



Bakersfield to Palmdale Project Section

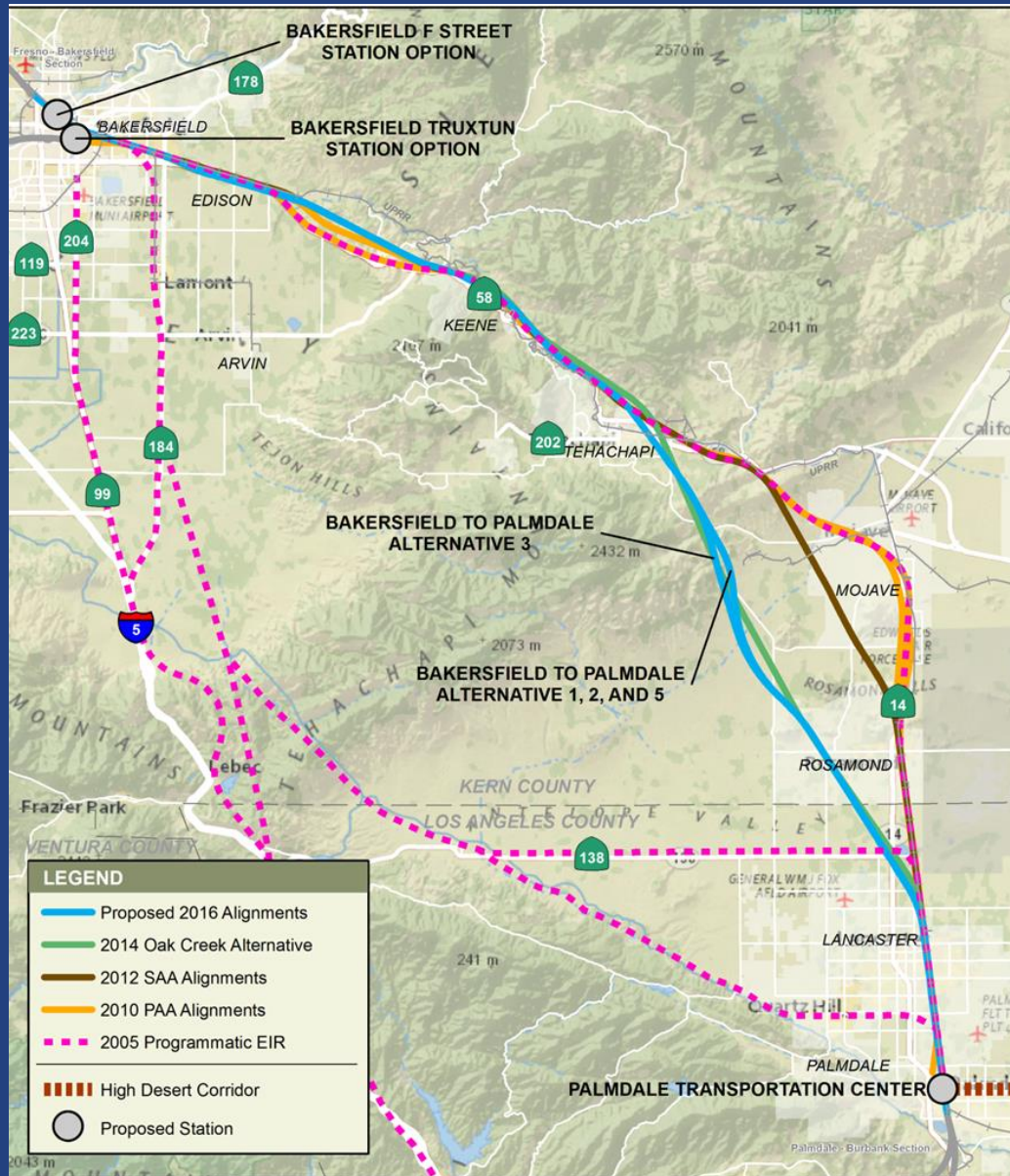
Presentation of the Staff-Recommended State's Preferred Alternative to the CHSRA Board of Directors

October 16, 2018

TODAY'S REQUESTED BOARD ACTION

- Concur with the staff recommendation to identify Alternative 2 with the CCNM Design Option as the State's Preferred Alternative in the Bakersfield to Palmdale Project Section Draft EIR/EIS
 - » Identifying a preferred alternative aligns with federal law, including MAP-21 (2012) and FAST Act (2015), and with CEQA
 - » This process is consistent with the approach adopted for the *Merced to Fresno Project Section: Central Valley Wye Supplemental EIR/EIS*
 - » Identifying a preferred alternative in the Draft EIR/EIS allows the public and agencies to comment on the preferred alternative
 - » Identifying a State's Preferred Alternative does not constitute the adoption or approval of a Preferred Alternative

ALTERNATIVES DEVELOPMENT OVERVIEW

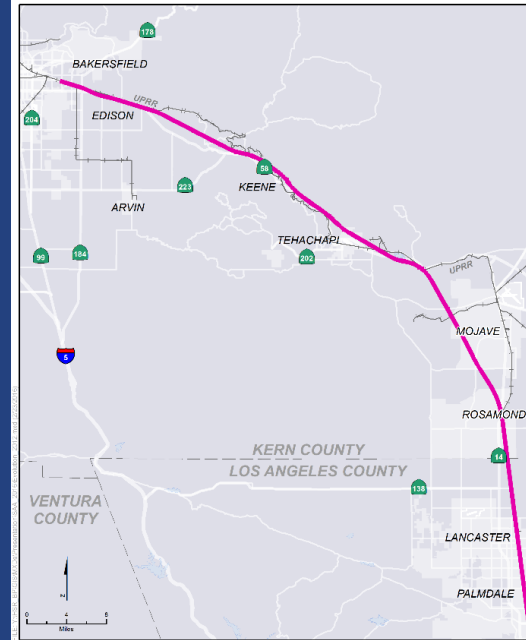


- The Authority considered a broad range of alignments since the 2005 Programmatic EIR/EIS and public scoping in 2009
 - » Refinements have been made to avoid and minimize environmental impacts, incorporate stakeholder feedback, and reduce costs
- Four distinct routes were identified for study through the environmental process

