



Transportation Authority of Marin

Marin Coalition
April 3, 2019



Transportation Authority of Marin

- TAM is the Congestion Management Agency (CMA), the Sales Tax Authority (2004 Measure A and 2018 Measure AA) and the Vehicle Registration Fee Authority (2010 Measure B)
- TAM is a Joint Powers Authority governed by a 16 member board consisting of the five County Board of Supervisors and a representative from each of Marin's 11 Cities and Towns



Current TAM Board Membership

TAM BOARD OF COMMISSIONERS

Damon Connolly, County of Marin District 1

Eric Lucan, City of Novato

Katie Rice, County of Marin District 2

Brian Colbert, Town of San Anselmo

Kathrin Sears, County of Marin District 3

Gary O. Phillips, City of San Rafael

Dennis Rodoni, County of Marin District 4

John Reed, Town of Fairfax

Judy Arnold, County of Marin District 5

Susan Cleveland-Knowles, City of Sausalito

Dan Hillmer, City of Larkspur

P. Beach Kuhl, Town of Ross

Alice Fredericks, Town of Tiburon

Stephanie Moulton-Peters, City of Mill Valley

David Kunhardt, Town of Corte Madera

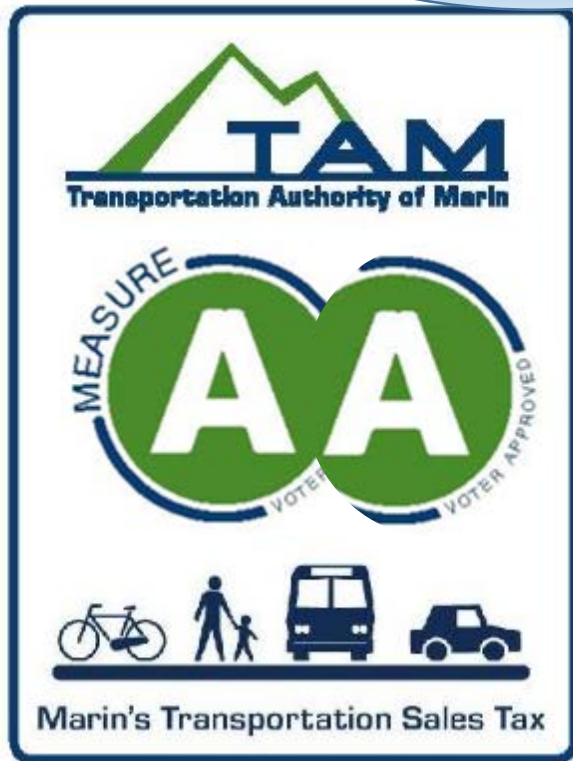
James Campbell, City of Belvedere



Measure AA Renewal Approved

2018

~ \$27m/year



½-cent sales tax

- On November 6, 2018, Measure AA – ½-cent transportation sales tax 30-year renewal – was approved by 76.7% of Marin voters

Local Funding = Marin is a Self-Help County

- Marin is one of 24 counties statewide who have passed a sales tax for transportation purposes
 - **Local funding attracts additional regional, state and local funding**
 - 2/3 voter approval required to pass these measures
 - Combined, they provide over **\$5 billion/year** in transportation funding
 - Counties where sales taxes exist for transportation represent over 85% of state's population – all major metropolitan areas
- 8 of the 9 Bay Area counties have similar sales tax income for transportation (Solano does not)



How will Measure AA be distributed?



11.5%

\$3.1M

Reduce school-related congestion and provide safer access to schools



55%

\$14.9M

Maintain and expand efficient and effective local transit services



26.5%

\$7.2M

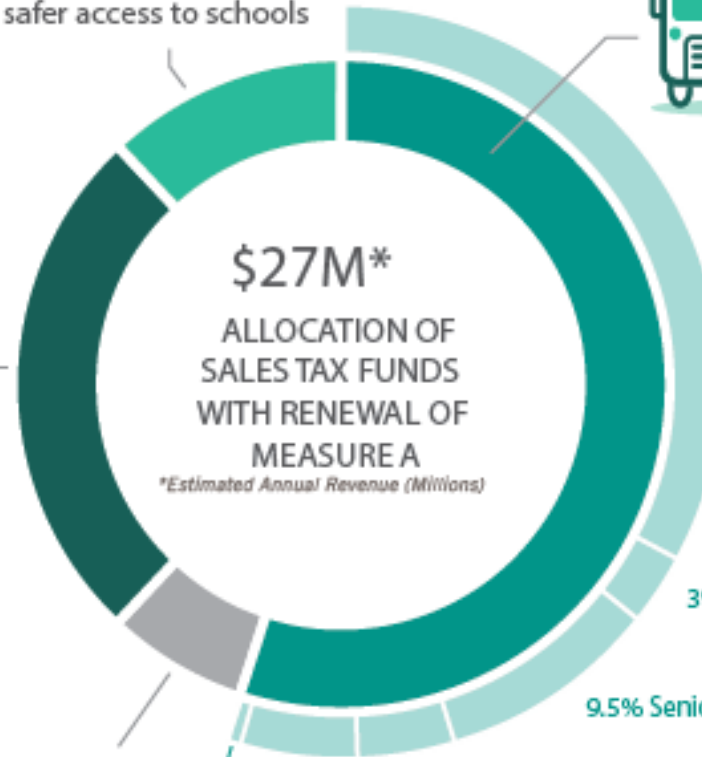
Maintain, improve, and manage local roads and related infrastructure



7%

\$1.9M

Reduce congestion on Highway 101 and adjacent roadways



33% Local

3% Rural

9.5% Seniors and People with Disabilities

4% Facilities

5% Schools

0.5% Access

Revenue Measures Work Together

- **Senate Bill 1** – (Passed by CA Legislature and Governor Brown in 2017 and avoided recall with defeat of Prop 6 by 56.8% in November) will primarily address local streets and roads needs, along with state highways & funds for Transit
- **Regional Measure 3** provides funds for 4 major projects in Marin
- **TAM's sales tax renewal** primarily addresses needs not funded by SB1 and RM3



SB1 – Annual Distribution

- **Formula:**
- 37%- \$1.9 Billion for State Highway System
- 30%- \$1.5 Billion for Local Streets and Roads
- 13%- \$750 Million for Transit and Rail
- **Competitive:**
- \$300 Million for Trade Corridor Enhancement
- \$250 Million for Solutions for Congested Corridors
- \$200 Million for Local Partnership Program
- \$100 Million for Active Transportation
- \$25 Million for Local Planning Grants



Regional Measure 3

- MTC – 9 County measure approved by 55% of voters in June 2018
- Toll increase on the 7 State owned toll bridges in the Bay Area (not the Golden Gate Bridge)
- \$1 increase in 2019, + \$1 in 2022, + \$1 in 2025
 - Projects funded by the toll revenue show a nexus – a benefit – to the toll bridge users who pay the fee.
 - Funds currently being held in a trust account pending resolution of litigation re: Fee (50%) vs. Tax (66.6%)



Regional Measure 3 – Marin County

Funds several large critical capital projects

- **NB Highway 101 to EB I-580 Direct Connector** – \$135m (\$210m for overall Richmond-San Rafael approaches)
(Measure AA, 2% of funding = \$16.5m)
- **Marin-Sonoma Narrows** - \$120m
(Measure AA, 1.5% of funding = \$12.4m)
- **The Downtown San Rafael Transit Center Relocation** - \$30m
- **State Route 37 Improvements** – \$100m



