516	$ 1,377,533	$ 2,846,048.74
SAN LEANDRO	$ 1,733,025	$ 1,609,357	$ 3,342,381.79
UNION CITY	$ 1,427,528	$ 1,340,530	$ 2,768,058.31
City Total	**$ 28,337,930**	**$ 27,088,935**	**$ 55,426,865**
County Total	**$ 23,655,413**	**$ 21,374,916**	**$ 45,030,328**
Grand Total	**$ 51,993,343**	**$ 48,463,851**	**$ 100,457,194**
CONTRA COSTA			
ANTIOCH	$ 2,121,877	$ 2,072,128	$ 4,194,005.64
BRENTWOOD	$ 1,111,250	$ 1,082,276	$ 2,193,525.33
CLAYTON	$ 227,156	$ 211,142	$ 438,298.04
CONCORD	$ 2,467,739	$ 2,377,247	$ 4,844,985.82
DANVILLE	$ 860,659	$ 790,792	$ 1,651,451.29
EL CERRITO	$ 482,079	$ 452,936	$ 935,015.52
HERCULES	$ 491,557	$ 460,464	$ 952,020.26
LAFAYETTE	$ 498,933	$ 462,888	$ 961,821.11
MARTINEZ	$ 737,912	$ 684,924	$ 1,422,835.31
MORAGA	$ 328,889	$ 308,698	$ 637,586.64
OAKLEY	$ 765,256	$ 741,138	$ 1,506,394.52
ORINDA	$ 370,655	$ 349,456	$ 720,110.47
PINOLE	$ 377,155	$ 349,274	$ 726,428.96
PITTSBURG	$ 1,327,961	$ 1,246,929	$ 2,574,889.91
PLEASANT HILL	$ 675,205	$ 630,604	$ 1,305,809.56
RICHMOND	$ 2,103,350	$ 2,024,918	$ 4,128,268.15
SAN PABLO	$ 588,950	$ 571,399	$ 1,160,348.89
SAN RAMON	$ 1,540,739	$ 1,439,162	$ 2,979,900.64
WALNUT CREEK	$ 1,313,169	$ 1,287,049	$ 2,600,218.35
City Total	**$ 18,390,491**	**$ 17,543,424**	**$ 35,933,914**
County Total	**$ 18,122,496**	**$ 17,992,374**	**$ 36,114,870**
Grand Total	**$ 36,512,987**	**$ 35,535,797**	**$ 72,048,785**

MARIN						
BELVEDERE	$	46,832	$	44,483	$	91,315.17
CORTE MADERA	$	191,226	$	176,272	$	367,498.06
FAIRFAX	$	155,084	$	141,584	$	296,668.45
LARKSPUR	$	247,767	$	233,671	$	481,438.90
MILL VALLEY	$	288,481	$	278,056	$	566,537.65
NOVATO	$	1,054,459	$	1,008,725	$	2,063,184.53
ROSS	$	54,073	$	51,136	$	105,209.19
SAN ANSELMO	$	254,053	$	241,363	$	495,416.76
SAN RAFAEL	$	1,164,206	$	1,115,049	$	2,279,255.38
SAUSALITO	$	148,584	$	137,500	$	286,084.08
TIBURON	$	185,563	$	179,169	$	364,732.03
City Total	**$**	**3,790,330**	**$**	**3,607,010**	**$**	**7,397,340**
County Total	**$**	**4,689,540**	**$**	**4,438,862**	**$**	**9,128,402**
Grand Total	**$**	**8,479,870**	**$**	**8,045,872**	**$**	**16,525,742**

NAPA						
AMERICAN CANYON	$	401,526	$	379,951	$	781,477
CALISTOGA	$	108,901	$	100,370	$	209,271
NAPA	$	1,548,719	$	1,479,500	$	3,028,219
ST HELENA	$	124,549	$	115,390	$	239,939
YOUNTVILLE	$	64,270	$	59,521	$	123,791
City Total	**$**	**2,247,965**	**$**	**2,134,732**	**$**	**4,382,697**
County Total	**$**	**3,068,597**	**$**	**2,956,624**	**$**	**6,025,221**
Grand Total	**$**	**5,316,562**	**$**	**5,091,356**	**$**	**10,407,918**

SAN FRANCISCO

City Total	**$**	**16,480,936**	**$**	**15,817,770**	**$**	**32,298,706**
County Total	**$**	**8,989,540**	**$**	**8,450,789**	**$**	**17,440,330**
Grand Total	**$**	**25,470,477**	**$**	**24,268,559**	**$**	**49,739,036**

SAN MATEO						
ATHERTON	$	141,480	$	136,280	$	277,760
BELMONT	$	530,914	$	516,806	$	1,047,720
BRISBANE	$	93,931	$	90,728	$	184,659
BURLINGAME	$	592,063	$	551,258	$	1,143,321
COLMA	$	40,429	$	32,580	$	73,010
DALY CITY	$	2,073,456	$	2,002,333	$	4,075,789
EAST PALO ALTO	$	577,408	$	566,223	$	1,143,631
FOSTER CITY	$	640,719	$	614,636	$	1,255,355
HALF MOON BAY	$	241,049	$	234,309	$	475,358
HILLSBOROUGH	$	229,725	$	219,855	$	449,580
MENLO PARK	$	657,903	$	626,703	$	1,284,606
MILLBRAE	$	455,027	$	430,296	$	885,323
PACIFICA	$	760,625	$	698,576	$	1,459,201
PORTOLA VALLEY	$	93,659	$	91,675	$	185,334
REDWOOD CITY	$	1,604,516	$	1,578,222	$	3,182,739
SAN BRUNO	$	874,633	$	836,270	$	1,710,904
SAN CARLOS	$	583,480	$	538,207	$	1,121,687
SAN MATEO	$	1,988,192	$	1,884,216	$	3,872,408
SOUTH SAN FRANCISCO	$	1,300,032	$	1,188,016	$	2,488,049
WOODSIDE	$	114,311	$	109,193	$	223,504
City Total	**$**	**13,593,553**	**$**	**12,946,384**	**$**	**26,539,937**
County Total	**$**	**12,852,053**	**$**	**12,010,056**	**$**	**24,862,109**
Grand Total	**$**	**26,445,606**	**$**	**24,956,440**	**$**	**51,402,046**

