

# CALIFORNIA HIGH-SPEED TRAIN SYSTEM



- Provide a new mode of high-speed intercity travel to link major metropolitan areas
- Forecasted to carry as many as 100 million passengers annually by the year 2035
- 800-mile system with stations built to allow for express service
- Service linking the San Francisco Bay Area, Central Valley and Southern California
- 100% clean electric power
- Estimated travel time from San Francisco to Los Angeles: less than 2 hours 40 minutes

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# WHY WE NEED HIGH-SPEED RAIL



## JOBS

- 600,000 full-time, one-year, construction-related job-equivalents
- 5,000 permanent operations and maintenance jobs
- 450,000 economy-wide jobs by 2035

## MOBILITY

- "Economic power is how fast you move people and goods around the state."  
*Gov. Arnold Schwarzenegger, January 15, 2008*

## ENVIRONMENT

- Reduced greenhouse gases
- AB 32: California's 2006 landmark legislation to reduce greenhouse gas emissions 25% by 2020
- Population Growth
- California's population now: 38 million  
By 2035: 50 million



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# WHY WE NEED HIGH-SPEED RAIL



*We can build...*

- **New freeways, airport runways and more departure gates to address our expected population growth**

*or*

*We can achieve...*

- **An 800-mile high-speed train system, powered by 100% renewable electricity generated by clean wind and solar energy**



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# DESIGN OBJECTIVES AND EVALUATION CRITERIA

## OBJECTIVE

- Maximize ridership & revenue potential
- Maximize accessibility
- Minimize operating and capital costs

## CRITERIA

- Minimize travel time
- Intermodal connections
- Minimize route length

## EVALUATION MEASURES

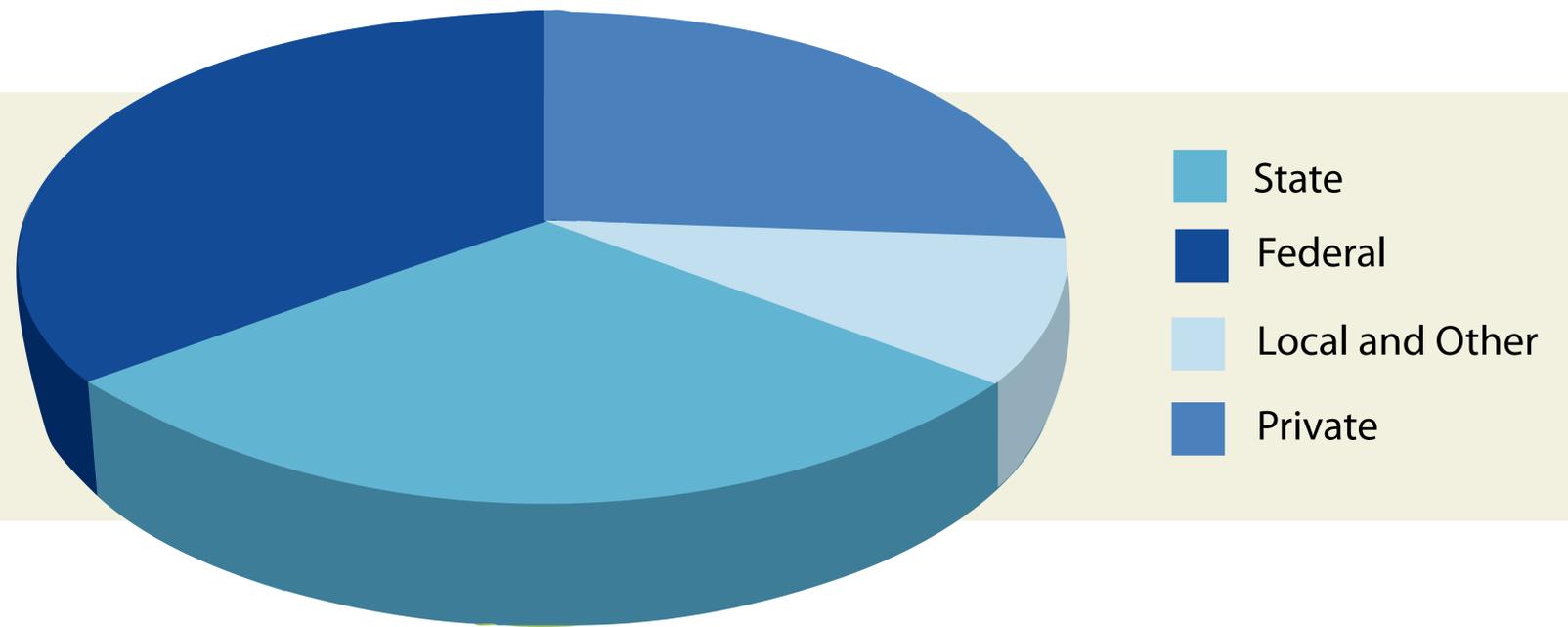
- Minimize disruption to neighborhoods and communities
- Minimize impacts to environmental resources
- Minimize impacts to natural resources
- Land use
- Construction feasibility

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# PROJECT FUNDING

**PROJECTED OVERALL STATEWIDE CONSTRUCTION COST: \$42.6 BILLION**  
(Anticipated funding sources)

**California Funding: \$9B**  
**Federal Funding: \$17-19B**  
**Local Funding: \$4-5B**  
**Private Investment: \$10-12B**



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# INITIAL CONSTRUCTION: 2012

