



CONNECTING AND TRANSFORMING CALIFORNIA

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San Jose Area Community Working Group

Tuesday, April 12, 2016

San Jose, California



INTRODUCTIONS

AGENDA REVIEW

COMMUNITY WORKING GROUPS (CWG)

- Purpose

- » Provide project updates to members
- » Present project alternatives to members for meaningful feedback
- » Access to Authority environmental and engineering technical staff
- » Collaborative engagement on environmental and engineering work
- » Move the environmental process forward in the spirit of cooperation

- Membership and Responsibilities

- » Broad spectrum of community representatives
- » Consider/present the interests of their respective communities/organizations
- » Participate in open communication among different interests
- » Help move the planning process forward in the spirit of cooperation

STATEWIDE UPDATE

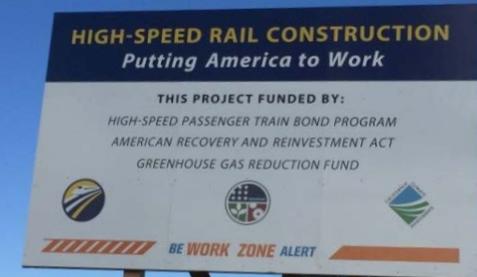
CONNECTING CALIFORNIA



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

CONSTRUCTION IS UNDERWAY

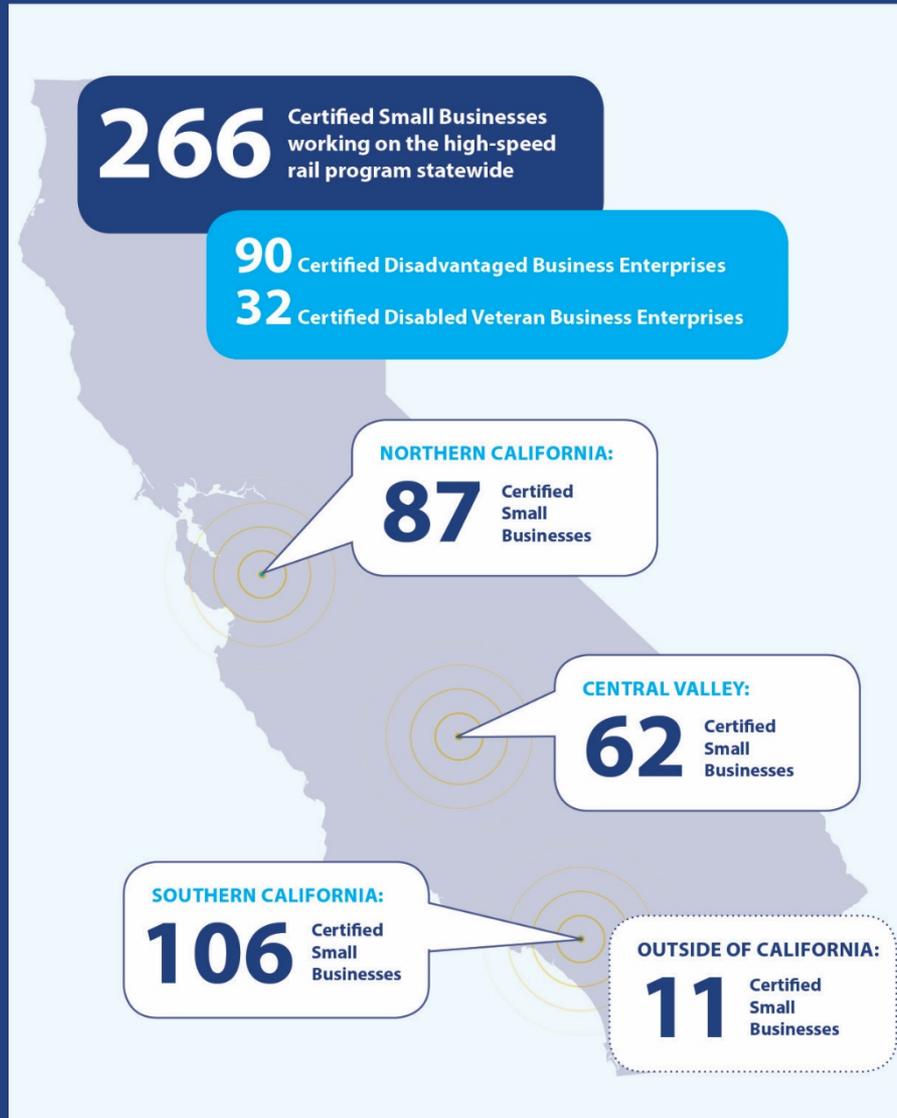
- **Construction Package 1: 29 Miles**
 - » DB: Tutor Perini/Zachry/Parsons
 - » PCM: Wong+Harris
- **Construction Package 2-3: 65 Miles**
 - » DB: Dragados/Flatiron
 - » PCM: Arcadis
- **Construction Package 4: 22 Miles**
 - » DB: California Rail Builders
 - » PCM: HNTB