SANTA CLARA			
CAMPBELL	$ 824,966	$ 785,670	$ 1,610,635
CUPERTINO	$ 1,174,755	$ 1,073,489	$ 2,248,244
GILROY	$ 1,043,268	$ 1,016,400	$ 2,059,668
LOS ALTOS	$ 594,904	$ 580,951	$ 1,175,855
LOS ALTOS HILLS	$ 168,845	$ 163,767	$ 332,612
LOS GATOS	$ 604,032	$ 581,370	$ 1,185,402
MILPITAS	$ 1,424,842	$ 1,387,358	$ 2,812,200
MONTE SERENO	$ 72,717	$ 68,417	$ 141,134
MORGAN HILL	$ 823,448	$ 805,009	$ 1,628,458
MOUNTAIN VIEW	$ 1,528,147	$ 1,431,177	$ 2,959,324
PALO ALTO	$ 1,314,415	$ 1,254,038	$ 2,568,452
SAN JOSE	$ 19,806,562	$ 19,016,984	$ 38,823,546
SANTA CLARA	$ 2,368,559	$ 2,268,699	$ 4,637,258
SARATOGA	$ 609,754	$ 560,281	$ 1,170,035
SUNNYVALE	$ 2,895,107	$ 2,717,473	$ 5,612,579
City Total	**$ 35,254,321**	**$ 33,711,082**	**$ 68,965,403**
County Total	**$ 28,353,947**	**$ 26,484,424**	**$ 54,838,371**
Grand Total	**$ 63,608,268**	**$ 60,195,506**	**$ 123,803,774**

SOLANO			
BENICIA	$ 549,227	$ 510,736	$ 1,059,963
DIXON	$ 381,281	$ 354,359	$ 735,640
FAIRFIELD	$ 2,191,805	$ 2,066,095	$ 4,257,900
RIO VISTA	$ 165,964	$ 162,728	$ 328,692
SUISUN CITY	$ 572,562	$ 539,719	$ 1,112,281
VACAVILLE	$ 1,854,877	$ 1,791,035	$ 3,645,912
VALLEJO	$ 2,343,453	$ 2,151,493	$ 4,494,947
City Total	**$ 8,059,169**	**$ 7,576,166**	**$ 15,635,336**
County Total	**$ 7,226,249**	**$ 6,914,137**	**$ 14,140,386**
Grand Total	**$ 15,285,418**	**$ 14,490,304**	**$ 29,775,722**

SONOMA			
CLOVERDALE	$ 175,987	$ 166,811	$ 342,798
COTATI	$ 149,479	$ 138,376	$ 287,855
HEALDSBURG	$ 234,922	$ 220,073	$ 454,995
PETALUMA	$ 1,170,550	$ 1,111,276	$ 2,281,826
ROHNERT PARK	$ 809,786	$ 775,079	$ 1,584,865
SANTA ROSA	$ 3,382,496	$ 3,215,005	$ 6,597,502
SEBASTOPOL	$ 152,613	$ 143,151	$ 295,764
SONOMA	$ 220,248	$ 204,871	$ 425,119
WINDSOR	$ 542,338	$ 502,170	$ 1,044,507
City Total	**$ 6,838,418**	**$ 6,476,813**	**$ 13,315,231**
County Total	**$ 10,522,307**	**$ 10,140,996**	**$ 20,663,304**
Grand Total	**$ 17,360,725**	**$ 16,617,809**	**$ 33,978,535**

REGION

City Total	**$ 132,993,112**	**$ 126,902,317**	**$ 259,895,430**
County Total	**$ 117,480,143**	**$ 110,763,179**	**$ 228,243,321**
Grand Total	**$ 250,473,255**	**$ 237,665,496**	**$ 488,138,751**

Note: Cities and counties will see an increase in funding in FY 2017-18, but much larger increases in FY 2018-19 and FY 2019-20 due to phasing in of new taxes, including new vehicle charge which takes effect January 1, 2018 and adjustment to variable rate excise tax, which is adjusted to 17.3 cents/gallon July 1, 2019 and indexed annually thereafter.

Estimate of State Transit Assistance Funding in Senate Bill 1 (Beall/Frazier)

Bay Area Transit Operators Estimates	Baseline Current STA Funding (FY 2016-17 Estimate)	Estimate of *Net Increase in* FY 2017-18*	Estimate of *Net Increase* in FY 2018-19 Estimate*
Statewide STA Funding	**$ 266,873,000**	**$ 166,666,500**	**$ 250,000,000**
Alameda CTC - Corresponding to ACE	$ 186,347	$ 116,275	$ 174,413
Caltrain	$ 3,877,168	$ 2,419,246	$ 3,628,873
County Connection	$ 438,211	$ 273,431	$ 410,147
City of Dixon	$ 3,400	$ 2,121	$ 3,182
ECCTA (Tri Delta Transit)	$ 202,949	$ 126,635	$ 189,952
City of Fairfield	$ 85,636	$ 53,434	$ 80,151
Golden Gate Transit	$ 3,432,072	$ 2,141,518	$ 3,212,280
City of Healdsburg	$ (744)	$ 224	$ 336
Livermore Amador Transit Authority	$ 177,130	$ 110,524	$ 165,786
Marin Transit	$ 639,229	$ 398,861	$ 598,293
Napa Valley Transit Authority	$ 44,265	$ 27,620	$ 41,430
City of Petaluma	$ 9,942	$ 6,204	$ 9,306
City of Rio Vista	$ 530	$ 488	$ 732
SamTrans	$ 2,384,429	$ 1,487,818	$ 2,231,729
City of Santa Rosa	$ 97,323	$ 60,727	$ 91,090
Solano County Transit	$ 199,935	$ 124,754	$ 187,131
Sonoma County Transit	$ 105,377	$ 65,752	$ 98,628
City of Union City	$ 29,967	$ 18,698	$ 28,048
Valley Transportation Authority	$ 9,173,929	$ 5,724,279	$ 8,586,427
VTA - Corresponding to ACE	$ 199,485	$ 124,473	$ 186,710
WCCTA (Western Contra Costa Transit Authority)	$ 229,652	$ 143,296	$ 214,945
WETA	$ 943,358	***$ 588,629***	$ 882,945
SUBTOTAL	***$ 22,459,586***	***$ 14,015,008***	***$ 21,022,533***
AC Transit	$ 6,938,750	$ 4,329,588	$ 6,494,389
BART	$ 15,941,572	$ 9,947,101	$ 14,920,667
SFMTA	$ 29,034,278	$ 18,116,589	$ 27,174,911
SUBTOTAL	***$ 51,914,600***	***$ 32,393,279***	***$ 48,589,967***
Total Revenue Based Funds	**$ 74,374,186**	**$ 46,408,287**	**$ 69,612,500**
Population Based Funds	**$ 26,001,993**	**$ 16,249,984**	**$ 24,375,000**
Bay Area Grand Total	**$ 100,376,179**	**$ 62,658,271**	**$ 93,987,500**

* $250 million assumed statewide. FY 2017-18 amount is estimated at 66 percent of revenue forecast since diesel sales tax increase takes effect November 1, 2017. Also note transit operator shares are based on FY 2014-15 revenue-based STA factors. Actual funding amounts should be expected to change and will not be known until State Controller issues fund estimate in August 2017.