Regional Measure 3 – Marin County

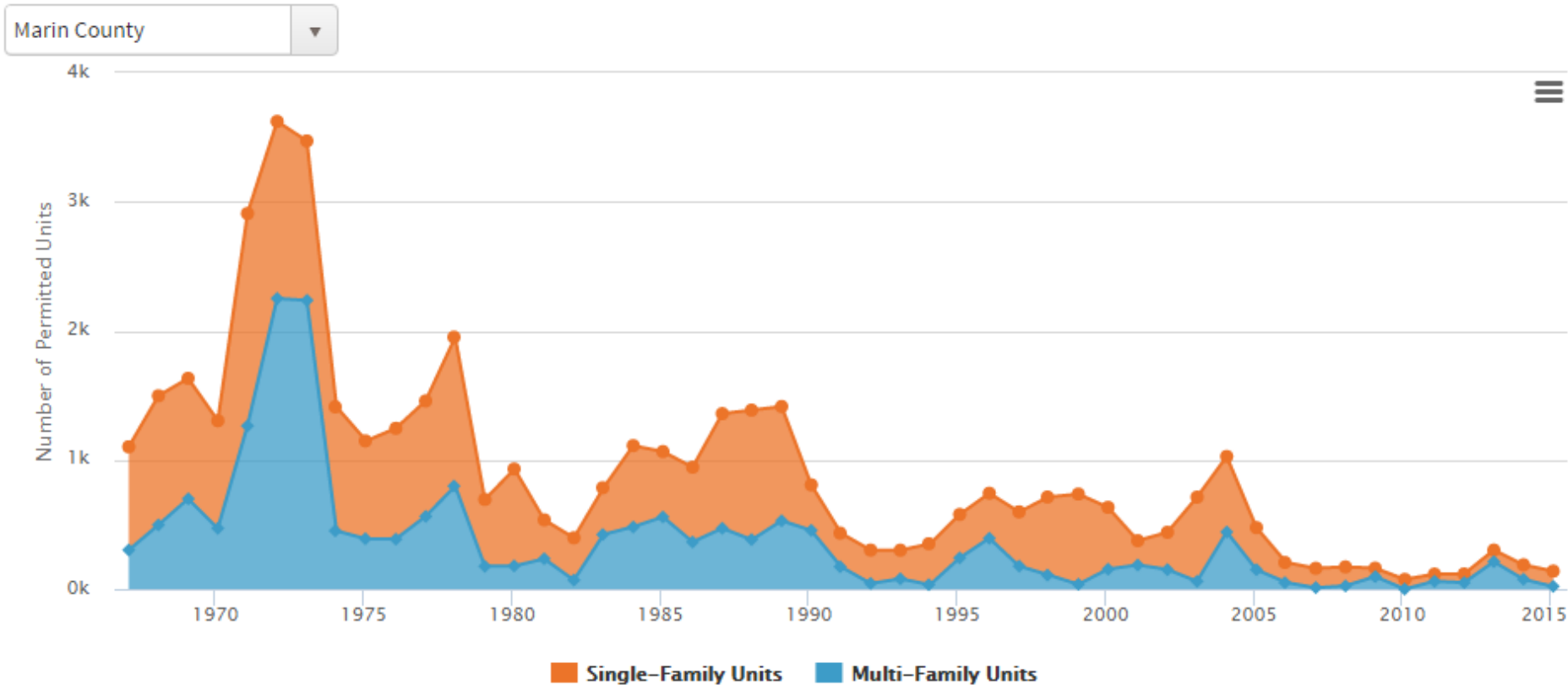
Additional revenue that will benefit Marin

- San Francisco Bay Trail Improvements / Safe Routes to Transit - \$150 million
- SMART Extension to Healdsburg & Windsor- \$40 million
- North Bay Transit Access Improvements – \$100 million



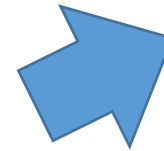
Housing Over Time – Marin County

Historical Trend for Housing Growth - Marin County



Marin Employment Forecast – Plan Bay Area

2010	2040
120,800	137,600



16,800 jobs
over 30 years

6.5% change

560/year

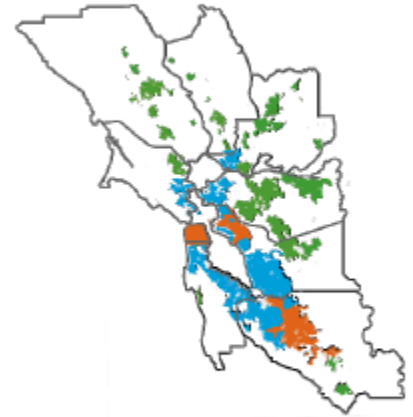
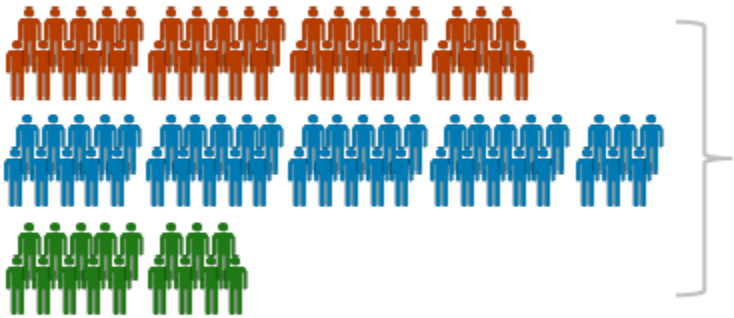


State EDD data:
2010 ~ 122,600
2017 ~ 137,300
13,900 jobs already
added!




Jobs added from 2011 through 2015:
501,000

Housing units built from 2011 through 2015:
65,000



Regionally: 1 house was built for every **8 jobs** created

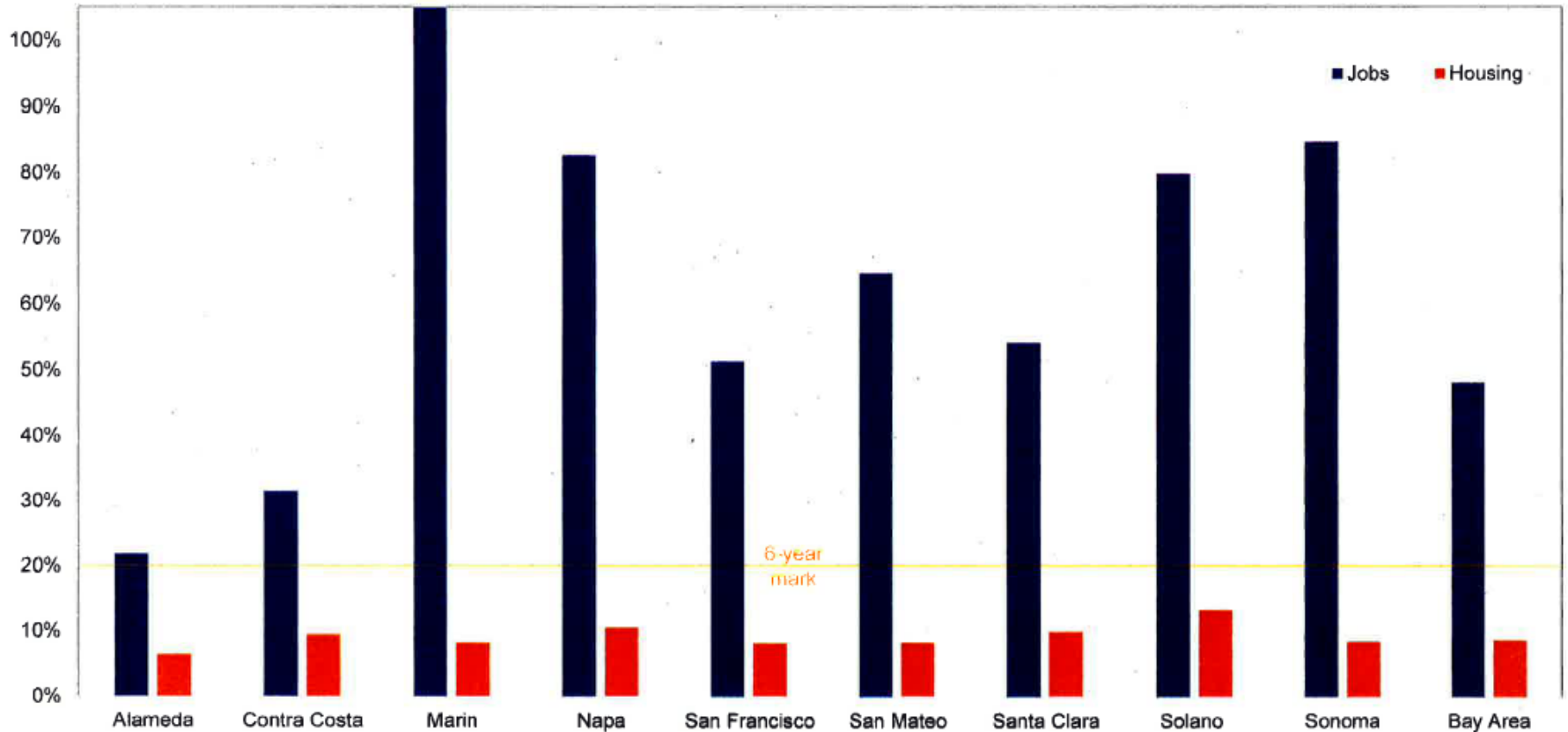
Low supply and high demand = 

City	House Price, % Change 1996-2016	Housing Units Added, % Change 1996-2016	Average Months for Building Approval
San Jose	295%	20%	6
San Francisco	290%	12%	10
Oakland	223%	17%	11