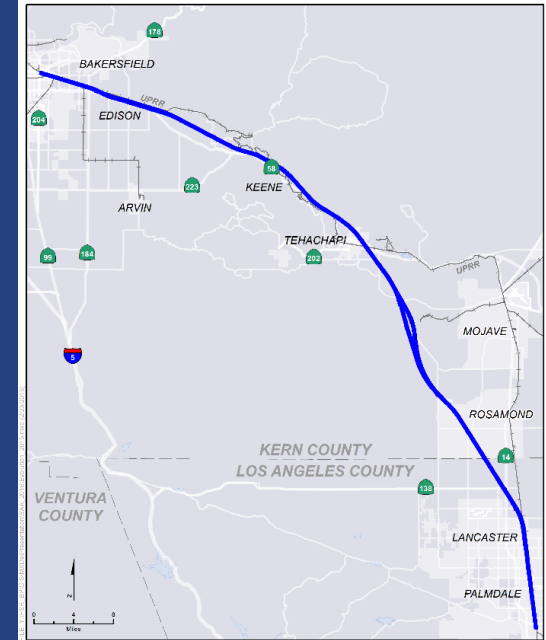
ALTERNATIVES DEVELOPMENT OVERVIEW



- 2010 Preliminary Alternatives Analysis (PAA) Report
- Board presentation September 2, 2010



- 2012 Supplemental Alternatives Analysis (SAA) Report
- Board presentation February 2, 2012



- 2016 Supplemental Alternatives Analysis (SAA) Report
- Board presentation April 12, 2016

BAKERSFIELD TO PALMDALE PROJECT SECTION

- Approx. 80 Miles
- Two Stations
 - » Bakersfield (Central Valley)
 - » Palmdale (Antelope Valley)
- Closes Passenger Rail Gap
- Connects Central and Southern California
- Alternatives 1, 2, 3, 5



PUBLIC & STAKEHOLDER ENGAGEMENT

- Stakeholder Working Group (SWG) and Open House outreach conducted in Edison, Rosamond, Tehachapi, Lancaster, and Palmdale

- » 18 total SWGs

- 8 in March 2016
- 5 in Jan. 2017
- **5 in Aug. 2018**

- » 11 total Open Houses

- 4 in July 2016
- 4 in Jan. 2017
- **3 in Sep. 2018**

- » 250+ coordination meetings with various stakeholders, agencies, and community organizations



KEY ISSUES IDENTIFIED DURING OUTREACH

- Agricultural and farm lands and mining
- Conservation areas and wildlife crossings
- Exotic Feline Breeding Compound and other boarding/rescue facilities
- César Chávez National Monument (CCNM)
- Recreational facilities and Pacific Crest Trail
- Downtown Areas of Tehachapi, Rosamond, Lancaster and development along Edison and Sierra Highways
- Green energy generation facilities
- Mojave Space Port
- Edwards Air Force Base
- Plant 42
- Seismic safety, drainage, and flooding
- Air quality, dust, Valley Fever



STATE'S PREFERRED ALTERNATIVE

- Staff recommends Alternative 2 with the CCNM Design Option
 - » Minimize potential impacts to residences, businesses, community facilities
 - » Minimize impacts to school and agricultural facilities in Edison
 - » Avoid impacts historic and recreational resources protected under Section 4(f)
 - » Incorporate the CCNM Design Option, which would minimize noise and visual impacts to the CCNM
 - » Minimize impacts to future mining areas, resulting in fewer miles of tunnel construction



COMPARISON OF THE FOUR DIFFERENT ROUTES: BASIC FEATURES

Criterion	HSR Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Total length ¹	81.3 miles	81.3 miles	81.2 miles	81.3 miles
Elevated profile	19.5 miles	20.3 miles	18.9 miles	19.5 miles
Underground profile	9.3 miles	9.3 miles	11.5 miles	9.3 miles
Surface profile	52.5 miles	51.7 miles	50.8 miles	52.5 miles
Travel time (approx.)	25 minutes	25 minutes	25 minutes	25 minutes
Speed capacity	200-220 mph	200-220 mph	200-220 mph	200-220 mph

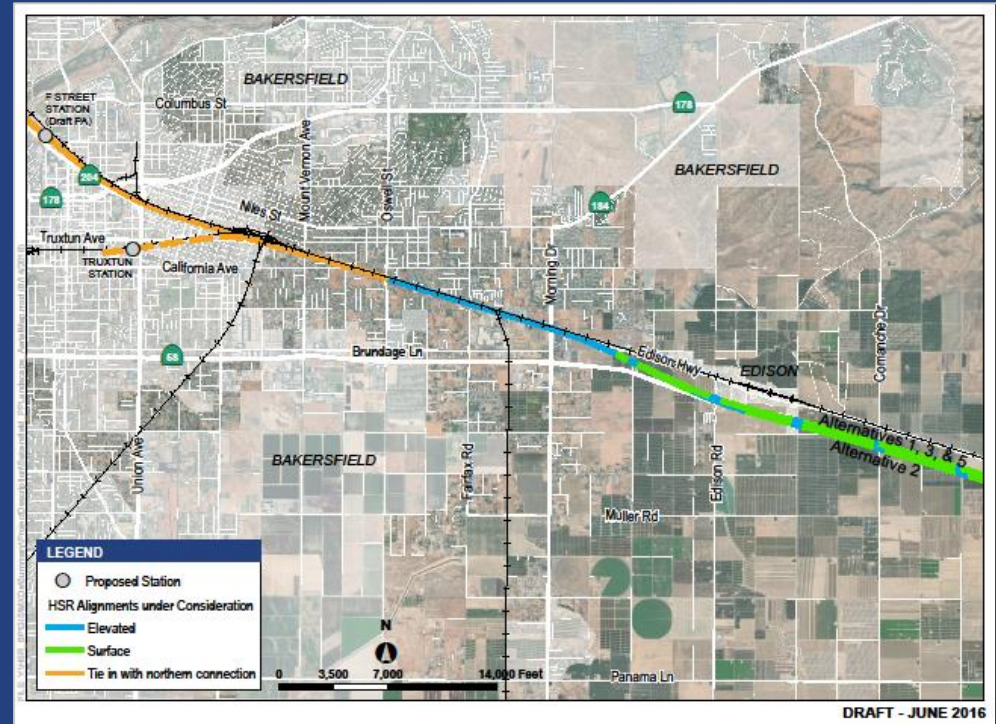
¹ Assuming the F Street Station is approved as the preferred station location in Bakersfield.

Cost Category	HSR Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Total Cost in 2016 Dollars ²	13.6 billion	13.9 billion	14.1 billion	13.4 billion

² The total cost estimate includes the total effort and materials necessary to construct the this section, including stations, maintenance facilities, and modifications to roadways required to accommodate grade separated guideways.

