



Los Angeles to Anaheim High-Speed Train Project EIR/EIS

Supplemental Alternatives Analysis

Presented to California High-Speed Rail Authority Board
July 8, 2010





Alternatives Analysis Process

- 2005 – Statewide Program EIR/EIS selected LOSSAN Corridor as route for LA-A Section
- June 2009 – Draft Alternatives Analysis Report Approved by Authority Board
- July 2010 – Supplemental AA Report, which modifies 2009 Draft AA Report, released





Supplemental AA Report

- Refinements to Dedicated HST Alternative (previously recommended alternative)
- Introduction of Consolidated Shared-Track Alternative. Objectives:
 - Consolidated/Rationalized Passenger Operations
 - Continued freight access in corridor
 - Reduced Right of Way Impacts
 - Reduced Capital Costs
- Options arose from extensive coordination with project stakeholders





Stakeholder Outreach

- Since 2007, more than 400 presentations and briefings reaching stakeholders:
 - Elected Officials
 - Chambers of Commerce
 - Neighborhood Councils / Homeowners Associations
 - Community and Business Organizations
 - Trade Organizations
 - Environmental Justice Groups





Technical Outreach

- Corridor Cities
 - 185 briefings, council workshops and community meetings
- Gateway Cities Technical Working Group - 5
- Gateway Cities Administrative Committee - 2
- Interagency Working Groups - 6
- OC City Managers - 3
- Scoping Meetings 3
- Stakeholder Working Groups - 2





Dedicated HST Alternative

2 Dedicated HST Tracks

4 Other Tracks:

- Amtrak
- Metrolink
- BNSF



Sub-Sections with Design Options

1. Los Angeles Station / Alignment
 - A. LAUS Aerial HST Option
 - B. LAUS At-Grade HST Option
2. DT Junction Area
 - A. Tall Aerial Option
 - B. South Aerial Option
3. Norwalk / Santa Fe Springs Station
 - A. No HST Station Option
 - B. East HST Station Option
4. Fullerton Station
 - A. No HST Station Option
 - B. At-Grade HST Station Option
5. Anaheim
 - A. At-Grade Option
 - B. Deep Bore Tunnel Option
6. ARTIC
 - A. West At-Grade HST Station Option
 - B. Underground HST Station Option

Vertical Profile Statistics

At-Grade:	14.4 mi	48%
Fill:	1.0 mi	3%
Aerial:	7.9 mi	26%
Trench:	1.9 mi	6%
Multiple Options:	4.8 mi	16%

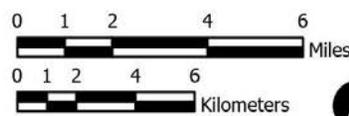
Overall Alignment Statistics

Single Design Option:	16.5 mi	55%
Multiple Design Options:	13.5 mi	45%

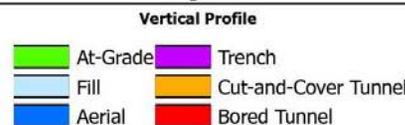
Source: STV Incorporated, AE LLC

June 29, 2010

California High-Speed Train Alternatives Analysis Report



Legend



Los Angeles to Anaheim Section - Vertical Profile and Design Options Dedicated HST Alternative





