CALIFORNIA’S HIGH-SPEED RAIL SYSTEM

Industry forum

Fresno

September 8, 2011
AGENDA

• Project update
• Initial construction packages
• Request for qualification and procurement process
CALIFORNIA’S HIGH-SPEED TRAIN SYSTEM
Largest public infrastructure project in U.S. history

- First phase of 520 miles; 800 miles when full system is realized
- Operating speeds up to 220 mph; 90-125 mph in urban areas
- 100% clean electric power
- Safely grade-separated
- Reliable, easy way to travel
- Creates jobs/stimulates economy
INITIAL CONSTRUCTION: 2012
Starting in the Central Valley

The foundation for true high-speed rail

- Only segment where trains will travel at 220-mph maximum operating speed for long stretches
  - Allowing the 2-hour 40-minute trip between Los Angeles and San Francisco
- Initial track in the Central Valley will serve as testing and proving ground for new high-speed train technology in the U.S.
- Technically simpler engineering than urban developed areas, majority at-grade in rural areas
IMPLEMENTING THE SYSTEM: ICS & POSSIBLE INTERIM SAN JOAQUIN SERVICE

- 130-mile ICS backbone of statewide system
- Add minimum interim systems elements
- Potential to operate 110-125 mph high-speed Amtrak San Joaquin service on ICS
- Faster, more reliable trip
- Continue bus connections, Bakersfield-LA

Note. the Altamont Corridor is not part of the State wide system but is shown for presentation purposes only.
Implementing the System: IOS North – San Jose to Bakersfield

- IOS option: San Jose-Bakersfield
- 6 HSR stations
  - San Jose, Gilroy, Merced, Fresno, Kings/Tulare, Bakersfield
- Approx. 250 miles
- Approx. 1h:49m
- Good connectivity – Bay Area to Central Valley
- Continue bus connection, Bakersfield-LA
IMPLEMENTING THE SYSTEM:
IOS SOUTH – MERCED TO SAN FERNANDO VALLEY

- IOS option: Merced-San Fernando Valley (Sylmar) [or possibly Merced-Palmdale]
- 6 HSR stations
  - Merced, Fresno, Kings/Tulare, Bakersfield, Palmdale, Sylmar
- Approx. 300 miles
- Approx. 2h:05m
- Good connectivity – LA Basin to Central Valley
- Connection to Metrolink at Sylmar
IMPLEMENTING THE SYSTEM: COMPLETE “BAY TO BASIN” SYSTEM

- Connect Bay Area with LA Basin
- Approx. 380 miles
- High-speed rail service between all three markets: Bay Area, Central Valley, LA Basin
- Connections at San Jose to Caltrain for service into SF
- Connection at Sylmar to Metrolink for service into LA
IMPLEMENTING THE SYSTEM: COMPLETE PHASE 1 (SF TO LA/ANAHEIM)

- LA-SF connection
- Establish “one seat ride” from SF to downtown LA/Anaheim in less than 3 hours
- New premium high-speed rail service on West Coast Corridor
IMPLEMENTING THE SYSTEM: COMPLETE PHASE 1 AND PHASE 2

- Complete statewide system with extensions to Sacramento and via Inland Empire to San Diego
PROJECT UPDATE SINCE LAST INDUSTRY FORUM (APRIL 12, 2011)

- Draft EIR/EIS for Merced to Fresno and Fresno to Bakersfield issued
- Additional FRA funding of $300 million
DRAFT TO FINAL – POSSIBLE CONSTRUCTION TASKS

- More detail on the following slides can be found in the draft EIR/EIS
- The preferred alignment has not yet been recommended
- These slides are an indication of what *could* be constructed – not what *will* be constructed
INITIAL CONSTRUCTION SECTION AND REQUEST FOR QUALIFICATION

ICS
(Fresno to Bakersfield)

Construction package 1
(N of San Joaquin River to East America Way)

Construction package 2
(East America Way to Lansing Ave)

Construction package 3
(Lansing Ave to Perkins Ave)

