The SR 37 Corridor
Goals and Objectives

Produce an integrated transportation and ecosystem design

Improve mobility across all modes and maintain public access

Increase corridor for resiliency to storm surges and sea level rise
100 Minutes to Travel Back Home Every Day

- **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

Parts of SR 37 Already Flood During Heavy Storms

- 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

- 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

Source: UC Davis, AECOM, 2015.
Many of the Adjacent Levees Protecting SR 37 Are Privately Owned

- Private Levees Not Constructed Specifically for Protecting SR 37
  - Ancillary Benefit for SR 37
  - Challenges with Maintaining and Upgrading Private Levees
- A Number of Low Elevation Hotspots Along Corridor

SR 37 Rich with Wetlands, Baylands, and State and Federally-Protected Species

- Wetlands and Baylands
- State and Federally-Protected Species:
  - Salt Marsh Harvest Mouse
  - CA Ridgeway’s Rail
  - CA Black Rail
  - Steelhead
  - Green Sturgeon
  - Longfin Smelt
  - CA Red Legged Frog

Environmental Resilience and Transportation Strategies for SR 37

Not an Option

Available Capacity on Alt. Roadways
Rail Alternative w/o SR 37
Ferry Alternative w/o SR 37

Focus on Protecting and Accommodating

Maintain Existing Roadway
- Near-Term Operational Improv.
Flood Protection
- Levee Improv.
- Building Seawall
- Marshland Restoration

Accommodate

Raised Roadway (SLR Adaptation)
- Improve Capacity on Segment B
Integrated Transportation and Ecosystem Design
Advanced Mitigation Planning Process-Ready

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A Corridor Vision for SR 37

• A Raised Roadbed That Provides Resiliency to Long Term Sea Level Rise Threat through Year 2100
  • Design for 66” SLR + 100-Year Storm
  • New Elevation: 17’ - 20’ (NAVD 88)

• Ecological Enhancement
  • Wetland Hydrological Connectivity
  • Living Levees that Provides Habitat Opportunities

• Improve Capacity in Segment B
  • New Managed Lane(s)

• Multimodal and Local Access Improvements
  • Improve Bay Trail/Bike Access, Provide Transit Service
  • Intersection and Interchange Improvements at SR 121, Mare Island, and Lakeville Highway
The SR 37 Project

- Total Project Cost (Entire Corridor): $1,600M – $4,620M
- Project Delivery: Between 10 – 30 Years

Note: High-level cost estimates, and includes a 3:1 environmental mitigation cost (wetland restoration).

**Segment A:** $420M - $1,600M
- Raised Roadbed
- Lakeville Highway Intersection/Interchange Improvements

**Segment B:** $1,030M - $2,650M
- Raised and Widened Roadbed:
  - (3-Lane or 4-Lane Section with Managed Lane, Bike Facility)
- SR 121 Intersection/Interchange Improvements and Railroad Grade-Separation
- Mare Island Interchange Improvements

**Segment C:** $150M - $370M
- Raised Roadbed
Segment B is the Priority Segment

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

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

**Composite Risk Rating**

<table>
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<th></th>
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Segment B Design Considerations – Cross Section

- Deliver Between 7 - 10 Years
- Construction Cost Range: $1,030M – $2,650M

- New Lane(s) be HOV/Managed Lanes
- Bay Trail/Bike Facility Options
- Footprint Consideration: Environmental, Future CV/AV Impacts on Roadbed Use and Lane Widths

Note: High-level cost estimates, subject to further refinement.
Priority Segment B Design Considerations – Raised Roadbed

Hybrid project design

The causeway would create wetland restoration opportunities, by reconnecting the hydrologic and ecological landscape, and reconfigure tidal exchange.

The levee/embankment would provides an option as a living levee, improve access to public viewing areas.

* Box culvert is also an option.
Note that this is an illustrative restoration scenario, not a proposed plan.
Construction Staging Consideration

Example: 3 Lanes Contra-Flow Lane With Movable Barrier

Segment B
- Embankment Option Shown; Other Options
  - Causeway
  - Box Culvert
  - Hybrid Section with Net Zero Environmental Impact
- Bike Lane Options
- Cross slope to allow for drainage and future widening

Most Conservative Assumption Shown (Range: 2’ – 10’)