Consolidated Shared-Track Alternative

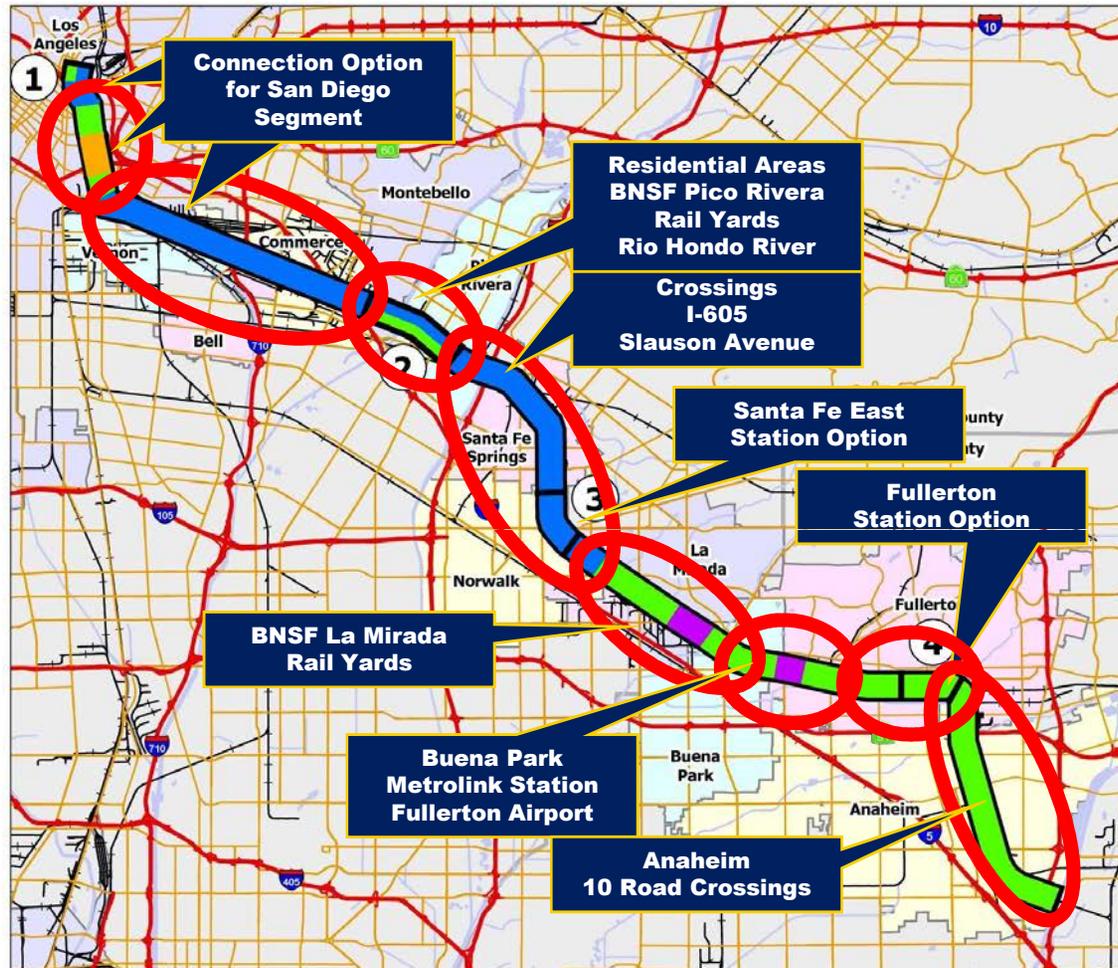
2 Passenger-Only Tracks:

- HST
- Amtrak
- Metrolink

3 Other Tracks:

- BNSF
- Amtrak
- Metrolink

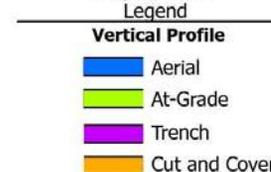
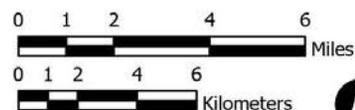
Improvements for all corridor operators



Source: STV Incorporated, AE LLC

July 6, 2010

California High-Speed Train Alternatives Analysis Report



Sub-Sections with Design Options

- Los Angeles Union Station
 - LAUS Aerial HST Option
 - LAUS At-Grade HST Option
- Montebello / Pico Rivera
 - At-Grade
 - Aerial
- Norwalk / Santa Fe Springs Station
 - No HST Station Option
 - East HST Station Option
- Fullerton Station
 - No HST Station Option
 - Aerial HST Station Option

Vertical Profile Statistics

At-Grade:	14.9 mi	49%
Aerial:	10.9 mi	35%
Trench:	1.4 mi	5%
Cut & Cover:	.9 mi	3%
Multiple Options:	2.4 mi	8%