BAKERSFIELD/EDISON AREA

- The recommended alternative:
 - » Crosses the SR 58 and is furthest away from the Edison Middle School, the residential area surrounding it, and the packing houses
 - » Avoids noise and vibration impacts to Edison Middle School, businesses, and residences



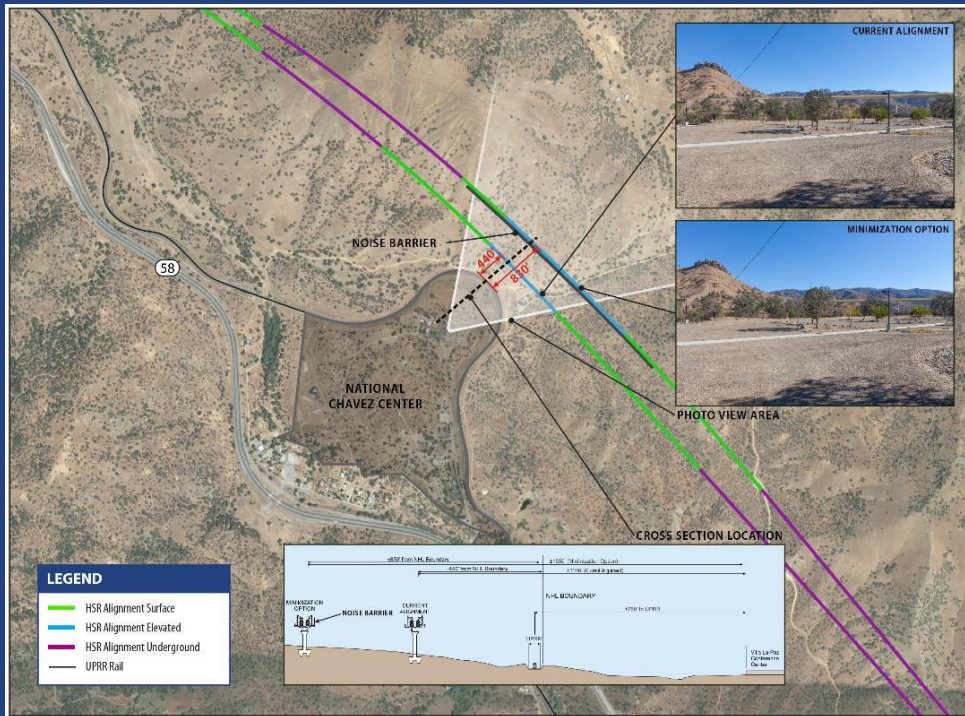
NORTH SLOPE OF THE TEHACHAPIS

- Mountainous areas and vertical grade considerations focus study area
 - » Cross Caliente Creek
 - » Climb into the Tehachapis
 - » Optimize crossing of Tejon Ranch/Tejon Conservancy Border



Photos and graphics for illustrative purposes only.

CÉSAR CHÁVEZ NATIONAL MONUMENT (NEAR KEENE)



- Newly developed CCNM Design Option minimizes visual and noise impacts by increasing distance between CCNM and proposed corridor and reducing height of proposed bridge spanning creek
- Authority staff continue to work with the César Chávez Foundation and other Section 106 consulting parties to minimize impacts to CCNM

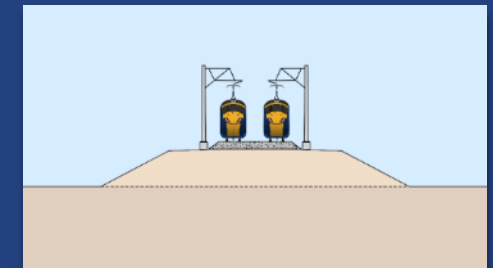
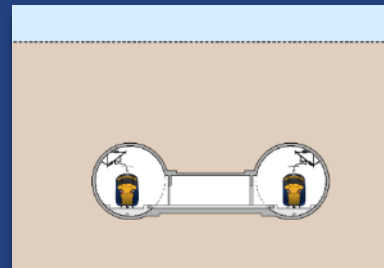
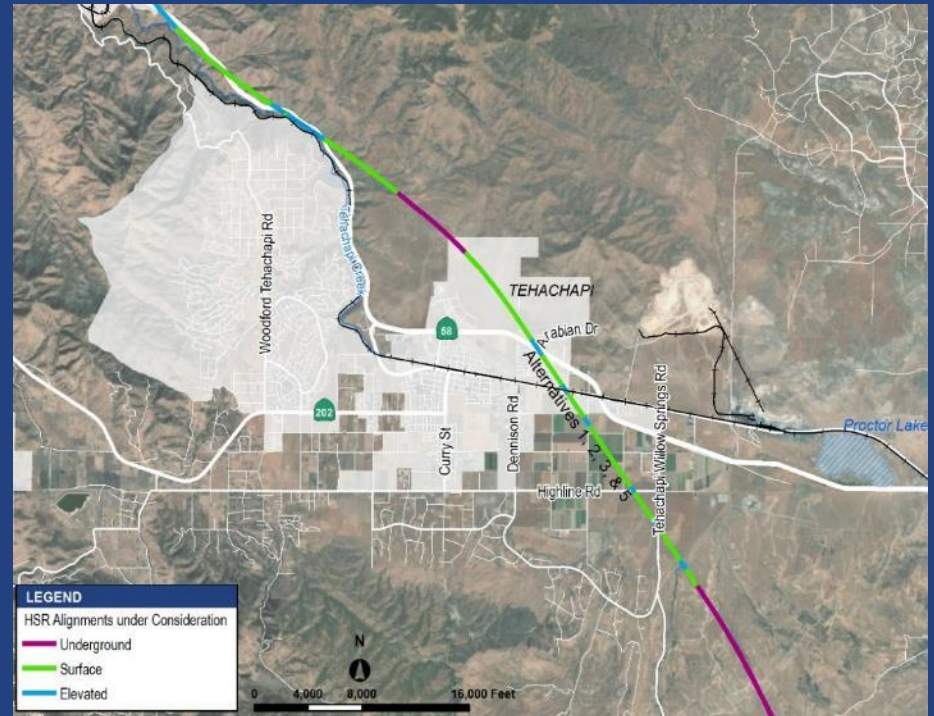


Chavez Center

Photos and graphics for illustrative purposes only.

