WHAT IS CALIFORNIA HIGH-SPEED TRAIN PROJECT (CHSTP) and HOW WILL IT BE IMPLEMENTED?
CALIFORNIA HIGH SPEED TRAIN PROJECT

- Connect California’s cities with clean, fast, modern passenger high-speed rail system
- Fully electric trains capable of sustained 220 mph speeds
- Los Angeles-San Francisco trip time of 2 hours, 40 minutes
- CHSRA business plan presents a phased implementation plan
CHSTP IMPLEMENTATION PHASES

- Blended/Integrated Services
- 2018 San Joaquin AMTRAK Services
- 2022 Initial Operating Section (IOS)
- 2027 Bay to Basin
- 2029 Phase 1 Blended
IOS/ FIRST CONSTRUCTION SEGMENT

- Roll-Out: 2018
- Madera - Rosedale
- No Traction Power or HST Signal System
- San Joaquin Service Uses HST Line
- Feeder Bus
INITIAL OPERATING SECTION (IOS)

- Roll-Out: 2022
- Electric HST Merced – San Fernando Valley
- Feeder Service on both ends
BAY TO BASIN

- Roll-Out: 2027
- San Jose & Merced – San Fernando Valley
- Feeder services at all ends
PHASE 1
“BLENDED”

- Roll-Out: 2029
- One-Seat HSR Service SF and LA
- CHST trains into SF on 2-Track Caltrain Corridor
More than High Speed Trains:
CALIFORNIA’S INVESTMENT IN LIVABLE COMMUNITIES
PROPOSITION 1A

“(h) Stations shall be located in areas with good access to local mass transit or other modes of transportation.

(i) The high-speed train system shall be planned and constructed in a manner that minimizes urban sprawl and impacts on the natural environment.”
General Principles for HST Station Area Development

• Higher density development in relation to existing patterns
• A mix of land uses and mix of housing types to meet the needs of the local community
• A grid street pattern, compact pedestrian-oriented design
• Context-sensitive building design
• Limits on parking for new development with passenger parking offered at market rates

Source: HST Station Area Development: General Principles and Guidelines. Adopted by Authority Board February 3, 2011.
Implementation by the CHSRA

- Selected locations; multi-modal transportation hubs with a preference for traditional city centers
- Station area development policies that promote TOD, value-capture
- Provide incentives to prepare and adopt Station Area Plans and to amend City and County General Plans that incorporate these principles in the vicinity of HST stations

Source:  HST Station Area Development: General Principles and Guidelines. Adopted by Authority Board February 3, 2011.
STATION AREA PLANNING FUNDING AGREEMENTS

• Maximum of between $600,000 and $900,000 in federal ARRA and state Prop 1A funding for each jurisdiction

• Initial Station Area Planning jurisdictions
  • Merced
  • Fresno
  • Bakersfield
  • Kings/Tulare
  • Palmdale
  • San Jose
  • Gilroy

• Eligible activities:
  • Station Area Plan development
  • Supporting plans and procedures
  • Incorporation of Plan into local land use plans
  • Outreach and facilitation

Source: California High-Speed Rail Authority Application Package for Station Area Planning Funds. March 2011.
CITY of FRESNO
RAIL~VOLUTION
PRESENTATION
Wilma Quan
Central Valley CA High-Speed Train Stations
FRESNO
HISTORICAL CONTEXT
Where is Fresno? It's the heart of California!
Topics:
1. Mayor’s Platform
2. Downtown Fresno Revitalization
3. How ‘big’ Fresno is and its growth trajectory
4. Synergy between HSR Station and Downtown Development
5. Extent of Station’s Influence on Surrounding Context
THE GREATEST DENSITY OF...EVERYTHING
HSR STATION AREA MASTER PLAN
EXISTING CONDITIONS