## Starting in the Central Valley

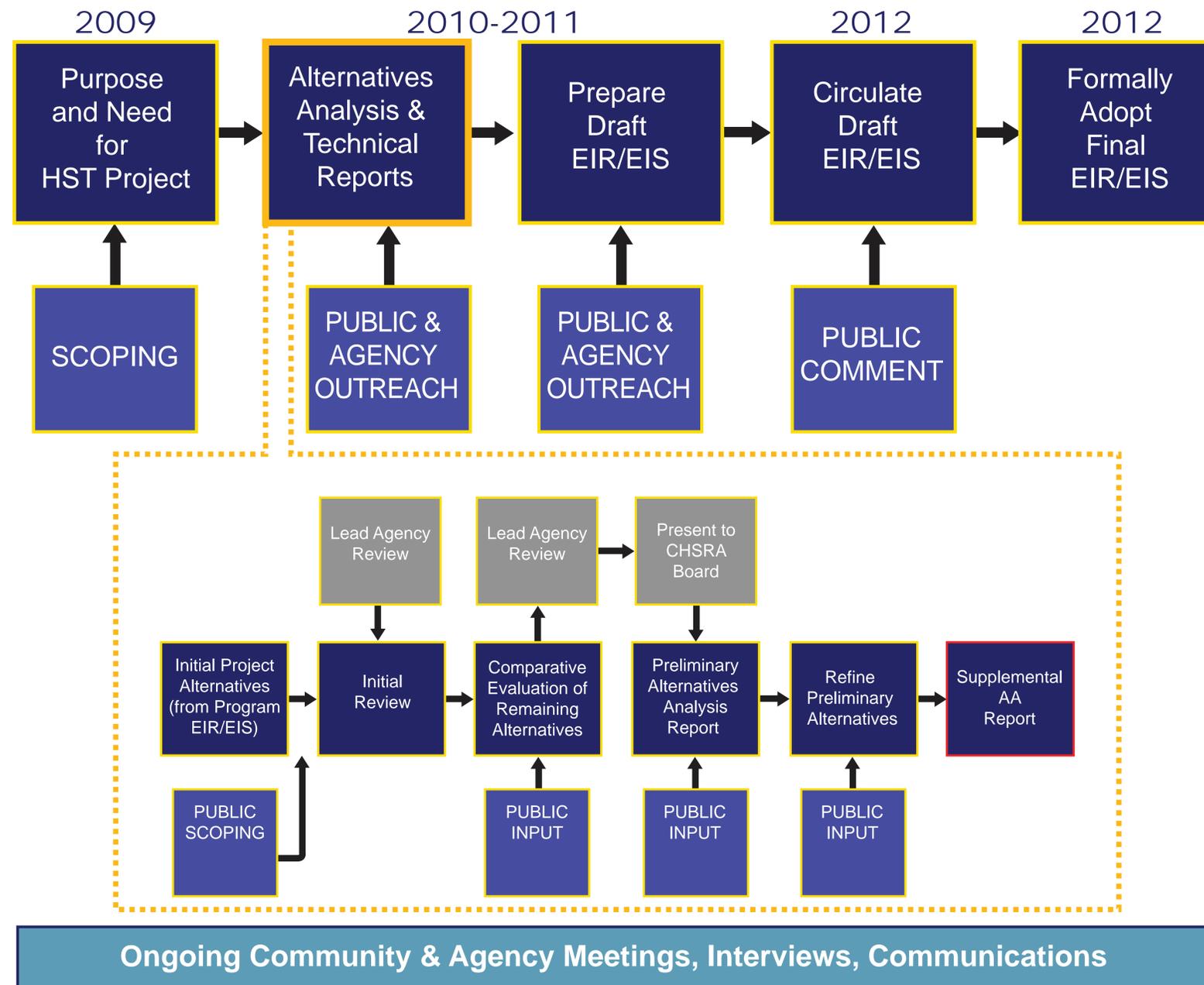
### THE FOUNDATION FOR TRUE HIGH-SPEED RAIL

- Only segment where trains will travel at 220-mph maximum operating speed for long stretches
  - Allowing the 2 hr 40 min trip between Los Angeles and San Francisco
- Initial track in the Central Valley will serve as testing and proving ground for new high-speed train technology in the U.S.
- Technically simpler engineering than urban developed areas, majority at-grade in rural areas.



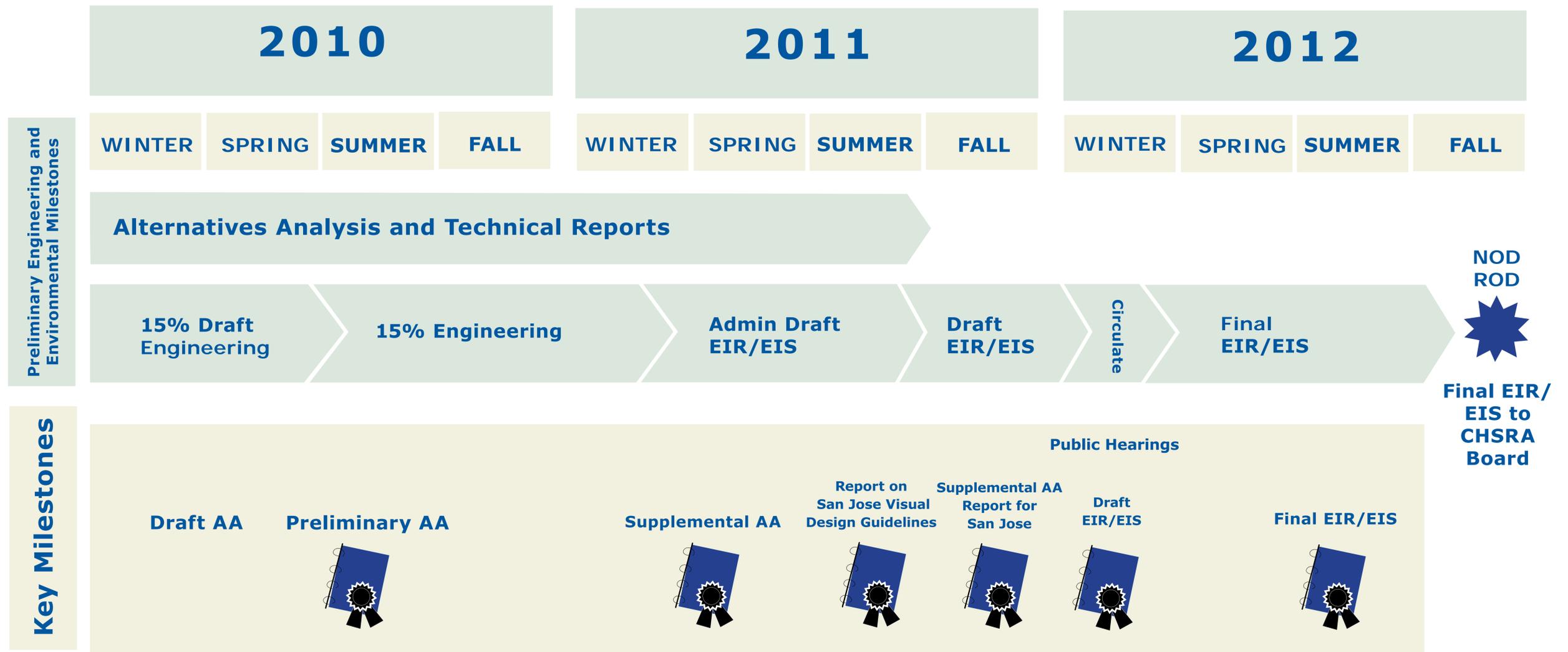
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# PROJECT ENVIRONMENTAL REVIEW SCHEDULE AND ALTERNATIVES ANALYSIS PROCESS



