I. Meeting #3 Recap
II. Goals for CWG Meeting #4
III. A Look at Grade Separation:
   • 16th Street
   • Mission Bay Drive
IV. Review Technical Feasibility and Opportunities of Components
V. Discussion of Tradeoffs
VI. Next Steps:
   • Meeting #5
   • Public Workshop
I. MEETING #3 RECAP
Review analysis and options for:

- Component 3: Railyard Reconfiguration/Relocation
- Component 4: Boulevard I-280
- Component 5: Opportunities for Public Benefit

Discussed component challenges and opportunities, which included the following takeaways (among others):

- Ensure outcomes reflect San Francisco’s (and the surrounding neighborhoods) sense of place and community
- Opportunities for new housing and office space are appreciated, though there is a strong interest in housing over office space
- Mobility issues in the area are a concern, including current traffic patterns and the need for better access
- Boulevard I-280 component is on a different timeline (longer) than some of the other components, questioned whether tying it to the Study was necessary
II. GOALS FOR MEETING #4
GOALS FOR MEETING #4

- Provide more information on the two grade-separated intersections (16th Street and Mission Bay Drive) with the Caltrain Tracks under the Baseline Alignment option.
- Review component and options feasibility, associated opportunities, and potential impacts
- Begin discussing tradeoffs for components and options
- Cover plan and timing for upcoming public workshop
III. A LOOK AT GRADE SEPARATION

- 16TH STREET
- MISSION BAY DRIVE
A LOOK AT GRADE SEPARATION

Considerations for Baseline Alignment Option:

- Increased Caltrain & High Speed Rail operations would result in further delays at the existing at-grade crossings.
- Due to existence of I-280 above the Caltrain tracks, there is not sufficient room to go over the Caltrain tracks but under I-280.
- Streets would need to be trenched (depressed) under the Caltrain tracks to allow for better access through the area and address concerns about traffic delays due to gate-down time at the Caltrain at-grade crossings.
- Both 16th Street and Mission Bay Drive would need to be trenched.

For both the Pennsylvania Avenue Alignment and the Mission Bay (3rd Street) Alignment, the Caltrain/HSR tracks are relocated to a tunnel underground. 16th Street and Mission Bay Drive would remain where they are.

<table>
<thead>
<tr>
<th></th>
<th># of Trains/peak hour/direction (total)</th>
<th>Approximate time of each closure</th>
<th>Total Closure Time/peak hour</th>
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<tr>
<td>Existing (2019)</td>
<td>5 (10)</td>
<td>60-100 seconds</td>
<td>≤15 minutes</td>
</tr>
<tr>
<td>Caltrain after electrification (2022)</td>
<td>6 (12)</td>
<td>Same</td>
<td>≤18 minutes</td>
</tr>
<tr>
<td>Caltrain + HSR (2025)</td>
<td>8 (16)</td>
<td>Likely slightly more</td>
<td>≤24 minutes</td>
</tr>
<tr>
<td>Caltrain + HSR (2029)</td>
<td>10 (20)</td>
<td>Likely slightly more</td>
<td>≤30 minutes</td>
</tr>
</tbody>
</table>
Fire, life, and safety needs require 7th and Mississippi Streets to remain as a through streets providing access to the adjacent buildings.

16th Street would be depressed 40 to 45 feet under 7th/Mississippi Streets, and the Caltrain tracks.

Presumed a 7% grade for streets.

Access along 16th Street to intersecting streets could be removed, including: Hubbell, Connecticut, Missouri, 7th/Mississippi, Owens, and 4th Street – for preliminary analysis and costing presumed these intersections were cul-de-sac’d.

- Connections to streets could be accommodated but at increased costs.

Currently, plans for grade separation at 16th Street are unfunded and would require additional design, environmental clearance, and construction.
APPROX. LENGTH OF POTENTIAL TRENCHING

- 16th Street
- Mission Bay Drive
A LOOK AT GRADE SEPARATION: 16TH STREET

16TH STREET AT-GRADE SEPARATION
Utilities at Mission Bay Drive would require a depressed intersection of 50-feet from current location

Presumed a 7% grade for streets

Access along 7th Street to intersecting streets could be removed, including: Townsend, King, Berry, Hooper, Irwin and Hubbell – for preliminary analysis and costing, these intersections were presumed to be cul-de-sacs
  - Connections to streets could be accommodated but at increased costs

Currently, plans for grade separation at Mission Bay Drive are unfunded and would require additional design, environmental clearance, and construction
GRADE SEPARATION OF MISSION BAY DRIVE

Division Street Sewer
Gravity Outfall at 28 feet below surface

LENGTH OF POTENTIAL GRADE-SEPARATION OF MISSION BAY DRIVE
IV. TECHNICAL FEASIBILITY AND OPPORTUNITIES
The Study team has assessed the technical feasibility and opportunities associated with the Study components and options

- Provides key information about each component and the options in a snapshot
- Helps us to understand the potential tradeoffs between individual options and components

Please see options matrix provided under separate cover
V. DISCUSSION OF TRADEOFFS
DISCUSSION QUESTIONS

- What combination of options best achieve your goals for the Study?
- Which components and options are less important to you?
- Which matrix items (columns) are most important to you?
- Which matrix items (columns) are you willing to compromise on?
VI. NEXT STEPS

- MEETING #5
- PUBLIC WORKSHOP
NEXT STEPS

NEXT CWG MEETING (CWG #5)
- Full Alternatives Discussion:
  • Includes benefits/impacts, schedule impacts, and costs
- Review Draft Public Meeting Materials
- CWG Meeting #5 (tentative) date: March 2, 2017

RAB PUBLIC WORKSHOP
- Review alignment options, opportunities and impacts
- Solicit public feedback on preferences and concerns
- Anticipated location: UCSF, the Genentech Auditorium and Atrium
- Public workshop (tentative) date: March 6, 2017
PHASE I –  
Preliminary Options Analysis  
June 2014 – Feb 2016

PHASE II –  
Alternatives Development Feb 2016 – Winter 2016/2017

PUBLIC MEETING – FEB 2016  
Preliminary Options Analysis  
Public Input

PUBLIC MEETING –  
ANTICIPATED FALL/WINTER 2016  
Draft Alternatives  
Public Input

PUBLIC MEETING –  
ANTICIPATED WINTER 2016/17  
Revised Alternatives  
Public Input

BOARD INVOLVEMENT –  
Determination of  
Elements to Move Forward  
(Antic Jun/Jul 2017)

BOARD INVOLVEMENT –  
Update – 
Draft Alternatives  
(Antic Feb/Mar 2017)

BOARD INVOLVEMENT –  
Update – 
Revised Alternatives  
(Antic Apr/May 2017)

FOLLOW-ON PHASES TO BE DETERMINED