HIGH-SPEED RAIL: Investing In Small Businesses

SMALL BUSINESS PARTICIPATION

As of November 2015

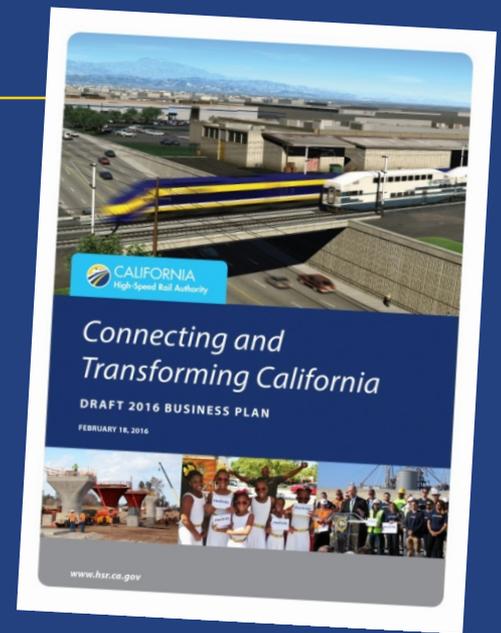


- **30% Goal for Small Business Participation**
 - » 10% Disadvantaged Business Enterprises (DBE)
 - » 3% Disabled Veteran Business Enterprises (DVBE)

DRAFT 2016 BUSINESS PLAN

DRAFT 2016 BUSINESS PLAN

- Required by PUC Section 185033
- Includes:
 - » Summary of Progress Over the Last Two Years
 - » Approach to Deliver the System Using Existing Funds
 - » Updated Ridership Forecasts and Cost Estimates
 - » Describes Next Major Milestones
- Three Main Objectives
 - » Initiate High-Speed Rail Service as Soon as Possible
 - » Make Strategic, Concurrent Investments that Connect State, Regional and Local Rail Systems
 - » Be Ready When Funding Becomes Available



DRAFT 2016 BUSINESS PLAN: Key Highlights

- **Capital Cost Reduction:**
 - » \$67.6 Billion (2014) to \$64.2 Billion
- **Phase 1 (San Francisco-LA/Anaheim)**
 - » Operational by 2029
- **Silicon Valley to Central Valley Line**
 - » Operational by 2025
 - » San Jose-North of Bakersfield
 - » \$20.7 Billion – Fully Funded
- **Burbank to Anaheim Corridor Improvements**
 - » Together with our Partners
 - » Invest \$4 Billion
- **Extension to San Francisco and Bakersfield**
 - » Additional \$2.9 Billion
 - » Operational by 2025



DRAFT 2016 BUSINESS PLAN: Submitting a Comment

- **Public Comment Period: February 18 – April 18**
- **Ways to Comment:**
 - » **Online** via our web comment form
 - » **Email** at 2016businessplancomments@hsr.ca.gov
 - » **Verbal** comment at (916) 384-9516
 - » **Mail** comment to Attn: Draft 2016 Business Plan
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814
 - » Board of Directors' Meetings:
 - March 8 (Sacramento), April 12 (Anaheim)
- **April 21 (San Jose): Board Adoption**
 - » Santa Clara County Board of Supervisors Chamber, 10 AM
- **May 1: Submit to Legislature**

**SAN JOSE TO MERCED
PROJECT SECTION UPDATE**

ENVIRONMENTAL & ENGINEERING TEAM

SELECTION OF TEAM

HNTB

The logo for ICF International features a blue horizontal bar above the letters 'ICF' in a bold, black, sans-serif font. Below 'ICF', the word 'INTERNATIONAL' is written in a smaller, blue, all-caps, sans-serif font.

ICF
INTERNATIONAL

The logo for ENGEO is set against a solid blue background. The word 'ENGEO' is written in a white, bold, sans-serif font. Below it, the tagline 'Expect Excellence' is written in a smaller, white, italicized, sans-serif font, flanked by two horizontal white lines.