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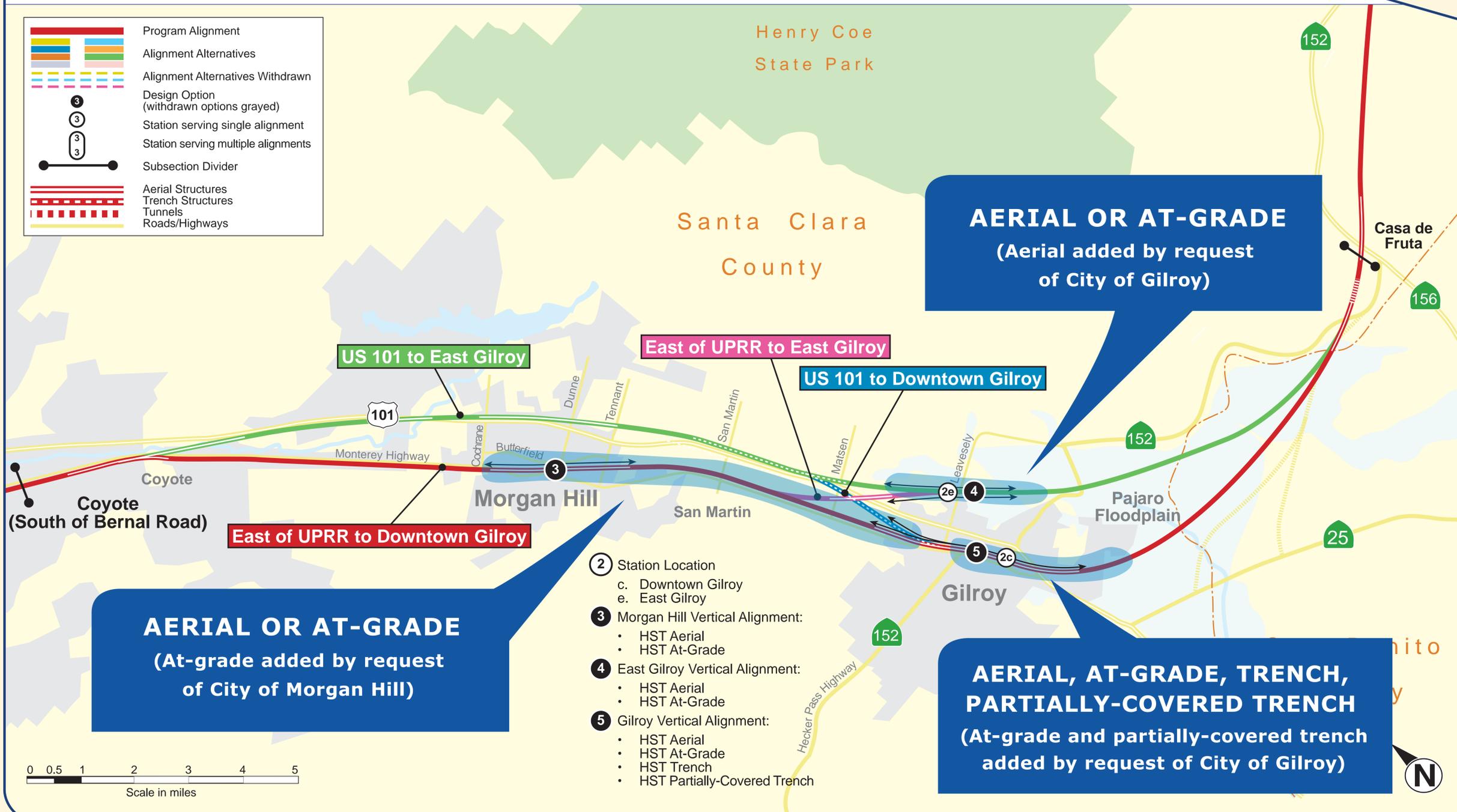
# NEXT STEPS



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# MORGAN HILL – GILROY SUBSECTION



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# MORGAN HILL – GILROY SUBSECTION

## ALTERNATIVES

Recommended alternatives to carry forward (additional alternatives shown in **bold**):

- East of UPRR to Downtown Gilroy Alignment Alternative
  - Design options in Morgan Hill: aerial, **at-grade**
  - Design options in Downtown Gilroy: aerial, open trench, **at-grade, partially covered trench**
- East of UPRR to East Gilroy Alignment Alternative
  - Design options in Morgan Hill: aerial, **at-grade**
  - Design options in East Gilroy Station area: at-grade, **aerial**
- US 101 to Downtown Gilroy Alignment Alternative
  - Design options in Downtown Gilroy: aerial, open trench, **at-grade, partially covered trench**
- US 101 to Gilroy Alignment Alternative
  - Design options in East Gilroy Station area: at-grade, **aerial in station area**

## STATIONS

Recommended stations to carry forward (additional alternatives shown in **bold**):

- Gilroy Downtown Station
  - Design options: aerial, trench, **partially covered trench, at-grade**
- East Gilroy Station
  - Design options: at-grade, **aerial in station area**

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# STATION DESIGN PROCESS



## California High-Speed Rail Authority Station Responsibilities

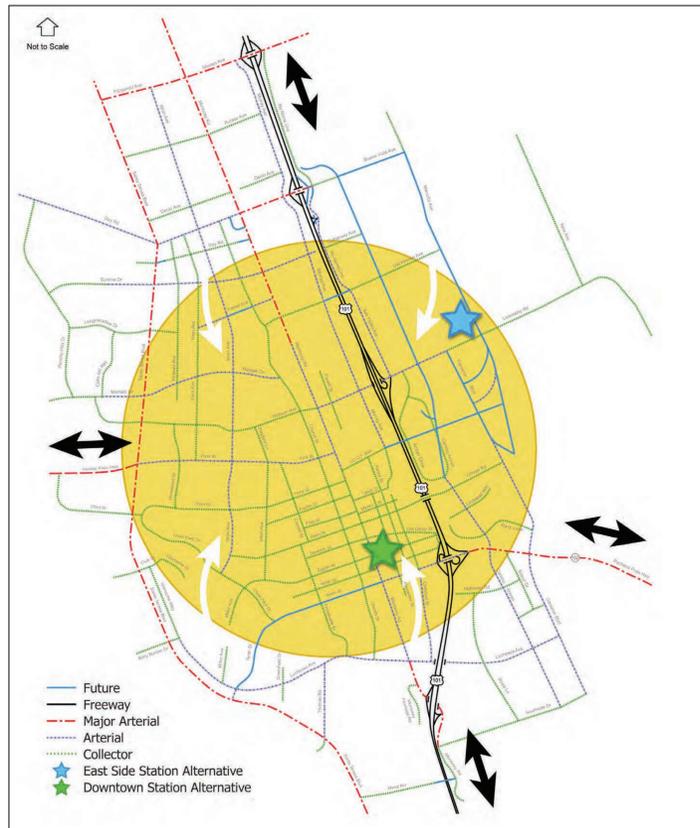
- Provide a functional station and related infrastructure
- Design a functional station sensitive to its surroundings
- Provide recommendations for parking
- Identify potential impacts and mitigation measures for each station option (Draft EIR/EIS)

## City of Gilroy Station Visioning Process

- Study pros/cons of the Downtown Gilroy and East Gilroy potential station locations
- Provide a recommendation to the Authority on where the Gilroy station should be located
- Provide a land use and transportation framework for each station
- Provide a framework for a Station Area Plan for the preferred station

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# GETTING TO THE GILROY STATION



- 15% Local traffic
- 30% South of Gilroy
- 18% North of Gilroy
- 22% Monterey Coast
- 15% Pacheco Pass

