



CALIFORNIA
High-Speed Rail Authority

A TRANSFORMATIVE INVESTMENT IN CALIFORNIA'S FUTURE

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Podcar City Conference

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Mountain View, California



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 Train Sets**
- **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



- **Phase I:**
 - » 520 Miles
 - » San Francisco to Los Angeles/Anaheim
- **Phase II:**
 - » Extends 300 Miles
 - » Connections to Sacramento & San Diego

KEY PROGRAM MILESTONES

- **Funding:**

- » \$3.3 Billion Federal and \$9 Billion Prop 1A
- » 25% of Cap and Trade Proceeds
- » RFEI – 36 Responses from Private Sector

- **Environmental Clearances to Date:**

- » Merced to Fresno: May 2012
- » Fresno to Bakersfield: June 2014

- **Construction Packages:**

- » CP 1: Executed in August 2013, Under \$1 Billion
- » CP 2-3: Executed in July 2015, Over \$1 Billion
- » CP4: Bids Due November 2015, Estimated \$400 – \$500 Million

- **Official Groundbreaking Ceremony**



CONNECTING CALIFORNIA: Northern California

- **Improves Mobility & Upgrades Bay Area Transportation Infrastructure**
- **Blended System Along Peninsula**
 - » Minimizes Impacts
 - » Reduces Costs
 - » Expedites Implementation
 - » Improves Safety
 - » Reduces Greenhouse Gas Emissions
- **Connects Bay Area to Central Valley**
- **Connections within Northern California**
 - » San Francisco to San Jose = 30 Minutes
 - » San Francisco to Fresno = 90 Minutes
 - » San Jose to Fresno = 60 Minutes
- **Create Multimodal Transportation Hubs**
 - » Transbay Transit Center
 - » Millbrae Transit Center
 - » San Jose Diridon Station
 - » Gilroy Station



CALTRAIN MODERNIZATION PROGRAM

- **Early Investment Program (\$1.7 billion)**
 - » Advanced Signal System (CBOSS/PTC)
 - Scheduled Completion 2015
 - » Peninsula Corridor Electrification Project
 - Scheduled Completion 2020
 - 87% Reduction in Air Pollution in 2020
- **Funded By 2012 Nine Party MOU**
 - » \$705 Million from High-Speed Rail



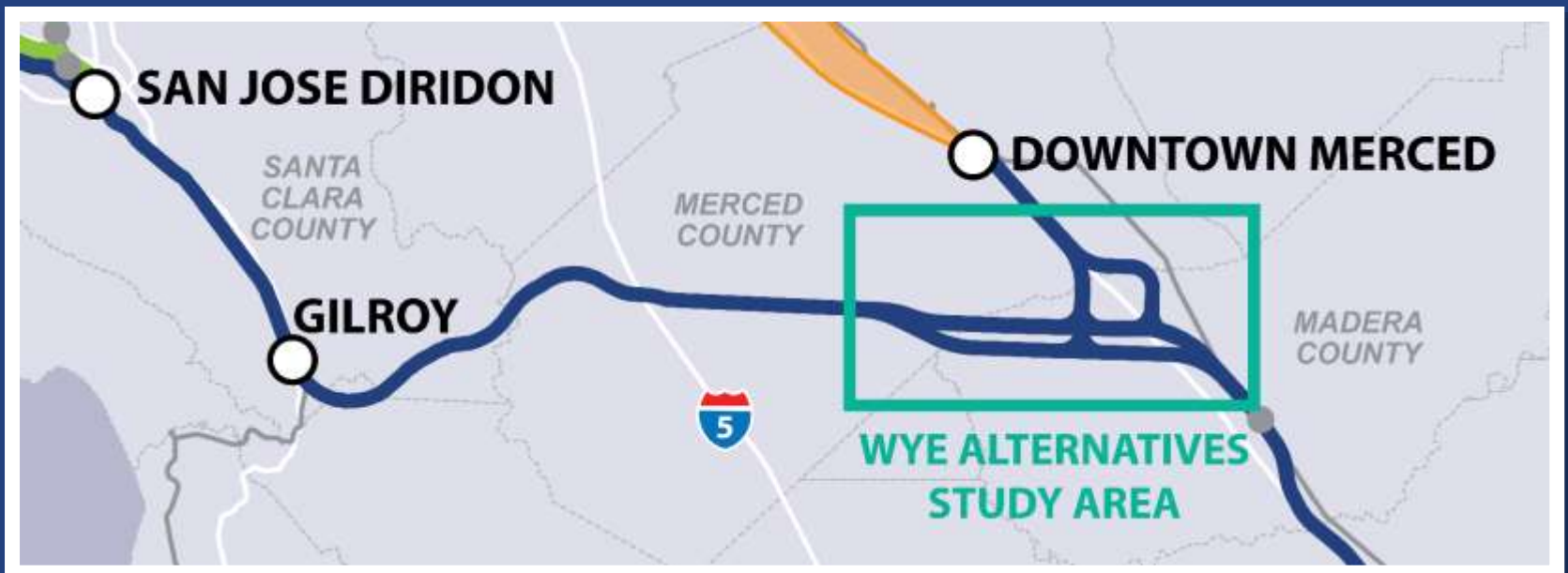
BLENDING SYSTEM: SAN FRANCISCO TO SAN JOSE