Overall Alignment Statistics

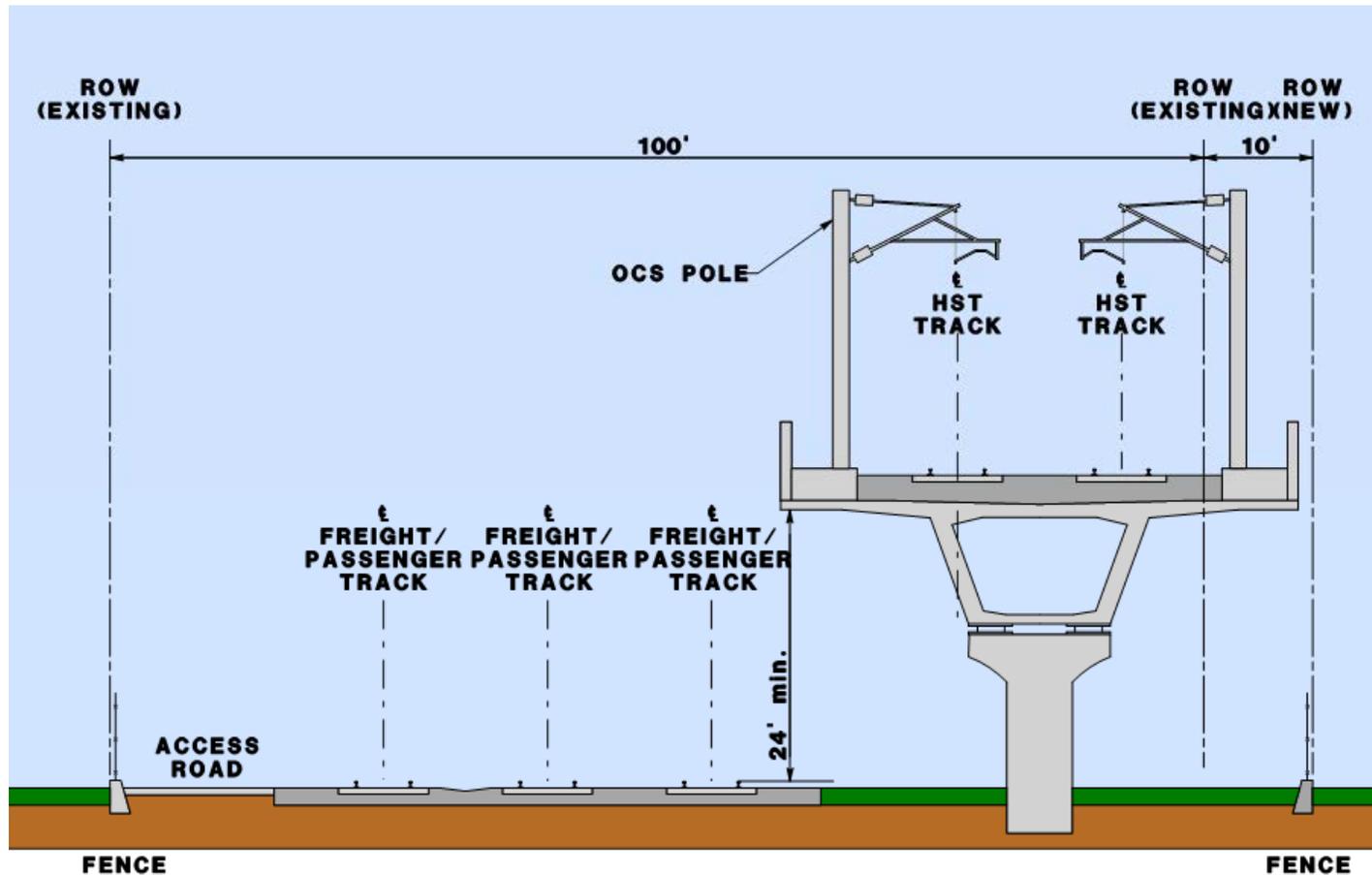
Single Design Option:	25.7 mi	84%
Multiple Design Options:	4.8 mi	16%

Los Angeles to Anaheim Section - Vertical Profile and Design Options Consolidated Shared-Track





