Supplemental Alternative Analysis Report

Presented to:

California High-Speed Rail Authority Board
August 5, 2010
• Preliminary AA Alternatives
• Refinement of Wye Connections to San Jose
  – Ave 24
  – Ave 21
• New Design Options
  – Le Grand
  – West Chowchilla
• Heavy Maintenance Facilities
Stakeholder Outreach

• Since 2008, more than 84 presentations and briefings to stakeholders:
  – Elected Officials
  – Chamber of Commerce
  – Resource Agency Staff
  – Planning and Transportation Agency Staff
  – Economic Development Agency Staff
  – City Councils & County Boards of Supervisors
  – Local Irrigation & Farm Bureau Organizations
  – Community and Business Organizations
  – Trade Organizations
  – Environmental Justice Groups
  – Business Members
36 Meetings were held:

- Technical Working Group Transportation /Planning Agencies (3)
- Public Information Meetings (9)
- Stakeholder Briefings (7)
- Elected Official Briefings (12)
- Community Organizations Presentation (1)
- County Farm Bureau (2)
- Station Workshop (1)
- Multicultural Outreach (1)
Prior Preliminary Alternatives

Alignment | SJ Wye Connection | Proposed HMFs
---|---|---
A1 (BNSF) | Ave 24 | 8 Proposed Sites
A2 (UPRR/SRR99) | South SR 152 (Ave 21 & 22) |
Henry Miller/Ave 24 Wye Refinement

**Original Ave 24 Wye**
- Smaller Triangle
- Constrain Chowchilla
- Curved Align/Farmland Impact

**Refined Ave 24 Wye (to be carried forward)**
- Larger Triangle
- Further from Growth Plans
- N-S Tangent Alignment/Aligned to Farm Grids/Less Impact

Map showing the change in alignment and impact of the Merced – Fresno Section California High-Speed Train Project.
### South SR152 Wyes Refinement

<table>
<thead>
<tr>
<th>Issues with Ave 22 Wye Option (Not to be Carried Forward)</th>
<th>Ave 21 Option (to be Carried Forward)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Chowchilla Airport Conflict</td>
<td>Similar performance without landfill, museum, interchange or airport conflicts</td>
</tr>
<tr>
<td>2- Adjacent to Fairmead Landfill</td>
<td></td>
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<tr>
<td>3-Adjacency to Museum</td>
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<tr>
<td>4-Conflicts with SR 99 Interchange</td>
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</tbody>
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![Map showing Ave 22 and Ave 21 Wye options]

- Ave 22 Wye option
- Ave 21 Wye option

1-Chowchilla Airport
2-Fairmead Landfill
3-Museum
4-SR99 Interchange
### Le Grand Bypass Design Options

#### Preliminary A1 Alignment

Through the City of Le Grand  
(To be Carried Forward)

#### Design Options

To Minimize or Avoid Impacts  
(To be Carried Forward)
West Chowchilla Design Option

- Eliminates 14 Miles Between Athlone & Fairmead
- Impacts Less Farmland
- Works with A2 and A1
- Reduces Impact to Cities:
  - Chowchilla & Madera
- Eliminates 3 Complex Crossings of UPRR & SR99
- Less Cost
## West Chowchilla Design Option
### Preliminary Consideration/Early Feedbacks

### Pros
- Potential to avoid/reduce impact to Cities of Chowchilla, Fairmead and Madera
- Works with both A1 and A2
- 10 miles shorter than A2
- Eliminates 3 complex structure crossings of SR99 and UPRR
- Less Cost
- Less Impact to Farmlands

### Cons
- Increased Travel Time from Los Angeles to Sacramento

### Involved Agencies | Early Feedbacks
---|---
Merced City & County | Merit to explore, Some concerns on Impact to Local Farmland
Le Grand | Merit to explore, Some concerns on Impact to Local Farmland
Madera County | Merit & Explore, No Commitment
City of Madera | No Commitment. Some opposition
Chowchilla (officials and Others) | Opposed, Constrain Growth, Farmland Impact compared to A1
Merced Farm Bureau | Not Supporting, Advocate A2 and SR 152 Wye
Madera Farm Bureau |
### Preliminary Alignments, Wyes & Design Options

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<tr>
<th>Alignment</th>
<th>SJ Wye Connection</th>
<th>Design Options</th>
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<tr>
<td>A1 (BNSF)</td>
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<td>Le Grand Bypass</td>
</tr>
<tr>
<td>A2 (UPRR/SR99)</td>
<td>Ave 21</td>
<td>West Chowchilla</td>
</tr>
</tbody>
</table>
A1 (BNSF) - Ave 21 Wye Through Le Grand

Merced – Fresno Section  California High-Speed Train Project  Slide 12
A1 (BNSF) - Ave 24 Wye
Through Le Grand

Merced – Fresno Section  California High-Speed Train Project  Slide 14
A2 (UPRR) - Ave 24 Wye Through Chowchilla

Legend

- UPRR/SR 99
- Other HST Project Section
- County Boundary
- Potential Station
- City Limits

Merced – Fresno Section  California High-Speed Train Project  Slide 17
A2 (UPRR) – Ave 24 Wye
West Chowchilla Design Option
A2 (UPRR) / A1 (BNSF) – Ave 24 Wye
West Chowchilla Design Option

Legend
- UPRR/SR 99
- UPRR/SR 99/BNSF Hybrid
- Other HST Project Section
- County Boundary
- Potential Station
- City Limits

Merced – Fresno Section  California High-Speed Train Project  Slide 19
Proposed Heavy Maintenance Facility (HMF) Sites

8 Proposed HMF Sites

Merced – Fresno Section  California High-Speed Train Project  Slide 20
Heavy Maintenance Facility Sites Evaluation

5 Sites Carried Forward
Heavy Maintenance Facility Sites Evaluation

3 Sites Not Carried Forward

**Mission Ave**
- Insufficient distance for northern yard turnout
- Curve and elevated alignment between site and Merced station
- Site entirely within 100-year floodplain

**Harris-Kwan**
- Not directly accessible from any HST alignment still under consideration
- Spur track would be required
- Emergent wetlands on site

**Harris Farms**
- Not directly accessible from any HST alignment still under consideration
- Spur track would be required
San Jose Wye Connections

- Carry Forward Refined Ave 24 Wye (large triangle)
- Do Not Carry forward Ave 22 Wye For South SR 152 Option
- Carry Forward Ave 21 Wye For South SR 152 Option

New Design Options

- Carry Forward Le Grand Bypass Design Options
- Carry Forward West Chowchilla Design Option

Heavy Maintenance Facility Sites

- Carry Forward 5 Feasible Sites (Castle Commerce Center, Fagundes, Gordon Shaw, Harris-DeJager, Kojima Development)
- Do Not Carry Forward 3 Non-Feasible Sites (Harris Farms, Harris-Kwan, Mission Ave)
Next Steps

• Board Concurrence with Staff Recommendation
• PIM & TWG Presentations-Supplemental AA
• Regulatory/Cooperative Agency Coordination
• Supplemental Survey/Studies
• Draft EIR/EIS, December 2010