



## **BRIEFING: OCTOBER 16, 2018 BOARD MEETING AGENDA ITEM #2 & 4**

**TO:** Chairman Richard and Board Members

**FROM:** Michelle Boehm, Southern California Regional Director  
Mark McLoughlin, Director of Environmental Services

**DATE:** October 16, 2018

**RE:** Consider Concurring with the Staff Recommended State Preferred Alternative for the Bakersfield to Palmdale Project Section for Identification in the Draft EIR/EIS

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### **Summary of Recommended Action**

California High-Speed Rail Authority (Authority) staff recommends that the Board of Directors (Board) identify Alternative 2 with the César Chávez National Monument (CCNM) Design Option as the State's Preferred Alternative for preparing the Bakersfield to Palmdale Project Section Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). Staff's recommendation is based on the conceptual engineering, environmental analysis, and numerous public, stakeholder, and agency meetings conducted to date.

With the Board's concurrence, Alternative 2 with the CCNM Design Option – an impact minimization design option near the César Chávez National Monument – will be identified as the State's Preferred Alternative in the Draft EIR/EIS. Identification of the State's Preferred Alternative is neither an approval nor a final decision, and the Authority may change the preferred alternative depending on the comments received during public and agency review of the Draft EIR/EIS. Staff will return to the Board to request project approval of an alternative once the Final EIR/EIS has been prepared. The Authority anticipates releasing the Draft EIR/EIS for public and agency review and comment in mid-2019, and staff will take those comments into consideration while developing the Final EIR/EIS.

Staff will seek concurrence regarding the State's Preferred Alternative from the Federal Railroad Administration (FRA). With FRA's concurrence, Alternative 2 with the CCNM Design Option will be identified both as the State's Preferred Alternative and the federal NEPA Preferred Alternative.

### **Background**

In the 2005 program-level, or Tier 1 EIR/EIS, the Authority and FRA selected the general corridor extending southeast from Bakersfield following the State Route 58 corridor to Palmdale, which resulted in the Bakersfield to Palmdale Project Section. Following the identification of the preferred corridor, preparation of a Tier 2 project-level EIR/EIS document was initiated to develop and evaluate a range of alignment alternatives within the Bakersfield to Palmdale Project Section.

Activities conducted during this process include:

- Scoping for the Bakersfield to Palmdale Project Section in 2009;
- Preparation of a Preliminary Alternatives Analysis in 2010;
- Preparation of a Supplemental Alternatives Analysis in 2012; and,
- Preparation of a second Supplemental Alternatives Analysis in 2016.

Through this process the Authority identified four unique, end-to-end Build Alternatives for study in the Draft EIR/EIS. These Build Alternatives, Alternatives 1, 2, 3, and 5, start in Bakersfield and end in Palmdale. The four alternatives share a common alignment throughout most of the project section because of the mountainous terrain that characterizes and physically constrains much of the corridor.

Alternatives 1, 2, 3 and 5 are shown in attached Exhibit 1. Each alignment is the summation of a series of design variations, which occur in Edison, an area north of Rosamond, and in Lancaster. In addition, through consultation with the César Chávez Foundation, National Park Service, State Historic Preservation Officer, and other consulting parties, required under Section 106 of the National Historic Preservation Act of 1966 (NHPA), the Authority has introduced a design variation (known as the CCNM Design Option, shown in Exhibit 2) near the César Chávez National Monument in the Keene area. These areas of variation are described below; a more detailed project description is included in the attached staff report, which also reviews the extensive evolution of alternatives development between 2009 and 2016 that led to the present four alternatives.