Source: <http://www.trulia.com/blog/trends/elasticity-2016/>

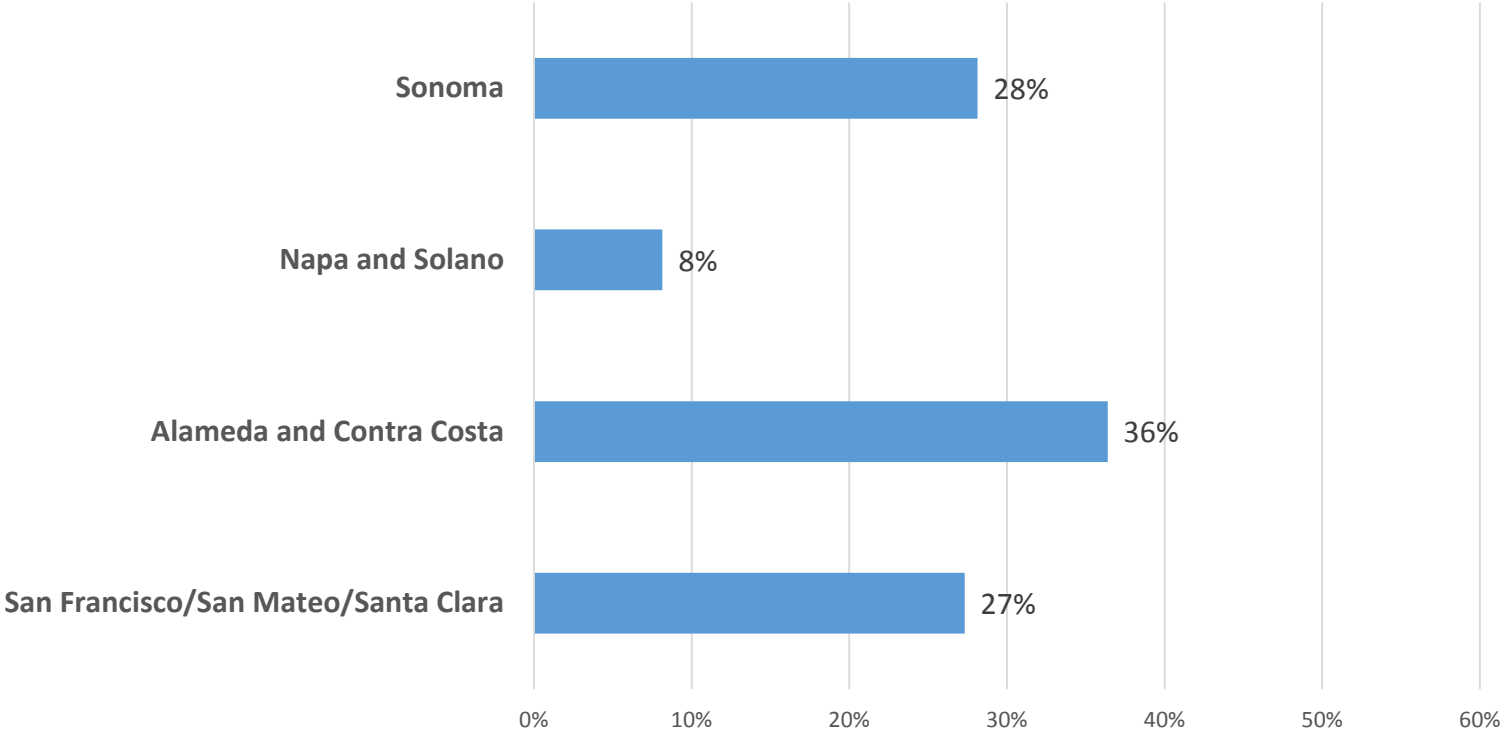
New Jobs and Housing, 2010 to 2016 As a Share of PBA 2040 Projections, 2010 to 2040

Source: Jobs – California County Economic Forecast, 2017-2050, Transportation Economics Branch, California Department of Transportation; Housing – E-5 Population and Housing Estimates for Cities, Counties, and the State, California Department of Finance; Plan Bay Area 2040 Jobs and Housing Projections



AM Peak Period Trips into Marin County

Where are morning trips into Marin County coming from?



Richmond-San Rafael Bridge (RSRB)

MTC/BATA Current Pilot Program and Local Marin Improvements



Recent Developments

- Traffic is increasing across the Bridge – average daily traffic increased from 68,000 to 82,000 between 2013 and 2017 (21% increase)
- Westbound traffic is increasing, current morning delay is 22 minutes, estimated to increase to at least 27 minutes in 2020

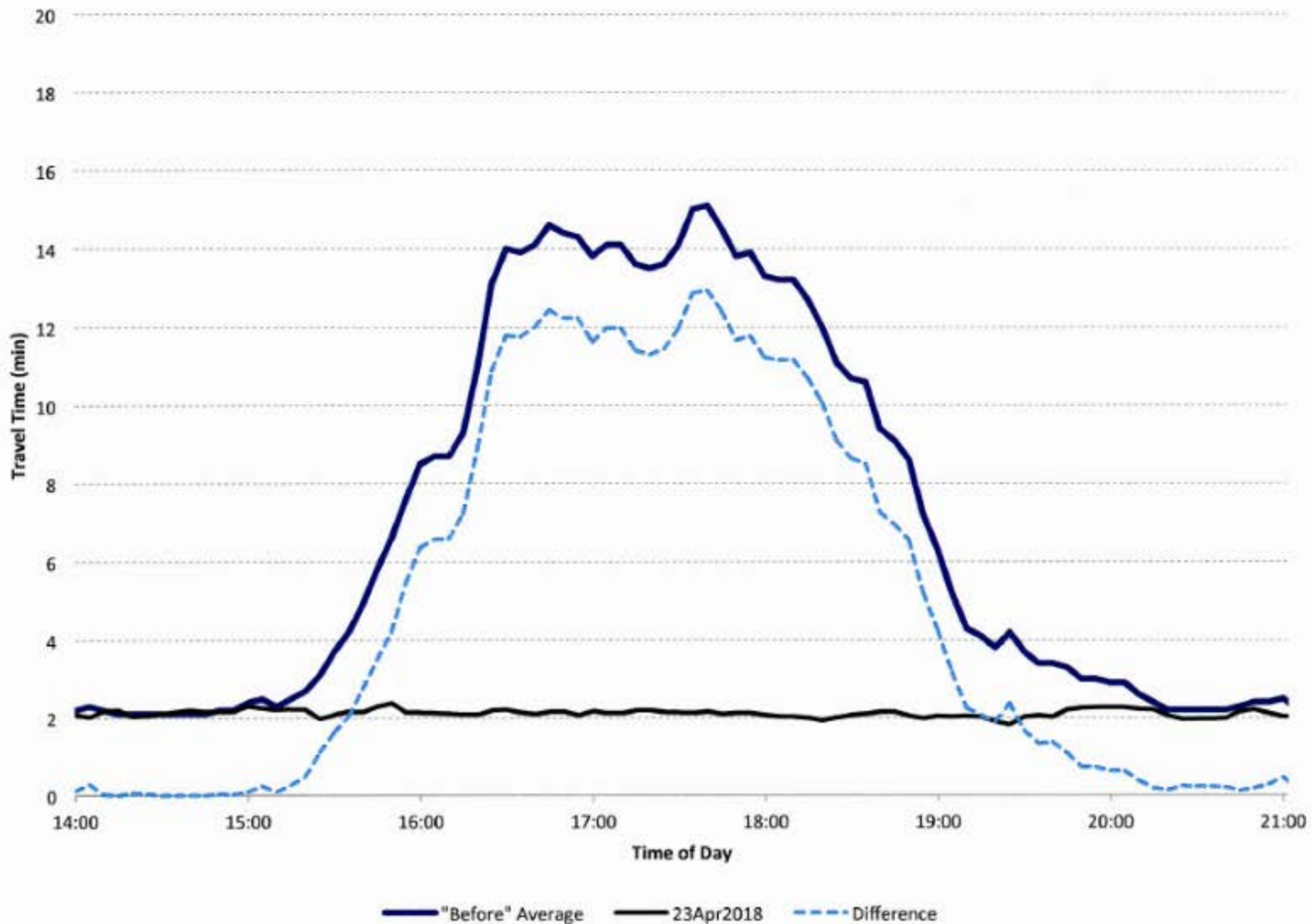


Richmond-San Rafael Bridge

Lower Deck 3rd Lane Open in April 2018 – A Success



I-580 RSRB EB Travel Times - Weekdays Before/After 3rd Lane Route 101 to Richmond-San Rafael Bridge



TAM Local Projects - \$7.7m to Improve Local Access to 3rd Lane on RSR Bridge



East Sir Francis Drake Blvd.