Source: Metropolitan Transportation Commissions. Contact: Rebecca Long at rlong@mtc.ca.gov

Estimate of Annual Transit Capital Funding Distributed via STA Formula in SB 1 (Beall/Frazier)

Bay Area Transit Operators Estimates	FY 2017-18
Statewide Funding for STA Capital	**$ 105,000,000**
Alameda CTC - Corresponding to ACE	$ 73,254
Caltrain	$ 1,524,127
County Connection	$ 172,262
City of Dixon	$ 1,336
ECCTA (Tri Delta Transit)	$ 79,780
City of Fairfield	$ 33,664
Golden Gate Transit	$ 1,349,158
City of Healdsburg	$ 141
Livermore Amador Transit Authority	$ 69,630
Marin Transit	$ 251,283
Napa Valley Transit Authority	$ 17,401
City of Petaluma	$ 3,908
City of Rio Vista	$ 307
SamTrans	$ 937,326
City of Santa Rosa	$ 38,258
Solano County Transit	$ 78,595
Sonoma County Transit	$ 41,424
City of Union City	$ 11,780
Valley Transportation Authority	$ 3,606,299
VTA - Corresponding to ACE	$ 78,418
WCCTA (Western Contra Costa Transit Authority)	$ 90,277
WETA	$ 370,837
SUBTOTAL	***$ 8,829,464***
AC Transit	$ 2,727,643
BART	$ 6,266,680
SFMTA	$ 11,413,463
SUBTOTAL	***$ 20,407,786***
Total Revenue Based Funds	**$ 29,237,250**
Population Based Funds	**$ 10,237,500**
Bay Area Grand Total	**$ 39,474,750**

Note: Shares are based on FY 2014-15 operator shares. Actual amount will vary based on each transit operator's share of statewide qualifying revenue.

Estimate of Bay Area STIP Funding Over 10 Years from SB 1 (Beall/Frazier)

(Dollars in millions)

County		
Alameda	$	28.56
Contra Costa	$	19.54
Marin	$	5.34
Napa	$	3.51
San Francisco	$	14.49
San Mateo	$	14.76
Santa Clara	$	33.93
Solano	$	8.85
Sonoma	$	10.88
Region	**$**	**139.86**
Statewide	**$**	**825.00**

Note: Amount shown depicts a forecast of *change* from current law with price-based excise tax, not a forecast of STIP funding levels. They can be expected to be substantially higher than today, given gas tax is currently only 9.8 cents/gallon but under SB 1 will be set at 17.3 cents/gallon on July 1, 2019 and indexed for inflation annually thereafter.

Source: Metropolitan Transportation Commissions. Contact: Rebecca Long at rlong@mtc.ca.gov

MTC OVERVIEW OF SB 1 (BEALL AND FRAZIER)

NEW & AUGMENTED FUNDING PROGRAMS

Below is a summary of the funding provided by program and the new revenue sources authorized in Senate Bill 1 (Beall and Frazier).

Road Maintenance and Rehabilitation Program

SB 1 establishes the Road Maintenance and Rehabilitation Program (RMRP) to address deferred maintenance on the state highway and local street and road systems. The California Transportation Commission (CTC) will allocate the funds and is required to develop guidelines by January 1, 2018. The bill provides that funds shall be used for projects that include, but aren't limited to, the following:

- Road maintenance and rehabilitation
- Safety projects
- Railroad grade separations
- Complete street components, including active transportation purposes, pedestrian and bicycle safety projects, transit facilities, and drainage and stormwater capture projects in conjunction with any other allowable project
- Traffic control devices

The RMRP, which would receive approximately $3.7 billion annually once all new revenue streams take effect, is funded by the newly established Road Maintenance and Rehabilitation Account (RMRA), which receives four sources of new revenue:

- A new 12-cent/gallon gasoline excise tax, effective November 1, 2017.
- Monies remaining from a new vehicle registration surcharge (called a Transportation Improvement Fee) after $600 million annually is set aside for public transit, intercity/commuter rail and a new Congested Corridors program. These programs are described in more detail on pages 2-5. The vehicle surcharge takes effect on January 1, 2018.
- A new $100/year zero-emission vehicle registration surcharge, which takes effect on July 1, 2020.
- 50 percent of the 20-cent/gallon diesel excise tax increase, effective November 1, 2017.

RMRP Takedowns

Before program funds are distributed to cities, counties and Caltrans, there are several annual takedowns, which are bulleted below:

- Cost of administration – unspecified
- $200 million for a self-help counties partnership program limited to counties that have voter-approved dedicated transportation taxes or uniform developer fees dedicated to transportation. Funds would be continuously appropriated to a county and each city within the county for road maintenance and rehabilitation purposes.
- $100 million for the Active Transportation Program
- $400 million to Caltrans for bridge and culvert maintenance and rehabilitation
- $25 million for Freeway Service Patrol
- $25 million for local planning grants to be administered by Caltrans

- $5 million for the California Workforce Development Board to assist local agencies to implement policies that promote pre-apprenticeship training programs from FY 2017-18 through FY 2021-22.
- $7 million for transportation research and workforce training including $5 million for the University of California and $2 million for the California State University.

Local Street & Road Funding
SB 1 continuously appropriates 50 percent of the RMRA revenues remaining after the takedowns described above to cities and counties using the same formula that applies to the existing base 18-cent per gallon gasoline excise tax. The bill includes a "maintenance of effort" requirement for local funds contributed to street and road repairs to help ensure that the new funding augments existing budgets for road repairs. Specifically, it requires each city and county to spend no less than the annual average from its general fund during 2009-10 through 2011-12. It also requires that a local jurisdiction submit a detailed list of proposed projects to be funded to the CTC prior to receiving an allocation, but authorizes cities and counties to fund projects outside of that list in accordance with local needs and priorities, so long as they are consistent with the program's project eligibility provisions. If a city or county can demonstrate that it has attained a pavement condition index of 80 or higher, it may spend the funds on other transportation priorities.

State Highway Maintenance & Rehabilitation
The remaining 50 percent of RMRA revenues are provided to Caltrans for maintenance of the state highway system or for purposes of the State Highway Operations and Protection Program (SHOPP). The bill requires Caltrans to report annually to the CTC on its use of these funds, including detailed project descriptions, and its progress to achieving the performance goals listed in the accompanying memo. In addition, the CTC is required to report annually on the department's progress and may withhold funds if it determines funding is not being spent appropriately.

Requirements and Policies Applicable to RMRP Funding
SB 1 provides that, to the extent possible and cost effective, Caltrans and local agencies:

- Use materials that reduce the life cycle cost and minimize greenhouse gas (GHG) emissions.
- Accommodate advance automotive technologies, such as charging or fueling for zero-emission vehicles.
- Include features in the project that make it more resilient to climate change risks, such as fire, flood and sea level rise.
- Incorporate complete streets elements that improve the quality of bicycle and pedestrian facilities, where feasible and practicable.

