

California

HIGH-SPEED TRAIN

Project Overview

Presentation to the
Ohio Transportation Engineering Conference
October 29, 2008



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California High-Speed Rail Authority

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URS Corporation



California High-Speed Train

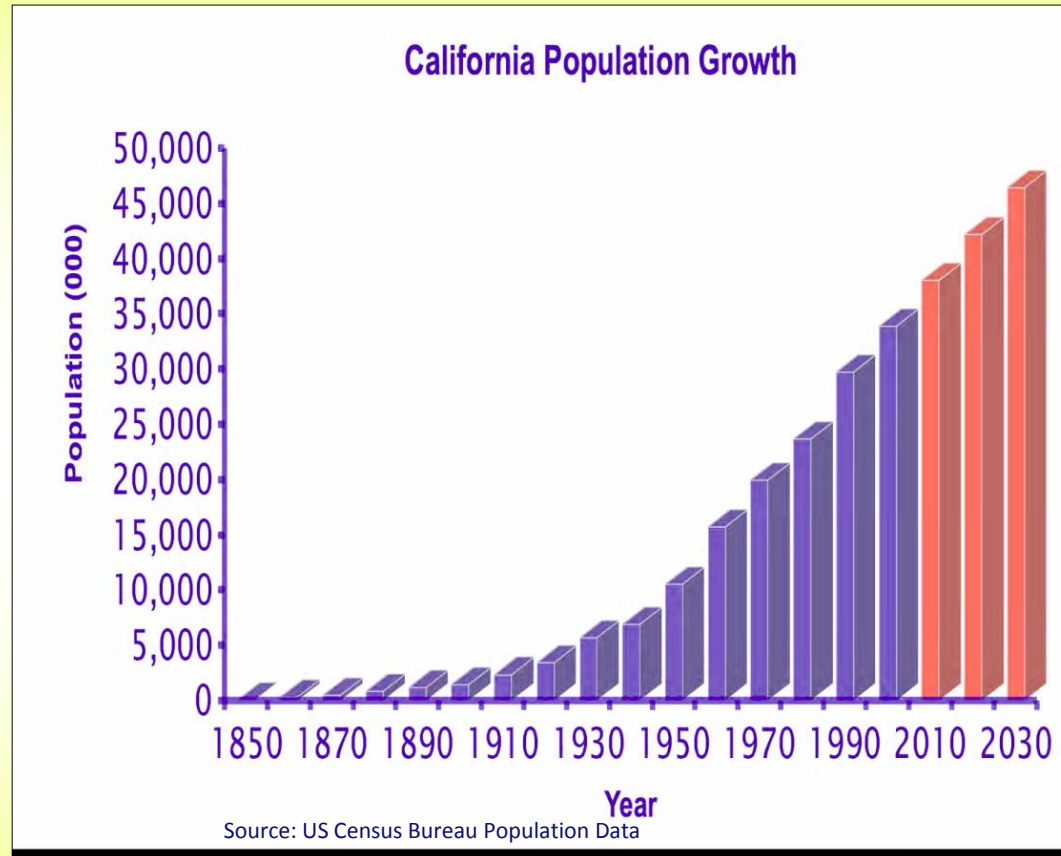
Agenda

- ✓ Purpose and Need
- ✓ The High-Speed Rail Solution
- ✓ Cost and Funding
- ✓ Implementation