Widen Bellam Blvd Off-Ramp

I-580 / US-101 Direct Connector

\$135m dedicated in RM 3 and \$16.5m in TAM Measure AA



Richmond-San Rafael Bridge

- Can we open the upper deck shoulder to bikes AND vehicles?
- Repeat the success we had on the lower deck



Richmond-San Rafael Bridge

BATA Access Improvements

- The project was accepted for funding by BATA in mid-2014 as three projects:
 - The Lower Deck eastbound mixed flow lane (completed)
 - The Upper Deck two-way multi-use path protected by a barrier
 - A Class 1 barrier-protected multi-use path between Point Richmond and Point Molate exit along I-580 that supplies safe path of travel (bikes were using Interstate shoulder)



Upper Deck Repairs, Path Schedule and Studies for Shared Use

Joint Repair – Through May/June



- Joint repair on upper deck (started mid March, duration ~3 months)
- Install movable barrier
- Open upper deck path (targeted for July)
- Continue studies for shared use
 - Traffic analysis for 3rd westbound lane
 - Load analysis for shared use of 3rd westbound lane

Recent Board Discussion and Action

- TAM supports further investigation of a potential peak period 3rd traffic lane on the upper deck, shared use with bikes
- TAM requested of BATA ongoing coordination/cooperation in further studying joint-use lane options
 - BATA in concert with Caltrans has agreed to conduct follow-up structural analysis to determine if upper deck can handle the weight of a barrier and a 3rd traffic lane
 - BATA in concert with TAM has agreed to conduct additional traffic studies to fully understand impacts if any in Marin of a 3rd lane of traffic
- CCTA and BATA open to further consideration of the joint use concept





State Route 37

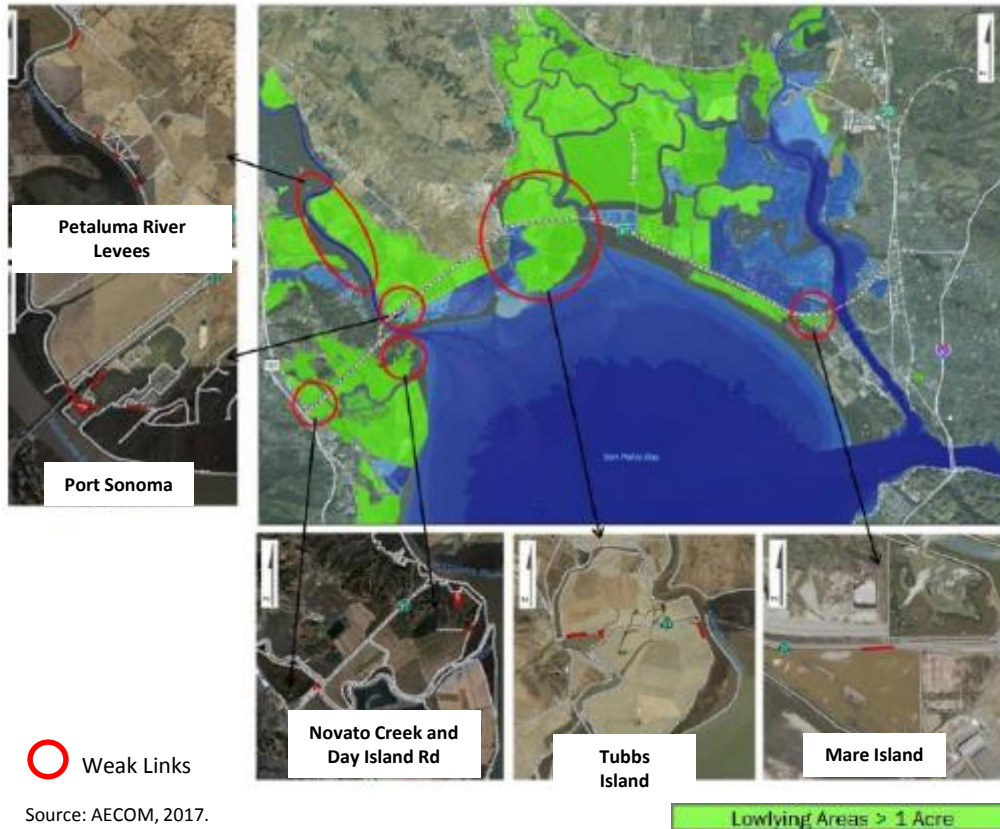
Transportation and Sea Level Rise Corridor Planning Update



Making the Most out of Marin Transportation Dollars



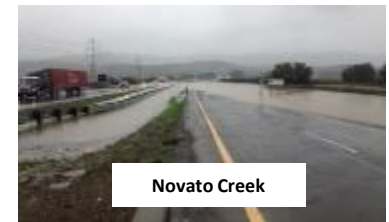
Parts of SR 37 Already Flood During Heavy Storms Due to Levee Breaches and HighTides



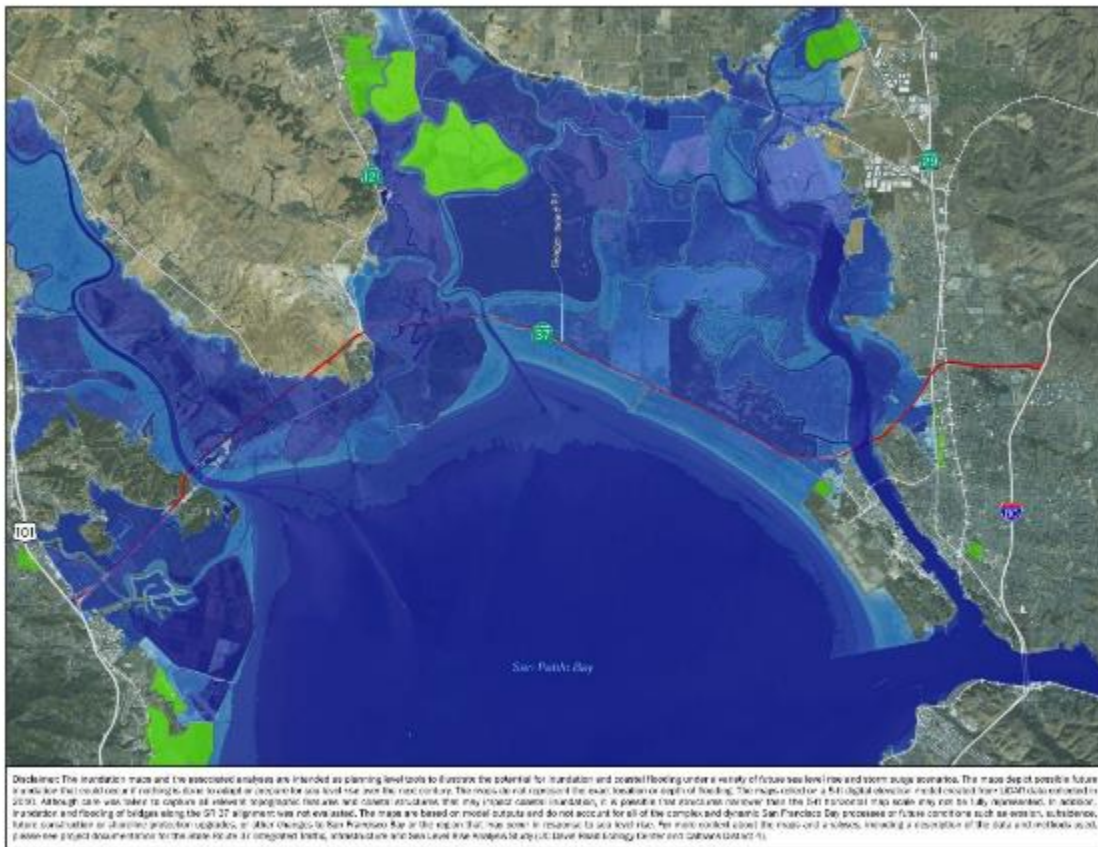
Source: AECOM, 2017.