FRESNO - MARIPOSA HST STATION
SITE STUDY DIAGRAM 1 - EXISTING CONDITIONS

County Retirement Building
2 Greyhound Station
3 Tulare st.
4 SP Depot (1889)
5 Railroad Express (Added 1914-1929)
6 Pullman Shed
7 Jensen & Pilegad
8 Fire Department
9 Chuckchansi Park
10 Fulton Mall
VISUAL IMPACTS– MARIPOSA OPTION
(VIEW FROM CHUKCHANSI PARK)
VISUAL IMPACTS– MARIPOSA OPTION
(VIEW FROM H STREET)
VISUAL IMPACTS—MARIPOSA OPTION
(VIEW FROM SOUTHERN PACIFIC DEPOT)
VISUAL IMPACTS– MARIPOSA OPTION
(VIEW FROM HST STATION ELEVATED CONCOURSE)
High Speed Rail

- Station Area Planning (EPA, DOT)
PACIFIC SOUTHWEST BUILDING
FRESNO, CA
THE HELM BUILDING
Station Area Planning
For High-Speed and Intercity Passenger Rail

Eric Eidlin
Federal Transit Administration
Region 9, San Francisco
The National View
Key Passenger Rail Investments since 2009

Pacific Northwest
$814M
Pop: 8.4M
World’s 30th Lgst economy

California
$4,239M
Pop: 38M
World’s 9th Lgst economy

Midwest
$2,586M
Population: 56M
World’s 7th Lgst economy

Northeast
$3,715M*
Pop: 52M
World’s 5th Lgst economy

Southeast
$700M
Pop: 18M
World’s 20th Lgst economy

* Includes all Federal funding for the Northeast Corridor and HSIPR program funding for the Northeast Region.
The Context

Changing Preferences
Federal Leadership
State Legislation
Changing Preferences

http://www.nbm.org/blueprints/00s/fall00/page6/sprawl.jpg
Changing Preferences
Federal Leadership: Livability
Federal Leadership:
FRA Station Area Planning
Station Area Planning recommendations
1. Location: OPTIMIZE

2. Transportation Connectivity: MAXIMIZE

3. Development: DESIGN and INFILL
Is the station located to support existing population and employment densities?
Is the station located to maximize access between regional or city centers to create a regional network?
2. Transportation: Maximize connectivity

Is the station physically connected to other passenger transport such as intercity rail, light rail, streetcars, so that transfers are convenient?
2. Transportation: Maximize station connectivity

In the station area, do streets include continuous sidewalks of adequate width for pedestrians?
2. Transportation: Maximize station connectivity

Do bikeways form a network throughout the city?
Transportation: Prioritization

- Pedestrians
- Bicyclists
- Public Transit
- Taxis and Kiss-n-Ride
- Self-drive auto / parking
What kinds and how many infill projects are proposed to be completed within 5 and 10 years of railway revenue operations?
Opportunities and Challenges
Scale: HSR stations = Airports

Strasbourg, France
Train Station

Airport
Scale: HSR stations = Airports
Impacts: Proximity to Development
Optimal Land Use Mix
Need to assess impact of high speed rail on entire transit network.

First mile/last mile issues.
Before you add more parking... count what you have.
THANK YOU!
ERIC.EIDLIN@DOT.GOV
SUSAN.HERRE@DOT.GOV

To access the recommendations:
http://www.fra.dot.gov
Future Urban Development With High-Speed Rail Stations

16 October, 2012
RAIL & URBAN DEVELOPMENT IN SAN JOSE, CALIFORNIA
PLANNED CALIFORNIA HIGH-SPEED TRAIN ROUTES
8 Principles of Development at Rail Stations

1. The Station: Fit the Station within city fabric
2. Station Area: Develop an area plan with the Station
3. Connections: Connect the Station with transit modes
4. Mode Shares: Shift mode share to walk, bike & transit
5. Car Parking: Minimize auto parking at Station
6. Bike Parking: Maximize bicycle parking at Station
7. The Tracks: Add uses in structure & minimize impact
8. Cultural Shift: Promote transport and development alternatives to car-based culture
San Jose Diridon Station – The Area Today
San Jose Diridon Station – The Area Today
San Jose Diridon Station Area – Alternative Plans
San Jose Diridon Station Area – Preferred Plan
<table>
<thead>
<tr>
<th><strong>Caltrain Southbound:</strong></th>
<th>Current: San Francisco - Gilroy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population:</strong></td>
<td>971,372</td>
</tr>
<tr>
<td><strong>San Fran. - San José:</strong></td>
<td>1 hour</td>
</tr>
<tr>
<td><strong>Station Parking:</strong></td>
<td>597 spaces in station area</td>
</tr>
<tr>
<td><strong>Number of Passengers:</strong></td>
<td>43,000 per week (2012)</td>
</tr>
<tr>
<td></td>
<td>(average weekday passenger activity for Diridon Station)</td>
</tr>
<tr>
<td><strong>Cost:</strong></td>
<td>$25 million – Phase One</td>
</tr>
<tr>
<td></td>
<td>(including new platforms &amp; tracks)</td>
</tr>
</tbody>
</table>

