



CALIFORNIA
High-Speed Rail Authority

A TRANSFORMATIVE INVESTMENT IN CALIFORNIA'S FUTURE

Business Advisory Council

October 15, 2015



HIGH-SPEED RAIL: More Than A Transportation Program

- California is 7th Largest Economy in the World
- Comparable to Northeast Corridor in Terms of Distance, Population and Complexity
- Transformative Investment
- Connecting all California Population Centers



HIGH-SPEED RAIL: Around the World

- 12 Countries with High-Speed Rail Service
 - » Dozens of Others with High-Speed Rail Under Construction & In Development
- Over 3,600 High-Speed Rail Systems
- Over 18,500 Miles of High-Speed Rail
- 1.6 Billion Annual Passengers



HIGH-SPEED RAIL OFFERS MORE CHOICES IN CALIFORNIA

- The State's Population is Growing
 - » 50 million by 2050
- Congestion Diminishes Our Competitiveness
 - » Highway: Six of top 30 **congested urban areas** in US are in California
 - » Airways: LAX to SFO is the **busiest short-haul market** in United States
 - » Railways: Freight and passenger service share tracks
- Poor Air Quality Impacts Our Communities
 - » South Coast and Central Valley Air Basins Don't Meet Current Clean Air Objectives
- An Efficient and Less Expensive Alternative
 - » Alternatives are 2-3 times more expensive



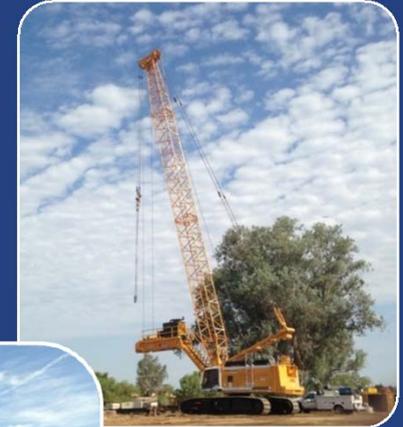
CONNECTING CALIFORNIA: PROJECT SCOPE



- Phase I:
 - » 520 Miles
 - » San Francisco to Los Angeles/Anaheim
- Phase II:
 - » Extends 300 Miles
 - » Connections to Sacramento & San Diego
- Proposition 1A
 - » At least 200 mph
 - » San Francisco-Los Angeles Union Station: two hours, 40 minutes
 - » 24 total stations

KEY PROGRAM MILESTONES

- **Funding:**
 - » \$3.3 Billion Federal and \$9 Billion Prop 1A
 - » 25% of Cap and Trade Proceeds
- **Environmental Clearances to Date:**
 - » Merced to Fresno: May 2012
 - » Fresno to Bakersfield: June 2014
- **Construction Packages (CP):**
 - » CP 1: Executed Aug 2013, Under \$1 Billion
 - » CP 2-3: Executed July 2015, Over \$1 Billion
 - » CP 4: Proposals due November 2015
Estimated \$400 – \$500 Million



KEY ENVIRONMENTAL MILESTONES

- **Ag Conservation & Preservation**
 - » Department of Conservation Solicits Farmland Mitigation Proposals
 - » 5,000 Acres of Permanent Easements in the Central Valley
- **Tier 4 Construction Equipment:**
 - » Engines Meet Nation's Most Stringent Standards
- **Mitigation with A Difference:**
 - » Lazy K Mitigation Site
 - » Habitat Mitigation in Central Valley
- **Voluntary Emissions Reduction Agreement (VERA):**
 - » MOU with San Joaquin Unified Air Pollution Control District
 - » Zero Net Emissions
 - » Replaces Aging Equipment Including Tractors and Irrigation Pumps



WHY START IN THE CENTRAL VALLEY?