ENGEO
Expect Excellence

The logo for FEHR & PEERS features the words 'FEHR' and 'PEERS' in a black, serif font, separated by a green, stylized ampersand symbol.

FEHR & PEERS

The logo for KEARNS WEST features the words 'KEARNS' and 'WEST' in a blue, sans-serif font, separated by a blue lightning bolt symbol.

KEARNS ⚡ WEST

MILESTONE SCHEDULE – SJ TO MERCED*

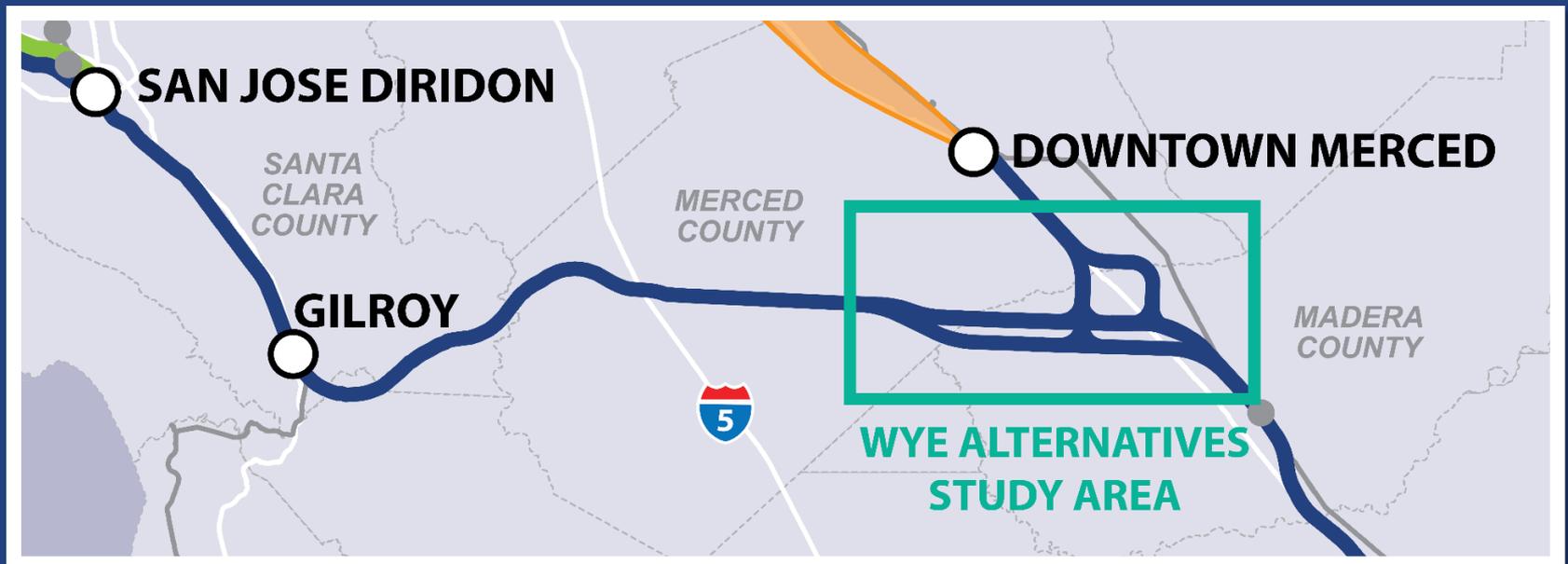


*Preliminary/Subject to Change

WHERE WE ARE

SAN JOSE TO MERCED PROJECT SECTION

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



WHERE WE ARE

- **Project History**
 - » Past Project Alternatives
 - » San Jose Visual Design Guidelines
 - » Why Work Stopped
- **What Happened While We Were Away**
 - » Central Valley Wye
 - » Regulatory agency concurrence on the range of alternatives to be studied in the environmental document
 - » Station Area Design Work
- **Restart of Environmental Review**
 - » Initial operating system from Bakersfield to San Jose identified in the Draft 2016 Business Plan