**Station Area:**

**Proposed Mix-Used Development:**
- 420,000 sf - Retail & Restaurants
- 2,600 du - Residential Uses
- 5,000,000 sf – Office, R&D, Light Industry
- 900 rooms - Hotels
- 32,000 seats - Stadium

**Diridon Station – San Jose, California**
## PROJECTED PARKING DEMAND
**DIRIDON STATION, SAN JOSE**

<table>
<thead>
<tr>
<th></th>
<th>FIRST PHASE (10 YEARS)</th>
<th>FINAL PHASE (25 - 30 YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35 ACRES</td>
<td>250 ACRES</td>
</tr>
<tr>
<td>EXISTING TRANSIT AGENCIES</td>
<td>1,240</td>
<td>960</td>
</tr>
<tr>
<td>HIGH SPEED RAIL</td>
<td></td>
<td>430**</td>
</tr>
<tr>
<td>BART</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>PRIVATE DEVELOPMENT</td>
<td>3,360</td>
<td>9,210</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,600</strong></td>
<td><strong>11,000</strong></td>
</tr>
</tbody>
</table>

(USING CURRENT PARKING RATIOS AND MODEST MODE-SHARE SHIFTS)

(USING AGGRESSIVE MODE-SHARE SHIFTS & REDUCED PARKING RATIOS)

**NOTE:** CHSRA ESTIMATES TOTAL DEMAND FOR 3,800 PARKING SPACES
430 SHORT TERM SPACES WITHIN 1/2 MILE RADIUS
3,370 LONG TERM SPACES WITHIN 3 MILE RADIUS

San Jose Diridon Station Area – Parking Projections
San Jose – Diridon, Downtown & Airport

Norman Mineta Airport
Santa Clara
Diridon Station Area
Downtown
City of San Jose – 2040 – 70 Planned Urban Villages
### San José Envision 2040
VMT Reduction Goals

<table>
<thead>
<tr>
<th>Mode Share</th>
<th>Existing</th>
<th>Model Results</th>
<th>10% VMT Reduction</th>
<th>20% VMT Reduction</th>
<th>40% VMT Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>77.8%</td>
<td>69%</td>
<td>61%</td>
<td>55%</td>
<td>40%</td>
</tr>
<tr>
<td>Carpool</td>
<td>9.2%</td>
<td>19%</td>
<td>15%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Transit</td>
<td>4.1%</td>
<td>9%</td>
<td>12%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Bike</td>
<td>1.2%</td>
<td>1.50%</td>
<td>6%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Walk</td>
<td>1.8%</td>
<td>1.50%</td>
<td>6%</td>
<td>9%</td>
<td>15%</td>
</tr>
</tbody>
</table>

San Jose – The City’s Transportation Goals
San Jose – High-Speed Rail – Visual Simulations
Diridon Station – San Jose, California - Today
Diridon Station – San Jose, California – Proposed
Santa Clara Street Section

San Jose Diridon Station – Elevated Structure
San Jose – High-Speed Rail – Visual Simulations
San Jose – High-Speed Rail – Visual Simulations
San José – High-Speed Rail – Visual Simulations
Millau Viaduct, France

Elevated Structure Precedents - Bridges
Elevated Structure Precedents
Elevated Structure Precedents - Paris
San Jose – Santana Row – Urban Village
Future Urban Development
With High-Speed Rail Stations

THANK YOU

Frank Fuller, FAIA  –  Rail-Volution 2012  –  Los Angeles, California
CHSR STATION AREA
PLANNING

QUESTIONS

CHALLENGES

FUTURE EFFORTS