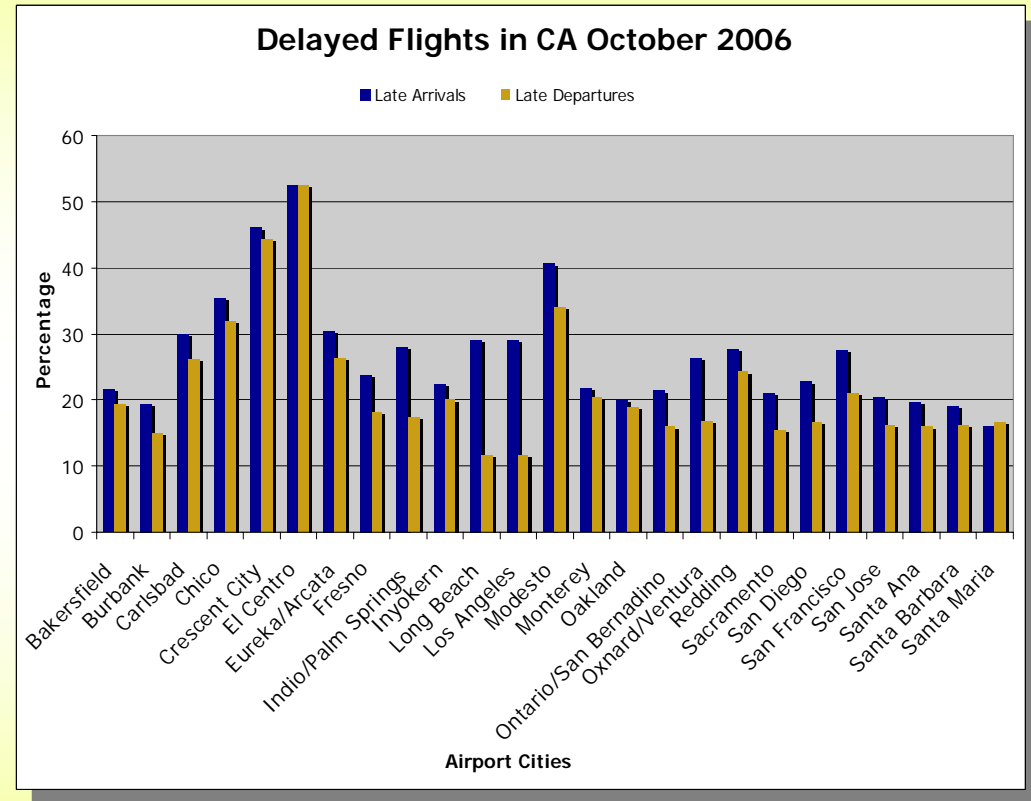
Growth and Congestion

- 51 million people in 2030 (15% of U.S.)
- Three of five most congested areas in the U.S.:
 - Los Angeles (#1)
 - San Francisco-Oakland (#2)
 - San Diego (#5)



Delay and Cost

- Auto congestion now costs \$20 billion annually and is growing 10% a year
- LAX and SFO airports among the worst in on-time performance

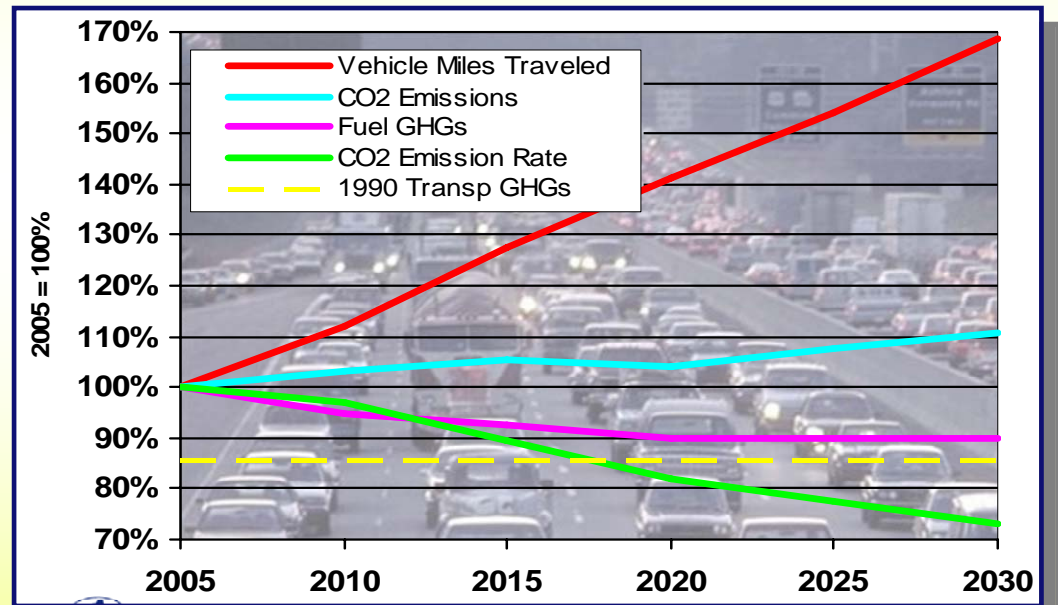


Source: Department of Transportation - October 2006 Air Travel Consumer Report



Air Pollution

- California is 12th largest source of greenhouse gas emissions in the world. Emissions rose by 15% between 1990 and 2004
- 41% of the state's emissions come from the transportation sector
- Cleaner fuels and more efficient vehicles alone *cannot* achieve state AQ goals.



Source: The Center for Clean Air Purity



Required Freeway and Air Investment

- 3,000 miles of freeways
- 5 airport runways
- 90 departure gates ...