There is also a requirement that by July 1, 2023, Caltrans and local agencies that receive RMRA funds through follow new workforce training guidelines developed by the California Workforce Development Board, pursuant to SB 1.

PUBLIC TRANSIT FUNDING

Public Transit Formula Funding

SB 1 provides a significant infusion of funding for public transit, including formula-based and competitive funding. The State Transit Assistance (STA) program, the state's flexible transit funding program which may be used for capital or operating purposes, would be boosted by approximately $250 million per year from an increase in the diesel sales tax rate of 3.5 percent. These funds would augment the existing STA program and would not be subject to additional requirements or conditions. MTC estimates the Bay Area would receive approximately $70 million more per year in revenue-based STA funds and $24 million more per year in population-based funds.

Another $105 million per year derived from a new Transportation Improvement Fee (TIF) would also be distributed using the STA formula but would be limited largely to capital improvements focused on modernizing transit vehicles and facilities. The Bay Area would receive approximately $39 million per year total from this capital-only component, including $29 million in revenue-based STA funds and $10 million more per year in population-based funds. Finally, the bill provides a substantial one-time infusion and an annual supplement to the competitive Transit and Intercity Rail Capital Program (TIRCP), as well as new funding for intercity and commuter rail, as described below.

Transit and Intercity Rail Capital
SB 1 provides additional one-time and ongoing funding to the TIRCP, a heavily oversubscribed program that is currently reliant upon somewhat unpredictable Cap-and-Trade funds and administered by the California State Transportation Agency (CalSTA). The TIRCP would receive a one-time infusion of at least $236 million as a result of a General Fund loan repayment as well as an additional $245 million annually from the TIF starting in FY 2018-19. This amount is set forth in the statute and will not escalate even though the TIF rate is indexed to inflation. In FY 2017-18, the TIRCP should receive approximately half the annual amount ($123 million) from the TIF since the new fee is not effective until January 1, 2018.

Intercity and Commuter Rail Funding
The bill boosts funding for intercity rail and commuter rail by dedicating a new 0.5 percent diesel sales tax to this purpose**.** Similar to the TIRCP, projects would be selected by CalSTA**.** Of the approximately $37.5 million available each year, funds would be distributed as follows:

- 50 percent to CalSTA for "state-supported intercity rail services." Of that amount, at least 25 percent shall be allocated to each of the state's three intercity rail corridors that provide regularly scheduled intercity rail service (the Capitol Corridor, San Joaquin, Pacific Surfliner routes).
- 50 percent to CalSTA to be allocated to public agencies responsible for commuter rail service. For FY 2018-19 and FY 2019-20, each of the state's five commuter rail agencies (including ACE, Caltrain and SMART) would receive 20 percent. Subsequent to that, CalSTA would allocate funds pursuant to guidelines to be adopted by July 1, 2019.
- Funds may be spent for operations or capital.
- Similar to the STA program, the actual amount of revenue each year will depend on diesel prices and sales.

OTHER PROGRAMS

State Transportation Improvement Program (STIP) Funding
While the bill doesn't include any specific provisions applicable to the STIP, effective July 1,

2019, it boosts funding for the STIP by virtue of eliminating the annual adjustment pegged to the price of fuel for what is known as the "price-based excise tax." Instead, SB 1 sets the rate at 17.3 cents/gallon on July 1, 2019, plus an annual adjustment to keep pace with inflation that will be begin in July 1, 2020.[1] This tax is a major source of STIP funding, receiving 44 percent of its revenue after backfilling the SHOPP for the loss of weight fees. Since the existing rate of 9.8 cents/gallon already offsets weight fees, any increase above that is distributed directly according to a 44/44/12 percent formula where the other 44 percent goes to cities and counties for local streets and roads, and the 12 percent goes to Caltrans for highway maintenance and rehabilitation.

While it's impossible to predict exactly how this will affect STIP funding in the future relative to what would have occurred if the rate were pegged to the price of fuel, the Department of Finance estimates a net benefit to the STIP over 10 years of $1.1 billion, or $825 million for the Regional Transportation Improvement Program. For the Bay Area, this amounts to approximately $140 million over 10 years. This estimate may be on the conservative side. If we assume the price-based excise tax would not go above the 11.7 cents/gallon rate in effect on July 1, 2017 then the 17.3 cents/gallon rate amounts to a 5.6 cents/gallon increase – equating to $840 million more per year statewide, including approximately $370 million per year in new STIP funding statewide. Note that this increase will not begin until the FY 2019-20 year.

State-Local Partnership Program for "Self-Help" Counties
As noted above, SB 1 authorizes $200 million per year to be continuously appropriated for a new program for counties that have dedicated transportation funding from uniform developer fees or voter-approved taxes. The program is similar to the State-Local Partnership Program established by Proposition 1B except it is limited to counties, so unfortunately transit agencies with voter-approved taxes are not eligible. Another important difference is that funds are to be distributed to counties and each city within the county and are limited to local road maintenance purposes as set forth in the RMRP program (which does include complete streets elements). The bill requires the CTC to adopt guidelines for the program on or before January 1, 2018.

Bicycle and Pedestrian Access Improvements
In addition to augmenting the Active Transportation Program by $100 million per year, SB 1 requires that Caltrans update the Highway Design Manual to incorporate the "complete streets" design concept. No other limitations or conditions on the use of funds are included in the bill.

Local Planning Grants
As noted above, the bill provides $25 million from the RMRA to be available to Caltrans for local planning grants on an annual basis, subject to appropriation. The bill states that the purpose of the grants is to "encourage local and regional planning that furthers state goals as provided in the regional transportation guidelines" adopted by the CTC. The bill requires Caltrans to develop a grant guide in consultation with the Air Resources Board, the Governor's Office of Planning and Research and the Department of Housing and Community Development. In addition, up to $20 million is available on a one-time basis from FY 2018 through FY 2020 for local and

[1] 17.3 cents/gallon is the rate that was set when the price-based excise tax was established as part of the Gas Tax Swap, replacing the state portion of the sales tax on gasoline (see AB x8-6 (2010), SB 70 (2010) and AB 105 (2011). It was set at this rate so as to be revenue neutral to the sales tax on fuel. The legislation required an annual adjustment to maintain this revenue neutrality and it has caused a steep cut in the rate, currently set at 9.8 cents/gallon but scheduled to rise to 11.7 cents/gallon on July 1, 2017.

regional agencies for climate change adaptation planning. This is funded from the Public Transportation Account as a result of a General Fund loan repayment.

Congested Corridors Program
The bill establishes a new "Solutions for Congested Corridors Program" and authorizes $250 million per year for annual appropriation in the budget act from revenue generated by the TIF. The program, to be administered by the California Transportation Commission (CTC), focuses on multi-modal solutions to the most congested corridors in the state and takes a performance-based approach. To qualify for funding a project must be included in a "comprehensive corridor plan designed to reduce congestion in highly traveled corridors by providing more transportation choices for residents, commuters and visitors to the area of the corridor while preserving the character of the local community and creating opportunities for neighborhood enhancement projects."