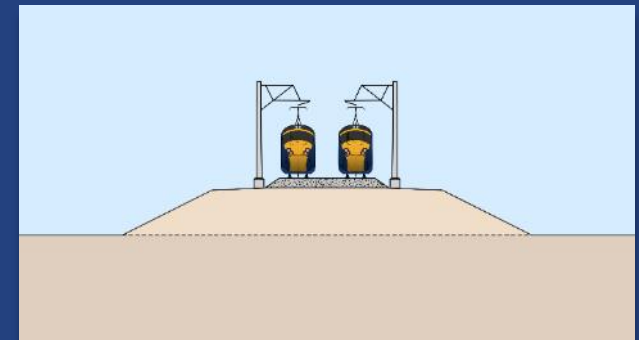
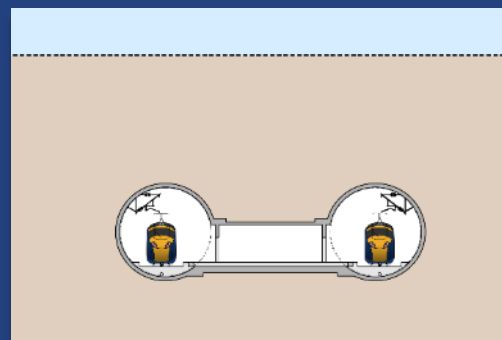
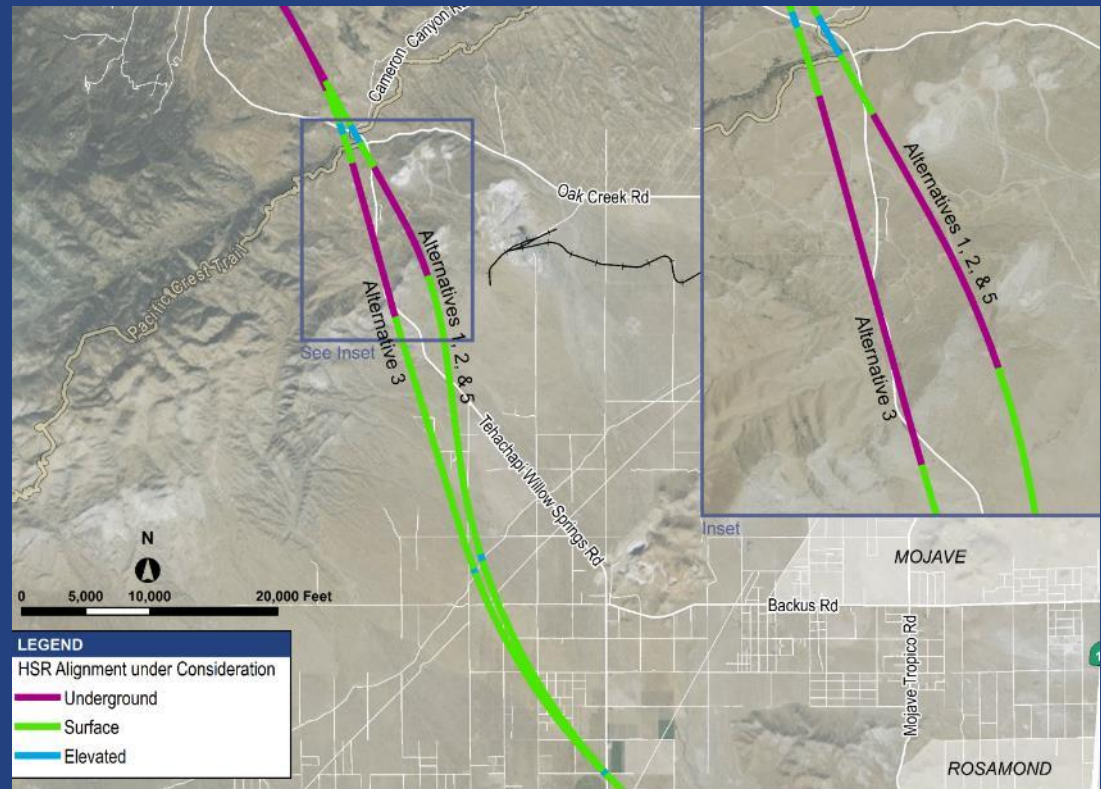
CITY OF TEHACHAPI

- The recommended alternative avoids or minimizes impacts to:
 - » New Hospital/Medical Center
 - » New development areas
 - » Recreation areas
 - » Downtown
- Does not preclude future expansion



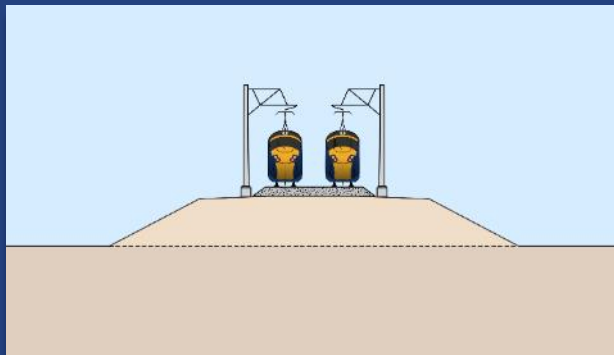
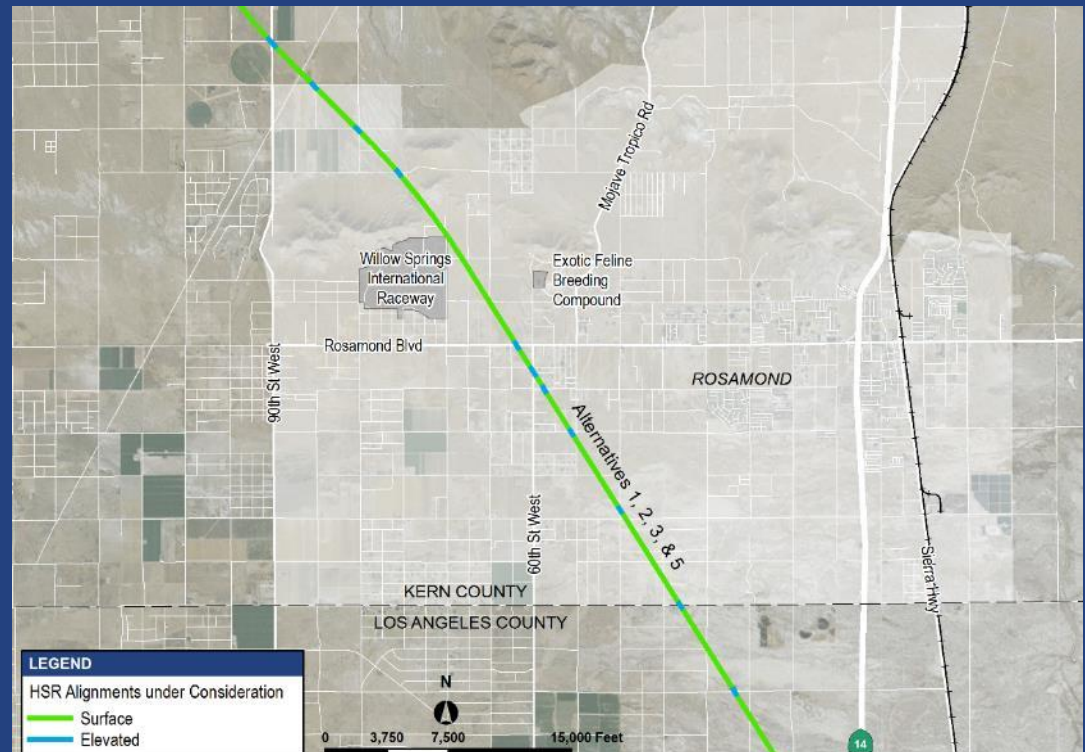
SOUTH SLOPE OF THE TEHACHAPIS & MOJAVE AREA

