



CALIFORNIA

HIGH-SPEED TRAIN

**Blueprint Learning Network
Towards Alignment: Regional
Transportation Strategies**

September 25, 2007



FLY CALIFORNIA

Without ever leaving the ground.

CALIFORNIA HIGH-SPEED RAIL AUTHORITY



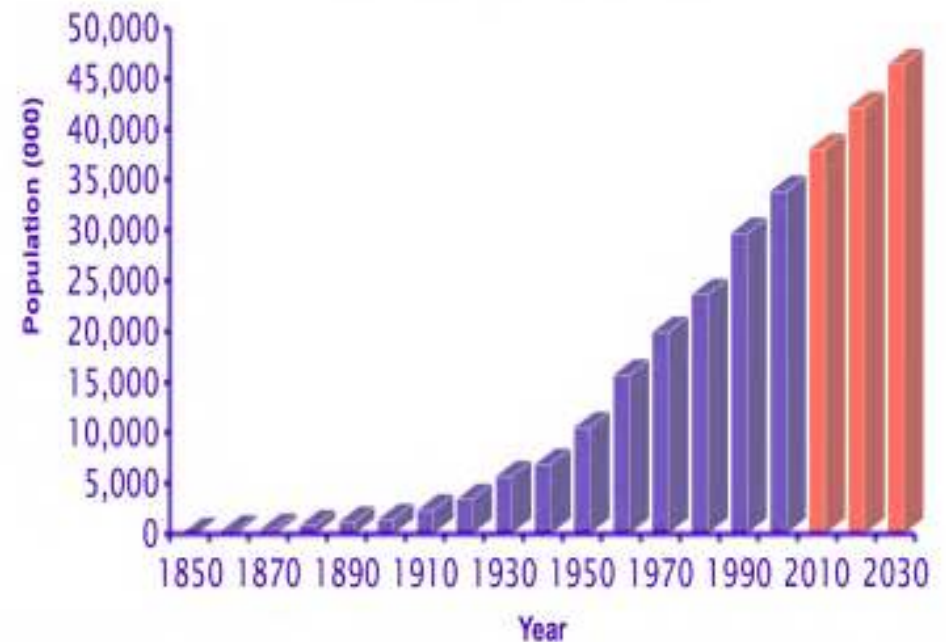
THE PROBLEM



CALIFORNIA'S RAPID GROWTH

- Estimated 2006 population:
36,457,549
- By 2030, CA is projected to hold over 15% of the U.S. population, approximately **50 million** people.
- By 2050, the San Joaquin Valley population is expected to reach over 9.4 million people.

California Population Growth



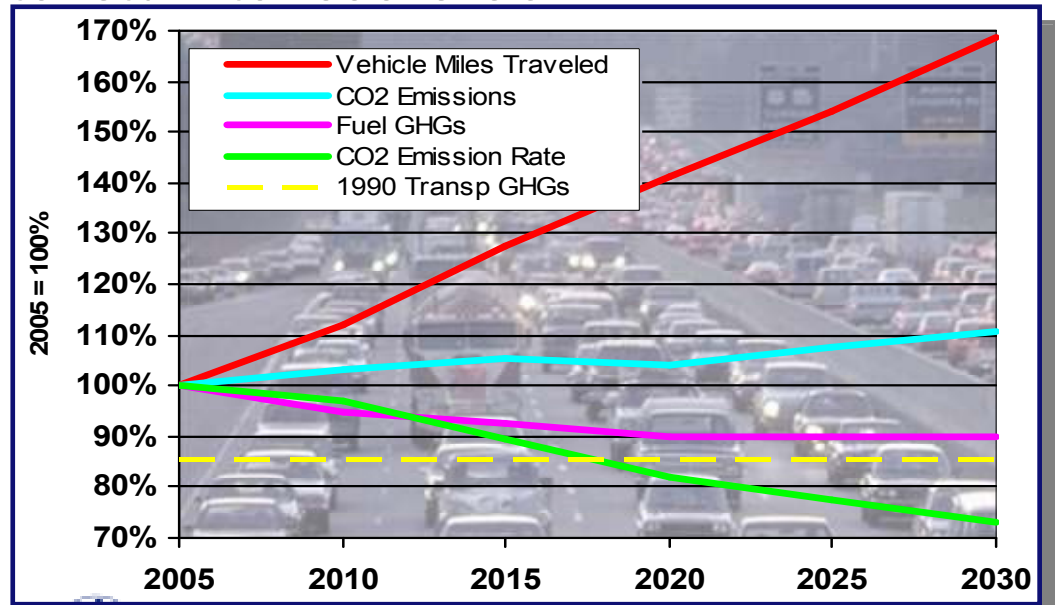
Source: US Census Bureau Population Data