Eligible projects for this new program include improvements to state highways, public transit facilities, local streets and roads, bicycle and pedestrian facilities, and restoration or preservation work that protects critical local habitat or open space. Highway capacity expansion projects are not eligible, with the exception of high-occupancy vehicle lanes (HOV) and high-occupancy toll (HOT) lanes or non-general purpose lane improvements designed primarily to improve safety for all modes of travel, such as auxiliary lanes, truck-climbing lanes or dedicated bicycle lanes.

The bill requires the CTC to score each project on the following criteria:

- Safety
- Congestion
- Accessibility
- Economic development and job creation and retention
- Furtherance of state and federal air quality and GHG reduction
- Efficient land use
- Matching funds
- Project deliverability

Either Caltrans or agencies responsible for developing the Regional Transportation Improvement Program (RTIP) (MTC in the Bay Area) can nominate projects, but a maximum of 50 percent can be awarded to projects nominated *only* by Caltrans. With respect to how projects will be scored, the bill emphasizes that preference will be given to projects that are developed as a result of collaboration between Caltrans and regional or local agencies "that reflect a comprehensive approach to addressing congestion and quality-of-life issues within the affected corridor through investment in transportation and related environmental solutions."

As for the mechanics of the program, the CTC is required to develop guidelines for the program in consultation with the Air Resources Board and after conducting at least one hearing in northern California and one hearing in southern California. CTC is also required to provide draft guidelines to the Joint Legislative Budget Committee and the transportation policy committees in each house and adopt the guidelines no sooner than 30 days after that submission to the Legislature. The bill requires the CTC to adopt an initial program based on the first appropriation of funds, but such program may cover a multiyear programming period. Subsequently, the program shall be adopted on a biennial basis. Beginning in March 2019, the CTC is required to

provide project updates in its annual report to the Legislature, including an assessment of how each project is performing relative to the quantitative and qualitative measurements outlined in its application.

Trade Corridors
SB 1 creates a new Trade Corridor Enhancement Account, and allocates to this account 50 percent of the diesel excise tax increase, or approximately $300 million annually. In an unusual move, the bill provides the Legislature with full discretion over project selection for this program specifying only that funds shall be available for "corridor-based freight projects nominated by local agencies and the state."

Advance Mitigation
SB 1 requires $30 million to be set aside annually from FY 2017 through FY 2020 from funding appropriated for the STIP and the SHOPP for an Advance Mitigation Program to protect natural resources through project mitigation, accelerate project delivery and to fully mitigate environmental impacts of transportation projects. The bill provides that the annual budget act or subsequent legislation may provide additional provisions for the program.

Job Training/Contracting Provisions
SB 1 requires that Caltrans develop a plan by January 1, 2020 to increase by up to 100 percent the dollar value of contracts and procurements awarded to small business, disadvantaged business enterprises, and disabled veteran business enterprises. In addition, the bill requires the Legislature appropriate $5 million per year for five years starting in FY 2017-18 to the California Workforce Development Board to assist local agencies with promoting pre-apprenticeship programs. As noted above, SB 1 also requires Caltrans and cities and counties receiving funding from the RMRA follow guidelines to be developed by the California Workforce Development Board regarding pre-apprenticeship training programs no later than January 1, 2023.

EFFICIENCY, ACCOUNTABILITY & OTHER RELATED PROVISIONS

New Caltrans Audit Office Established
The bill requires the creation of an Independent Office of Audits and Investigations within Caltrans. The director of the office, whose title would be inspector general, would be appointed for a six-year term by the Governor and confirmed by the Senate, with significant restrictions and transparency required for his/her removal from office. The office would be responsible for ensuring compliance by Caltrans and all entities receiving state and federal transportation funds with state and federal requirements and ensuring Caltrans follows accounting standards and practices and manages its programs in a financially responsible manner. The inspector general shall be required to report annually on any audit or investigation findings and recommendations.

Capital Outlay Support and SHOPP Oversight Strengthened
The bill adds additional transparency requirements with respect to Caltrans support funding for projects in the State Highway Operation & Protection Program (SHOPP), requiring that such costs be identified up front for every SHOPP project by project phase and a delivery date for each project phase, including "project approval," be provided. In addition, starting July 1, 2017, the bill requires that the CTC allocate the department's capital outlay support (COS) resources by project phase to provide greater transparency in the development of the Caltrans budget.

Caltrans is Required to Implement Efficiency Measures
The bill requires Caltrans to implement efficiency measures with goal of saving $100 million/year in savings to invest in maintenance and rehabilitation of the state highway system. No specific efficiency measures are suggested in the bill.

OVERVIEW OF REVENUE INCREASES

Funding Source	**Estimate of 10-Year Revenue *(in 1,000s)***
12-cent per gallon gas tax	$24,400,000
Vehicle Registration Surcharge (Transportation Improvement Fee)	$16,300,000
20-cent/gallon diesel excise tax	$7,300,000
4% increase in diesel sales tax	$3,500,000
$100 zero emission vehicle fee	$200,000
General Fund loan repayments	$706,000

Gasoline and Diesel Fuel Tax Increases
SB 1 increases the fuel tax on gasoline by 12-cents per gallon and the diesel excise tax by 20-cents per gallon effective November 1, 2017. In addition, the bill eliminates the variable portion of the gasoline excise tax, which is currently set at 9.8-cents per gallon, but is scheduled to rise to 11.7-cents per gallon on July 1, 2017 due to the statutorily required adjustments that the Board of Equalization makes each year based on the price of fuel. On July 1, 2019, the bill restores the portion of the gas tax to 17.3-cent per gallon rate that was in effect when the gasoline tax swap was enacted in 2010. Given the Board of Equalization forecasts an increase in gasoline prices over the next several years, establishing a rate of 17.3-cent per gallon on July 1, 2019 may in fact not constitute an increase at all. Effective July 1, 2020, all fuel taxes will be indexed annually each July by the Department of Finance based on the California Consumer Price Index.

New Annual Vehicle Registration Surcharge
Section 31 of the bill creates a new annual Transportation Improvement Fee (TIF), based on the value of the vehicle, as shown below, which would go into effect on January 1, 2018. Commercial vehicles weighing more than 10,000 pounds would be exempt from the tax. Effective January 1, 2020 and annually thereafter, the fee would be indexed annually by the Department of Finance based on the Consumer Price Index. The new fee is estimated to generate $16.3 billion over ten years, with $350 million annually dedicated to public transit and TIRCP, $250 million set-aside for the new Congested Corridor Program and the remaining revenues allocated to the new RMRA account.