- The recommended alternative minimizes impacts to:
 - » Green energy generation
 - » Pacific Crest Trail
 - » Mining facilities
 - » BLM Lands



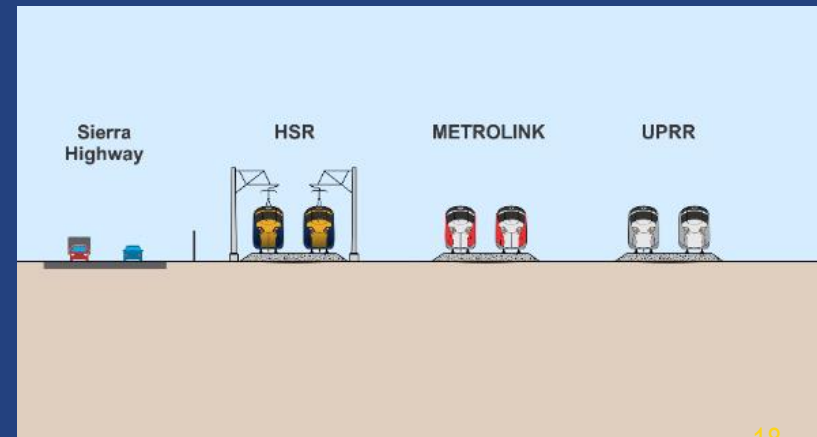
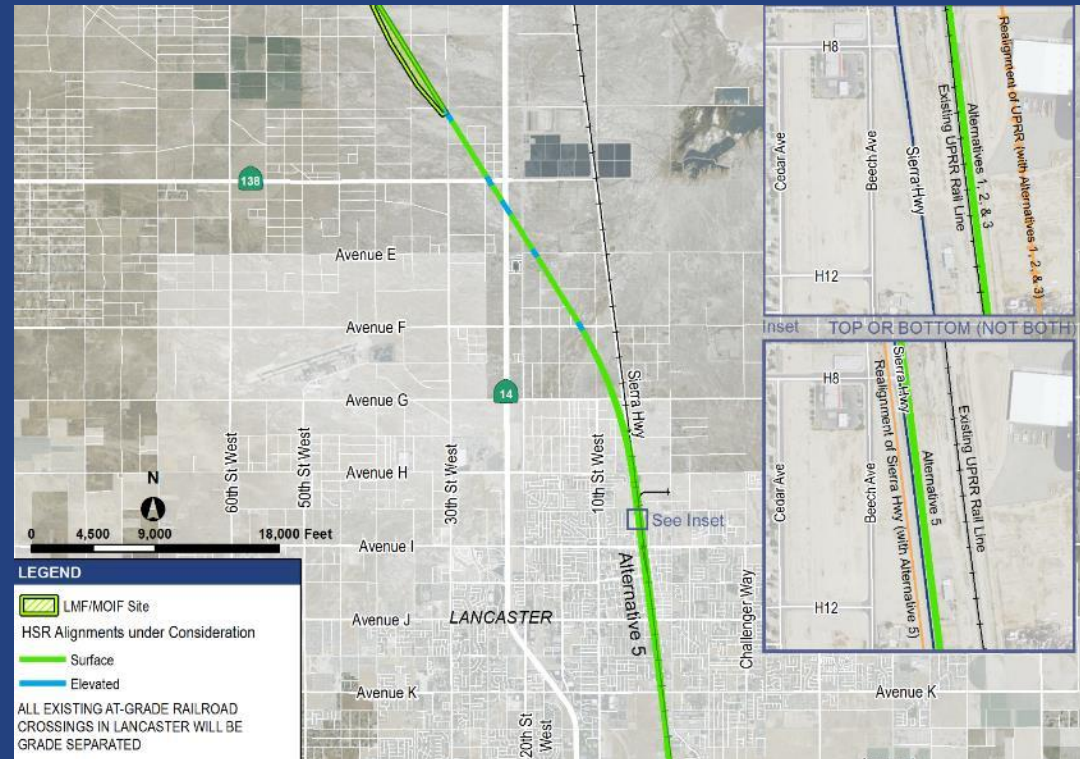
COMMUNITY OF ROSAMOND

- Avoid impacts in downtown area
- Provide for existing and planned access/street crossings, wildlife crossings, drainage, and utilities