WHERE WE ARE: PROJECT HISTORY

San Jose to Merced Section - Alignment Alternatives



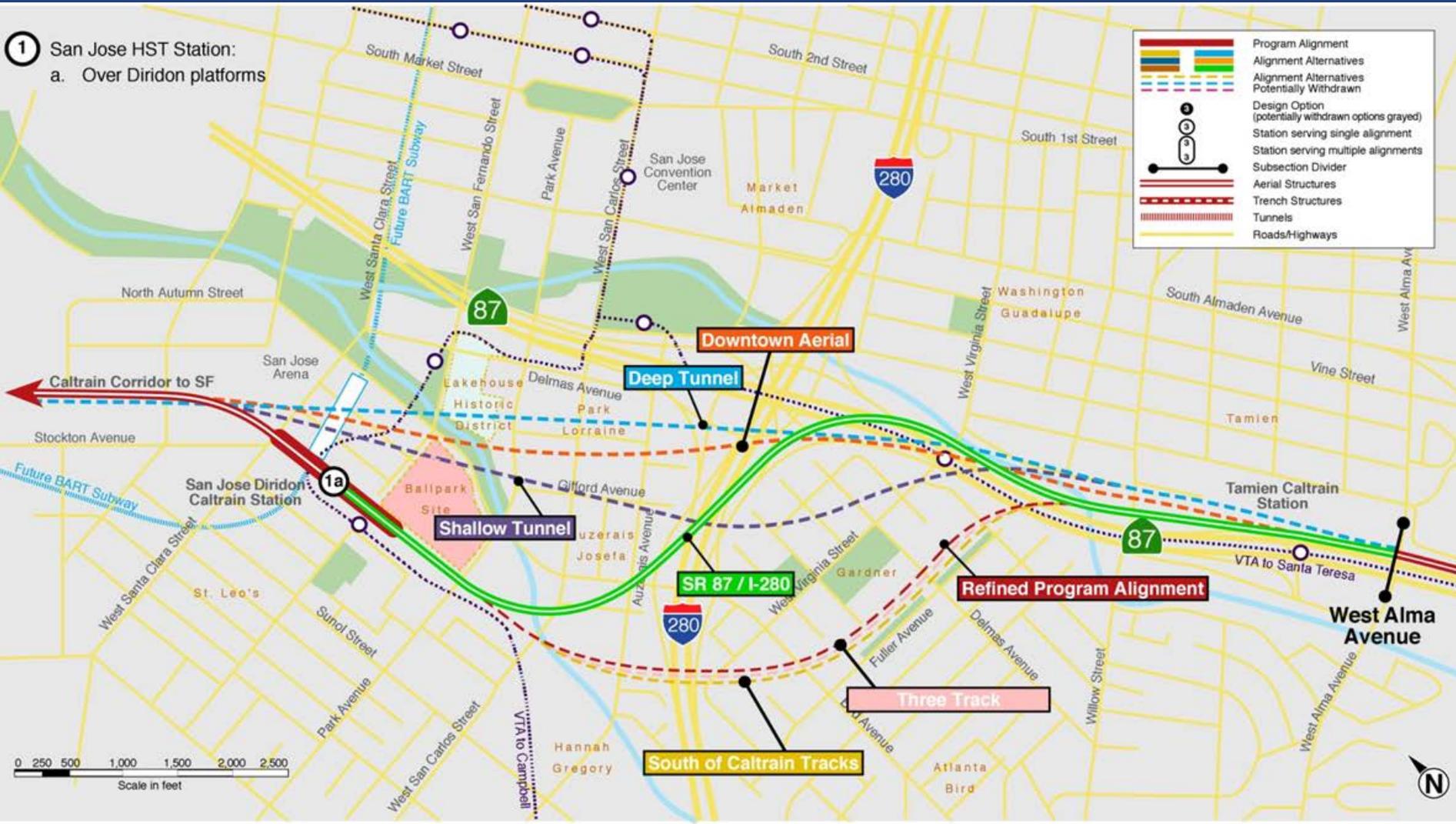
WHERE WE ARE: SAN JOSE STATION APPROACH

- Evaluated a modified tunnel alignment in San Jose and reconfirmed previous analysis which found an underground station to be infeasible
- Authority worked with the City of San Jose to develop Visual Design Guidelines
- The I-280/SR 87 aerial alignment will be the alternative carried forward for this subsection



WHERE WE ARE: SAN JOSE STATION APPROACH

① San Jose HST Station:
a. Over Diridon platforms



WHERE WE ARE: FINAL VISUAL DESIGN GUIDELINES

- Extensive review and input with City of San Jose and community
- Defines roles and responsibilities for implementation

CALIFORNIA HIGH-SPEED TRAIN INFRASTRUCTURE VISUAL DESIGN GUIDELINES SAN JOSE

3.0 GENERAL DESIGN GUIDANCE

3.1 AESTHETICS

3.1.1 Objectives

The THSI and CHSI broadly define the objectives of aesthetic design for HST infrastructure as:

1. Emphasize engineering design, which is the visual expression of efficient structural function.
2. Engineering design that is well-composed and coherent, where the parts harmoniously relate to each other and work together to create a unified whole.
3. Engineering design that is well- and carefully detailed, with specific attention to the HST corridor.