Vehicle's Value	**Amount of Fee**
$0-$4,999	$25
$5,000-$24,999	$50
$25,000-$34,999	$100
$35,000-$59,999	$150

$60,000 +	$175

Diesel Sales Tax
SB 1 increases the diesel sales tax rate by an additional 4 percent, bringing it to a total of 13 percent. The new funds would be deposited in the Public Transportation Account. Of this 4 percent rate, 3.5 percent is for the State Transit Assistance (STA) program, while 0.5 percent is for the new Intercity and Commuter Rail program.

OTHER PROVISIONS AND RELATED LEGISLATION

Zero-Emission Vehicle Registration Surcharge
SB 1 includes a $100 vehicle registration surcharge applicable to zero-emission motor vehicles model year 2020 and later vehicle that takes effect on July 1, 2020. The charge is indexed to inflation with the first adjustment scheduled for January 1, 2021 and subsequent adjustments to be made every January 1 thereafter. The charge is estimated to generate about $20 million per year.

Truck Emissions
SB 1 includes a provision that limits the State Air Resources Board (ARB) from requiring truck owners to retire or retrofit trucks that meet existing ARB emissions standards (by 2023, all trucks must have 2010 model year engines or equivalent) before they are 13 years old or reach 800,000 miles. According to the California Trucking Association, this will ensure truck owners have time to recoup their investment in more efficient technology before being faced with a newer, stricter mandate. Environmental and health advocates raised concerns that the provision was overly broad and would prevent regulators from developing other air quality rules, such as capping emissions at warehouses and ports. In response, SB 1 was amended to clarify that the provision is not intended to undermine regional efforts. Though ARB expressed support for the deal, it was not sufficient to alleviate the aforementioned concerns and a number of groups opposed the bill.

Related Legislation
In parallel to the negotiations on SB 1 to secure two-thirds support, several other bills were amended including, SB 132, a budget trailer bill and SB 496, a companion bill that must pass for the trailer bill to take effect. The April 6th version of SB 132 includes several very large earmarks, notably:

- 427 million for the Riverside County Transportation Efficiency Corridor for five specific projects, including grade separation projects, bridge widening, an interchange and the 91 Toll Connector to Interstate 15 North.
- $400 million for the extension of the Altamont Commuter Express to Ceres and Merced from the TIRCP
- $100 million for the University of California, Merced Campus Parkway Project from the State Highway Account

SB 496 (Canella), whose provisions were recently amended into a bill originally authored by Senate President Pro Tempore Kevin DeLéon (who remains as a coauthor) now pertains to indemnity agreements with design professionals. SB 496 provides that with respect to all contracts for design services entered into after January 1, 2018, indemnity agreements are unenforceable, except under certain circumstances. The bill is similar – though not identical – to SB 885 (Wolk, 2016), which MTC opposed last year and which did not ultimately reach the

Governor’s desk. MTC staff will review the bill in detail and with confer with our public agency partners and the Self-Help Counties Coalition, which actively opposed SB 885.

SB 595 (Beall)
Regional Measure to Improve Mobility in Bay Area Bridge Corridors
Fact Sheet

ISSUE

Transportation infrastructure is key to supporting the San Francisco Bay Area's strong economy and maintaining California's leadership in high-tech and high-paying jobs. Traffic congestion on the region's freeways, overcrowding on BART, Caltrain, ferries and buses in the toll bridge corridors is eroding the Bay Area's quality of life, access to jobs, cultural and educational opportunities, and undermining job creation and retention. The traffic chokepoints are especially acute in the corridors of the seven state-owned toll bridges that are critical east-west and north-south arteries that bind the Bay Area together.

BACKGROUND

Bay Area voters have led California's "self-help" movement in supporting new local revenue for congestion relief, including strong voter support for toll increases in 1988 and 2004. In 1988, the Legislature enacted SB 45 (Lockyer), placing on the ballot Regional Measure 1, which standardized all bridge tolls at $1 to help build the new Benicia-Martinez Bridge and the Carquinez Bridge replacement, among other projects. The measure was approved by 70 percent.

In 2003, Senate Bill 916 (Perata) authorized Regional Measure 2, a $1 toll increase to fund transit and roadway improvements in the bridge corridors. The measure helped build numerous transportation improvements, including the Caldecott Tunnel's 4th Bore, BART to Warm Springs Extension (the first phase of BART to Silicon Valley), BART seismic retrofit and HOV lanes on Interstate 80, among other major projects. The measure was approved by 57 percent. In 2005, the Legislature delegated administration of all bridge toll revenue to the Bay Area Toll Authority, the Metropolitan Transportation Commission (MTC)'s affiliate agency which shares the same governing board.

THIS BILL

SB 595 would provide voters in the nine Bay Area counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma) the opportunity to jumpstart the next generation of critical transportation improvements in the bridge corridors funded by an increase in bridge tolls. The bill would require the MTC to place a measure on the ballot in all nine counties. The expenditure plan, the toll level and the timing of the vote are not yet specified in the bill and are subject to discussion with members of the Legislature and key stakeholders. SB 595 will include strong accountability provisions to ensure that funds are invested according to the voter-approved plan.

While SB 1 (Beall) provided a substantial increase in state funds focused primarily on repairing local roads and the state highway system – the state's *aging* pains – SB 595 will address the Bay Area's *growing* pains, by improving mobility and enhancing travel options in the region's bridge corridors.

STATUS/VOTES

SUPPORT

Metropolitan Transportation Commission

OPPOSITION

None on file

FOR MORE INFORMATION

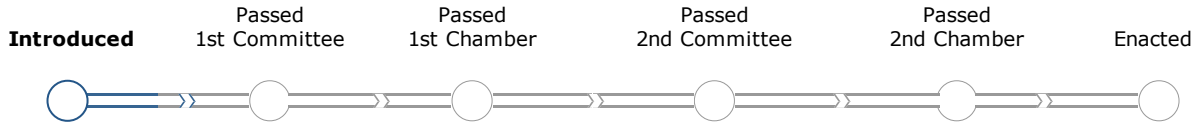
Staff Contact: Lynne Jensen Andres
Lynne.Andres@sen.ca.gov (916) 651-4015

Status actions entered today are **listed in bold.**

File name: TWIC-TransLeg

California

1. CA AB 13



Author: Eggman (D)

Title: 580 Marine Highway

Introduced: 12/05/2016

Disposition: Pending

Location: Assembly Transportation Committee

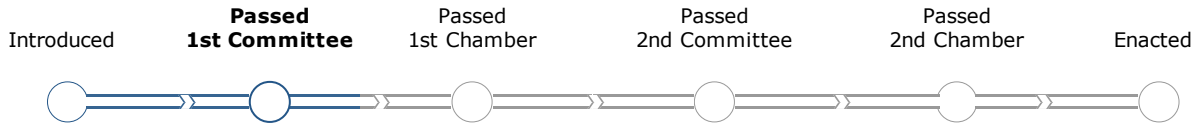
Summary: Requires the Department of Transportation to implement and oversee the 580 Marine Highway corridor project to reduce traffic by facilitating a permanent shift in container traffic away from truck transport to marine transport between the Port of Oakland and the Port of Stockton. Requires that the project be funded by an appropriation in the Budget Act of 2017.