## AVERAGE DAILY TRIP GENERATION BY MODE, YEAR 2035

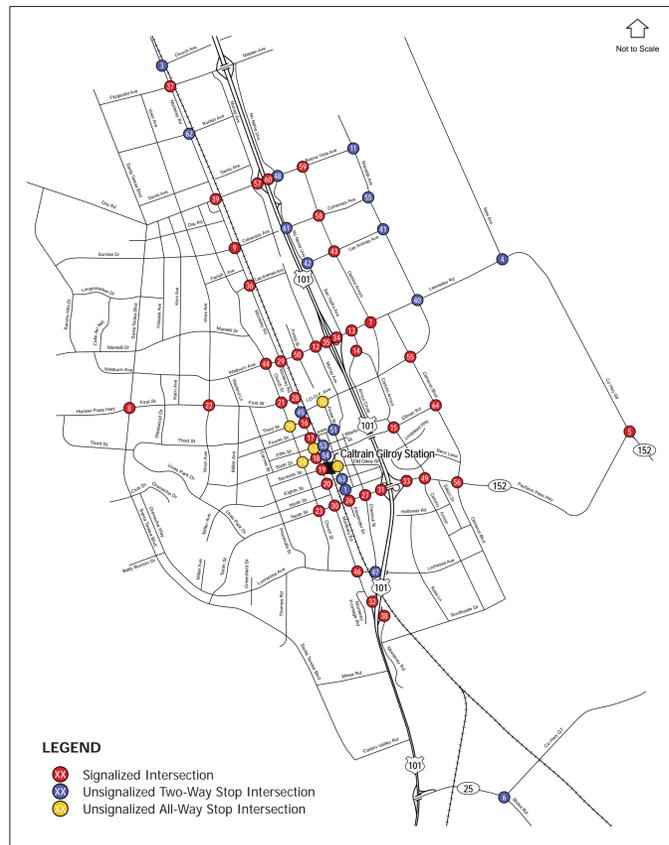
	Trips (# of cars)				Trips (# of people)	
	Pick-up/ Drop off	Drive & Park	Rental Car	Taxi	Train/ Bus	Walk/Bike/ Other
<b>Gilroy Station</b>	<b>1,200</b>	<b>2,100</b>	<b>200</b>	<b>300</b>	<b>200</b>	<b>200</b>

Source: 2009 CHSRA Business Plan

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# ANALYZING TRAFFIC IMPACTS

## STUDY INTERSECTIONS



City staff and the project team evaluate intersections that are critical to the city's transportation network

## EXAMINE LEVELS OF SERVICE (LOS) DURING PEAK HOURS

### MULTI-LANE HIGHWAYS

Level of Service	Flow Conditions	Operating Speed (mph)
<b>A</b>		60
<b>B</b>		60
<b>C</b>		60
<b>D</b>		57
<b>E</b>		55
<b>F</b>		<55

Source: 2000 HCM, Exhibit 21-3, Speed-Flow Curves with LOS Criteria for Multi-Lane Highways

### INTERSECTIONS WITH TRAFFIC SIGNALS

Level of Service	Delay per Vehicle (seconds)
<b>A</b>	≤10
<b>B</b>	11-20
<b>C</b>	21-35
<b>D</b>	36-55
<b>E</b>	56-80
<b>F</b>	>80

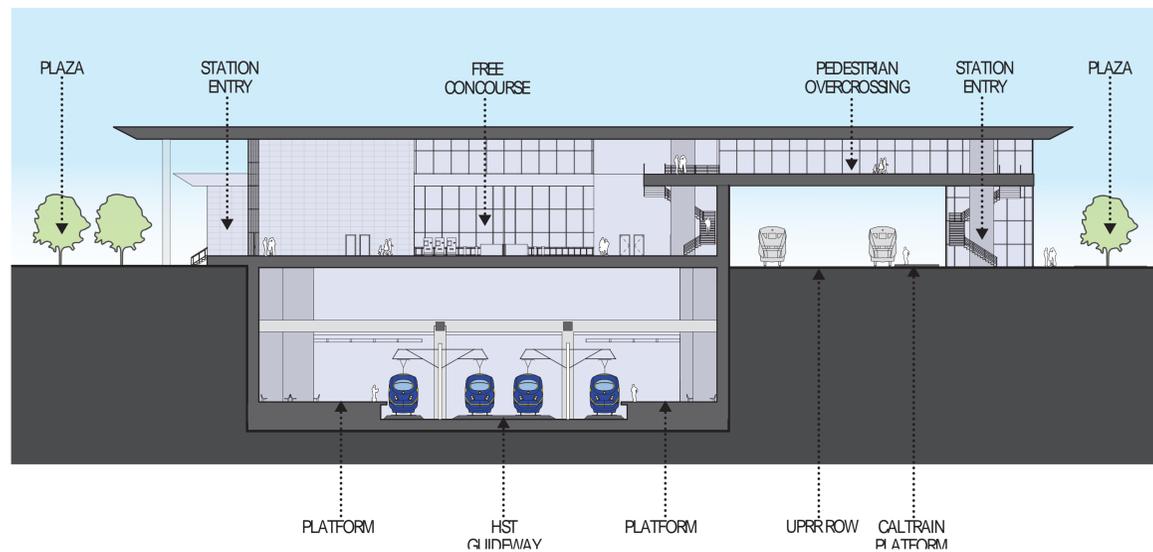
Source: 2000 HCM, Exhibit 16-2, Level of Service Criteria for Signalized Intersections

Peak hours: Monday – Friday, 7 a.m. – 9 a.m. and 4 p.m. – 7 p.m

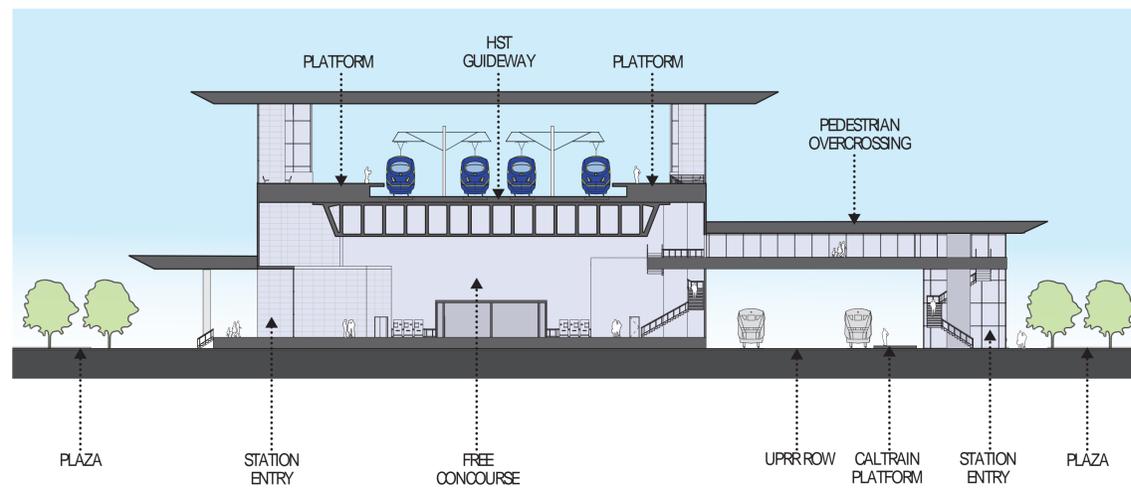
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# DOWNTOWN GILROY STATION- DESIGN OPTIONS