3.1.1.1 Principles
Aesthetically refined design is attractive and pleasing to look at. It brings forth a feeling of balance, stability, substance and completeness. Good aesthetic design is needed to create our principles.

- **Proportion:** The size and shape of design elements are in scale and proportional relationship to each other and to the whole.

3.1.2 Distinct Elements

- **Repetition:** The form and structure of design elements have an exact match in size and shape between two halves, parts or sides; design elements at varying scales reflect each other in proportion and shape, and/or the distribution of design elements achieves a visually balanced composition.
- **Unity:** The design looks and feels complete in a natural, identifiable and satisfying way.

3.1.3 Unified Elements

- HST infrastructure is aesthetically refined and functionally elegant throughout the corridor.
- HST infrastructure is integrated with urban design, contributing to the feel and look of the City's General Plan when the HST alignment is integrated into public or other private property owned for right-of-way.
- HST station design advances the implementation of the Station Area Plan.

Two quotes informed discussion of aesthetics

"The visual expression structural function is a form of elegance in bridge design."

— Christian Blevins, whether you're a Designer

"Ready to see simple, elegant, dependent on the eye of the beholder... beauty never." In science, for example, fields the beauty of a theory or its elegant, coherent and hard parts generated naturally from elegant, total research.

— Dan



3.1.1.2 Crossing

Planned Project Features

- Provide daylight between street and structure.
- Minimize the number of columns with the use of long-span, balanced cantilever construction for approach to the Station Area and 1000' long span viaduct.
- Develop column orientation and spacing to support future park site uses, reduce number of possible barriers and ensure development of the Municipal Area per the Station Area Plan.
- Provide turn-off for active bicycle use of space under the viaduct.
- Implement gateway improvements at the Bell Avenue and Avenue Avenue intersection.
- Implement 100' long span bridge structure.
- Maintain/reduce backside Park Trail.
- Provide turn-off back for House of Blue Print.

3.1.1.3 Crossing

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3.1.1.4 Column and Pier Shape

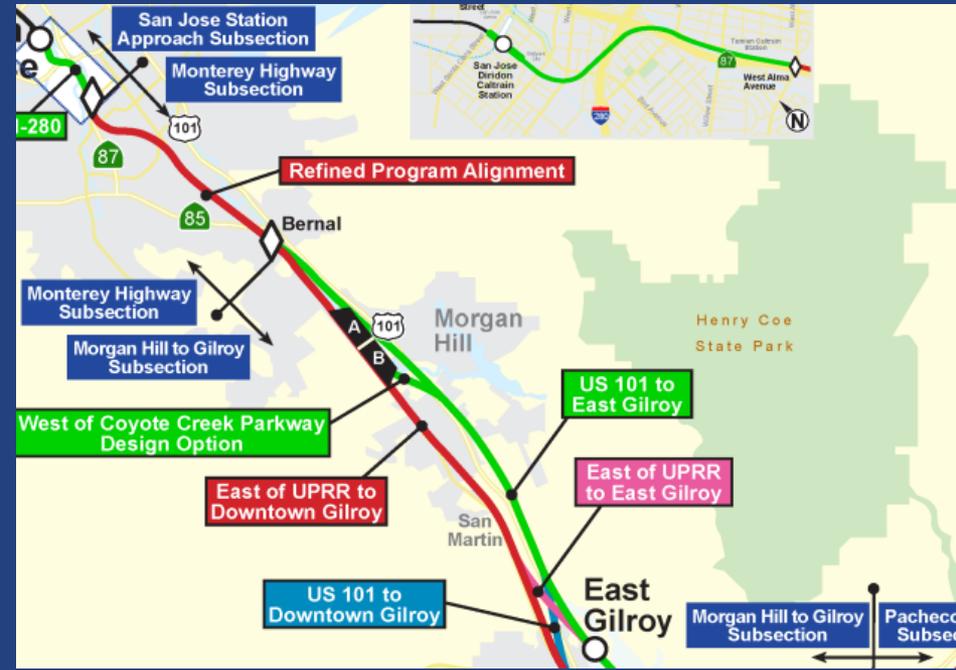
A column is a slender, independent vertical support. Piers are vertical supports that are proportionally wider relative to their height.