Construction package 4
(Perkins Ave to +/- Bakersfield)

Construction package 5
(Track)

First RFQ

Second RFQ

Third RFQ

2-3 months between

2-3 months between

… and after the RFQs come the RFPs…
CONSTRUCTION PACKAGES 1-4

- Construction package 1 – N of San Joaquin River to East America Way
- Construction package 2 – East America Way to Lansing Ave
- Construction package 3 – Lansing Ave to Perkins Ave
- Construction package 4 – Perkins Ave to +/- Bakersfield
• Draft environmental documents for public review/input: ongoing (close Oct. 13)
• ROD/NOD early 2012
• Right-of-way acquisition: beginning spring of 2012
• Issue RFP for construction package 1: early 2012
• Award first Design-Bid-Build construction packages: summer 2012
• Award First Design-Build contract: late 2012
• Complete payment for work funded with ARRA dollars: September 2017
**SMALL BUSINESS INVOLVEMENT**

- 30 percent small business involvement goal
- Maximum participation
- Race and gender neutral
- Reporting at the lowest level
  - Contractors will have to report on every tier of sub contractors
INITIAL CONSTRUCTION SEGMENT
DESIGN-BID-BUILD PACKAGES

• What:
  – Two north (Fresno St and Church St)
  – Possible D-B-Bs South

• Why:
  – Facilitate the larger Design-Build package
  – Allow the Authority to test Construction Management systems

• When:
  – Summer 2012
INITIAL CONSTRUCTION SEGMENT
DESIGN-BID-BUILD DETAIL: FRESNO AND CHURCH ST

• Fresno St underpass extended and lowered
• Church St goes over HSR and BNSF
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: NORTH OF THE SAN JOAQUIN RIVER

- Two possible alignments
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: SAN JOAQUIN RIVER

• Major river crossing
• Aerial structures
• Utility relocations
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: HERNDON AVE AND VETERANS BLVD

- Road relocations
- Aerial structures
- Utility relocations
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: HERNDON CANAL

- Road relocations
- Building relocations
- Utility relocations
- Bridge relocation

Union Pacific HSR Road
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: SHAW

- HSR at grade, Shaw goes over HSR and UP
- Golden State Blvd moves right in this picture
- Possible complex five-legged intersection
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: ASHLAN AVE

- Ashlan Ave raised to accommodate HSR
- Highway moved
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: ASHLAN TO CLINTON

- Constrained
- Caltrans coordination
- Improved 99

Highway 99
HSR
Union Pacific
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: CLINTON

- Aerial structures
- Highway relocation
- New junctions
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: MCKINLEY AVE

- Aerial structures
- Intersection remodeled
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: OLIVE AVE

- Aerial structures (Olive)
- Roeding Park further constrains construction
- Golden State Blvd terminates
- HSR cutting 42’ deep
- Non intrusion barriers
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: BELMONT CIRCLE

- Park remediation
- Overpass
- Surge pond modifications
- Underpass
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: BELMONT CIRCLE

[Images of construction details at Belmont Circle]
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: STANISLAUS AND TUOLUMNE

- Existing structures rebuilt
- New foot bridge
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: STATION
(MARIPOSA ST)
INITIAL CONSTRUCTION SEGMENT
PACKAGE 1 DETAIL: STATION (KERN ST)

- Enhanced civil work in preparation for station packages
Tulare St has two options: over or under
Kern St is closed
Ventura St goes over HSR
Fresno sign could be relocated
Jensen Ave goes under, possible water control challenges
CONSTRUCTION PACKAGES 2-4

- Construction package 1 – N of San Joaquin River to East America Way
- Construction package 2 – East America Way to Lansing Ave
- Construction package 3 – Lansing Ave to Perkins Ave
- Construction package 4 – Perkins Ave to +/- Bakersfield
## Construction Packages 2-4