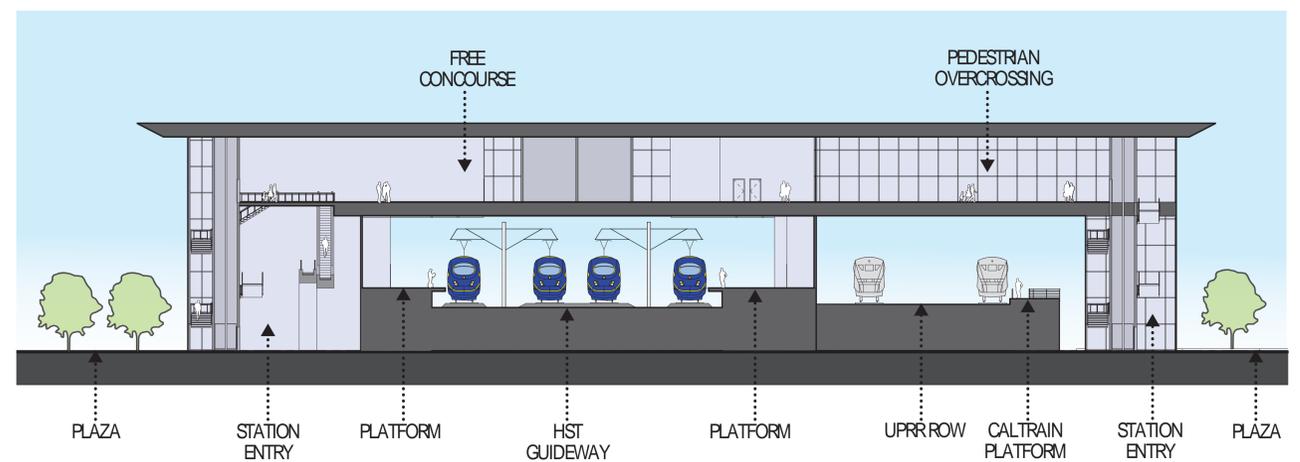
TRENCH STATION



AERIAL STATION



AT-GRADE STATION

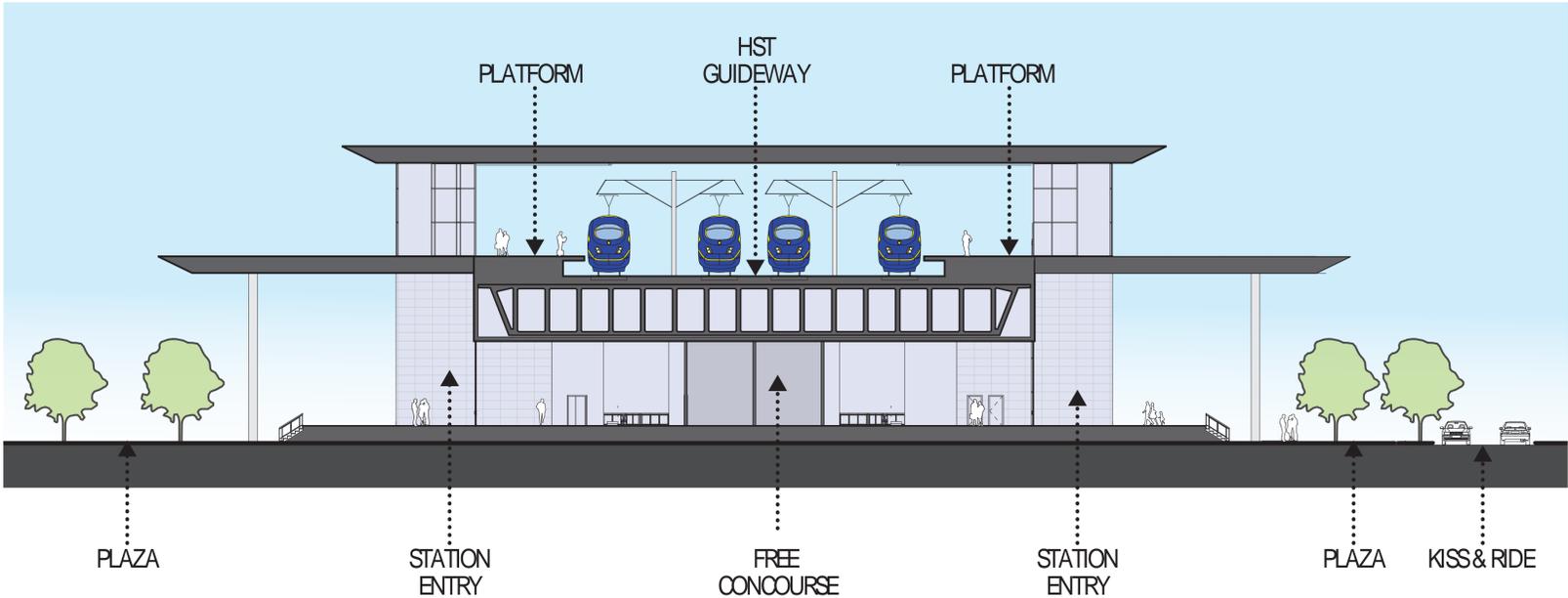


*\* All images are conceptual and subject to change*

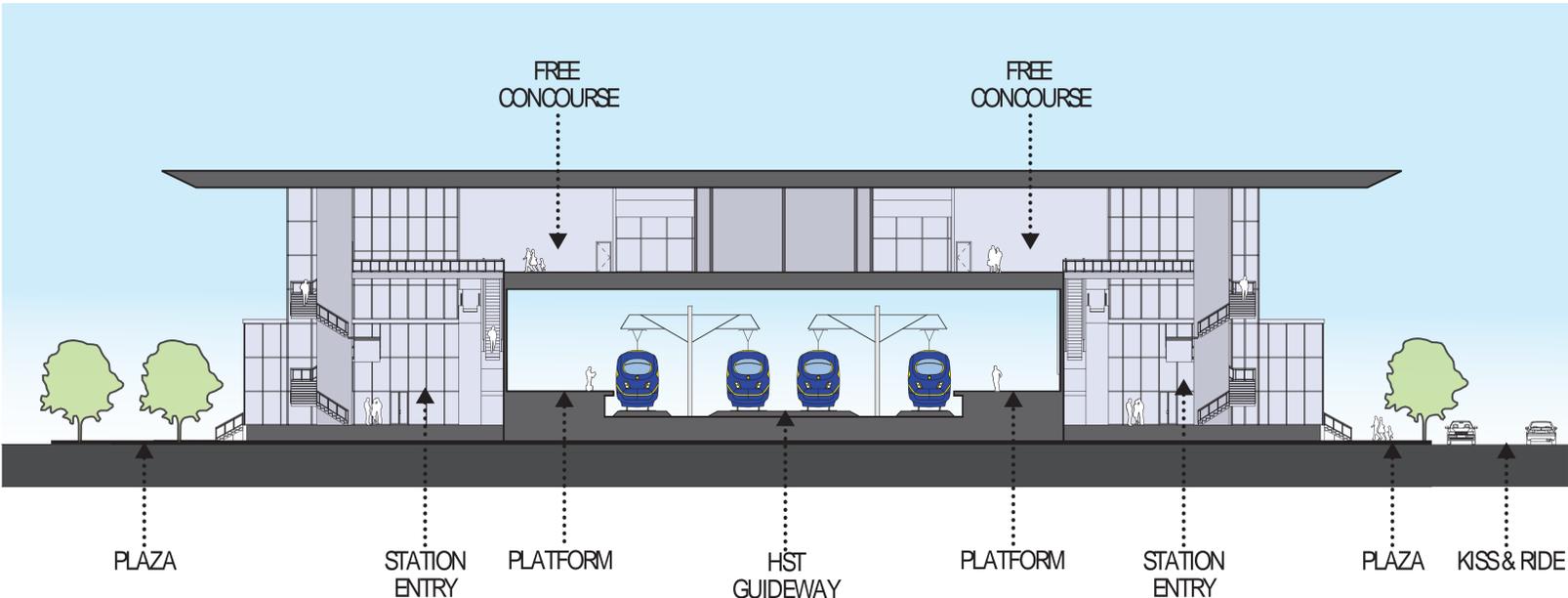
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# EAST GILROY STATION- DESIGN OPTIONS

AERIAL STATION