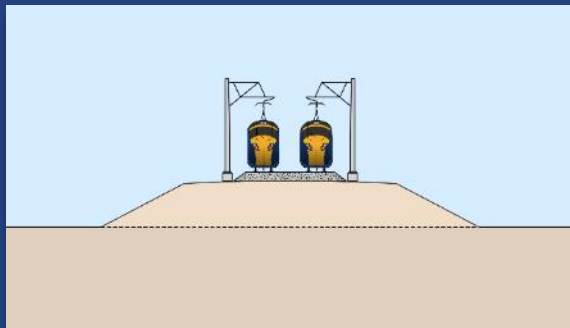
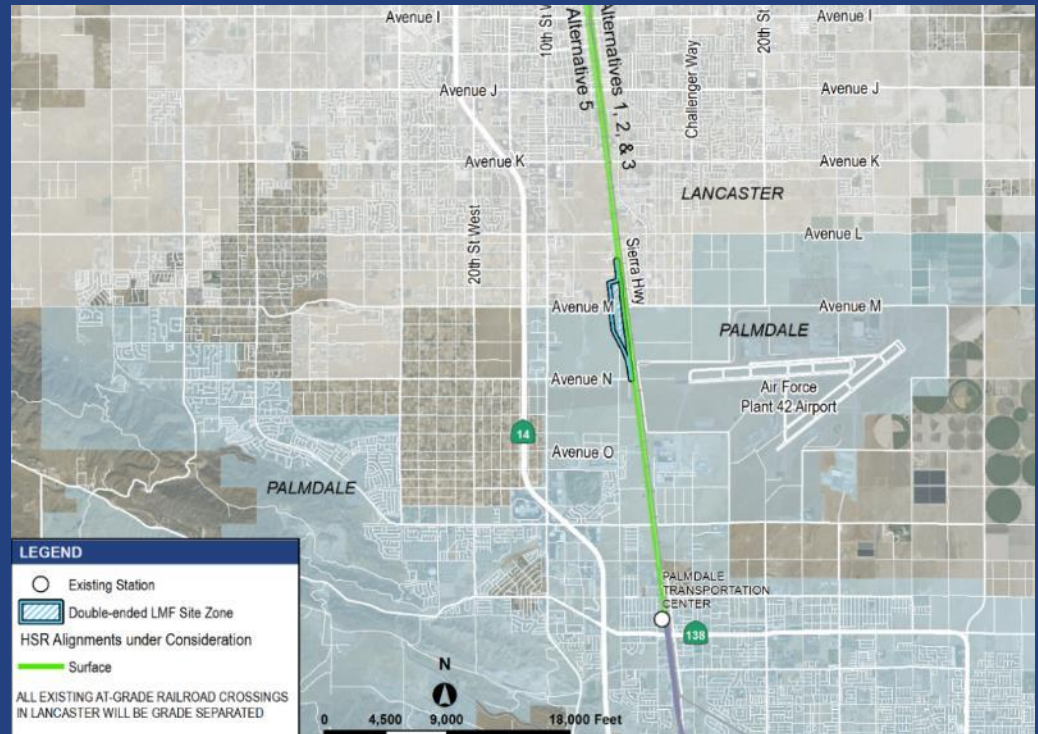
CITY OF LANCASTER

- The recommended alternative:
 - » Minimizes residential and commercial displacements
 - » Avoids impacts to 4(f) properties (recreational and historic resources)
 - » Consolidates rail lines into one modern sealed rail corridor
- Grade Separate remaining rail crossings at: Avenue I, Lancaster Blvd. (Milling St.), Avenue J, Avenue K, and Avenue M
- Identify locations north and south of City for potential maintenance facilities



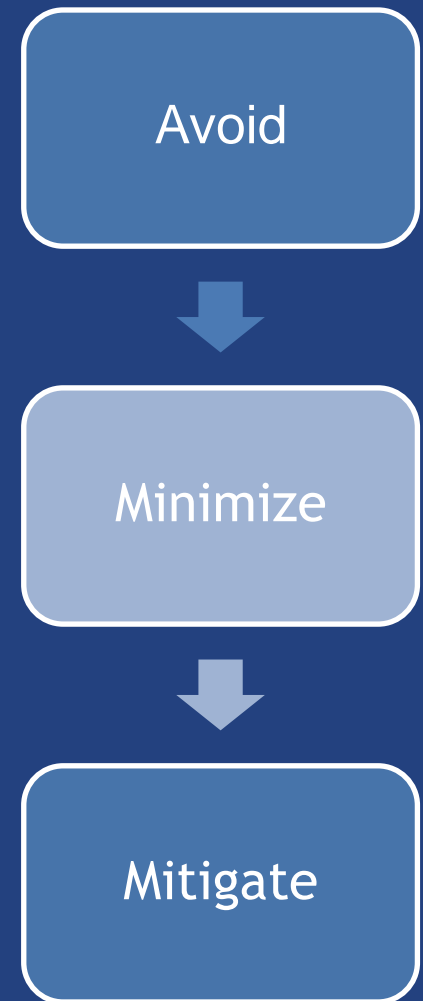
CONNECTION TO PALMDALE STATION

- Consolidate rail lines into modern sealed rail corridor
 - » Grade Separate remaining at grade Crossings at: Avenue M, Rancho Vista Blvd., Sierra Highway, Palmdale Blvd.
- Avoid Plant 42 & Palmdale Airport Airspace
- Accommodate a multi-modal shared station and future out of state connections



IDENTIFYING A PREFERRED ALTERNATIVE

- When developing alternatives, the Authority strives to:
 1. **Avoid** impacts;
 2. **Minimize** impacts, when they cannot be avoided; and
 3. **Mitigate** impacts, when they cannot be avoided or minimized.
- When identifying a preferred alternative, the Authority identifies the alternative that best balances environmental and community impacts with project costs and stakeholder input.
- The resources areas below effectively illustrate differences among alternatives:
 - » Section 4(f)
 - » Socioeconomics and communities (including Environmental Justice)
 - » Agricultural lands
 - » Noise and vibration
 - » Biological and aquatic resources



SECTION 4(F)



Denny's Restaurant #30

- Section 4(f) of the U.S. Department of Transportation Act of 1966 protects publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites.