- Shape: The proportion of a column's width and depth can be determined by the shape and type of interaction. Columns and piers shall be oriented so the narrowest side faces the profile of the railbed. A range of column and pier section shapes are possible. Round columns and piers with the smallest width or corner form the column to reduce appearance over the use of aluminum. Columns shall use recessions from the top to bottom to increase viewer perception of dimensionality, such as recessions at the top and all vertical column faces.
- Column capitals: Design capitals to express the structural relationship and recession in shape from column to girder.
- Design recessions: Columns shall be recessed at the top, bottom, and on all vertical column faces. Recessions shall be recessed in a circular profile height, to be recessed in a circular profile height, to be recessed in a circular profile height, to be recessed in a circular profile height.

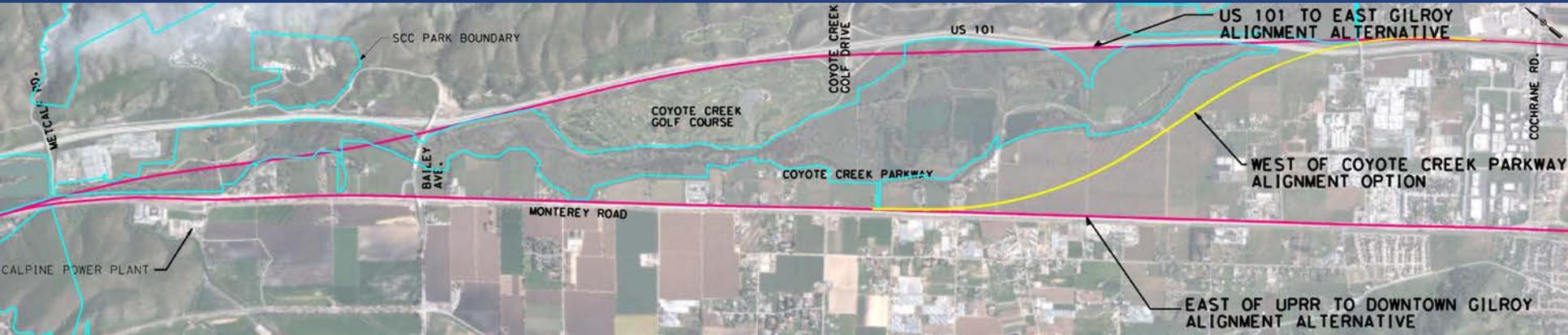
WHERE WE ARE

- West of Coyote Creek Parkway Alignment Option
 - » Minimize Park Impacts
 - » Reduced Impacts to Creek/Riparian Habitat
 - » Reduced Construction Costs
 - » Increase in Agricultural Lands Impacts

DRAFT: for discussion only



For discussion – subject to change



WHAT WE WILL BE WORKING ON WITH YOU

- **New Design Refinements**
 - » Blended Service at Diridon Station
 - » Monterey Viaduct
 - » Pacheco Pass Tunnel Refinements

- **Current Work**
 - » Validating Previous Studies
 - » Completing Environmental Review Process

