

## Overview of Highway 37 Planning Project

TAM Board January 26, 2017



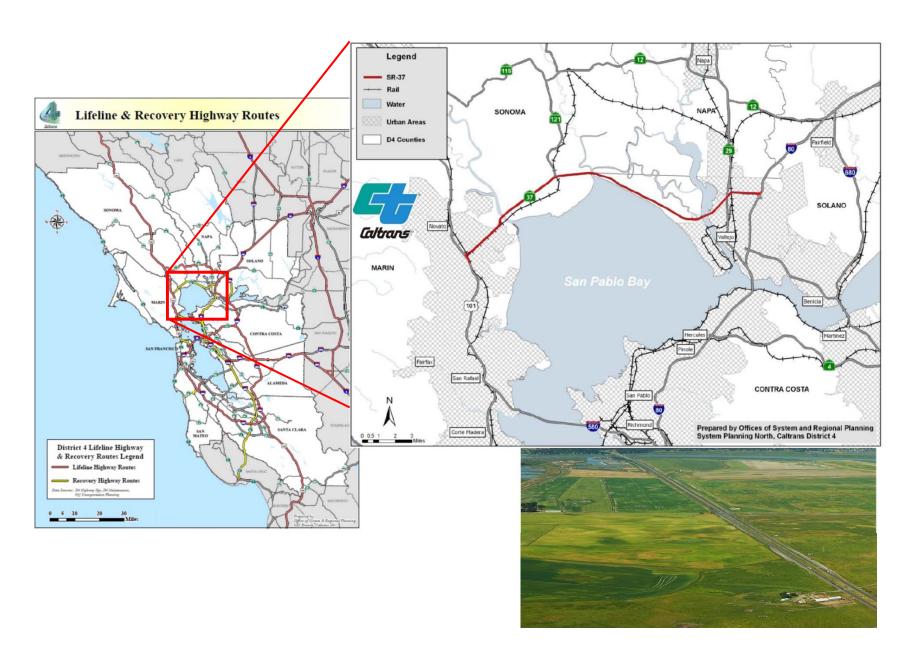








## Project Location – North Bay Caltrans District 4



### SR 37 Corridor Features

- Two to Four lane 21 mile corridor traversing Solano, Sonoma, and Marin Counties.
- Connects I-80 in Solano County to 101 in Marin County.
- SR 101 is critical connection for North Bay freight movement, job markets, housing, tourism, and recreation.
- Corridor is located in highly sensitive environmental marshland areas.
- Vulnerable to Sea Level Rise.
- Serves as a Recovery Route for the North Bay.
- Current congestion expected to increase adding to longer peak commute times.







## **SR 37 Corridor Characteristics**



## SR 37: Segment A

- Hwy 101 in Marin County to SR 121 in Sonoma County.
- 4 Lane Expressway at 65 MPH
- Combination of Flat and Rolling Terrain.
- **2013 AADT**: 40,000 veh. both direction.
- **2040 AADT** Forecast: 70,000 veh. both directions.
- 2012 Truck Volume: Estimated 4% to 5% of AADT.
- Elevation: 1.1' to 15.7'
- Railroad Levee





<sup>\*</sup>Based on Caltrans 2015 SR 37 Transportation Concept Report

## SR 37: Segment B

- SR 121 in Sonoma County to Mare Island in Solano County.
- 2 Lane Highway at 55 MPH.
- Combination of Rolling and Flat Terrain.
- **2013 AADT**: 40,000 veh. both direction.
- **2040 AADT** Forecast: 70,000 veh. both directions.
- 2012 Truck Volume: Estimated 5% to 6% of AADT.
- Elevation: 3.6' to 11.8'