[Diagram of construction staging consideration]
Integrated Ecosystem Design

Net-Zero Wetland Loss and Mitigation Integration

- Collaborate with On-Going Restoration Efforts
- Advanced Mitigation Planning Process Ready
- Hybrid Project Design: Embankment/Causeway/Box Culvert
- Large-scale offsite or onsite restoration
Near-Term, Low-Cost, High-Impact Operational Improvements
And Flood Protection Improvements

A $43M Improvement Package Delivered Between 1 to 5 Years

Segment A:
- Flood Protection ($8M)

Segment B:
- Improve EB lane drop merge and intersection modification at SR 121: Roundabout/Continuous T/Restriping & Channelization, Maintain railroad crossing elevation ($10M)
- Improve WB lane merges and provide ramp metering at the Mare Island on-ramp ($7M)
- Flood Protection ($12M)

Note: High-level cost estimates, subject to further refinement.
Near-Term Operational Improvements at SR 121

Last minute maneuvers:
• Eastbound left lane is a trap lane
• Vehicles cut in from left-lane to right-lane

• Mandatory Stopping for Some Vehicles at Railroad Xing (buses, trucks with hazardous materials)
• Railroad Crossing Dip Causes Slow Down

• Extend 2 Eastbound Lanes East of Railroad Crossing
• SR 121 Intersection Improvements
• Increase Existing Throughput
Near-Term Operational Improvements – WB at Mare Island

- Closely spaced on-ramp merge and lane drop
- Cut-through traffic from Vallejo via Mare Island
- Metering Westbound on-ramp
- Improve on-ramp and lane drop merges
- Increase Existing Throughput
Near-Term Improvements: Shoreline/Flood Protection Strategies

- Raising Levee Crest with Fill
- Install Sheet Pile Wall in Levee
- Install Flood Barrier
- Raising a Small Section of Roadway at Low Spots
Multimodal Corridor: Bay Trail and Transit Services

- Bay Trail/Bike Facility Options
  - Existing and Planned
  - Potential Improvements

- Potential Transit Markets
  - Fairfield, Vallejo, Novato, San Rafael

- Match Transit Options with Needs/Demand

- Rideshare and Vanpool Options

- Park and Ride:
  - SR 37 at Fairgrounds in Vallejo
    (STA is currently leading the planning work)

Source: Bay Trail Project, 2017
Implementation Timeline

- **2017-2020**
  - **SLR**
  - **Corridor Wide:** Flood Protection Near-Term Ops Improve.
  - **Segment B:** Elevate and Widen Roadbed, SR 121 and Mare Island I/C Improv, Bay Trail/Transit Improv
  - **Segments A & C:** Flood Protection Improvements

- **2030**
  - **Accommodate:**
    - **Segment B:** Elevate and Widen Roadbed, SR 121 and Mare Island I/C Improv, Bay Trail/Transit Improv
    - **Segments A & C:** Flood Protection Improvements
  - **Consider Alternative Expedited Project Delivery Options**

- **2050**
  - **Protect/Accommodate:**
    - **Segment A:** Elevate Roadbed, Lakeville Hwy Improv
    - **Segment C:** Elevate Roadbed, Bay Trail/Transit Improv
  - **Planning/Design Approvals**
  - **Construction**
  - **Maintenance/In-service/Useful Life**
Next Steps – Focus on Priority Segment B

• Develop Preliminary Design for Segment B:
  - 3-Lane and 4-Lane Options
  - Hybrid Roadbed Design Option: Causeway/Box Culvert/Levee
  - Interchange Improvements at Mare Island and SR 121
  - Bay Trail/Bike Facility options
  - Refine Cost Estimates

• Near-Term Operational Improvements at SR 121 and at Mare Island

• Conduct Traffic Analysis for the Corridor

• Develop Shoreline/Flood Protection Strategies (Near-Term)

• Evaluate Transit Options for the Corridor

• Environmental Community Outreach & Public Outreach

• Complete Phase II/Design Alternative Assessment by Spring, 2018
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
4981 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:
As the planning process for State Route 37 moves forward, we anticipate hosting and conducting a number of different outreach activities to keep the public informed and provide opportunities for input. To ensure broad participation, outreach activities will provide opportunities for people to participate in-person, via the internet and by telephone. The outreach activities and opportunities for public participation proposed for the next year include:

- **Open Houses**
  September 20th, 27th, 28th, and October 2nd

- **Focus Groups**

- **Online Survey**

- **Community Workshops**

- **Telephone Town Hall**

Stay Engaged!

Learn more at:
- scta.ca.gov/highway37 |
- tam.ca.gov |
- sta.ca.gov |
- nvta.ca.gov |
- facebook.com/route37