Supplemental Alternatives Analysis

Presented to California High-Speed Rail Authority Board
July 8, 2010
Alternatives Analysis Process

- 2005 – Statewide Program EIR/EIS selected LOSSAN Corridor as route for LA-A Section
- June 2009 – Draft Alternatives Analysis Report Approved by Authority Board
Supplemental AA Report

• Refinements to Dedicated HST Alternative (previously recommended alternative)

• Introduction of Consolidated Shared-Track Alternative. Objectives:
  – Consolidated/Rationalized Passenger Operations
  – Continued freight access in corridor
  – Reduced Right of Way Impacts
  – Reduced Capital Costs

• Options arose from extensive coordination with project stakeholders
Stakeholder Outreach

• Since 2007, more than 400 presentations and briefings reaching stakeholders:
  – Elected Officials
  – Chambers of Commerce
  – Neighborhood Councils / Homeowners Associations
  – Community and Business Organizations
  – Trade Organizations
  – Environmental Justice Groups
Technical Outreach

- Corridor Cities
  - 185 briefings, council workshops and community meetings
- Gateway Cities Technical Working Group - 5
- Gateway Cities Administrative Committee - 2
- Interagency Working Groups - 6
- OC City Managers - 3
- Scoping Meetings - 3
- Stakeholder Working Groups - 2
2 Dedicated HST Tracks

4 Other Tracks:
- Amtrak
- Metrolink
- BNSF

Sub-Sections with Design Options
1. Los Angeles Station / Alignment
   A. LAUS Aerial HST Option
   B. LAUS At-Grade HST Option
2. DT Junction Area
   A. Tall Aerial Option
   B. South Aerial Option
3. Norwalk / Santa Fe Springs Station
   A. No HST Station Option
   B. East HST Station Option
4. Fullerton Station
   A. No HST Station Option
   B. At-Grade HST Station Option
5. Anaheim
   A. At-Grade Option
   B. Deep Bore Tunnel Option
6. ARTIC
   A. West At-Grade HST Station Option
   B. Underground HST Station Option

Vertical Profile Statistics
At-Grade: 14.4 mi 48%
Fill: 1.0 mi 3%
Aerial: 7.9 mi 26%
Trench: 1.9 mi 6%
Multiple Options: 4.8 mi 16%

Overall Alignment Statistics
Single Design Option: 16.5 mi 55%
Multiple Design Options: 13.5 mi 45%
Consolidated Shared-Track Alternative

2 Passenger-Only Tracks:
- HST
- Amtrak
- Metrolink

3 Other Tracks:
- BNSF
- Amtrak
- Metrolink

Improvements for all corridor operators

Sub-Sections with Design Options
1. Los Angeles Union Station
   - LAUS Aerial HST Option
   - LAUS At-Grade HST Option
2. Montebello / Pico Rivera
   - At-Grade
   - Aerial
3. Norwalk / Santa Fe Springs Station
   - No HST Station Option
   - East HST Station Option
4. Fullerton Station
   - No HST Station Option
   - Aerial HST Station Option

Vertical Profile Statistics
- At-Grade: 14.9 mi 49%
- Aerial: 10.9 mi 35%
- Trench: 1.4 mi 5%
- Cut & Cover: 0.9 mi 3%
- Multiple Options: 2.4 mi 8%

Overall Alignment Statistics
- Single Design Option: 25.7 mi 84%
- Multiple Design Options: 4.8 mi 16%

Source: STV Incorporated, AE LLC

July 6, 2010
Legend

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<tr>
<th>Vertical Profile</th>
<th>Aerial</th>
<th>At-Grade</th>
<th>Trench</th>
<th>Cut and Cover</th>
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<tr>
<td>Los Angeles to Anaheim Section - Vertical Profile and Design Options</td>
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<td>Consolidated Shared-Track</td>
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California High-Speed Train Alternatives Analysis Report
Minimizes ROW takes by putting HST tracks above existing tracks
Additional potential impacts from aerial structures
- At-grade configuration possible in areas with wider ROW
- Narrower width than Dedicated HST Alternative – Five tracks instead of Six
Five HST Station options examined at Los Angeles Union Station:

- LAUS Aerial
- LAUS At-Grade
- LAUS Tunnel
- Vignes Aerial
- West Bank
HST Station at Anaheim Regional Transportation Intermodal Center (ARTIC)

Three options examined:
- At-Grade West 4 Track
- At-Grade Under 57 2 Tracks
- Underground 4 Track
Vehicle Maintenance Facility Options

VMF Sites Investigated

Orange (2)
Anaheim East
Anaheim West
Fullerton Airport
Santa Fe Springs
Montebello
LA Golden Pig
Amtrak 8th Street
Los Angeles to Anaheim                     California High-Speed Train Project

Timeline and Public Comment Opportunities

July 2010
• Supplemental Alternatives Analysis to CHSRA Board
  • To be released on www.cahighspeedrail.ca.gov and available for public comment
  • Technical workshops and community meetings

Ongoing Public Comment

Fall 2010
• Technical workshops and community meetings

Feb 2011
• Draft EIR/EIS Released
  • To be released on www.cahighspeedrail.ca.gov and available for public comment
  • Mandatory NEPA/CEQA Public Hearings

July 2011
• Final EIR/EIS Released

September 2011
• Record of Decision / Notice of Determination

13  Los Angeles to Anaheim  California High-Speed Train Project
• Staff recommends
  • Adding the Shared-Track Alternative to LA-Anaheim Draft EIR/EIS
  • Continued work with Cities to reduce impacts and improve design options
  • Continued investigation of Maintenance Facility sites