... are needed to equal the capacity of the High-Speed Train

Improvement	Cost
Highway Component	\$66 Billion
Aviation Component	\$16 Billion
Total Cost	\$82 Billion



Source: CA High Speed Train System EIR/EIS: Appendix 2E



High-Speed Rail → ... →





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California HST System



- Total Length: 800 miles
- Service to over 90% of state's population centers
- Priority (spine) segment and two extensions



HST Priority Segment

HST Priority Segment:

San Francisco to Anaheim

via

- San Jose
- San Joaquin Valley
- Antelope Valley (Palmdale)
- Los Angeles Union Station



California HST Project Details



- State-of-the-art electrically powered steel-wheel-on-steel-rail technology
- Completely double-tracked with passing tracks at intermediate stations
- Fully grade-separated
- Downtown stations, with connections to major airports and transit
- Ridership up to 117 million passengers annually by 2030. No operating subsidy.

HST Priority Segment Phasing

5-7 Years

- SF to San Jose
- LA to Anaheim

7-10 Years

- Merced to Bakersfield

10-13 Years

- Bakersfield to LA
- Merced to San Jose



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High-Speed Train Benefits

Economic Impact

- Approximately \$3 billion in annual revenue
- Approximately 160,000 construction jobs and 450,000 permanent jobs by 2035
- Total economic impact over \$5 billion annually

Congestion Relief

- Eliminate 70 million auto trips annually
- Reduce delays at California's 9 largest airports



High-Speed Train Benefits

GHG and Pollution Reduction

- Eliminate CO² emissions by 6.4 million tons per year by 2030
 - Equivalent to 1.4 million fewer passenger cars
 - Meet 50% of AB 32 greenhouse gas emission reduction goal for land use and transportation
- Part of the San Joaquin Valley APCD Clean Air Plan

Energy Savings

- Save 13 million barrels of oil annually





Cost and Funding...



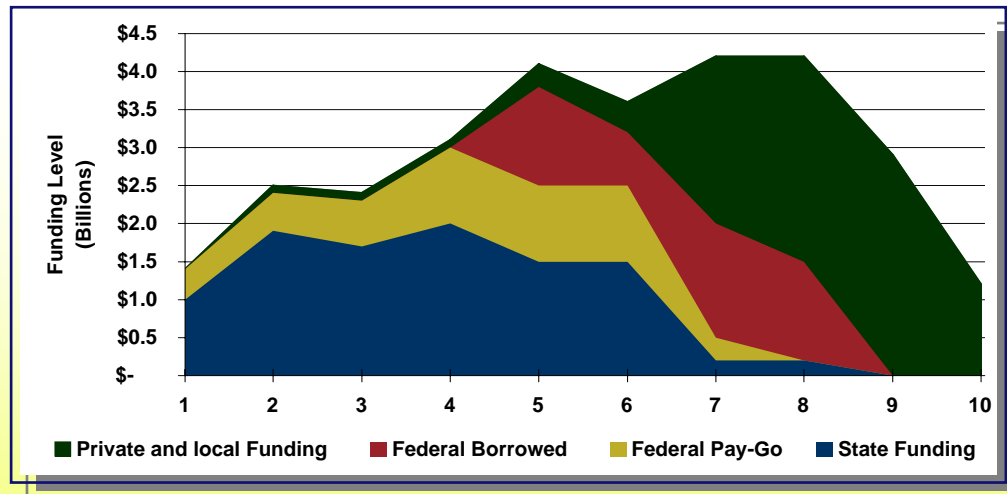
Cost and Funding

- **Cost of Priority Segment: \$30 billion**
- **Three-Part Funding Plan:**
 - **State Funds: \$9 Billion (Pending bond issue)**
 - **Federal Funds: HSR legislation moving forward in both houses of Congress**
 - **Private Investment: Revenue-backed investment via Design-Build, DBOM, etc.**



Timing of Funds

- State/Federal commitments needed for private participation
- State funds all pre-construction and early construction
- Feds help fund initial segments (e.g., SF-San Jose)
- Private funds invested after other funds committed



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Federal Legislation

- ***HR 2095 signed into law (October 2008)***

Division B (Passenger Rail Investment and Improvement Act of 2008)