Consolidated Shared-Track Alternative Aerial

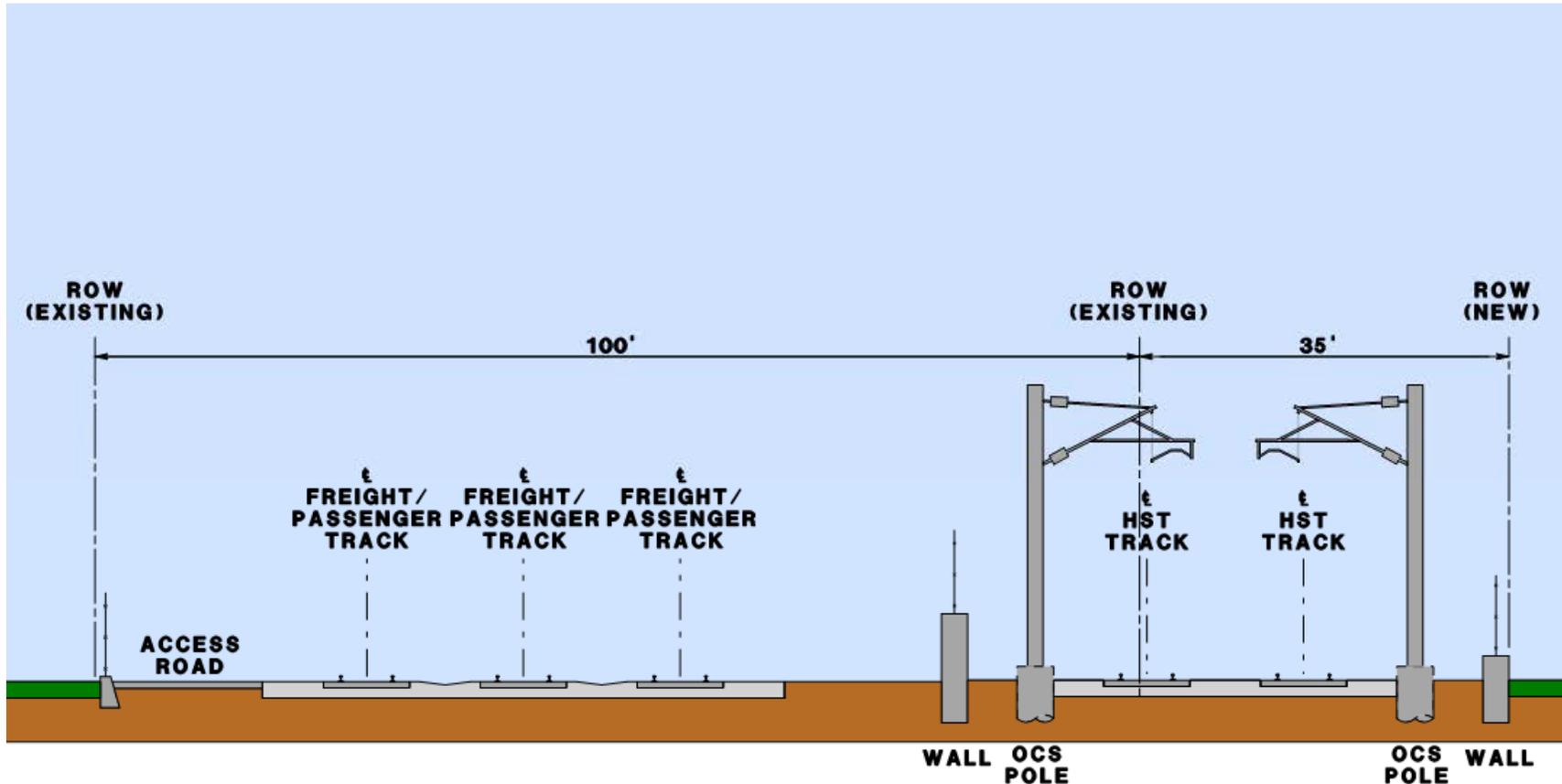


- Minimizes ROW takes by putting HST tracks above existing tracks
- Additional potential impacts from aerial structures





Consolidated Shared-Track Alternative At-Grade



- At-grade configuration possible in areas with wider ROW
- Narrower width than Dedicated HST Alternative – Five tracks instead of Six