- 6 known Weak Links Are Most Vulnerable to Short Term Flooding and Eventual SLR

Recent Floods in Spring, 2017



Majority of SR 37 Will Be Inundated by 2050 Conditions with Sea Level Rise & Storm Surges



Source: UC Davis, AECOM, 2015.

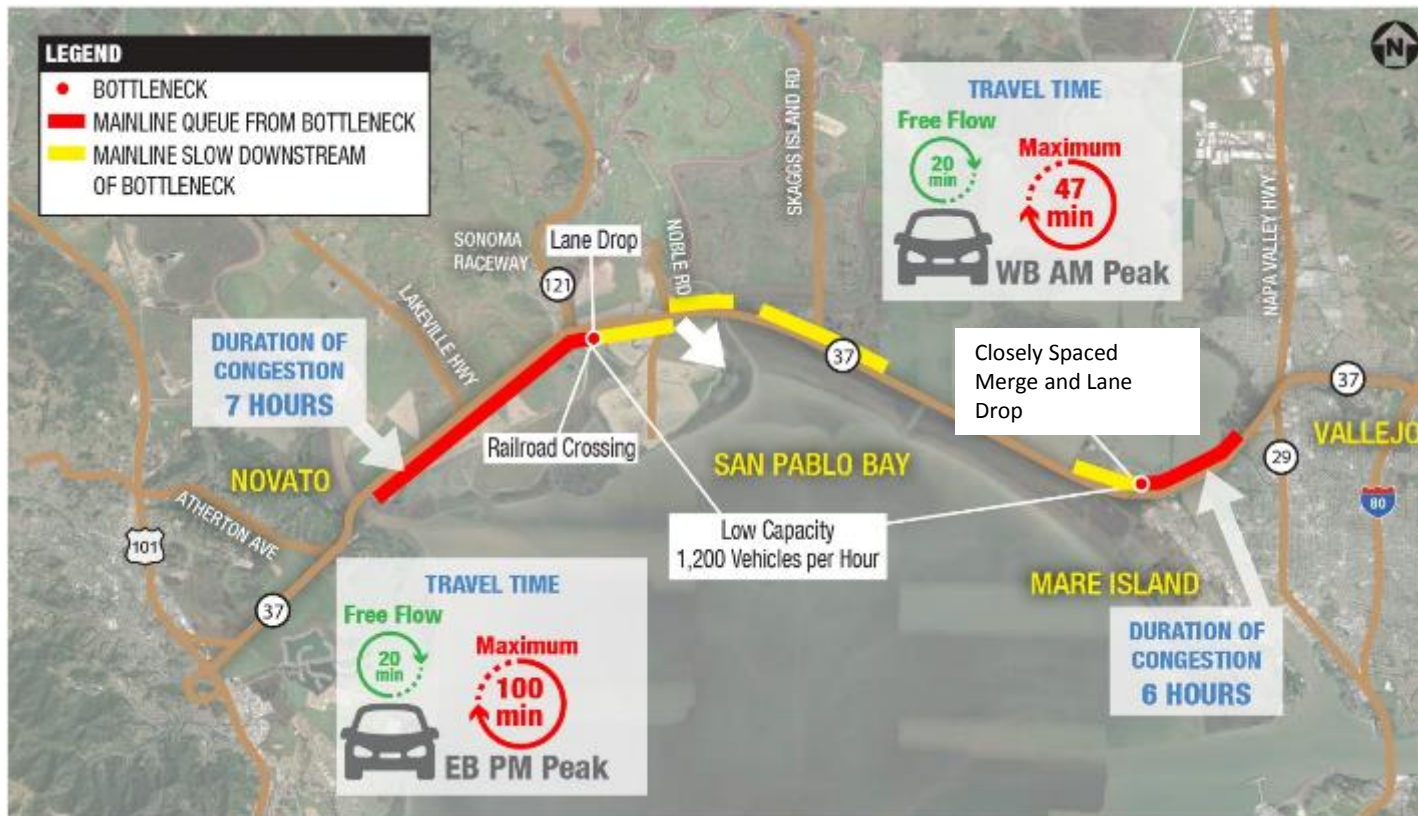
- Year 2100 Sea Level Rise Scenario

- Permanent Inundation Expected by 2050: Segment A and Segment B from SR 121 to Sonoma Creek

- SR 37 Closure would Divert Traffic to Other Already Congested Routes: I-80, US 101, I-580, SR 12, SR 121, etc.

- State and Federal-Protected Species Lose Habitat

100 Minutes to Travel Eastbound Every Day



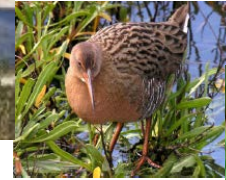
Source: Kimley-Horn, 2017.

- **6 Hours** of Congestion During Weekday AM Commute (Westbound)
- **7 Hours** of Congestion During Weekday PM Commute (Eastbound)
- **Weekend** Congestion Throughout Most of the Day
- **No Transit** Services

MTC SR 37 Transportation & SLR Corridor Improvement Plan Started in January 2017 – Completed in March 2018



Goals and Objectives



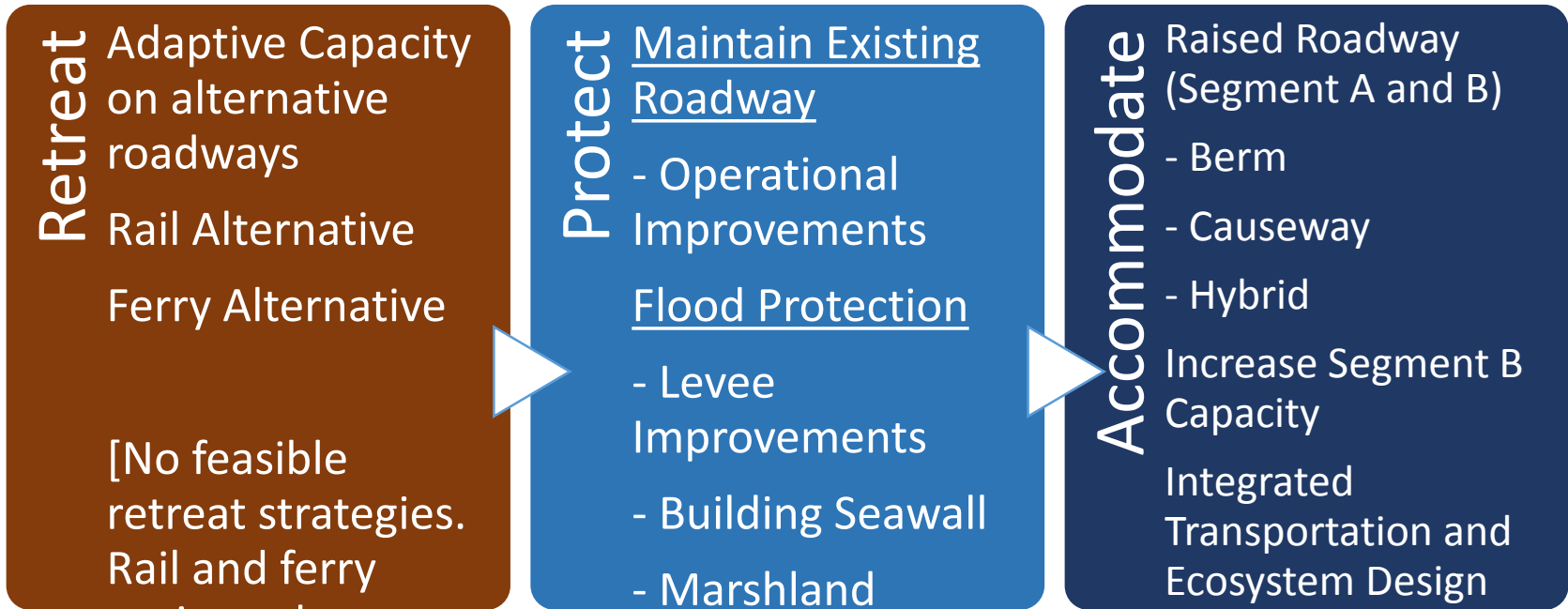
Integrate transportation, ecosystem and sea level rise adaptation into one design

Improve mobility across all modes and maintain public access

Increase corridor for resiliency to storm surges and sea level rise



MTC Evaluation Process - Transportation Strategies for SR 37



Public Outreach



Highway 37 Improvement Plan

Join us for an Informational Open House
Come to the one nearest you!