**SAN FRANCISCO TO SAN JOSE
PROJECT SECTION UPDATE**

BLENDING SYSTEM: SAN FRANCISCO TO SAN JOSE

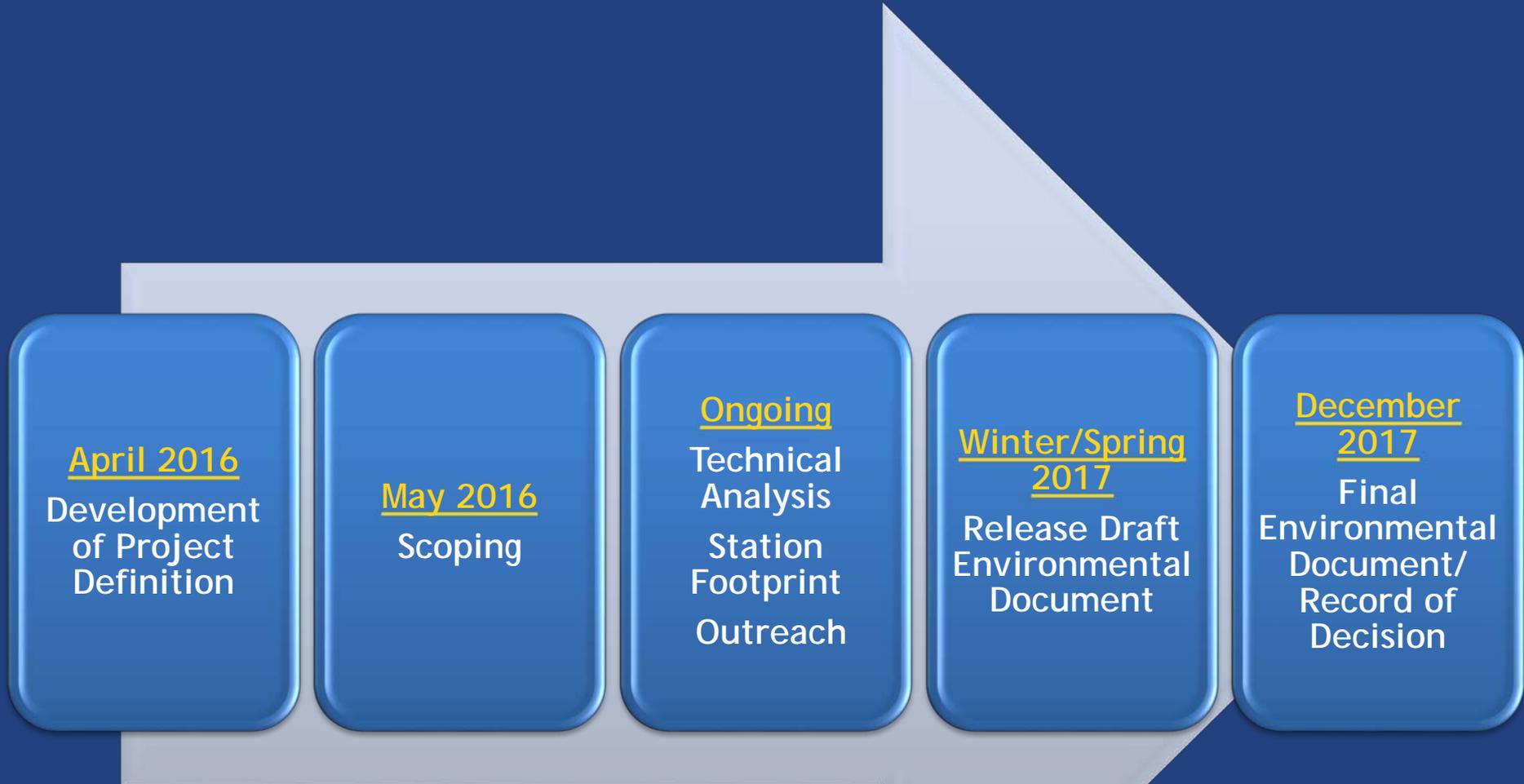
- 51-mile corridor
- Blended Service on Electrified Caltrain Corridor
- Stations Being Studied:
 - » Transbay
 - » 4th and King
 - » Millbrae-SFO
 - » San Jose (Diridon)



SAN FRANCISCO TO SAN JOSE: Project Description

- This Project Section is not like the others...
 - » Not drawing new lines and comparing them on a map
 - » Alignment defined by state legislation and regional, multi-agency agreement
 - » High-speed service will be blended with existing, commuter service
 - » Largely on two tracks within Caltrain right-of-way
 - » Design and implemented to achieve compliance
 - » Operations of four trains per peak hour per direction