<sup>\*</sup>Based on Caltrans 2015 SR 37 Transportation Concept Report

## SR 37: Segment C

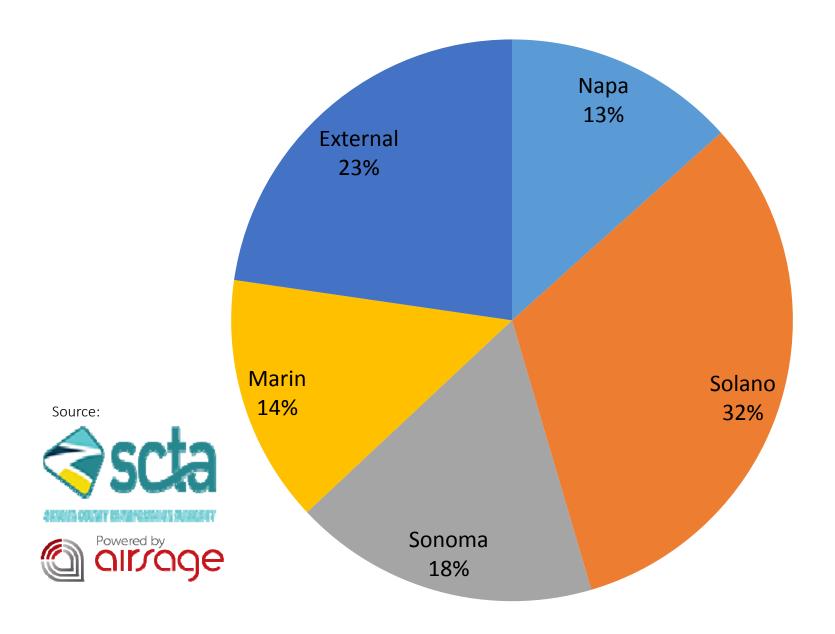
- Mare Island to I-80 in Solano County.
- 4 Lane Freeway at 65 MPH
- Flat Terrain
- 2013 AADT: 95,000 veh. both directions.
- **2040 AADT** Forecast: 115,000 veh both directions.
- 2012 Truck Volume Estimated 6% to 13% of AADT
- Elevation: 8.3' to 15.2'
- Substantial Investment in 1990's from I-80 to Mare Island.



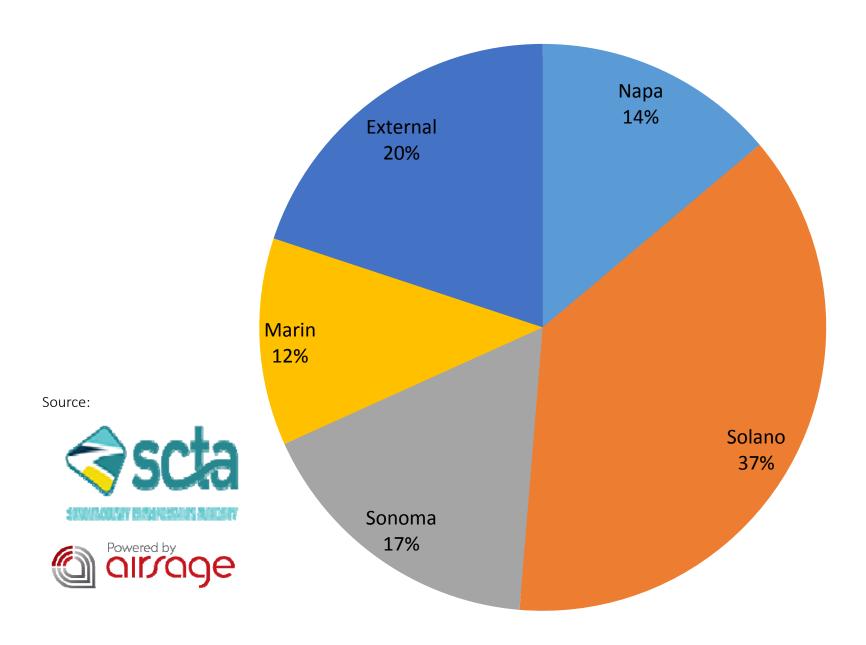


<sup>\*</sup>Based on Caltrans 2015 SR 37 Transportation Concept Report

### County Share of Trip Origins, Hwy 37, Avg. Weekday, Sept. 2014



### County Share of Trip Destinations, Hwy 37, Avg. Weekday – Sept. 2014



## SR 37 Sea Level Rise (SLR) Challenges-Analyzed Results

### **Year 2050 Estimated inundation:**

- MHHW + 12" SLR
- 2. 100 yr SWEL + 12" SLR
- 3. MHHW + 24" SLR (potentially)