- Central Valley will Serve as the “**Backbone**” of a System that will Tie Major Regions of California Together
- Fastest **Growing** Region in the State
- Revitalize Central Valley **Downtown Centers**
- Creates **Jobs** in a Region with High Unemployment
- Best, Most **Cost-Efficient** Location for Testing

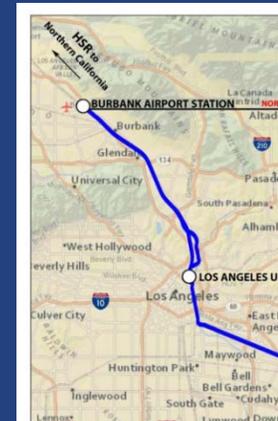
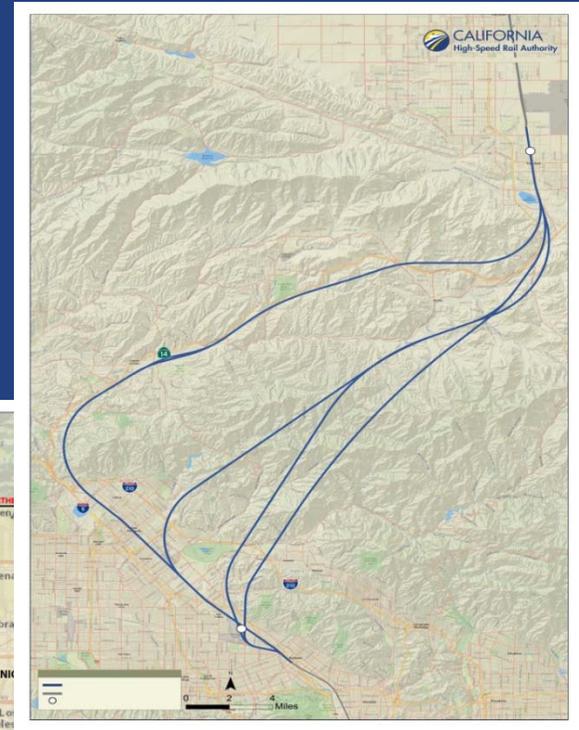


PROGRAM DELIVERY STATUS: DESIGN AND CONSTRUCTION

- **Construction Package 1**
 - » 29 miles between Madera and Fresno
 - » Construction underway
- **Construction Package 2-3**
 - » 65 miles between Fresno and Tulare-Kern County line
 - » Environmental clearances complete
 - » Executed in July 2015
- **Construction Package 4**
 - » 22 miles between Tulare-Kern County line and North of Bakersfield
 - » Environmental clearances complete
 - » Design-Build proposals due November 2015
 - » Proposals for Project and Construction Management (PCM) received

PROGRAM DELIVERY STATUS: ENVIRONMENTAL

- Environmental Sections
 - » 10 sections, 2 completed
 - » Complete by the end of 2017
 - » Awarded contracts for Regional Consultant Services for:
 - Palmdale to Burbank (SENER)
 - Burbank to Los Angeles/Anaheim (STV)
 - » Request for Qualifications
 - San Francisco to San Jose
 - San Jose to Merced



NORTHERN CALIFORNIA: Electrification & Connectivity

- San Francisco to San Jose/San Jose to Central Valley Wye
 - » Community Meetings & Outreach
- Electrification of the Caltrain Corridor
 - » Environmental Review Complete
 - » Request for Proposals Submitted
- Transbay Terminal
 - » Construction Proceeding
- Station Area Planning
 - » Gilroy & San Jose



SOUTHERN CALIFORNIA: Acceleration & Connectivity

- **Palmdale to Burbank/Burbank to Los Angeles**
 - » Public & Community Feedback
 - » Palmdale: Golden Spike
- **Connectivity & Bookend Projects**
 - » Southern California Regional Interconnector Project (SCRIP)
 - » Grade Separations
- **Station Area Planning**
 - » Palmdale, Burbank & LA Union Station



HIGH-SPEED RAIL: Improving Safety

- Elimination of Grade Crossings in the Central California
 - » From Madera to North of Bakersfield:
 - BNSF: 39 Existing Grade Crossings = Eliminated
 - UP: 16 Existing Grade Crossing = Eliminated