Status: 01/19/2017 To ASSEMBLY Committee on TRANSPORTATION.

CSAC: Watch

LCC: Watch

2. CA AB 17



Author: Holden (D)

Title: Transit Pass Program: Free or Reduced-Fare Passes

Introduced: 12/05/2016

Disposition: Pending

Committee: Assembly Appropriations Committee

Hearing: 05/03/2017 9:00 am, State Capitol, Room 4202

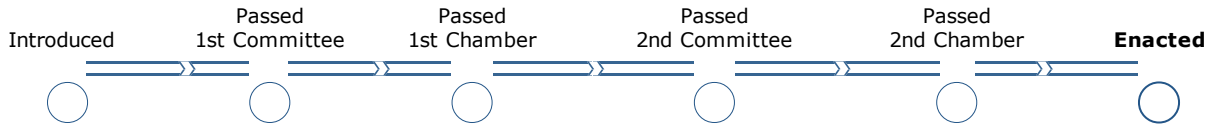
Summary: Creates the Transit Pass Program. Requires the Controller of the state to allocate moneys made available for the program to support transit pass programs that provide free or reduced-fare transit passes to specified pupils and students.

Status: 04/24/2017 From ASSEMBLY Committee on TRANSPORTATION: Do pass to Committee on APPROPRIATIONS. (11-3)

CSAC: Watch

LCC: Watch

3. CA AB 28



Author: Frazier (D)

Title: Department of Transportation: Review: Federal Program

Introduced: 12/05/2016

Enacted: 03/29/2017

Disposition: Enacted

Effective Date: 03/29/2017 [code impact]

Location: Chaptered

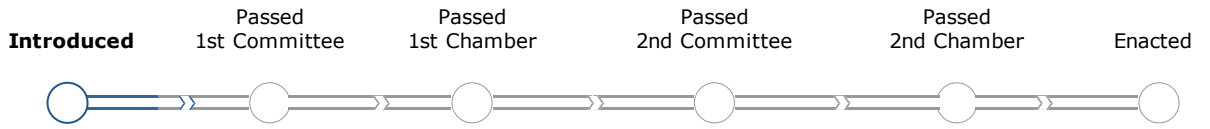
Chapter: 2017-4

Summary: Reinstates the operation of existing law which provided that the state consents to the jurisdiction of the federal courts with regard to the compliance, discharge, or enforcement of responsibilities it assumed as a participant in an interstate surface transportation project delivery pilot program for environmental review. Makes a repeal of that provision on a specified date.

Status: 03/29/2017 Enrolled.
03/29/2017 Signed by GOVERNOR.
03/29/2017 Chaptered by Secretary of State. Chapter No. 2017-4

MTC: Support

4. CA AB 65



Author: Patterson (R)

Title: Transportation Bond Debt Service

Introduced: 12/13/2016

Disposition: Pending

Location: Assembly Transportation Committee

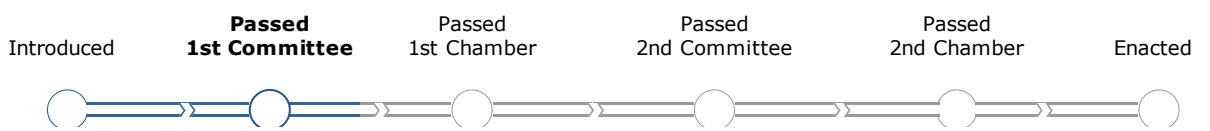
Summary: Amends an existing law which provides for transfer of certain vehicle weight fee revenues to the Transportation Debt Service Fund to reimburse the General Fund for payment of current year debt service on certain general obligation bonds. Excludes from payment the debt service for Proposition 1A bonds.

Status: 01/19/2017 To ASSEMBLY Committee on TRANSPORTATION.

CSAC: Watch

LCC: Watch

5. CA AB 179



Author: Cervantes (D)

Title: California Transportation Commission

Introduced: 01/18/2017

Last Amend: 04/20/2017

Disposition: Pending

Committee: Assembly Appropriations Committee

Hearing: 05/03/2017 9:00 am, State Capitol, Room 4202

Summary: Requires a voting member of the California Transportation Commission to have worked directly with those communities in the state that are most significantly burdened by, and vulnerable to, high levels of pollution, including, but not limited to, those communities with racially and ethnically diverse populations or with low-income populations. Requires the commission and the Air Resources Board to hold a specified number of meetings per year to coordinate implementation of transportation policies.

Status: 04/24/2017 From ASSEMBLY Committee on TRANSPORTATION: Do pass to Committee on APPROPRIATIONS. (9-5)

CSAC: Watch

LCC: Watch

6. CA AB 342

Introduced | **Passed 1st Committee** | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Chiu (D)

Title: Vehicles: Automated Speed Enforcement: Five-Year Pilot

Introduced: 02/07/2017

Last Amend: 04/06/2017

Disposition: Pending

Location: Assembly Transportation Committee

Summary: Authorizes the City of San Jose and the City and County of San Francisco to implement a pilot program utilizing an automated speed enforcement system for speed limit enforcement on certain streets. Provides that a speed violation that is recorded by an ASE system is subject to a specified civil penalty.

Status: 04/24/2017 In ASSEMBLY Committee on TRANSPORTATION: Heard, remains in Committee.

CSAC: Watch

LCC: Watch

7. CA AB 467

Introduced | **Passed 1st Committee** | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Mullin (D)

Title: Local Transportation Authorities: Transactions and Tax

Introduced: 02/13/2017

Last Amend: 04/17/2017

Disposition: Pending

Committee: Assembly Elections and Redistricting Committee

Hearing: 05/10/2017 9:00 am, State Capitol, Room 444

Summary: Exempts, upon the request of an authority, a county elections official from including the entire adopted transportation expenditure plan in the voter information handbook, if the authority posts the plan on its Internet Web site, and the sample ballot and the voter information handbook sent to voters include information on viewing an electronic version of the plan and obtaining a printed copy at no cost.

Status: 04/17/2017 In ASSEMBLY. Read second time and amended. Re-referred to Committee on ELECTIONS AND REDISTRICTING.