#### **Year 2100 Estimated inundation:**

- 1. MHHW + 36" SLR
- 2. 100 Yr SWEL + 36" SLR
- 3. MHHW + 66" SLR (potentially)



100 yr SWEL

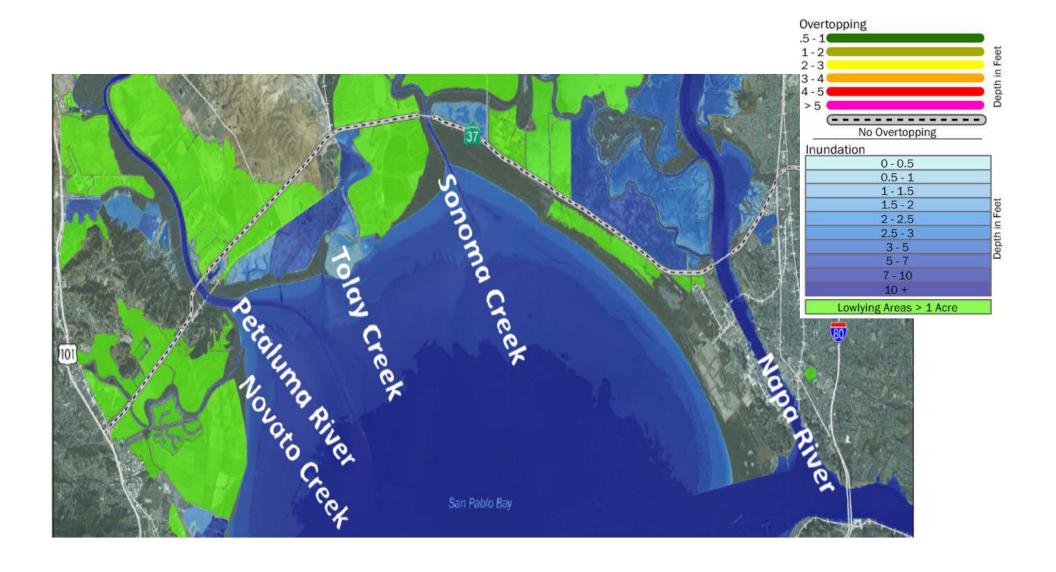
• 100 yr Stillwater Elevation (SWEL) – Extreme high tide + storm surge- 9.3-9.9 ft. Vary rare temporary flooding event



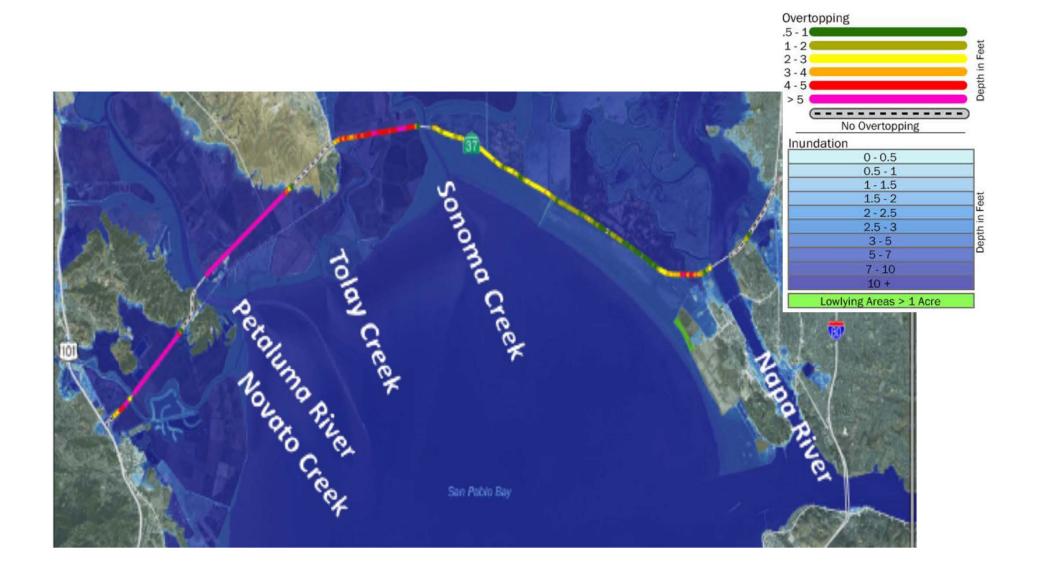
Mean Higher High Water (MHHW)- Typical daily high tide- 6.0-6.3 ft. Existing Conditions