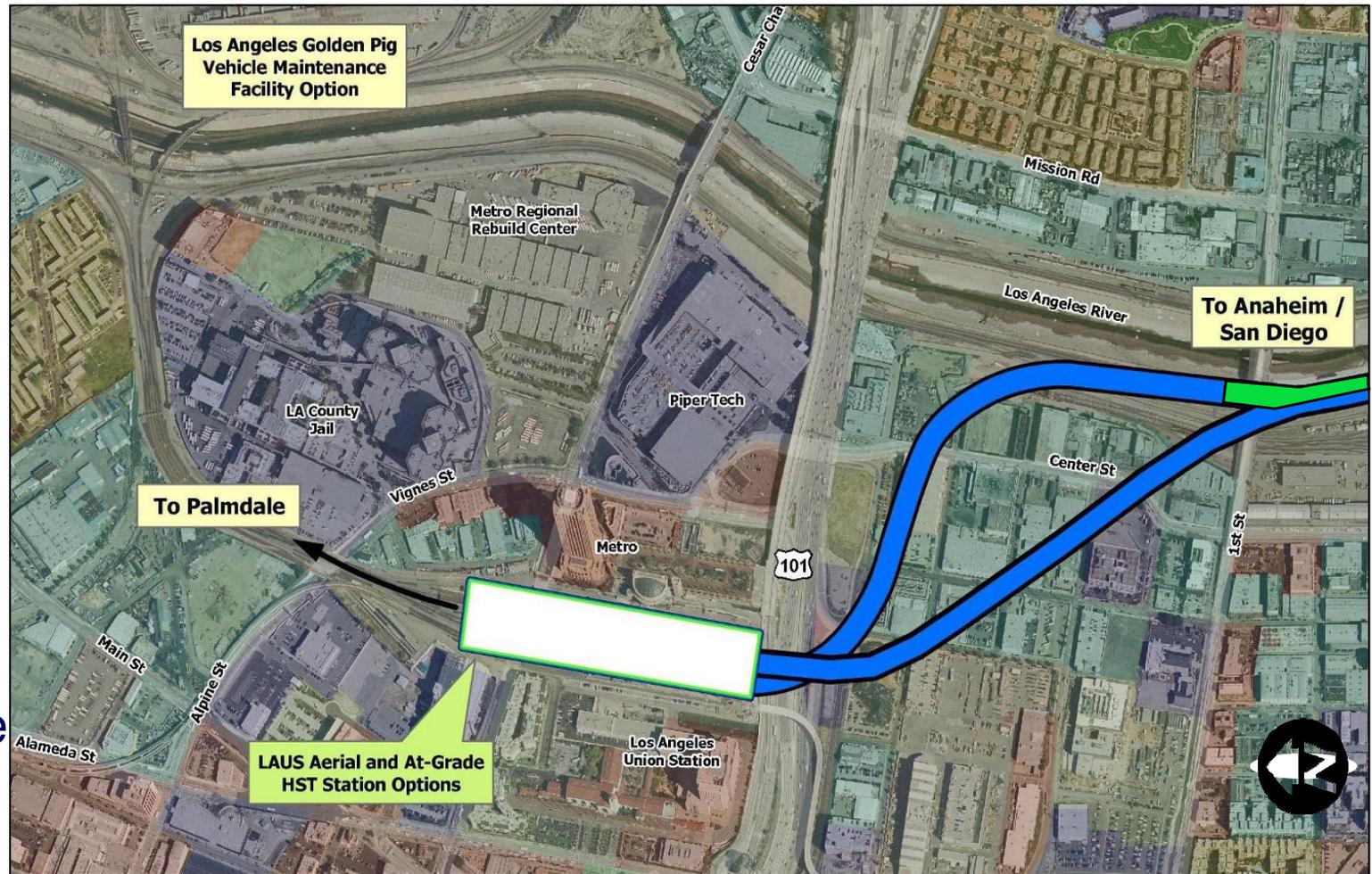




Los Angeles Station

Five HST Station options examined at Los Angeles Union Station:

- LAUS Aerial
- LAUS At-Grade
- LAUS Tunnel
- Vignes Aerial
- West Bank





ARTIC

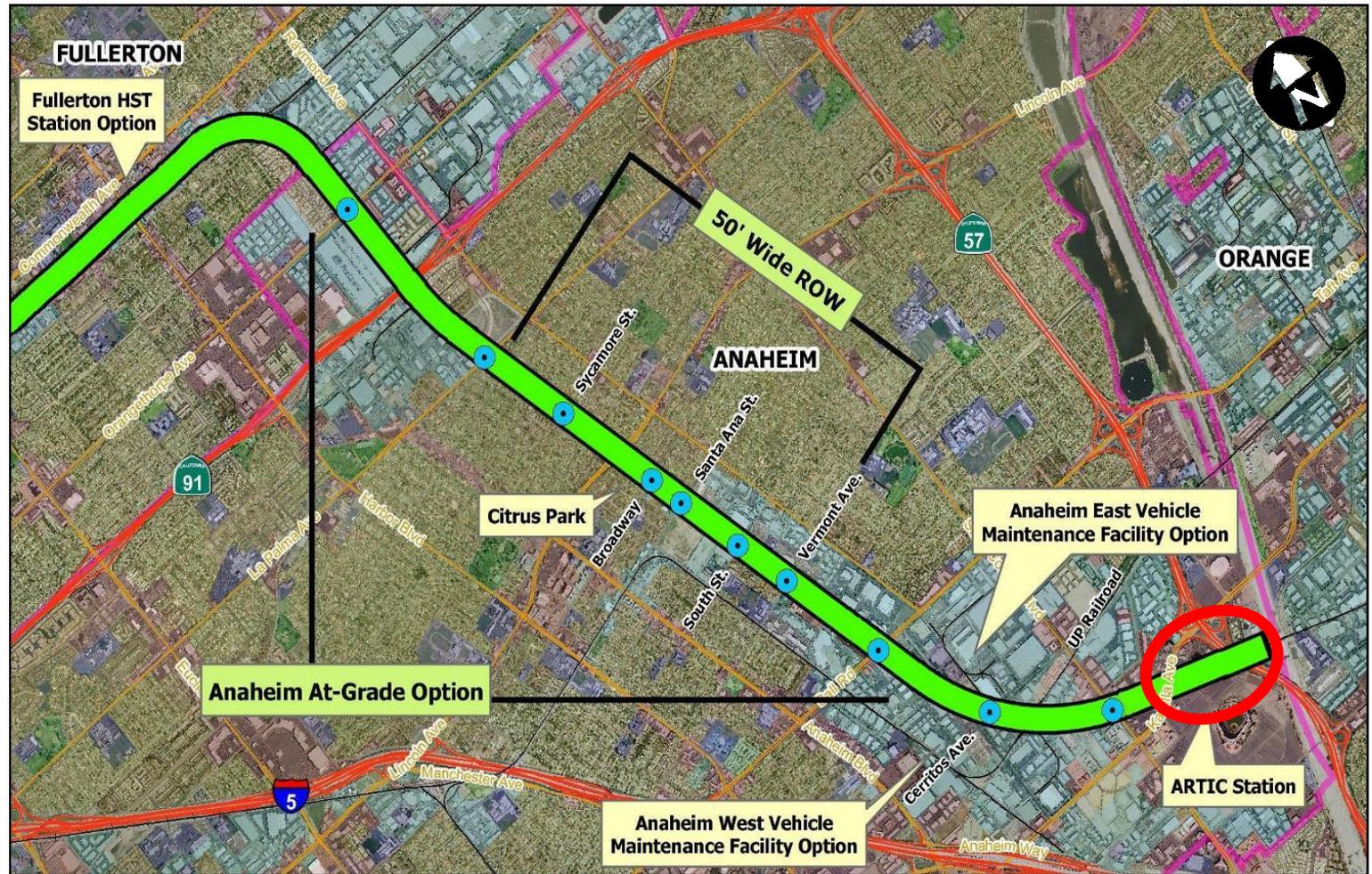
HST Station
at Anaheim
Regional
Transportation
Intermodal
Center
(ARTIC)

Three options
examined :