CSAC: Support

LCC: Watch

8. CA SB 1

Introduced | Passed 1st Committee | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | **Enacted**

Author: Beall (D)

Title: Transportation Funding

Introduced: 12/05/2016

Enacted: 04/28/2017

Disposition: Enacted

Effective Date: 04/28/2017 [code impact]

Location: Chaptered

Chapter: 5

Summary: Creates the Road Maintenance and Rehabilitation Program to address deferred maintenance on the state highway and local street and road systems. Provides for certain funds, creation of the Office of the Transportation Inspector General, certain loan repayments, diesel fuel excise tax revenues, the appropriations to the Low Carbon Transit Operations Program, gasoline excise taxes, a certain CEQA exemption, an Advance Mitigation Program, and a certain surface transportation project delivery program.

Status: 04/28/2017 Signed by GOVERNOR.
04/28/2017 Chaptered by Secretary of State. Chapter No. 5

9. CA SB 80

Introduced | Passed 1st Committee | **Passed 1st Chamber** | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Wieckowski (D)

Title: California Environmental Quality Act: Notices

Introduced: 01/11/2017

Last Amend: 02/14/2017

Disposition: Pending

Location: ASSEMBLY

Summary: Amends the California Environmental Quality Act. Requires a lead agency to post certain notices on the agency's Internet Web site and to offer to provide those notices by e-mail. Requires a county clerk to post notices regarding an environmental impact report or a negative declaration on the county's Internet Web site. Requires the filing of a notice in certain cases.

Status: 04/24/2017 In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY. (27-7)

CSAC: Watch

LCC: Watch

10. CA SB 595

Introduced | **Passed 1st Committee** | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Beall (D)

Title: Metropolitan Transportation Commission: Toll Bridge

Introduced: 02/17/2017

Last Amend: 04/18/2017

Disposition: Pending

Location: Senate Appropriations Committee

Summary: Requires the City of County of San Francisco and the other 8 counties in the San Francisco Bay area to conduct a special election on a proposed unspecified increase in the amount of the toll rate charged on the state-owed toll bridges in that area to be used for unspecified projects and programs. Makes the Bay Area Toll Authority responsible for the programming, administration, and allocation of toll revenues from the state-owned toll bridges in the San Francisco Bay area.

Status: 04/25/2017 From SENATE Committee on TRANSPORTATION AND HOUSING: Do pass to Committee on APPROPRIATIONS. (9-3)

CSAC: Watch

LCC: Watch

11. CA SCA 2

Introduced | **Passed 1st Committee** | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Newman (D)

Title: Motor Vehicle Fees and Tax: Restriction on Expenditures

Introduced: 01/18/2017

Last Amend: 03/30/2017

Disposition: Pending

File: A-10

Location: Senate Inactive File

Summary: Requires revenues derived from vehicle fees imposed under a specified chapter of the Vehicle License Fee Law to be used solely for transportation purposes. Prohibits these revenues from being used for the payment of principal and interest on state transportation general obligation bonds. Restricts portions of the sales and use tax on diesel fuel to expenditure on certain transportation planning or mass transportation purposes. Requires those revenues to be deposited in the Public Transportation Account.

Status: 04/17/2017 In SENATE. From third reading. To Inactive File.

CSAC: Support

LCC: Watch

12. CA SCA 6

Introduced | **Passed 1st Committee** | Passed 1st Chamber | Passed 2nd Committee | Passed 2nd Chamber | Enacted

Author: Wiener (D)

Title: Local Transportation Measure: Special Taxes: Voter

Introduced: 02/13/2017

Last Amend: 05/01/2017

Disposition: Pending

Committee: Senate Transportation and Housing Committee

Hearing: 05/09/2017 1:30 pm, John L. Burton Hearing Room (4203)

Summary: Requires that the imposition, extension, or increase by a local government of a special tax as may otherwise by authorized by law, whether a sales or transactions and use tax, parcel tax, or other tax for the purpose of providing funding for transportation purposes be submitted to the electorate by ordinance and approved by a certain percentage of the voters voting on the proposition.

Status: 05/01/2017 From SENATE Committee on TRANSPORTATION AND HOUSING with author's amendments.
05/01/2017 In SENATE. Read second time and amended. Re-referred to Committee on TRANSPORTATION AND HOUSING.

CSAC: Support

LCC: Watch

Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE **7.**

Meeting Date:	05/08/2017
Subject:	COMMUNICATION/News Clippings
Submitted For:	TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE,
Department:	Conservation & Development
Referral No.:	N/A
Referral Name:	N/A
Presenter:	John Cunningham, DCD
Contact:	John Cunningham (925)674-7833

Referral History:
Communication items are added to the TWIC agenda on an as-needed basis.

Referral Update:
Communication Received:

4/24/17 Memo: Randy Iwasaki to the Regional Transportation Planning Committees (RTPCs): This is a monthly memo from CCTA to the RTPCs reporting major actions of the Contra Costa Transportation Authority Board.

Recommendation(s)/Next Step(s):
RECEIVE communication and DIRECT staff as appropriate.

Fiscal Impact (if any):
N/A

Attachments

April 19 2017 RTPC Memo

CONTRA COSTA
transportation
authority

MEMORANDUM

To: Matt Todd, TRANSPAC
Lisa Bobadilla, SWAT
Jamar Stamps, TRANSPLAN, TVTC
John Nemeth, WCCTAC
Ellen Clark, LPMC

From: MRE for Randell H. Iwasaki, Executive Director

Date: April 24, 2017

Re: Items of interest for circulation to the Regional Transportation Planning Committees (RTPCs)

At its April 19, 2017 meeting, the Authority discussed the following items, which may be of interest to the Regional Transportation Planning Committees:

1. **Review and Approve Proposed Revised Scope and Schedule for the 2017 Countywide Transportation Plan (CTP) Update and EIR.** In accordance with Authority action taken in March 2017, the Draft CTP and Environmental Impact Report (EIR) will rely upon the most recently adopted planning and forecasting information available from the regional agencies, namely, MTC's 2013 Regional Transportation Plan (RTP) and ABAG's Projections 2013. Staff seeks Authority approval of the proposed revisions. *The Authority Board reviewed and approved the proposed revised scope and schedule for the 2017 Countywide Transportation Plan Update and EIR.*

2. **Authorize the Issuance of up to $100 Million Aggregate Principal Amount of Contra Costa Transportation Authority Sales Tax Revenue Bonds for the Purpose of Financing Measure J Projects.** The Authority's Strategic Plan calls for the periodic issuance of revenue bonds to finance construction and delivery of Measure J projects. The next bond installment, the Series 2017A Bonds, issues up to $100 million in the form of fixed-rate sales tax revenue bonds. All required documents have been prepared in substantially final form and staff is seeking approval to take the necessary steps to complete the transaction in May 2017. Staff seeks approval of Resolution 17-05-A providing for the issuance of the Series 2017A Bonds in an amount not to exceed $100 million. *The Authority Board approved Resolution No. 17-05-A*

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authorizing the issuance of up to $100 million aggregate principal amount of Contra Costa Transportation Authority Sales Tax Revenue Bonds for the purpose of financing Measure J projects.