<table>
<thead>
<tr>
<th>Design Option</th>
<th>BNSF Alternative</th>
<th>Alternatives to BNSF Alignment</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Corcoran Elevated</td>
</tr>
<tr>
<td>Total length (linear miles)</td>
<td>114</td>
<td>4(4)</td>
</tr>
<tr>
<td>At-grade profile (linear miles)</td>
<td>91</td>
<td>0(4)</td>
</tr>
<tr>
<td>Elevated profile (linear miles)</td>
<td>23</td>
<td>4(0)</td>
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<tr>
<td>(including Retained Fill)</td>
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<td></td>
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<tr>
<td>Number of Straddle Bents</td>
<td>29</td>
<td>7(0)</td>
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<tr>
<td>Number of Railroad Crossings</td>
<td>9</td>
<td>8(1)</td>
</tr>
<tr>
<td>Number of Major Water Crossings</td>
<td>7</td>
<td>0(0)</td>
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<tr>
<td>Number of Road Crossings</td>
<td>124</td>
<td>6(5)</td>
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<tr>
<td>Number of Roadway Closures</td>
<td>37</td>
<td>1(2)</td>
</tr>
<tr>
<td>Number of Roadway Overcrossings and Undercrossings</td>
<td>55</td>
<td>0(4)</td>
</tr>
</tbody>
</table>

*Note: Equivalent numbers for the corresponding segment of the BNSF Alternative are presented in parenthesis.*
CONSTRUCTION PACKAGE 2 - EAST AMERICA WAY TO LANSING AVE

- Approximately 28 miles long
- Grade separations
- Aerial structures
- Crossing Kings River
- Realignment of BNSF tracks
- Crossing Highway 198
- Some enabling infrastructure works for the future Kings Tulare Station
CONSTRUCTION PACKAGE 3 - LANSING AVE TO PERKINS AVE

- Approximately 55 miles long
- Grade separations
- River crossings
- Aerial structure
- Improvements to Highway 43
- Skewed aerial crossing over BNSF and highway
CONSTRUCTION PACKAGE 4 -
PERKINS AVE TO NORTH OF
BAKERSFIELD

• Approximately 14 miles long
• Grade separations
• Aerial structures
• Two options for Wasco and Shafter either through town or a bypass at grade
• Road relocation (Santa Fe Way/Central Valley Highway)
• Relocation of BNSF including a new BNSF bridge
• Relocation of existing railroad spur
• Skewed aerial crossing over BNSF and highway
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CONTRACT PACKAGE #1 RFQ AND RFP PROCESS (DESIGN-BUILD)

Draft RFQ with FRA for review

Sep 2011 RFQ issued

30 days for SOQ responses received

30 days to evaluate and shortlist

Shortlisted offerors review and comment on Draft RFP

RFP issued to shortlist

Jan 2012

6 months for RFP response

Jul 2012 close

2 months to evaluate RFP

2 months to negotiate contract

Notice to proceed

Dec 2012
ICS CP #1 DESIGN-BUILD SOQ
RESPONSIVENESS & PASS/FAIL REVIEW

• To be responsive, SOQs must:
  – Conform to RFQ organization and format instructions
  – Be responsive to RFQ requirements

• SOQ pass/fail criteria includes:
  – Required signed commitments and forms
  – Financial capability; bonding capacity
  – Legal & other disclosures are not materially adverse to offeror’s performance of required work
After responsiveness and pass/fail review, offerors will be evaluated based on the following criteria:

- Design-build experience
- Technical competence
- Capability to perform
- Past performance
- SB/DVBE/DBE utilization
- Key personnel
OTHER CONSIDERATIONS

• Permitting with Authority control
• HAZMAT
• Utility relocations
• Right of way access is anticipated to be at 80 percent at time of notice to proceed with a plan for 100 percent completion
ICS CP #2, 3 & 4 DESIGN-BUILD RFQ #2

- Single RFQ for CPs 2-4
- Released 2-3 months after RFQ #1
- Response time of 30 days
- Separate RFPs for CPs 2-4
- RFP response time of 6 months
CONCLUSION

• First true high-speed rail in the US
• Best and most innovative companies
• Active involvement by the small business community
• Partnerships between contractors and the community
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