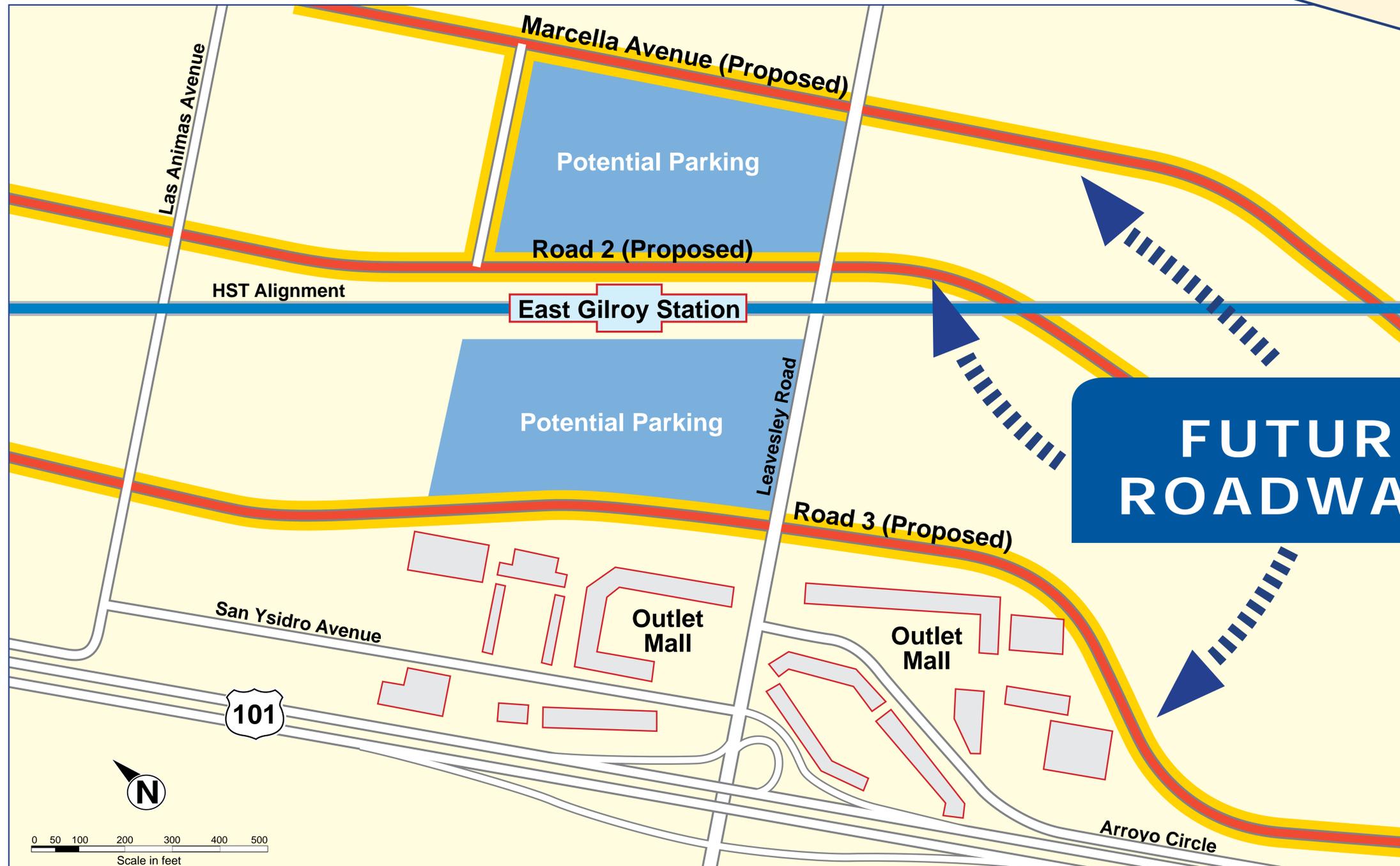
AT-GRADE STATION



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# EXISTING AND PROPOSED FUTURE ROADWAYS EAST GILROY STATION AREA

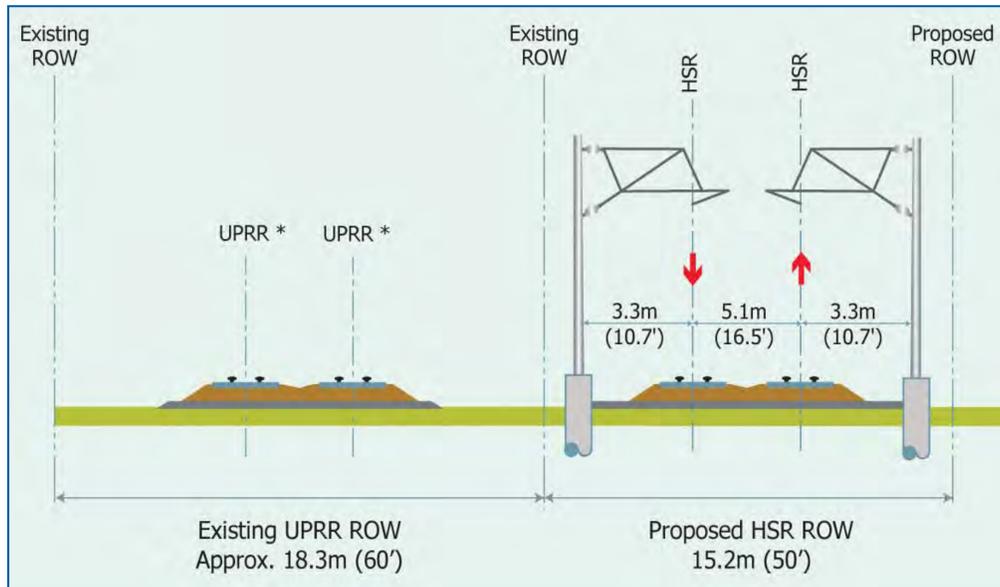


*\*Proposed, subject to change*

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# TYPICAL SECTIONS ALONG ALIGNMENT