At-Grade
West 4 Track

At-Grade
Under 57 2
Tracks

Underground
4 Track

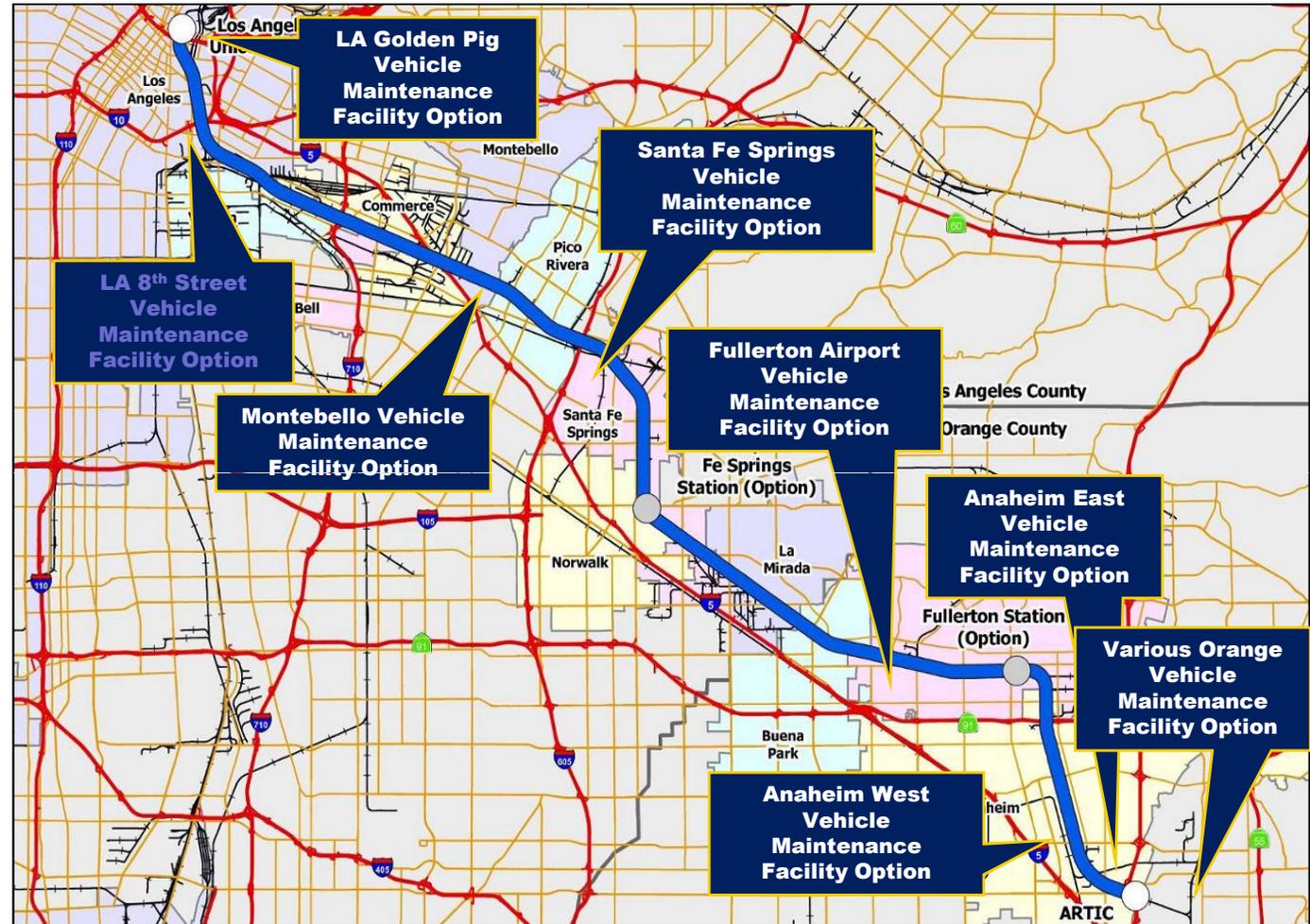




Vehicle Maintenance Facility Options

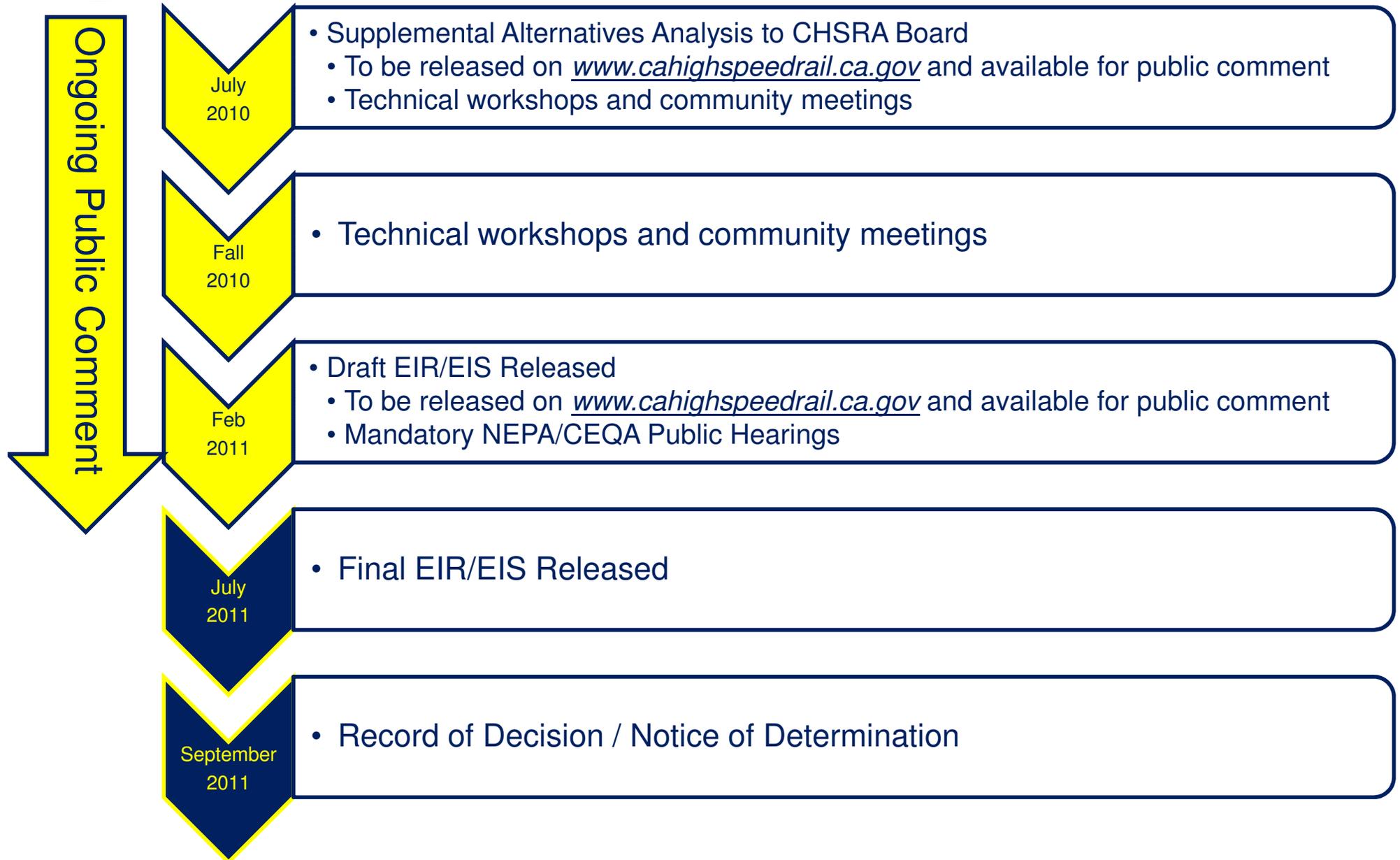
VMF Sites Investigated

- Orange (2)
- Anaheim East
- Anaheim West
- Fullerton Airport
- Santa Fe Springs
- Montebello
- LA Golden Pig
- Amtrak 8th Street





Timeline and Public Comment Opportunities





Timeline and Public Comment Opportunities

- Staff recommends
 - Adding the Shared-Track Alternative to LA-Anaheim Draft EIR/EIS
 - Continued work with Cities to reduce impacts and improve design options
 - Continued investigation of Maintenance Facility sites