In response to impacts from **sea-level rise, flooding and increased traffic** along the corridor, the counties of Marin, Napa, Sonoma and Solano, in partnership with Caltrans and the MTC, are planning to **improve access and safety** along Highway 37.

The Open Houses will aim to:

- Inform residents and Highway 37 users about the status of the planning process
- Provide an opportunity for participants to share their concerns and **provide feedback**

NOVATO - Wednesday, Sept. 20th

6 pm to 8 pm at The Key Room
1385 Hamilton Parkway, Novato

AMERICAN CANYON - Wednesday, Sept. 27th

6 pm to 8 pm at the American Canyon Council Chambers
4381 Broadway Street, American Canyon

SONOMA - Thursday, Sept. 28th

6 pm to 8 pm at Sonoma Veterans Memorial Building
126 First Street West, Sonoma

VALLEJO - Monday, Oct. 2nd

6 pm to 8 pm at the Vallejo Naval and Historical Museum
734 Marin Street, Vallejo

Project led in partnership by:



Input received from:

- Four Open Houses on Draft Corridor Plan: Sept. – Oct 2017
- Online Place based survey with approximately 3700 responses: Dec. – Jan. 2018
- Focus Groups: Jan – Feb & May – June 2018
- Environmental Stake Holder Working Group Meetings.
- Policy Committee Meetings since November 2015



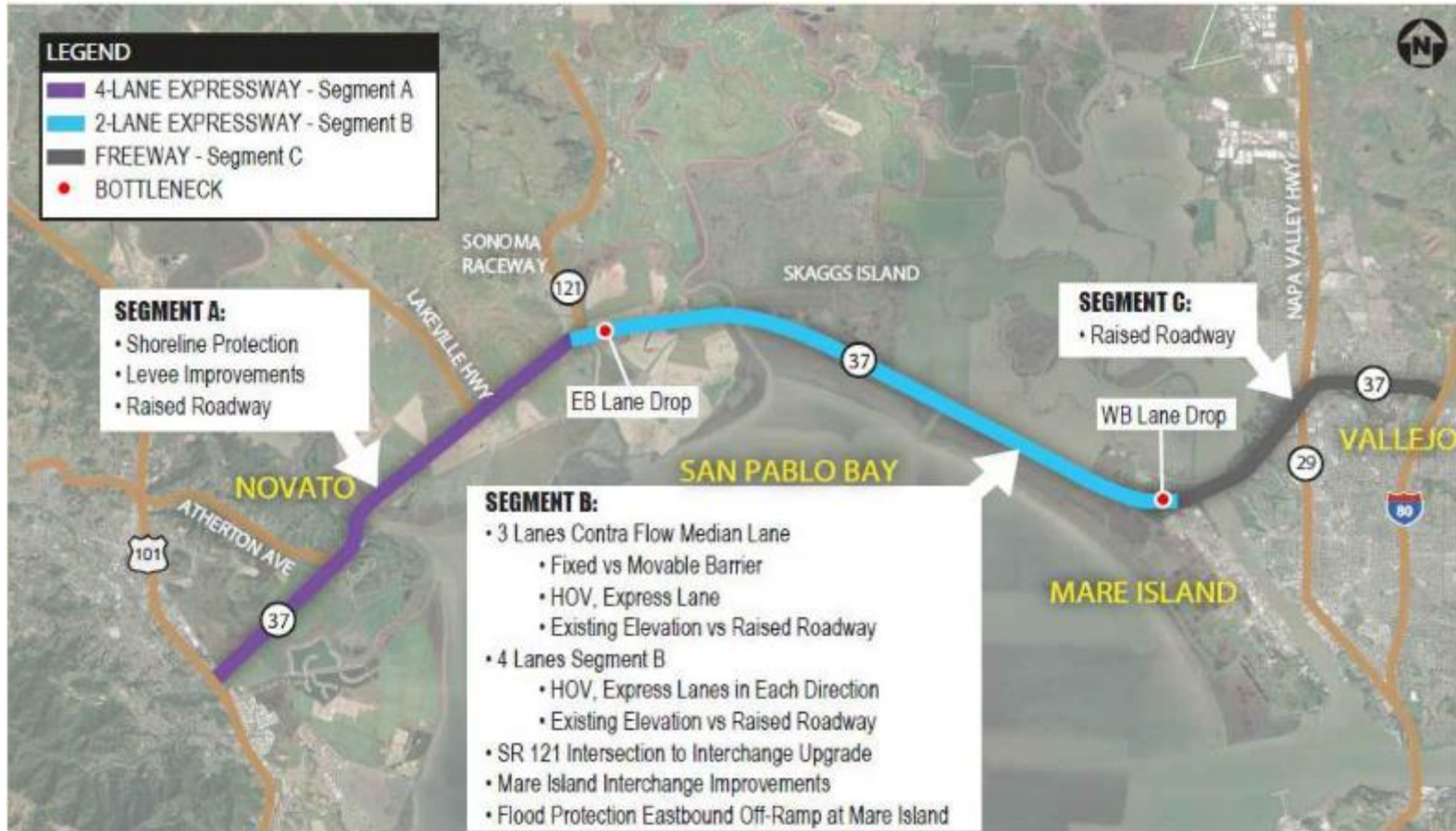
Segment B is the Priority Segment



Segment Risk Rating	Segment A	Segment B	Segment C
Effect on Existing Traffic Congestion	1	3	1
Effects on Environmental Resources	2	3	1
Impacts Due to Sea Level Rise	3	3	1
Economic Impact on Commuters	3	3	3
Economic Impact on Goods Movement	2	3	3
Impacts to Recreational Activities	2	3	2
Length of Segment Impacted/Capital Improvement Cost	3	3	1
Composite Risk Rating	2	3	2

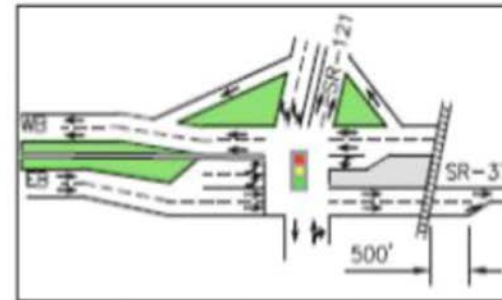
Note: Risk ratings were assigned as follows: 1.0 - 1.4 (low), 1.5 - 2.4 (moderate), and a 2.5 - 3.0 (high)

Segment B: PSR and Environmental Clearance for Interim and Ultimate Projects

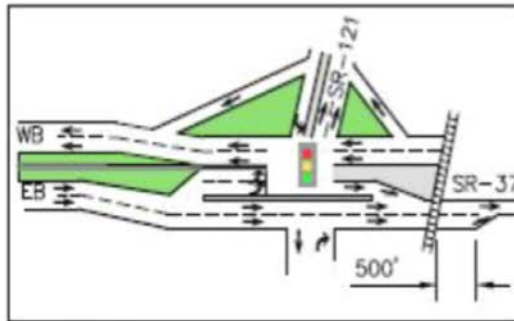


SR 37/121 – Highway Operational Improvement Options

- Signal optimization and roadway widening
- Continuous T intersection
- Roundabout with two EB by-pass lanes



Signal Optimization



Continuous T Intersection



Roundabout Intersection

Latest Recommendation: Segment B 'Congestion Relief' Project

SEGMENT B CAPACITY/OPERATIONAL IMPROVEMENTS



Managed Lane Options:



RESILIENTSR37

Novato to Mare Island “Big Picture Ultimate Project”

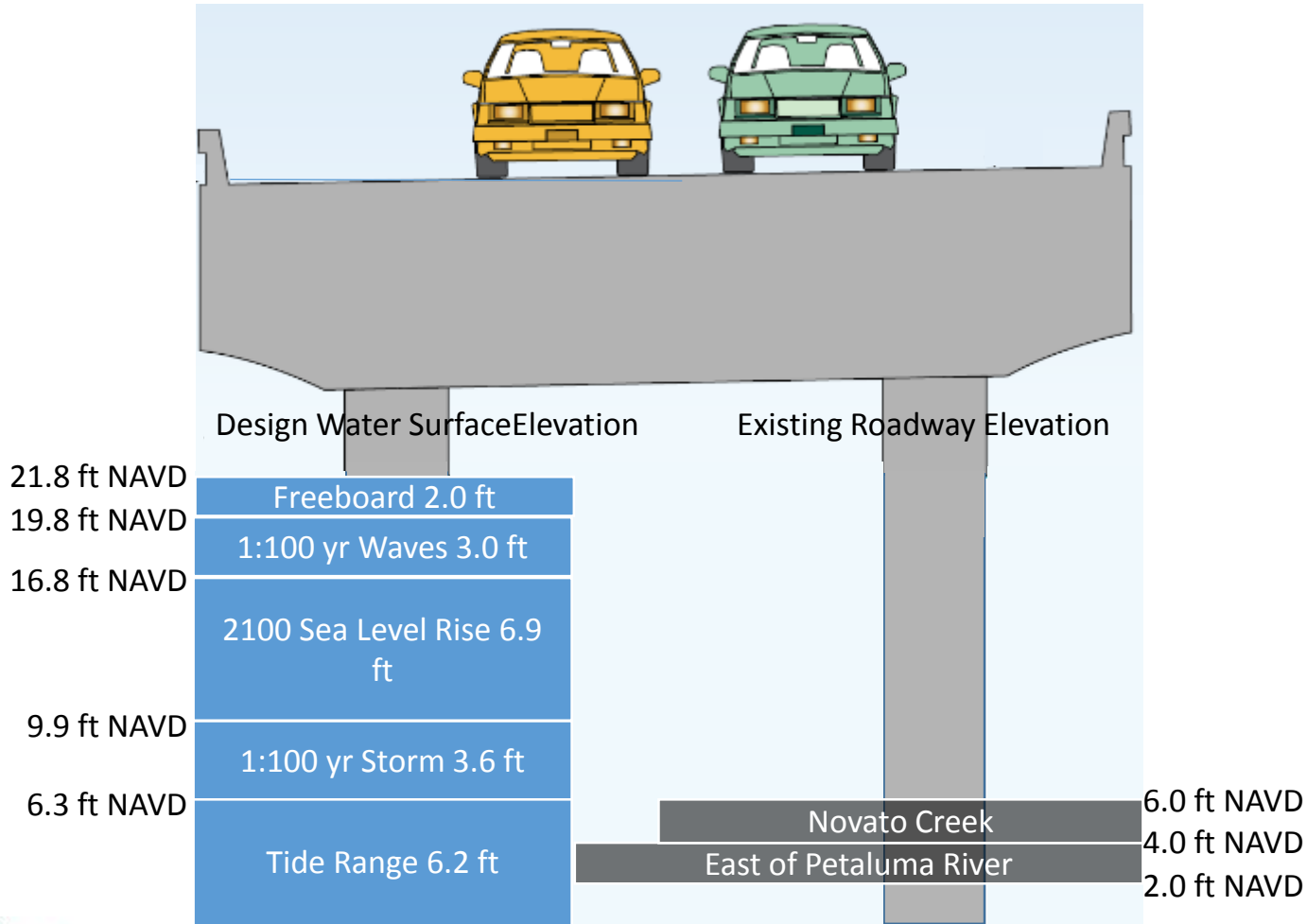
- Re-establish connectivity and allow for future restoration
- Design to latest Year 2100 Sea Level Rise (SLR) projection
- Provide a continuous four-lane conventional highway facility including a multi-use path





Alternative 1 – Piled Causeway

Water Surface Elevations



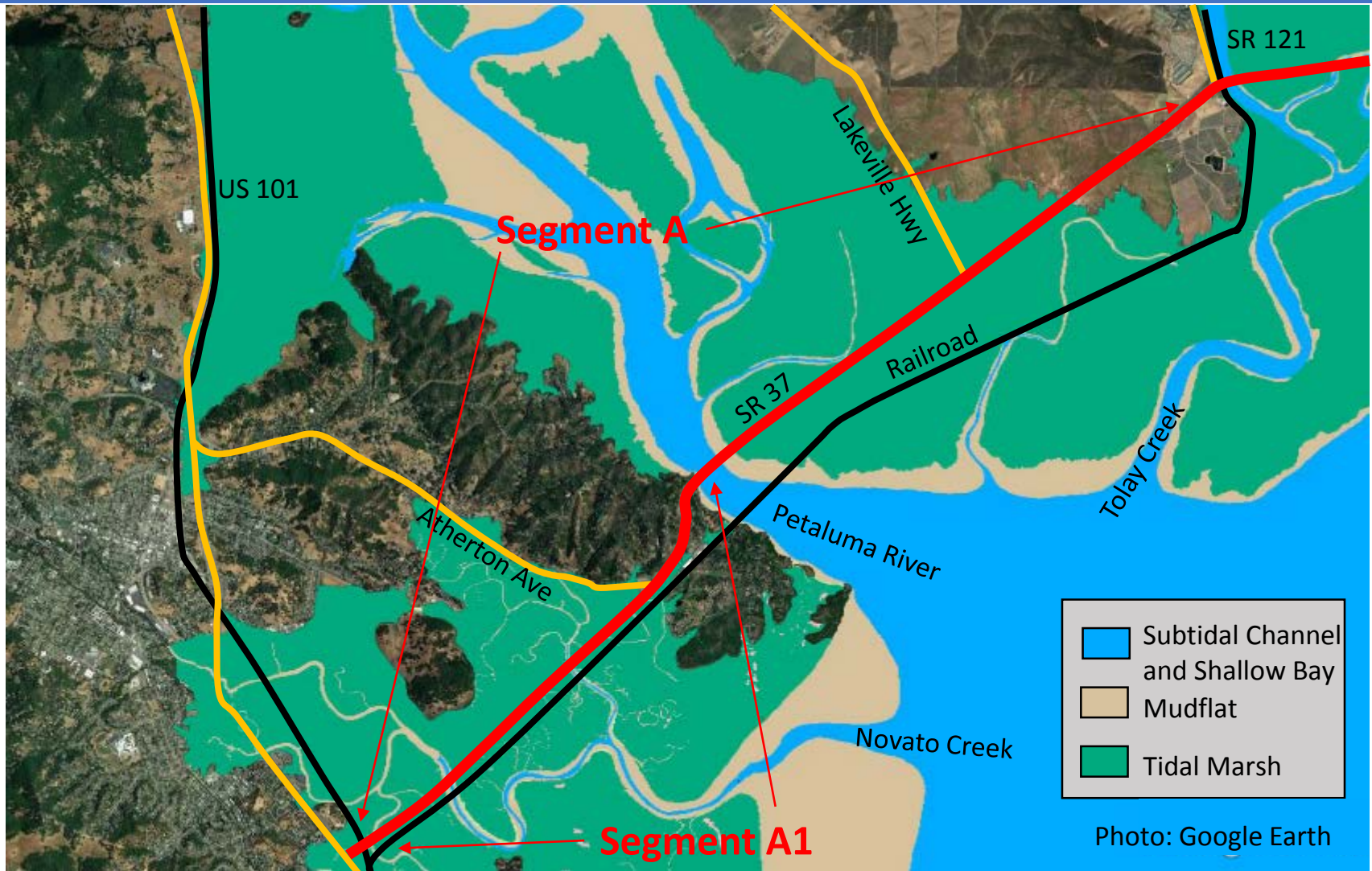


Alternative 2 – Hybrid (Piled Causeway/Embankment)