## Shared Railroad Corridor

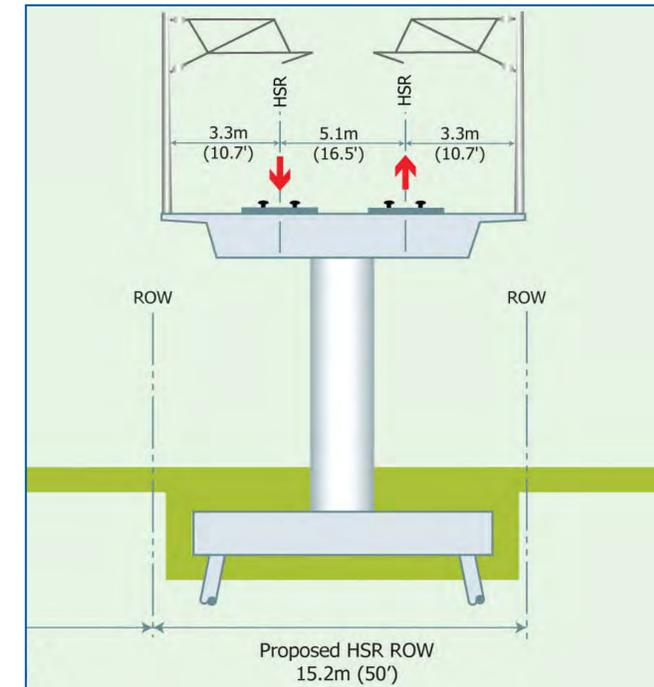


Portions of the alignment will need special structures to fit into the built environment

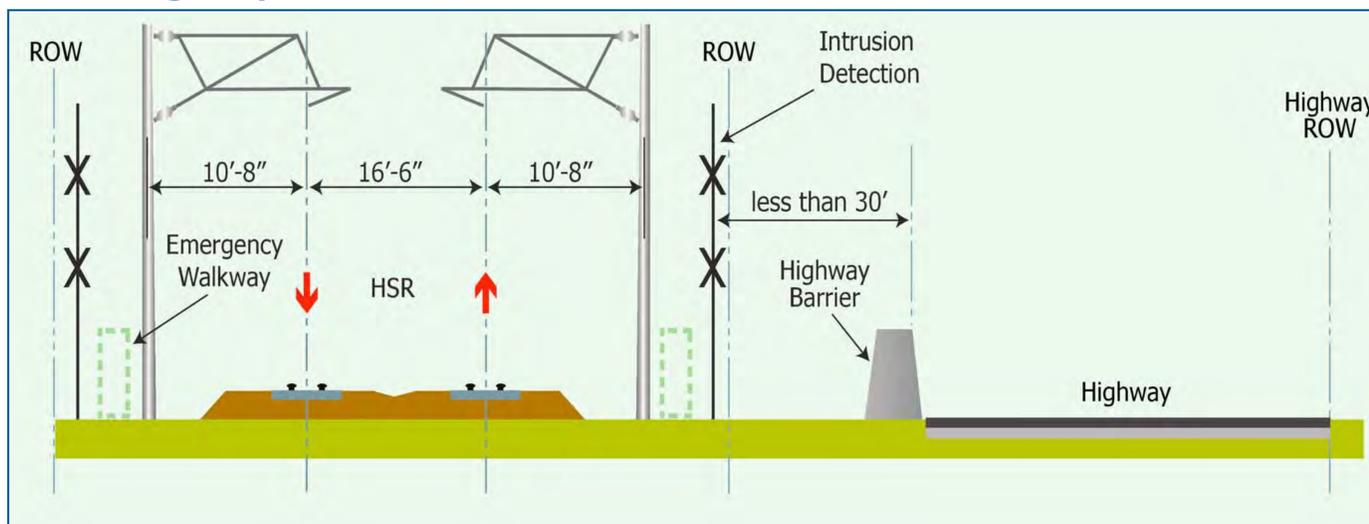
Structures could include:

- Aerial structures
- At-grade
- Trenches

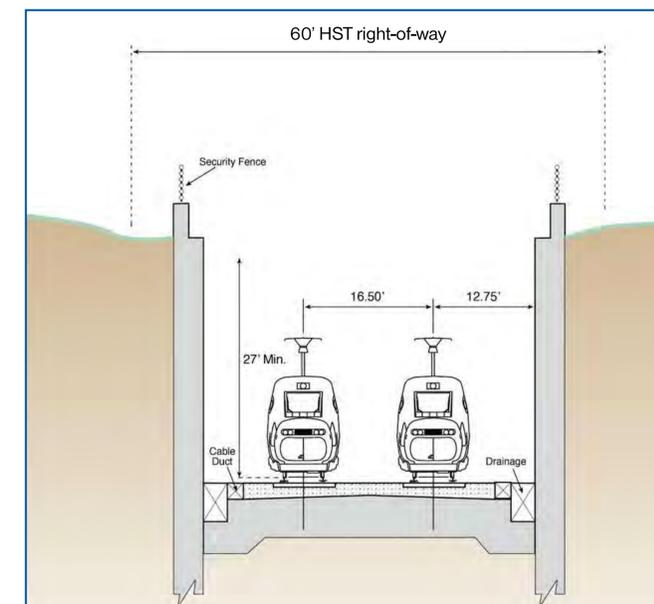
## Aerial Structure



## Shared Highway Corridor

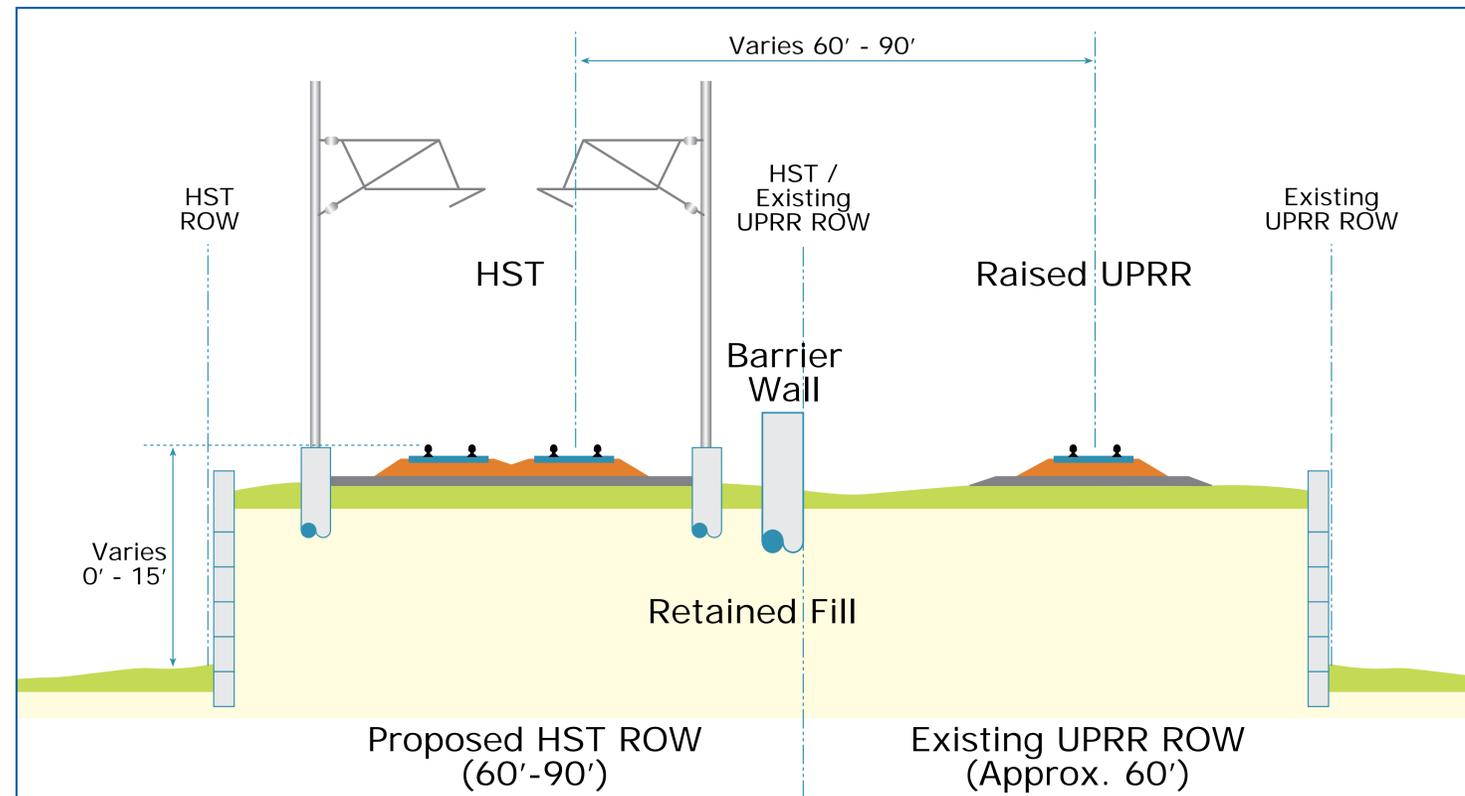


## Trench Section

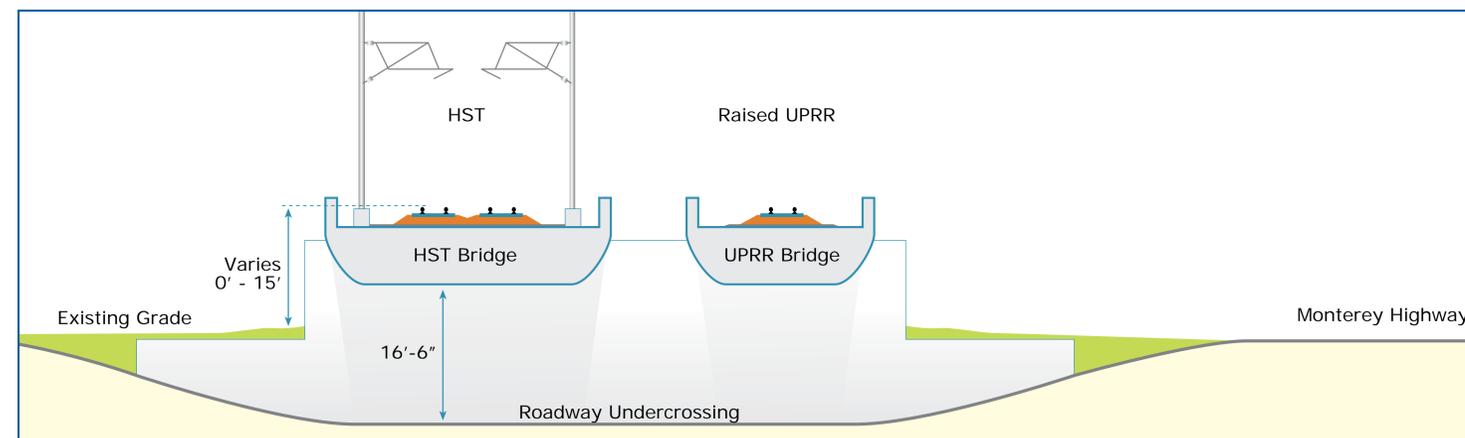


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# TYPICAL SECTIONS ALONG ALIGNMENT



**AT-GRADE (ON RETAINED FILL)**



**ROADWAY UNDERCROSSING**

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# GRADE SEPARATIONS



*Before*

## Typical Underpass

*After*



- **Grade separations are underpasses and overpasses where roadways cross railroad tracks**
- **Grade separations reduce congestion and noise and improve safety**
- **California High-Speed Train tracks will be grade-separated from adjacent roadways**

## Typical Overpass



## Grade Separated from Roadway



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# PACHECO PASS SUBSECTION

RECOMMENDED ALTERNATIVES TO CARRY FORWARD (ADDITIONAL ALTERNATIVE SHOWN IN **BOLD**):



- Close Proximity to SR 152 Alignment Alternative
- Refined Program Alignment Alternative
- **Both alignments were refined for potential landslide areas in the western portion of the Pacheco Pass**

*\*Alignments subject to change*

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# *SAN JOSE-MERCED SIMULATIONS*



**Downtown Gilroy (6th St.)**

**Casa de Fruta**



**Monterey Rd.**

**Los Banos Wildlife Area at Henry Miller Rd.**



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# ***HOW TO PARTICIPATE***

- **Talk to high-speed train staff**
- **Fill in and drop off comment cards**
- **Add your e-mail to our mailing list**

**For more information after this meeting:**

**Call: (800) 881-5799**

**Visit: [www.cahighspeedrail.ca.gov](http://www.cahighspeedrail.ca.gov)**

**E-mail: [san.jose\\_merced@hsr.ca.gov](mailto:san.jose_merced@hsr.ca.gov)**

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