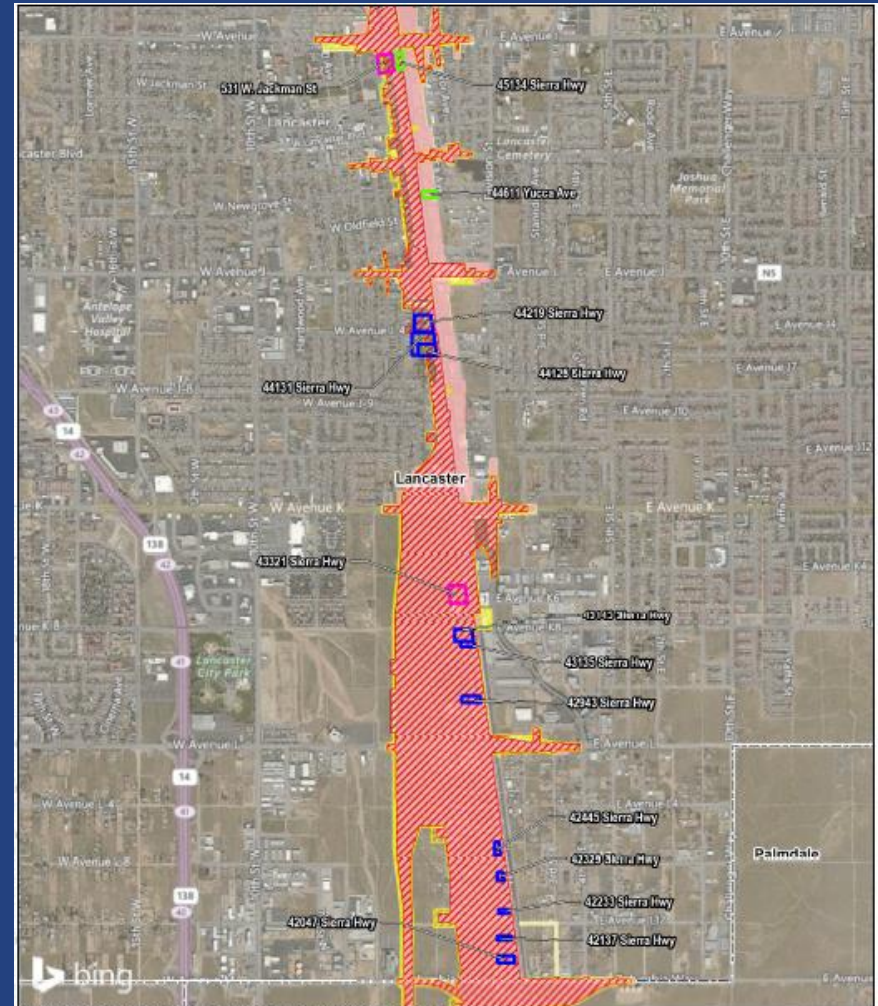
Whit Carter Park

- Alternative 5 would result in a *permanent use* of two additional 4(f) resources, whereas Alternatives 1, 2, and 3 would avoid these impacts:
 1. Whit Carter Park; and
 2. Denny's Restaurant #30 (Village Grille).

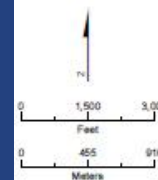
* A permanent use of a Section 4(f) resource occurs when property is permanently incorporated into a proposed transportation facility. This might occur as a result of partial or full acquisition.

SOCIOECONOMICS/COMMUNITIES AND EJ

- Alternative 2 would be located further away from Edison Middle School and EJ populations in the community of Edison.
- Alternatives 1, 2, and 3 would have fewer impacts to de-facto affordable housing motels in the Lancaster area.
- Alternatives 1 and 2 would displace the fewest number of residential units and businesses.



PRELIMINARY DRAFT/IS SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
SOURCE: Bing Maps (2015); CH2R (4/2016)



Facilities of Concern		Alternatives 1, 2, & 3	
 	Motels (Affordable Housing)	 	Permanent Impact Areas
 	Homeless Service Centers	 	Temporary Impact Areas
 	Apartments (Affordable Housing)	 	Alternative 5
		 	Permanent Impact Areas
		 	Temporary Impact Areas

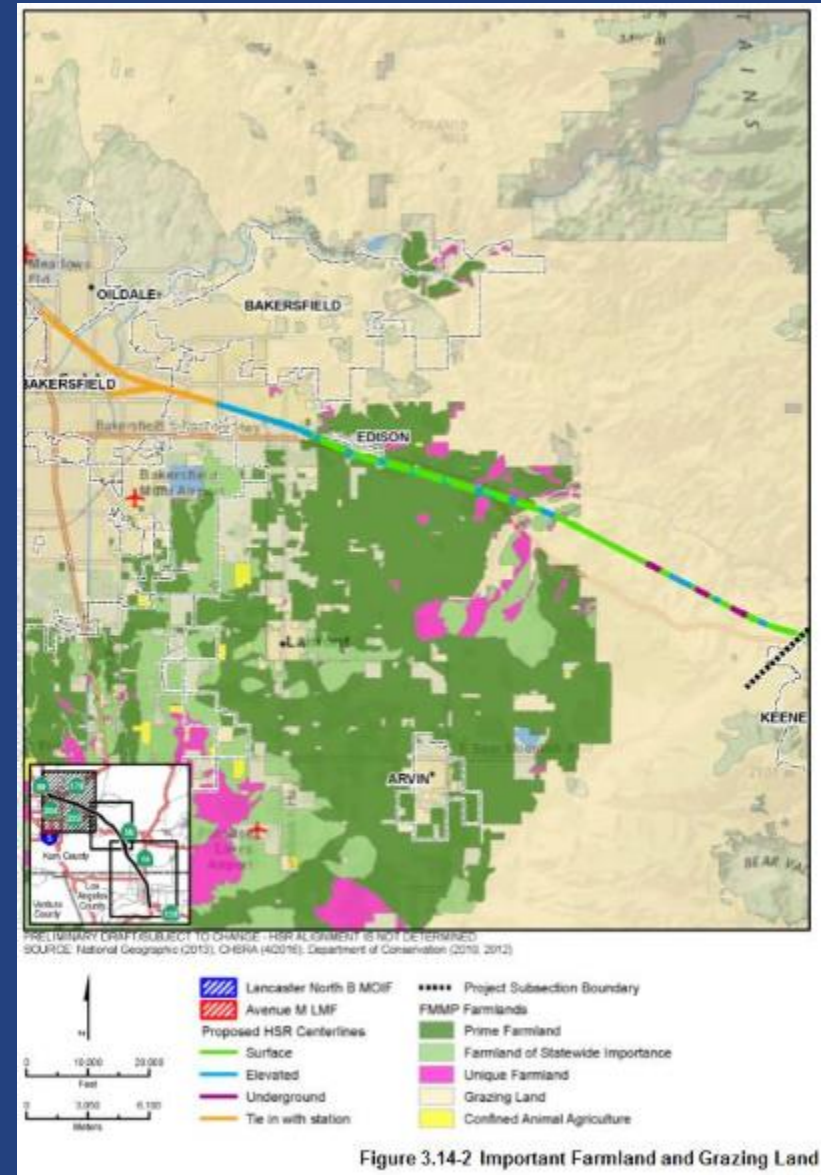
Figure 5-A-5
Facilities of Concern for Low-Income Populations in Lancaster

* Environmental Justice or “EJ” refers to minority and low income populations.