Renderings of Shaw Avenue

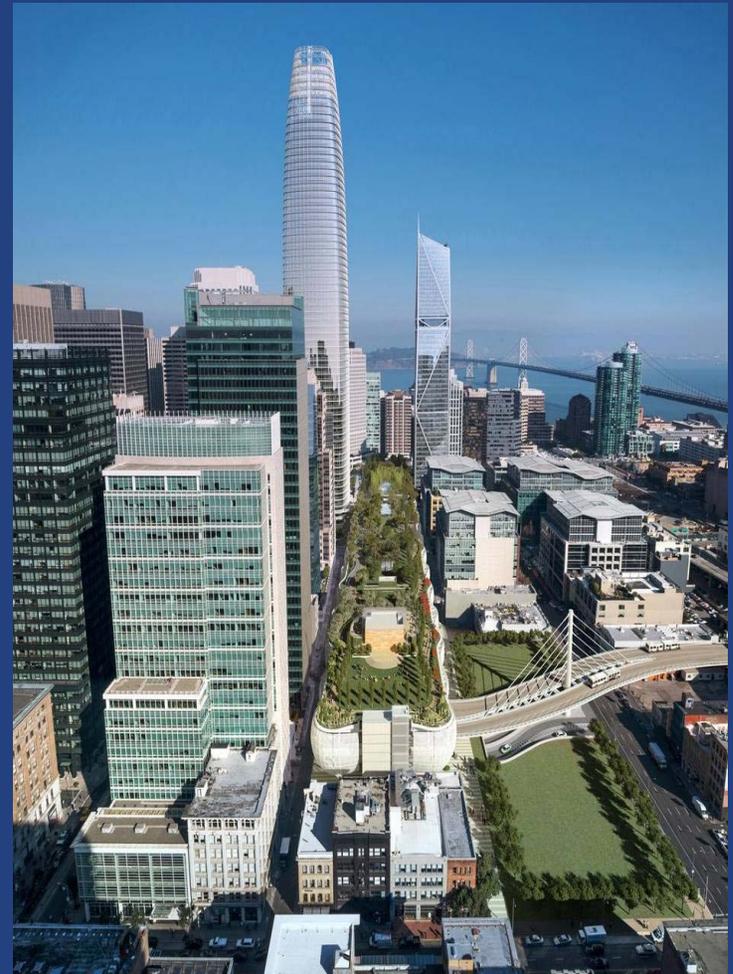


HIGH-SPEED RAIL: Grade Crossing



HIGH-SPEED RAIL STATION VISION

- Advance the economic role of stations
 - » Statewide connectivity
 - » Capacity for growth
- Influence the heart of California's cities
 - Integrate station design and station area planning
 - Expand connectivity & access
- Create Value
 - » Attract the next generation of travelers
 - » Facilitate transit & sustainable infrastructure investment
 - » Catalyst for private investment & joint development



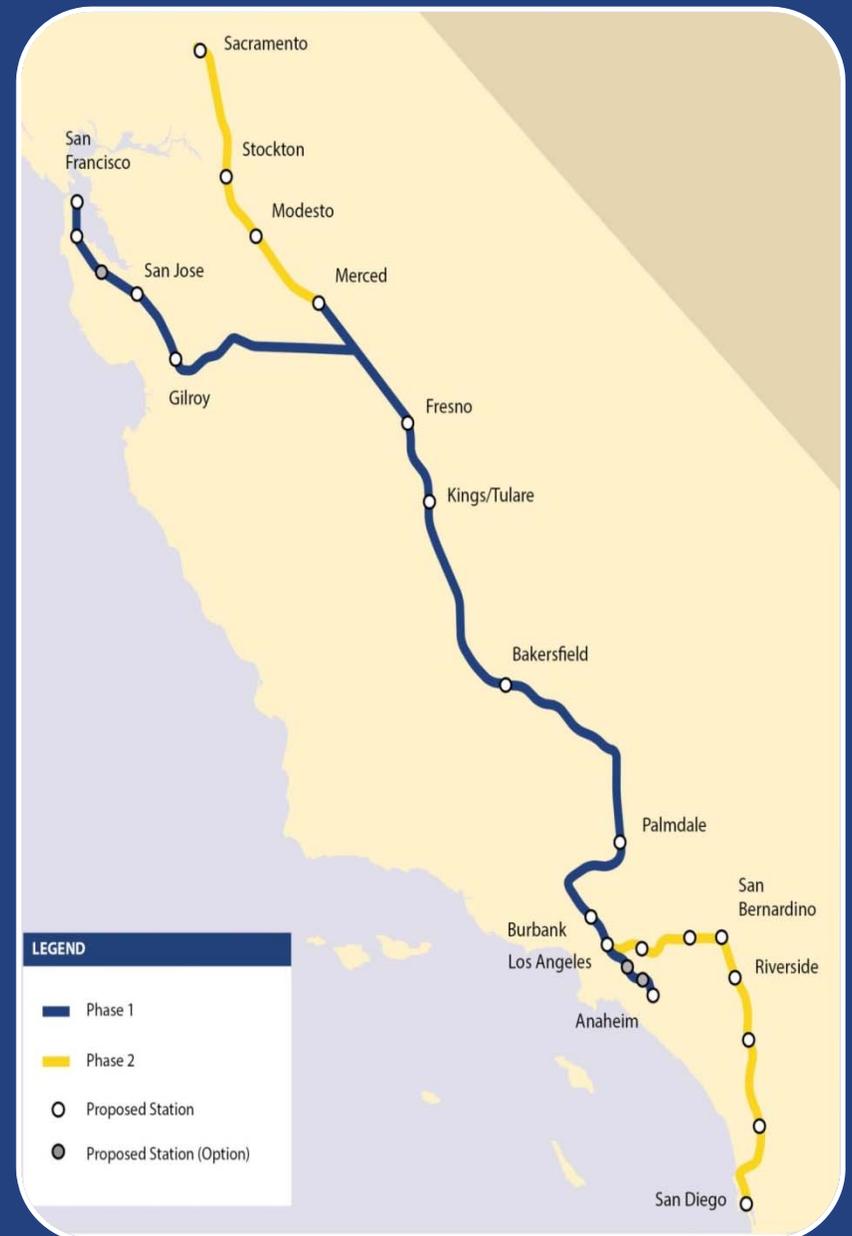
TRANSBAY TRANSIT CENTER: Under Construction