TITLE V – HIGH-SPEED RAIL

— SEC. 501. HIGH-SPEED RAIL CORRIDOR PROGRAM

— SEC. 502. ADDITIONAL HIGH-SPEED RAIL PROJECTS

- **Other House legislation under consideration**

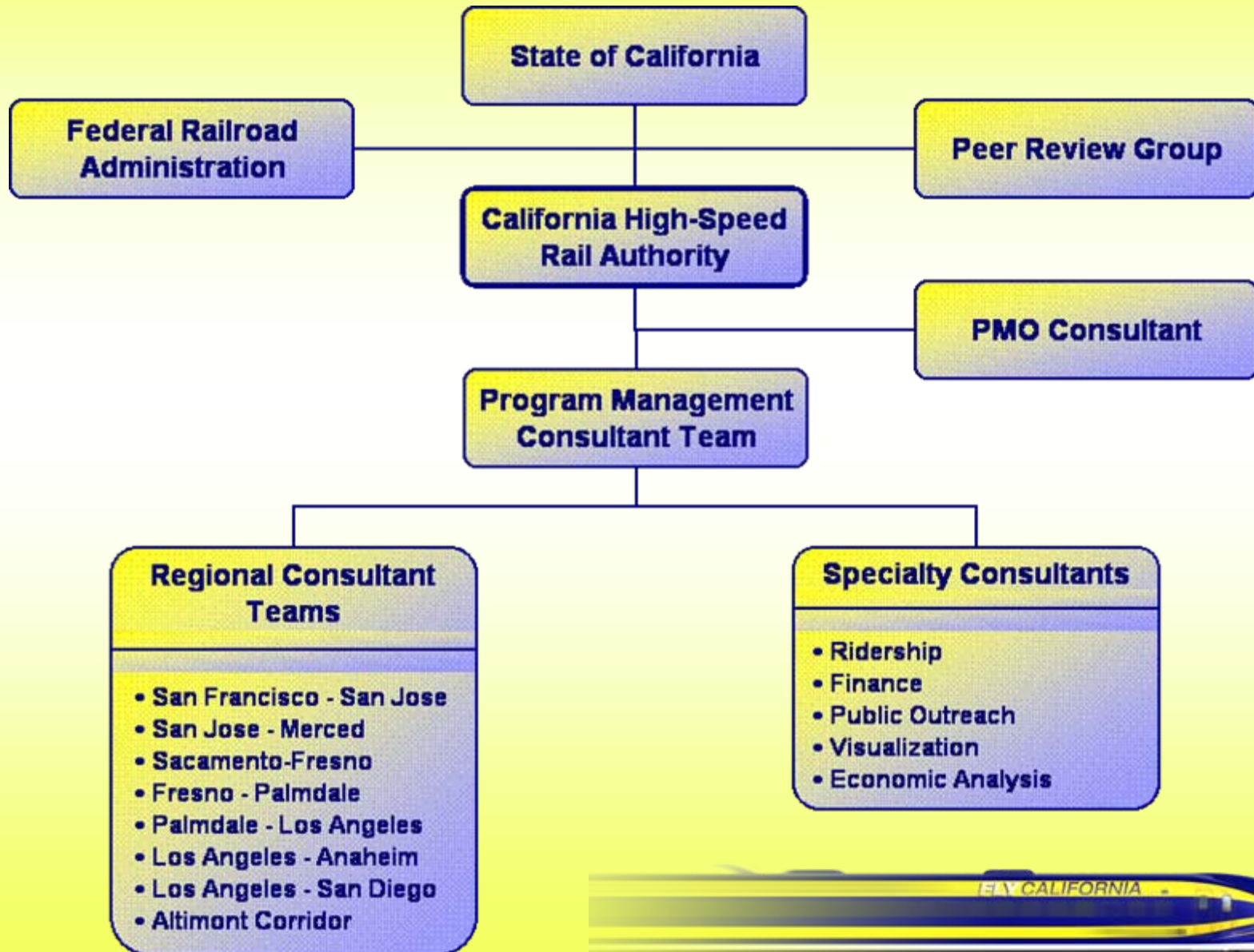


Private Financing

- **California HSR Authority has met with over 70 private contractors, equipment vendors, operators, and financiers**
- **Discussed P3 approach to help fund the HST Project**
- **Received Expressions of Interest from over 50 possible partners**



HST Project Organization



Accelerated Activity

- **Final Route Approved (ROD and Cert.)**
- **\$46 million FY09 Budget Approved**
- **Nine Consulting Teams Under Contract**
- **\$9.95B Bond Issue on November Ballot**
 - **\$9B for HST**
 - **\$950 Million for Other Rail Transit**



November Bond Election

On Nov 4, ask your California family,
friends, (anybody, really) to:

Vote “Yes” on Prop 1A!



California HST Project

Questions and Answers



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