MILESTONE SCHEDULE – SF TO SJ*



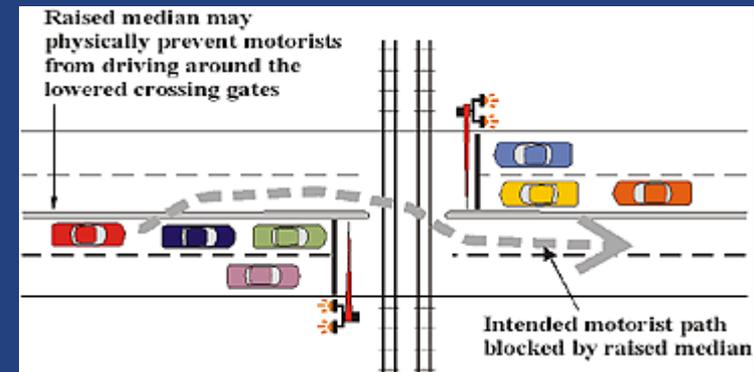
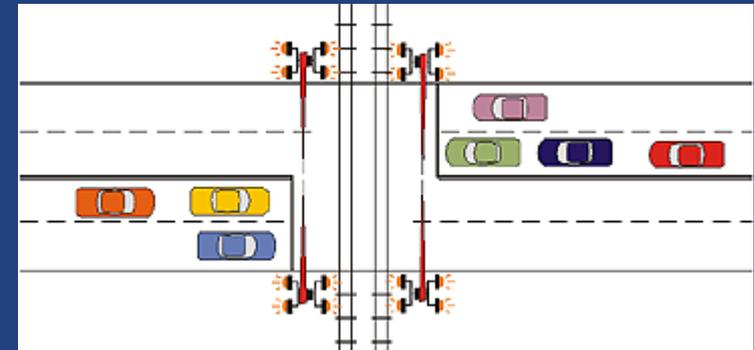
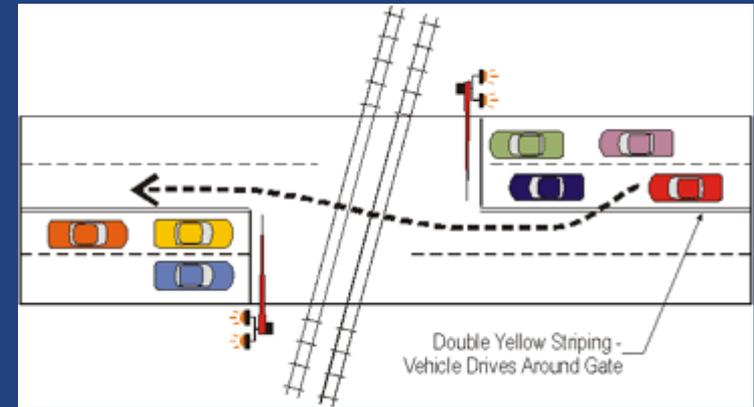
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CORRIDOR SAFETY IMPROVEMENTS

CORRIDOR SAFETY IMPROVEMENTS

- Safety Improvements

- » Perimeter Fencing
- » Four-Quadrant Gates at At-Grade Crossings
- Existing one set of Four-Quadrant Gates at Fair Oaks Lane



CORRIDOR SAFETY IMPROVEMENTS: Quad Gate

- Example of 4-Quad Gates at Fair Oaks Lane in Atherton
 - » Fair Oaks Lane, MP 27.8
 - » Existing 4-quad gates
 - » Requested by Atherton
 - » No channelization



CORRIDOR SAFETY IMPROVEMENTS: Channelization



CORRIDOR SAFETY IMPROVEMENTS: Fencing



AT-GRADE CROSSING EVALUATIONS

- **Grade Crossings**
 - » 42 At Grade Road Crossings
 - 2 = City and County of San Francisco
 - 30 = San Mateo County
 - 10 = Santa Clara County
- **At-Grade Crossing Evaluations:**
 - » Operational Evaluation:
 - Potential grade separations necessary for project, such as at passing track location (s)
 - Not required per for proposed speed (max. 110 mph)
 - » EIR/EIS Evaluation
 - Project traffic delay, noise, safety effects at the grade crossings
 - Identify additional HSR effects above existing + Caltrain electrification + future growth
 - Mitigation identified as fair-share for cumulative effects
 - Feasibility of mitigation (including GS) to be evaluated

STATIONS UPDATE

STATION UPDATE

- Existing Stations to be Modified
 - » San Francisco 4th & King
 - » Millbrae Intermodal Station
 - » San Jose Diridon Station
 - San Jose Station Area Agreement
 - At-grade and aerial options
 - Platform Modifications and Passenger Facilities
 - » Gilroy

COMMUNICATIONS & OUTREACH

COLLABORATIVE APPROACH



COMMUNITY ENGAGEMENT

- Resource Agency Coordination
- Station Area Planning
- Environmental Justice Outreach
- Community Working Groups
- Open Houses (SJ to Merced Section)
 - » May 16 – Los Banos
 - » May 17 – San Jose
 - » May 19 – Gilroy
- Scoping Meetings (SF to SJ Section)*
 - » May 23 – San Francisco
 - » May 24 – San Mateo
 - » May 25 – Mountain View

*Tentative and subject to change.

SCOPING

- Why Additional Scoping for SF-SJ
- Scoping Helps:
 - » Determine the focus and content of an environmental document and provides an opportunity for public involvement
 - » Identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth
 - » Focus detailed study on those issues pertinent to the final decision on the proposed project



ROUNDTABLE DISCUSSION

DISCUSSION TOPICS/QUESTIONS

- Questions re: environmental approach?
- Interests, priorities, concerns
- Topics for future discussion/information
- Next steps
 - » Next San Jose CWG meeting

PUBLIC COMMENT

THANK YOU & STAY INVOLVED

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