- Transbay Transit Center
 - » Northern Terminus of High-Speed Rail
 - » Construction Proceeding
 - » Funding Plan for Downtown Extension (DTX) in Progress



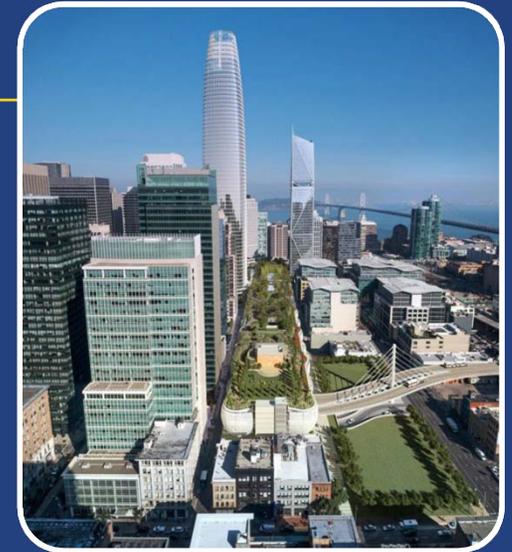
HIGH-SPEED RAIL: STATION COMMUNITIES

- **Up to 24 Stations**
 - » Some built from ground-up (Gilroy, Fresno)
 - » Some integrated into existing stations (San Jose, LA Union Station, ARTIC)
- **Stations Communities will Enhance Surrounding Areas Through:**
 - » Active Transportation Opportunities (Bikes, Walking, etc.)
 - » Creating Vibrant, Urban Centers and Livable Spaces
 - » Access to the Heart of Downtown Areas
 - » Designed to Integrate with Existing Transportation Systems and Economies



HIGH-SPEED RAIL: Helping Shape Cities

- Ties Economies Together
 - » San Francisco to Fresno = 60 Minutes
 - » Bakersfield to Los Angeles = 60 Minutes
 - » San Francisco to Los Angeles = 2 Hours 40 Minutes
- Connects With and Reinforces Local Mobility
- Foundation for Sustainable Growth
- Opportunities for Revitalization in Downtown Cores



HIGH-SPEED RAIL: Station Animation

THANK YOU

Thomas Fellenz, Chief Counsel
(916) 322-1237 thomas.fellenz@hsr.ca.gov

Headquarters

California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
www.hsr.ca.gov



[instagram.com/cahsra](https://www.instagram.com/cahsra)



[facebook.com/CaliforniaHighSpeedRail](https://www.facebook.com/CaliforniaHighSpeedRail)



twitter.com/cahsra



[youtube.com/user/CAHighSpeedRail](https://www.youtube.com/user/CAHighSpeedRail)