# SR 37 Sea Level Rise Potential Affect – MHHW (Existing)



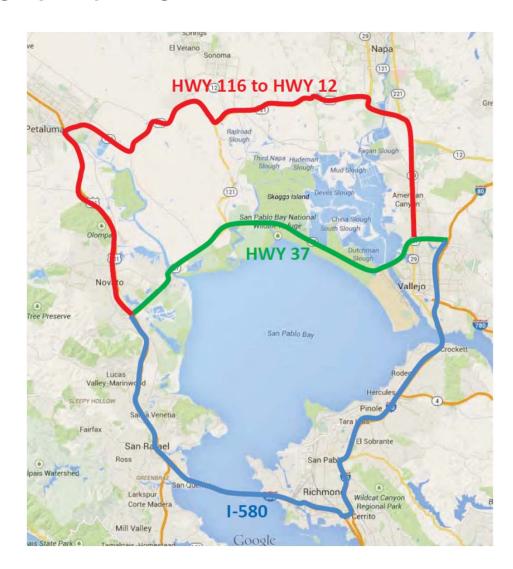
# SR 37 Sea Level Rise Potential Affect — Year 2100 - 100 yr SWEL + 36" SLR



# SR 37 Alternative Routes Between I-80 and 101

- SR 37 Corridor is 21 miles
- Northern Route (Hwy 12 to Hwy 116) = 44 miles
- Southern Route (Richmond Bridge – 580)= 43 miles

Any SR-37 closure would have severe congestion impact to I-80 and SR 101 and sub corridors



# SR 37 Corridor Connection and Impact

Regional significance – San Rafael Bridge shut-down on Sept.
27, 2016 and January 10, 2017 SR 37 Flood Closure



## Adaptive Structural Scenarios ConsideredUC Davis Road Ecology Study

- Berm/Embankment
- Causeway (over land)
- Bridge/causeway (over land-water)







# Cost Estimate Comparison From UC Davis Study

From Hwy 101 to I-80



Berm Embankment



**Box Girder Causeway** 



Slab Bridge Causeway

REACH	ALTERNATIVE		
	1 - Berm/ Embankment	2 - Box Girder Causeway	3 - Slab Bridge Causeway
Α	\$460	\$1,400	\$1,300
В	\$650	\$2,500	\$2,200
С	\$150	\$400	\$340
TOTAL	\$1,260	\$4,300	\$3,840

- Cost Estimate Comparison assumes preliminary total cost estimates
- SR 37 Project will be further defined to identify phasing options with timing options for elevating each segment
- SR 37 Project Definition task will result in refined cost assumptions for near, mid and long term considerations

## SR 37 MOU Partnership

4 North Bay Congestion Management Agency (CMA) Memorandum of Understanding (MOU) Partnership:

"...to develop an expedited funding, financing and project implementation strategy for the reconstruction of SR 37 to withstand rising seas and storm surges while improving mobility and safety along the route"



## SR 37 Corridor Funding Challenges

 SR 37 not the top priority transportation project of the 4 North Bay Counties :

Marin County – Highway 101 MSN and 580 Napa County – Highway 29 Solano County – Highway 80 Sonoma County - Highway 101



- California Highway Capacity Funding Crisis
  - Due to drop in price-base excise portion of the State gas tax
  - No new funding capacity over the next five years
  - About \$800 Million loss of transportation capacity revenue
  - \$5.7 Billion annual maintenance fund shortfall for system repairs on existing State Highway System
  - \$7.8 Billion annual maintenance fund shortfall for local streets and roads



## **Next Steps**



Spring 2017 –

SR 37 Corridor Financial Opportunities Analysis

Public private, full private, public/toll bond

• Fall 2017 –

Project Definition & Transportation and Sea Level Rise Corridor Improvement (Alternative Assessment) with MTC support

• On-going –

Policy development for entire corridor

• On-going -

Outreach and comprehensive plan with Caltrans support

On-going –

Identify Funding for Environmental Review











## **Questions and Discussion**