CA. Dept. of Finance - 2007



POLLUTION

- CA is the 12th largest source of greenhouse gas emissions on the planet, with emissions rising by 15.1% during 1990-2004
- CA has recognized this problem and enacted legislation, AB 32, which requires greenhouse gases to return to 1990 levels
- 41% of the State's emissions come from the transportation sector
- Cleaner fuels and more efficient vehicles alone *are not* predicted to achieve AB 32's goals.



Source: The Center for Clean Air Purity





HIGH-SPEED TRAINS PART OF THE SOLUTION



CALIFORNIA HIGH-SPEED RAIL



The majority of the system will be at-grade along side existing railroads, roads, and highways

- Length: 700 miles
- Speed: 220 mph
- Path: 50ft wide



PROJECT DESCRIPTION



- Over 700 miles long, connecting major cities and regions, traveling at maximum speeds of 220 mph.
- State-of-the-art electrically powered steel-wheel-on-steel-rail technology with automatic train control.
- Fully grade-separated tracks (no auto or pedestrian crossing on tracks) fences to prevent intrusion and completely doubled tracked with four-tracks at intermediate stations to provide express service.
- Estimated to carry up to 117 million passengers annually by 2030.
- Most HST alignment (50' right-of-way) within or adjacent to existing rail or highway ROW.
- New and upgraded stations, with connections to major airports.



CENTRAL VALLEY COMPONENT



CENTRAL VALLEY PREFERRED ALIGNMENTS & STATION LOCATIONS

Preferred Alignments:

Sacramento – Stockton

- UPRR (Preferred)
- CCT (Additional Study)

Stockton – Merced

- BNSF *

Merced – Fresno

- BNSF

Fresno – Bakersfield

- BNSF (Preferred)
- Alignment Study

Preferred Station Locations:

Sacramento – Amtrak Station

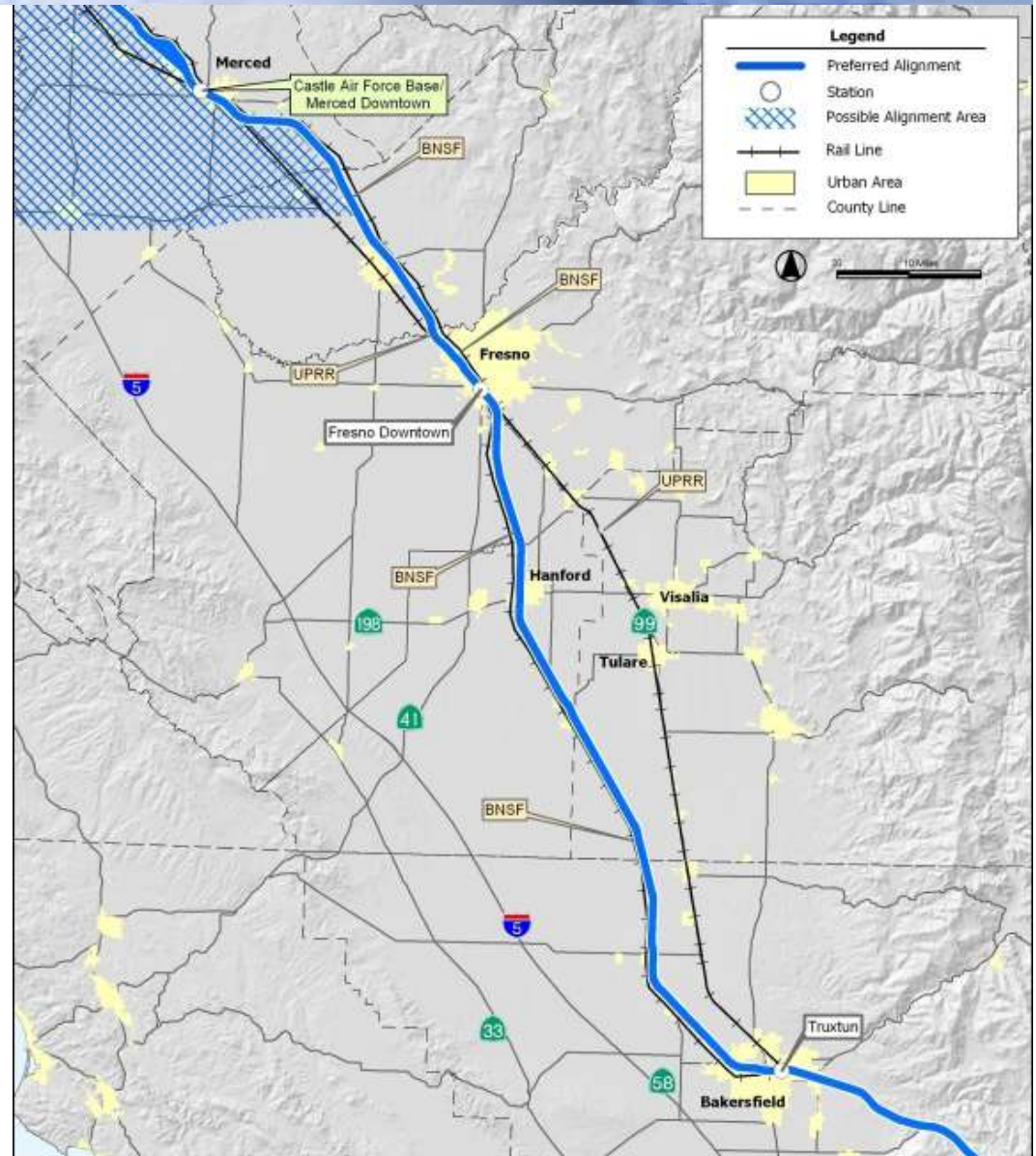
Stockton - ACE Station

Modesto – Amtrak Station

Merced – Either Castle AFB or
Downtown Merced

Fresno – Downtown Fresno

Bakersfield - Amtrak Station



**This alignment is subject to change pending the outcome of the BA-CV EIR/EIS*



BENEFITS



ECONOMIC BENEFITS

Like past major infrastructure projects – California’s water, university and highway systems – the high-speed train system would be an economic stimulant and smart investment in California’s infrastructure.

- HSR will generate approximately **\$3 billion** in annual revenues
- HSR will create 450,000 permanent jobs by 2035 and 300,000 job-years of employment from construction
- HSR will eliminate the need to construct 3,000 lane miles of highway, 90 airport gates, and 5 additional airport runways
- Increased mobility will alleviate critical housing problems
- By connecting the urban centers of major cities, the high-speed train system provides opportunities to plan for transit-oriented growth, and urban infill as opposed to continued sprawl.
- HSR will cost less than half the cost of expanding freeways and airports to meet future intercity travel demand.



OTHER BENEFITS

Energy Savings and Air Emissions Reductions:

- HSR will reduce CO2 emissions by 17.6 billion pounds per year
 - Equivalent to taking over 1.4 million passenger cars off the road each year
- HSR saves 22 million barrels of oil annually
 - Uses 1/3 the energy per mile of air travel & 1/5 the energy per mile of auto travel

Congestion:

- HSR will lower long-distance auto passengers on highways by 57 million annually
- HSR will divert airline passengers to reduce delays at CA's 9 largest airports
- HSR will carry up to 117 million annual passengers by 2030

Environmental:

- HSR requires less land than would be needed to expand existing highways & airports
- Would provide for transit oriented growth
- Less impact on biological resources
- HSR would stimulate in-fill development





Q & A

