Overview of Highway 37 Project

Napa County Board of Supervisors
December 20, 2016
Project Location-Caltrans District 4
SR 37 Corridor Features

• 2 to 4 lane 21 mile corridor traversing Solano, Sonoma, and Marin Counties

• Connects I-80 in Solano County, traverses through Sonoma County onto 101 in Marin County

• SR 101 in 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**: 20,300 (EB); 20,100 (WB)
- **2040 AADT** Forecast: 34,650 (EB); 37,500 (WB)
- 2012 Truck Volume: Estimated 4% to 5% of AADT
- Elevation: 1.1’ to 15.7’
- Railroad Levee

*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**: 20,350 (EB); 19,100 (WB)
- **2040 AADT** Forecast: 35,800 (EB); 34,500 (WB)
- 2012 Truck Volume: Estimated 5% to 6% of AADT
- Elevation: 3.6’ to 11.8’

*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:** 49,200 (EB); 45,200 (WB)
- **2040 AADT** Forecast: 56,000 (EB); 58,200 (WB)
- 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

*Based on Caltrans 2015 SR 37 Transportation Concept Report*
County Share of Trip Origins, Hwy 37, Avg. Weekday, Sept. 2014

- Napa: 13%
- Solano: 32%
- Sonoma: 18%
- Marin: 14%
- External: 23%
County Share of Trip Destinations, Hwy 37, Avg. Weekday – Sept. 2014

- Napa: 14%
- Solano: 37%
- Sonoma: 17%
- Marin: 12%
- External: 20%
SR 37 Sea Level Rise (SLR) Challenges - Background

Water Level Analysis Conducted by UC Davis, AECOM and Caltrans

**Key Terms:**

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

- 100 yr Stillwater Elevation (SWEL) – Extreme high tide + storm surge - 9.3-9.9 ft. Vary rare temporary flooding event
SR 37 Sea Level Rise Potential Affect – MHHW (Existing)
SR 37 Sea Level Rise Potential Affect – Year 2050 MHHW + 24”
SR 37 Sea Level Rise Potential Affect – Year 2100 100 yr SWEL + 36” SLR
SR 37 Sea Level Rise (SLR)
Additional Challenges

• Sea levels are >8” higher than expected this winter because of El Nino

• With 4” of SLR + El Nino = 12” (next El Nino)

• One large storm + El Nino could flood Marina to Lakeville (this or next El Nino)

• 100 year SWEL (a.k.a. Storm Surge + Extreme High Tide) could occur anytime adding 9.3 to 9.9”
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 – I-580) - 43 miles

SR 37 Closure would have severe congestion impact to I-80 and SR 101 and sub corridors
Cost Estimate Comparison

**ALTERNATIVE**

<table>
<thead>
<tr>
<th>REACH</th>
<th>1 - Berm/ Embankment</th>
<th>2 - Box Girder Causeway</th>
<th>3 - Slab Bridge Causeway</th>
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<tbody>
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<td>A</td>
<td>$460</td>
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<td>$1,300</td>
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<tr>
<td>B</td>
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<tr>
<td>C</td>
<td>$150</td>
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<td><strong>TOTAL</strong></td>
<td>$1,260</td>
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SR 37 MOU Partnership

4 North Bay Congestion Management Agencies (CMAs) 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 MOU Partnership

- SR 37 Policy Committee – 3 elected representatives from Napa, Marin, Sonoma, and Solano County CMAs
- SR 37 Executive Committee- 4 CMA Executive Director Committee
- SR 37 Project Leadership Team- 4 CMA Project Manager Technical Advisory Committee
- Other participants include Caltrans and MTC staff
SR 37 Corridor Funding Challenges

• SR 37 not the top priority transportation project of the 4 North Bay Counties:
  Marin County – Highway 580
  Napa County – Highway 29
  Solano County – Highway 80
  Sonoma County - Highway 101

• California Highway Capacity Funding Crisis
  • Due to drop in priced based portion of the State gas excise tax
  • No new funding capacity over the next five years
  • $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
Assumptions:
1. SR 37 Segment B Cost $1.2 Billion (Starting Point)
2. All STIP from all 4 N. Bay Counties committed
3. ITIP Population Share of 4 N. Bay Counties also committed
4. Cost assumptions for each phase is noted above
SR 37 Financial Pursuits

- Public Private Partnership (P3)
- Full Privatization
- Public/Public
  - BATA
- Traditional Public Financing
Next steps

- SR 37 Corridor Financial Opportunities Analysis
- Project Design Alternative Analysis - MTC leading effort in partnership with 4 CMAs
- Identifying Funding for Environmental Document(s)
- Evaluate Unsolicited Proposal for Full Private
  - Toll bridge between Hwy 121 and Mare Island
  - Private funds would fund Environmental, Design, Build, Operate and Maintain
Key Consideration for Next Steps

• Government structure – JPA may be needed if project were to be relinquished by Caltrans?
• How do we fund Environmental Document(s)?
• Are there similar successful P3 Projects that SR 37 can be compared to?
• What available Sea level Rise grants can this project take advantage?
• How do we evaluate unsolicited proposals for SR 37 going forward?
• What legislation is necessary to complete SR 37 through P3 financing?
Questions?