- 51-Mile Corridor
- Blended Service on Electrified Caltrain Corridor
- Stations Being Studied:
 - » Transbay Terminal (TTC)
 - » 4th and King
 - » Millbrae-SFO
 - » Mid-Peninsula Option
 - » San Jose (Diridon)

SAN JOSE TO MERCED PROJECT SECTION

- 84-Mile Corridor
- Central Valley Wye Portion Being Studied Separately
- Primarily Follows Highway 101 and Highway 152 through the Pacheco Pass
- Stations Being Studied:
 - » San Jose (Diridon)
 - » Gilroy



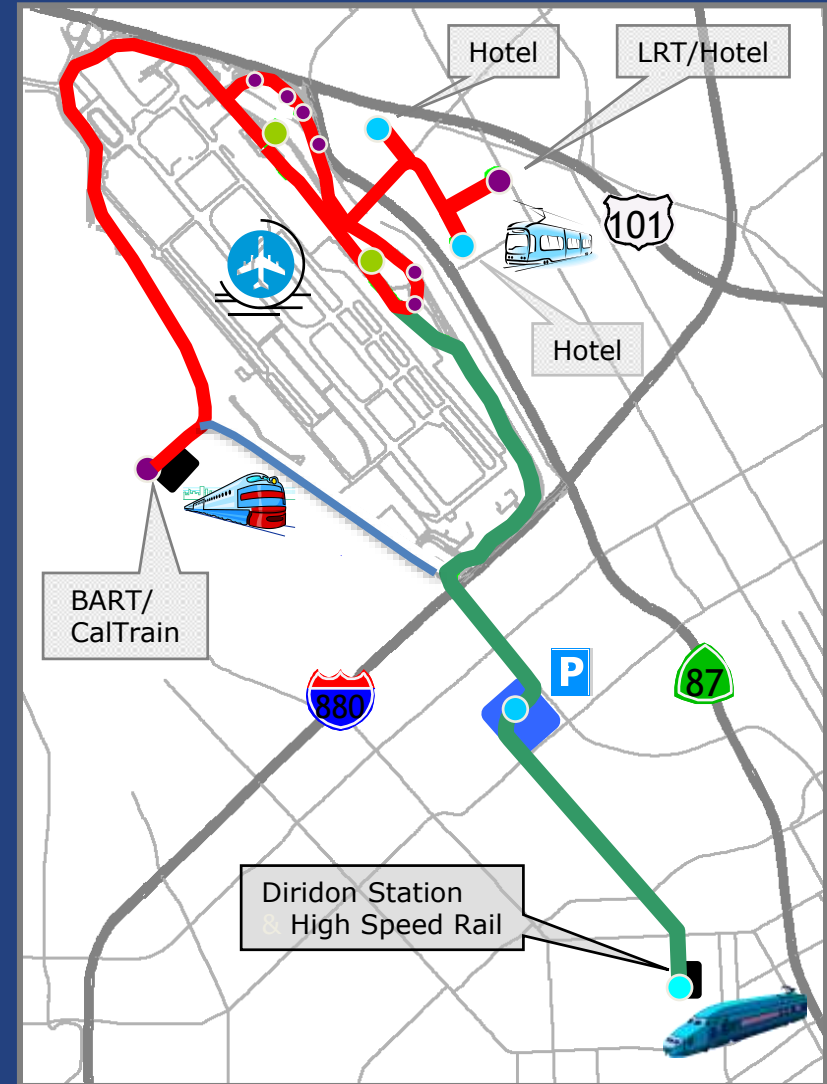
REGIONAL IMPROVEMENTS BENEFIT EXISTING SYSTEMS

- **BART:** \$145 Million, Millbrae Station Track Improvements and New BART Cars
- **SF Muni:** \$61 Million, Light Rail Extension
- **Caltrans/Amtrak Capitol Corridor:** \$63 Million, Track Improvements to Increase Service
- **Caltrans/Amtrak San Joaquin:** \$41 Million, Construction of New Track to Increase Service
- **Altamont Commuter Express (ACE):** \$11 Million, Stockton Passenger Track Extension