- In Edison, Alternatives 1, 3, and 5 share a common alignment. Alternatives 1, 3, and 5 begin at the Bakersfield Station and travel along the Edison Highway and SR 58 corridors. At Edison Road, these alternatives would relocate SR 58 to the south, allowing the alignment to run within the existing highway right of way, parallel to the relocated SR 58 alignment on the north side. In contrast, Alternative 2 crosses over SR 58 and Edison Road on an elevated structure and travels on the south side of SR 58, eliminating the need to relocate SR 58. Alternative 2 is thus further away from the Edison community than Alternatives 1, 3, and 5.
- In Keene, Alternatives 1, 2, 3, and 5 share a common alignment. The alternatives would generally follow SR 58 south as they pass the César Chávez National Monument, approximately 440 ft. from the monument boundary. In contrast, the CCNM Design Option, an impact minimization design option, moves the alignment further away from the boundary of the CCNM. Thus, the nearby viaduct is lowered and the separation between the CCNM and the alignment is increased to approximately 830 ft. This variance also results in slightly longer tunnels in the area.
- In the area north of Rosamond, Alternatives 1, 2, and 5 share a common alignment. These alternatives would cross the Tehachapi Valley on a straight alignment and pass through the mountains southeast of Tehachapi in a tunnel. In contrast, Alternative 3 splits off from the other three alternatives south of Tehachapi, travelling further west along Tehachapi Willow Springs Road, which results in Alternative 3 having a longer tunnel.
- In Lancaster, Alternatives 1, 2, and 3 share a common alignment. The alignment would enter Lancaster at Avenue H, running parallel to the Union Pacific Railroad (UPRR) and Metrolink corridor. Alternatives 1, 2, and 3 would utilize the existing rail corridor and relocate the UPRR and Metrolink rail facilities to the

east. In contrast, Alternative 5 would be situated west of the existing UPRR and Metrolink facilities, avoiding the need to relocate them. Alternative 5 would, however, require the relocation of Sierra Highway to the west of the high-speed rail alignment.

The variations outlined above result in meaningful differences in the technical analysis of environmental and community factors when comparing Alternatives 1, 2, 3, and 5 and the CCNM Design Option. These differences are summarized in greater detail in the discussion section below and described in detail in the attached staff report.

### *Stakeholder Engagement*

Over the course of developing these Alternatives, the Authority has proactively sought to initiate meaningful dialogue with stakeholders, resource agencies, municipalities, landowners, community leaders, and interested members of the public, going beyond the outreach required by the NEPA/CEQA process to secure the broadest possible participation in the development of the project. The Authority has frequently held public meetings to inform the development of the project design and the preparation of the Draft EIR/EIS. To date, over 250 meetings with key stakeholders and community organizations have been held throughout the project section.

Authority staff has engaged with the public in a variety of ways, including responding to questions, one-on-one meetings, small group meetings, public meetings, participation in local events, and presentations at community meetings. Most recently, Authority staff engaged with agencies, stakeholders, and the public to provide information about the staff-recommended State's Preferred Alternative and solicit feedback on the proposed recommendation. These activities included:

- Preferred Alternative briefing with Southern California Regulatory Agencies on August 15, 2018;
- Five Stakeholder Working Group meetings held between August 21, 2018 and August 22, 2018 in the communities of Edison, Tehachapi, Rosamond, Lancaster, and Palmdale; and,
- Three Community Open Houses between September 5, 2018 and September 12, 2018 in the communities of Tehachapi, Edison and Lancaster.

These meetings provided participants with a forum to ask questions and share comments and concerns about the staff-recommended State's Preferred Alternative and the project section in general. Approximately 225 community members participated in the Stakeholder Working Groups and Open Houses, an additional 21 members logged in for a live stream (of the Edison Open House), and a total of 45 comments were received. The Edison Open House included an English and Spanish presentation as well as a live webcast. Questions and concerns expressed by the public in these meetings included, but were not limited to: noise and vibration, right-of-way acquisition, operations and maintenance, travel time, trip frequency, project cost, station locations, safety features, design features, ranchlands, and Valley Fever.

### **Prior Board Action**

On July 8, 2010, Authority staff recommended Initial Alternatives for analysis to the Board in the subsequent 2010 Preliminary Alternatives Analysis (PAA). Subsequently, in September 2010, staff presented the 2010 PAA. The PAA introduced an initial range of alternatives based on the 2005 Program EIR/EIS. Staff

recommended alternatives to be carried forward for further analysis. The Board concurred with the proposed action.

In January 2012, Authority staff presented a Conceptual Study of the I-5 corridor confirming the 2005 decision to drop the I-5 corridor from consideration and reaffirming the decision made in the 2005 Program EIR/EIS in favor of the Antelope Valley corridor (Resolution #HSRA 12-01). The next month, staff presented the 2012 Supplemental Alternatives Analysis (SAA), which provided detailed technical analysis, a summary of outreach conducted in 2011, and refinements made to the initial alternatives identified in the 2010 PAA. Staff recommended alternatives to be carried forward for further analysis. The Board concurred with the proposed action.