SR-37 Policy Committee Adopted Regional Measure 3 (RM3) Funding Plan

<u>SPONSOR</u>	<u>AMOUNT</u>	<u>DESCRIPTION</u>
STA	\$15 M	Segment C - Fairgrounds Interchange
SCTA	\$20 M	Interim Segment B - PAED and PS&E
SCTA	\$4 M	PAED for Highway 37/121 Improvements
TAM	\$3M	Segments A1 & A2 Levee Study
SCTA/TAM	\$58M	Segment A & B improvements

**Segment A: Levee and Roadway Study to be led by TAM with RM3 funds;
Marin County DPW is leading off with Segment A1 with a SR37 Adaptation Study**



Caltrans SR 37 10-Year Maintenance & Improvement List

SR 37 Projects

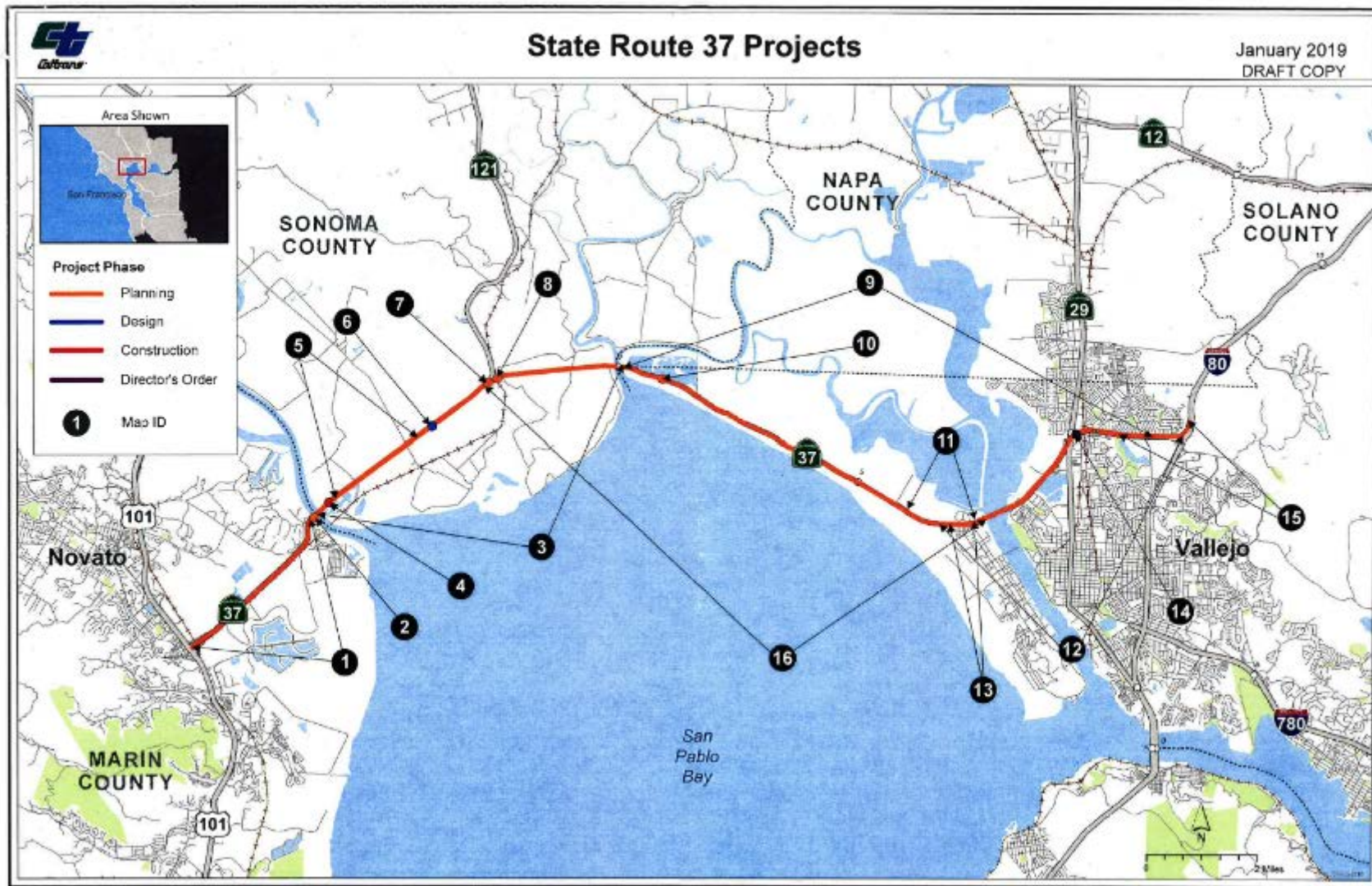
January 2019

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Map ID	SHOPP Tool ID	EA	CO	PM	Descriptions	Activity Category	Phase	Status of PID	Projected RTL FY	Estimated Capital Cost
1	13658	2K740	MRN	11.2/14.6	Pavement from Route 101 to Sonoma County Line	Pavement (2017 TYP)	Planning	Post-PIR Not yet Programmed	2022/23	\$ 1.8M
2	20749		MRN	14.5/15.0	Resurface deck and replace fender system at Petaluma River Bridge.	Bridge (2017 TYP)	Planning	Pre-Programming	2023/24	\$ 1.2M
3	13669		SON	0/6.245	Pavement from Marin County Line to Solano County Line	Pavement (2017 TYP)	Planning	Pre-PIR	2024/25	\$ 1.4M
4	21027	2J500	SON	0.3	Reconstruct embankment with lightweight fill at the Petaluma River Bridge.	Major Damage (2017 TYP)	Construction		2017/18	\$ 1.5M
5	20142		SON	0.4/2.3	Drainage Improvements from Railroad Avenue to Lakeville Road	Drainage (2017 TYP)	Planning	Pre-PIR	2025/26	\$ 0.6M
6	11335	1A210	SON	2.62	Install Weigh-in-Motion at Sonoma Station just west of Route 121.	Mobility (2017 TYP)	Design		2018/19	\$ 2.6M
7	20561	1Q480	SON	3.78/4.00	Reconstruct intersection of SR 37 and SR 121.	Mobility (2017 TYP)	Planning	Pre-Programming	2025/26	\$ 30M
8	20471	2Q200	SON	3.92/4.12	Extend 2 line section on eastbound SR 37 and improvement railroad crossing.	Mobility (2017 TYP)	Planning	Pre-Programming	2023/24	\$ 7.0M
9	11302	1Q400	SOL	0.0/11.2	Pavement from Sonoma /Solano County Line to Sage Street Undercrossing	Pavement (2017 TYP)	Planning	Pre-PIR	2024/25	\$ 8.2M
10	17969	0P760	SOL	VAR	Install Rectangular Rapid Flashing Beacons on Route 37, 80 & 780 at various location.	Safety (2017 TYP)	Planning	Pre-Programming	2022/23	\$ 1.1M
11	20603		SOL	6.0/7.3	Raise highway from 1.3 miles west of Railroad Avenue to Railroad Avenue.	Major Damage (2017 TYP)	Planning	Pre-PIR	2025/27	\$ 25M
12	20899		SOL	6.7/11.73	Install Ramp Metering on westbound SR 37 from Walnut Avenue Interchange to Route 80. Install TOS on westbound/eastbound SR 37.	Mobility (2017 TYP)	Planning	Pre-PIR	2024/25	\$ 36M
13	20520		SOL	R6.85/R7.31	Improve westbound SR 37 lane merge near SR 37 /Walnut Avenue Interchange.	Mobility (2017 TYP)	Planning	Pre-PIR	2024/25	\$ 5.0M
14	21055	0P330	SOL	9.8	Reconstruct joint seals and bearing pads at the Route 29 separation and at Ulatis Creek.	Major Damage (2017 TYP)	Director's Order		2017/18	\$ 0.7M
15	20392		SOL	10.5/12.0	Replace Box Beam Structures from Fairgrounds Drive to Columbus Parkway.	Other (2017 TYP)	Planning	Pre-PIR	2025/26	\$ 2.7M
16	LOCAL	1Q760	SON/SOL	3.76/R6.24; R0.0/R7.38	Traffic Operations and Sea Level Rise Improvements from SR 121/SR 37 Junction to the Mare Island Interchange.		Planning	Pre-Programming		Interim: \$ 85M ~ \$125M Ultimate: \$ 3.0B ~ \$3.9B



Caltrans SR 37 10-Year Maintenance & Improvement List





Questions