AGRICULTURAL LANDS

- Alternative 2 would have the fewest number of partial agricultural parcel acquisitions, and the least amount of total agricultural parcel acquisition acreage.
- Alternative 2 would have the fewest number of temporary road closures in agricultural areas.
- Alternative 2 would have the least number of temporary impacts to Important Farmlands; however, it has the greatest number of permanent impacts to Important Farmlands.

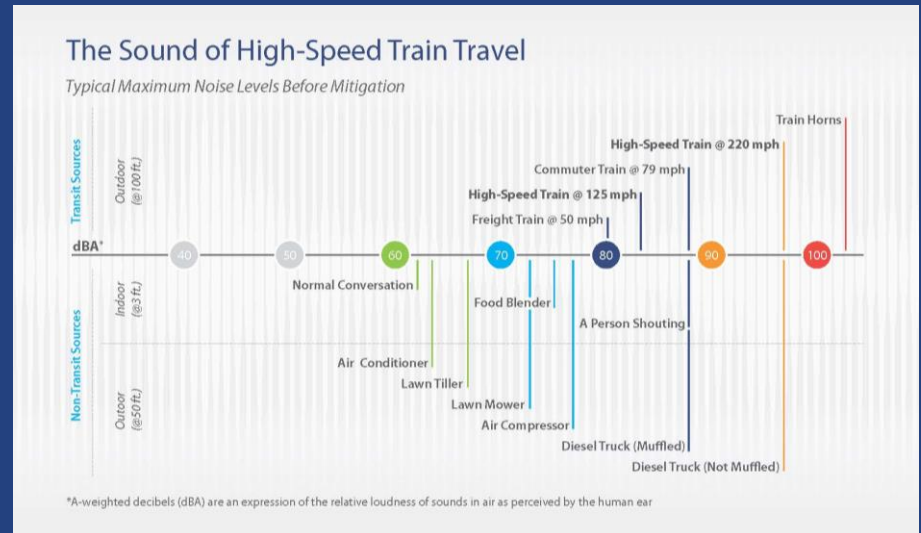
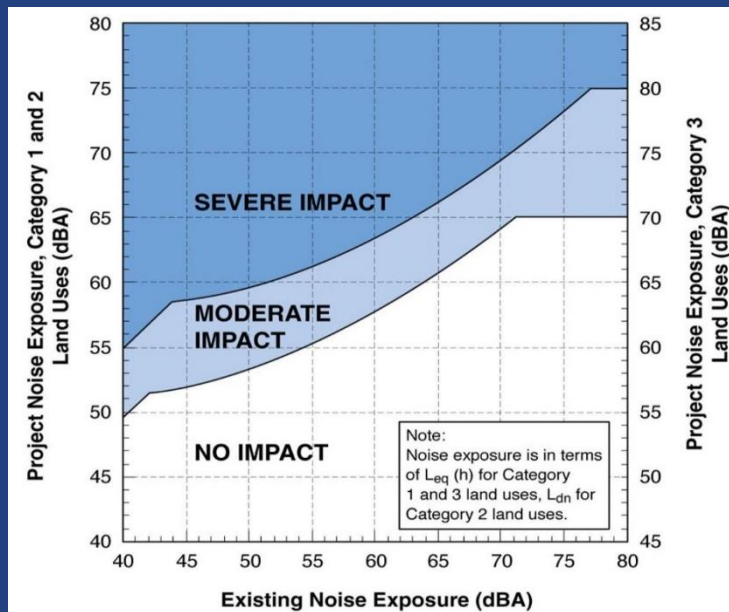
* Important Farmland includes: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.



NOISE AND VIBRATION

Criterion	HSR Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Number of severe operational noise impacts to sensitive receivers (residential)	1,852	1,810	1,850	1,947
Number of severe operational noise impacts to sensitive receivers (institutional)	5	5	5	5

The above numbers do not include mitigation, such as noise barriers.



BIOLOGICAL AND AQUATIC RESOURCES

Criterion	HSR Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Special status plant species (acres of overall habitat)	9,387	9,187	9,568	9,351
Special status wildlife species (acres of overall habitat)	23,895	23,252	23,933	23,744
Modeled federal and state threatened/endangered species habitat (acres)	16,986	16,987	17,041	16,893
Waters of the State (acres)	67	65	69	63
Waters of the U.S. (acres)	N/A	N/A	N/A	N/A



Tejon poppy



Golden eagle



Claypans

ALTERNATIVE 2 WITH CCNM DESIGN OPTION



- Alternative 2 would, in general, result in:
 - ✓ Fewer relocations and displacements (incl. EJ);
 - ✓ Fewer impacts to 4(f) resources;
 - ✓ Fewer impacts to agricultural facilities;
 - ✓ Lessened impacts to mining areas; and
 - ✓ Fewer miles of tunnel.
- CCNM Design Option would minimize noise and visual impacts to CCNM.

* FRA has not yet concurred with the State's Preferred Alternative

IDENTIFICATION OF PREFERRED ALTERNATIVE

- Information presented today is preliminary. There are tradeoffs among the four alternatives and staff has based their recommendation on the preliminary analysis completed to date.
- All alternatives will be analyzed further at an equal level of detail as the Draft EIR/EIS is prepared.
- Staff will carefully consider the comments received at today's meeting, until the release of the Draft EIR/EIS, and during the public comment period for the Draft EIR/EIS. Staff will also continue to coordinate with resource agencies and stakeholders on key issues. This process may lead to modifications between now and when the final route is adopted in 2020.
- Identifying the State's Preferred Alternative does not constitute the adoption or approval of a preferred alternative.

NEXT STEPS

**Summer
2019**

**Release of Draft
EIR/EIS &
Hearings**

DRAFT ENVIRONMENTAL DOCUMENT

Ongoing Communication/Engagement
Public Hearings
Response to Comments

**Summer
2020**

**Completion of
EIR/EIS & Adopt**

FINAL ENVIRONMENTAL DOCUMENT

Community Open Houses & Briefings
Authority Board Decision (Notice of Determination)
NEPA Decision (Record of Decision)

TODAY'S REQUESTED BOARD ACTION

- Concur with the staff recommendation to identify Alternative 2 with the CCNM Design Option as the State's Preferred Alternative in the Bakersfield to Palmdale Project Section Draft EIR/EIS
- NOTE: Identifying a state's preferred alternative does not constitute the adoption or approval of a Preferred Alternative