PROJECT DESCRIPTION

- Connections
 - » Airport
 - » Parking
 - » Rental Cars
 - » Hotels
 - » Transit
- 6 Miles, 3 Bridges
- 10 Stations
- 150-300 Vehicles



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



CENTRAL VALLEY: BACKBONE OF HIGH-SPEED RAIL

- **Construction Package 1**

- » 29 Miles Between Madera and Fresno
- » Work is Underway

- **Construction Package 2-3**

- » 65 Miles Between Fresno and Tulare-Kern County Line
- » Environmental Clearances Complete
- » Design-Build Contract Executed in June 2015

- **Construction Package 4**

- » 22 Miles Between Tulare-Kern County Line and North of Bakersfield
- » Environmental Clearances Complete
- » 5 Teams Qualified to Bid
- » RFP for Design-Build Released
- » RFQ Awarded to HNTB



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: Creating Jobs & Workforce Development

- Targeting: **California**
- Construction: Direct, Indirect Jobs in Hard-Hit Sectors
- Permanent: Rail Modernization Creates Efficiencies Statewide
- U.S. Conference of Mayors: High-Speed Rail Will Add **\$4.3 Billion** to Los Angeles Regional Economy and **55,000 Jobs** by 2035
- Bay Area Council: Caltrain Electrification Would Create almost **9,600 Jobs** and Generate **\$2.5 Billion** in Economic Activity



HIGH-SPEED RAIL JOBS

- **Preliminary Construction Phase Jobs**
 - » Planners – Transportation, Environmental, Urban
 - » Engineers – Civil, Mechanical/Industrial, Rail, Architectural, computer, Geotechnical, Electrical
 - » Managers/Workers – Contracts, Compliance, Project, Program, Risk
 - » Environmental
 - » Surveyors
 - » Estimators
 - » Right of Way Agents
 - » Outreach /Public Relations
 - » Construction Worker/Trades



HIGH-SPEED RAIL JOBS

- **Post Construction/Permanent Jobs**

- » Trainset Procurement
- » Railcar Manufacturer/Assembly
- » Operation Planners
- » Station Managers/Workers
- » Passenger Service/Reservation Agents
- » Train Operators/Workers
- » Train Dispatchers/Signaling
- » Train/System Security
- » Maintenance Engineers
- » Maintenance Workers – Infrastructure, Train, Station, Track



SMALL BUSINESS PROGRAM

SMALL BUSINESS PARTICIPATION*

AS OF JUNE 2015



- **30% Goal for Small Business Participation**
 - » 10% Disadvantaged Business Enterprises (DBE)
 - » 3% Disabled Veteran Business Enterprises (DVBE)

*Based on 35 contracts

MILLENNIAL GENERATION: A SHIFT IN PERSPECTIVE

- **Average Americans:**
 - » 6% Decrease in Miles Driven in 2011 vs. 2004
- **Drivers 16-34 Years:**
 - » 23% Less Miles Driven from 2001 to 2009
- **Ownership Alternatives:**
 - » Bike, Zip Car, Lyft, Uber, Mega Bus
- **Embrace Public Transport**
 - » Los Angeles Metro and Metrolink
 - » BART and Muni (Bay Area)
 - » Amtrak



SOCIAL MEDIA: #IWILLRIDE

- Support and Educate Others on this Transformative Investment in California's Future
- **#Iwillride** Social Media Campaign
 - » Engage & Educate
- **#Iwillride** Youth Advocacy Campaign
 - » Increase Millennial Support



CHALLENGES OF TRANSFORMATIVE PROJECTS

- Transformative Projects Have **Never Been Easy**
- Golden Gate Bridge:
 - » “Upside-Down **Rat Trap** that will Mar the Beauty of the Bay”
 - » **2,000** Plus Lawsuits
- BART: Called the **Train to Nowhere**
- University of California System & California State Water Project:
 - » Single Vote Margins
- **Where would California be without these?**



THANK YOU

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