US 101 / 92 Interchange

Presentation Outline

• Preliminary Planning Study (PPS) Overview
• Previous Studies, Existing Conditions and P&N
• Alternatives Development and Overview
• Recommendations
• Next Steps
Preliminary Planning Study (PPS) Overview

- SMCTA (Funding & Implementer) & C/CAG (Sponsor) joint effort with input from Caltrans, City of San Mateo, City of Foster City, and consultant

- Assess traffic deficiencies, develop project Purpose and Need

- Develop alternatives with stakeholders; evaluate costs, impacts and benefits

- Recommend Short- and Long Term projects to move forward into the Caltrans Project Initiation Document (PID) Phase

Previous Studies

- SR 92 PSR-PDS (2001)
- US101/SR92 Area Study (2013)
- SR92/SR82 PR (2014)
92/82 I/C Reconfiguration

AM QUEUES – EXISTING AND 2040 NO-BUILD

PM QUEUES – EXISTING AND 2040 NO-BUILD

LEGEND:
- Study Area
- Interchange
- Existing AM Bottleneck
- Existing AM Peak-Hour (a) Queue Lengths
- 2040 AM No-Build AM Bottleneck
- 2040 AM No-Build AM Peak-Hour (a) Queue Lengths

SAN MATEO COUNTY
Transportation Authority
AM QUEUES – EXISTING AND 2040 NO-BUILD

PM QUEUES – EXISTING AND 2040 NO-BUILD

AM QUEUES – EXISTING AND 2040 NO-BUILD

PM QUEUES – EXISTING AND 2040 NO-BUILD
Project Purpose and Need

PURPOSE
Improve traffic flow and safety, and increase mobility through the 101/92 Interchange area by minimizing traffic conflict locations and improving peak-period travel times within project limits along 101 and 92

NEED
Overall substantial delay and congestion at the 101/92 Interchange
101/92 Deficiencies - N/B 101

101/92 Deficiencies - S/B 101
Alternatives Development

- Evaluated seven Short Term and twenty-one Long Term alternatives
- Brain-storming session with Cities of San Mateo and Foster City, C/CAG and SMCTA
- Shortlisted nine basic alternatives
- Presented to Caltrans
- Revised alternatives based on Caltrans comments. Cost estimates, impact evaluations, design exceptions and traffic operations benefits incorporated into final PPS June 2016.
Naming Convention for Alternatives

Short Term Alternatives: A
- Projects that can be implemented more quickly through streamlined Permit Engineering Evaluation Report (PEER) Caltrans Process
- Projects with relatively low total cost (<$10M)

Long Term Alternatives: X, Y, Z
- Projects that require full Caltrans Oversight Process (Planning, Environmental, Design) and take longer to implement
- Projects with relatively high total cost (>=$10M)
- Projects that provide more traffic and safety improvements

Alternatives at 101/92 Interchange
Alternatives Ratings

<table>
<thead>
<tr>
<th>ALTERNATIVE</th>
<th>Not Likely to Support</th>
<th>Neutral</th>
<th>Very Likely to Support</th>
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</thead>
<tbody>
<tr>
<td>1X</td>
<td></td>
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<td></td>
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<tr>
<td>4H</td>
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A and B = Short Term Alternatives  X, Y and Z = Long Term Alternatives

C/CAG Foster City City of San Mateo

Short Term Alternative 7A:

WB 92 to SB 101 Loop Ramp Connector ML Addition

SHORT TERM ALTERNATIVE 7A:
Proposes an additional ML preferential lane to compliment the existing mixed-flow lane. The connector traffic will be ramp metered before entering SB US 101.

$7M
Short Term Alternative 8A: EB 92 Merge Reconfiguration and Lane Add

Short Term Alternative 8A:

- Multiple changes over a short distance along EB 92.

$3.5M

Long Term Alternative 1X: 101 Braided Ramps

Long Term Alternative 1X:

- Traffic congestion between SF Highway 101 and US 101 due to heavy weaving and short weaving lengths.

$52M
Long Term Alternative 2X: WB 92 to 101 Managed Lane Direct Connectors

LONG TERM ALTERNATIVE 2X:
The proposed ML connectors from west bound SR 92 to US 101 NB and SB would provide direct access to ML lanes.

New ML Direct Connectors

$93M

Long Term Alternative 8X: SB 101 to WB 92 Added Inside Direct Connector

LONG TERM ALTERNATIVE 8X:
The proposed alternative would reallocate the inside lane range and quick access between the NB US 101-ES 92 ramps, and add mainline ES 92 capacity between the US 305 on-ramps and Foster City Boulevard.

$40M
Long Term Alternative 8ZX: EB 92 Collector Distributor System

$154M

Alternatives Rated on Various Criteria

**SAFETY**
- **Low:** No improvement to weave/merge areas; minimal mobility improvement could potentially lower rear-end type of accidents
- **High:** Clear safety improvement by eliminating unsafe merges at weave conflict locations

**ENVIRONMENTAL**
- **Low:** Minimal impact that could likely be cleared with CE/CE approval
- **Medium:** Not CE/CE, but avoids adverse impacts and may qualify for IS/EA approval
- **High:** Adverse impacts requiring EIR/EIS approval

**RIGHT OF WAY**
- **Low:** May have only temporary construction easement requirements
- **Medium:** May require partial right of way acquisitions or sliver takes
- **High:** Full right of way acquisitions potentially requiring relocations
### Summary of Alternatives Along 101

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Estimated Total Cost (in millions)</th>
<th>Operational Benefit</th>
<th>Safety Benefit</th>
<th>Impact to Local Traffic Circulation</th>
<th>Environmental Impact</th>
<th>Right of Way Impact</th>
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<tbody>
<tr>
<td>1X*</td>
<td>$52M</td>
<td>Improves weaving and operations</td>
<td>High</td>
<td>Needs further evaluation</td>
<td>Medium</td>
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<td>1Y</td>
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*Recommended alternative

### Summary of Alternatives Along 92

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<th>Estimated Total Cost (in millions)</th>
<th>Operational Benefit</th>
<th>Safety Benefit</th>
<th>Impact to Local Traffic Circulation</th>
<th>Environmental Impact</th>
<th>Right of Way Impact</th>
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<td>$7M</td>
<td>Improves operations for ML users (WB 92 to SB 101 only)</td>
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<td>None</td>
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<td>9A</td>
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<tr>
<td>9Y*</td>
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</table>

*Recommended alternative
Recommended Alternatives and Packages

Short Term:
Alternatives 3A, 7A, 8A and 9A ($14M)

Long Term Reduced Package:
1X, 3X, 8X, 9Y ($146M)

Long Term Alternate Package:
1Y, 3X, 8Z and 9Y ($246M)

Long Term Primary Package:
1X, 2X, 3X, 8ZX and 9Y ($353M)

Next Steps

• Project sponsor(s) to determine which alternatives to advance using stakeholder input, regional goals and anticipated funding ranges

• Sponsor to pursue Measure A or other source to fund effort

• Engage Caltrans with Pre-PID meeting to discuss project Purpose & Need and project development path

• Prepare PEER, PID and PR or PID as appropriate to program funding; gain project approval