Finally, in April 2016, Authority staff presented the 2016 SAA, which detailed further refinements made to the alternatives identified in the 2012 SAA. Staff presented four end-to-end alternatives (1, 2, 3, and 5) for further study in the Draft EIR/EIS.

## **Discussion**

When comparing Alternatives 1, 2, 3, and 5, Authority staff established a range of criteria to evaluate the alternatives in consideration of a preferred alternative. These criteria included:

- Community and environmental factors;
- Differentiators; and,
- Performance criteria (e.g., capital costs, travel time, etc.).

Each criterion features multiple components and each component is qualitatively weighed differently depending on the sensitivity associated with the resource and the context and intensity of the effect(s). Comparative tables for community and environmental factors are included in the detailed staff report attached to this memorandum, but a high-level summary of the community and environmental factors affected by the differentiations are described below.

### *Community of Edison:*

- Alternative 2 is located farther from key community resources, including Edison Middle School, low-income housing, and agricultural packing houses when compared to Alternatives 1, 3, and 5. This reduces effects related to noise, vibration, and access. However, it increases visual effects as the train would be on an elevated structure rather than at-grade.
- Alternative 2 would not require relocation of SR 58. This results in fewer access impacts and reduces the construction period, which reduces the duration of construction-related impacts when compared to Alternatives 1, 3, and 5.

### *Area north of Rosamond, just south of Tehachapi:*

- Alternatives 1, 2, and 5 would require one less mile of tunnel, cross fewer Bureau of Land Management (BLM) parcels, and avoid effects to future mining operations. Alternative 3 would affect future mining operations, but would have less of an impact on existing mining operations, depending on the timing of construction.

*City of Lancaster:*

- Alternatives 1, 2, and 3 would shift the existing rail corridor and avoid effects to downtown Lancaster because they would not require the realignment of Sierra Highway. This would result in Alternatives 1, 2, and 3 having fewer effects to residences, businesses, and de-facto affordable housing motels in the downtown area. Alternative 5, alternatively, would not move existing rail facilities and rather relocate Sierra Highway into more intensely developed areas in Lancaster.
- Alternatives 1, 2, and 3 would also avoid effects to two sites in the Lancaster area that are protected under Section 4(f) of the U.S. Department of Transportation Act of 1966: Whit Carter Park and Denny’s #30 (Village Grille). In contrast, Alternative 5 would result in a *permanent use* of these protected resources.

*César Chávez National Monument, near Keene:*

- The CCNM Design Option would minimize noise and visual effects near the César Chávez National Monument in Alternatives 1, 2, 3, and 5.

Based on analysis contained in the draft NHPA Section 106 Finding of Effect Report (FOE), and in consultation with the César Chávez Foundation, National Park Service, State Historic Preservation Officer, and other consulting parties, Authority staff has developed a preliminary design option to minimize potential noise and visual effects to the CCNM. Detailed analysis of the design option, formally named the CCNM Design Option, will be included in the Draft EIR/EIS at the same level of detail as Alternative 1, 2, 3, and 5. Due to the fact that all four Build Alternatives share a common alignment in this area, the CCNM Design Option would be incorporated into whichever alternative is identified as the State’s Preferred Alternative. Based on a preliminary assessment of the environmental analysis, staff recommends incorporating the CCNM Design Option into Alternative 2 as part of the State’s Preferred Alternative.

*Comparison of performance criteria*

- Travel time, alignment length, and speed capacity would be similar for Alternatives 1, 2, 3, and 5. See below for a summary.

Criterion	HSR Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3	Alternative 5
Total length <sup>1</sup>	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
At-grade 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

- Capital cost estimates are detailed in the table below in 2016 dollars. The cost estimate includes the total effort and materials necessary to construct the Bakersfield to Palmdale Project Section, including

<sup>1</sup> Assuming the F Street Station is approved as the preferred station location in Bakersfield.

stations, maintenance facilities, and modifications to roadways required to accommodate grade-separated guideways.

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

In summary, when compared to Alternatives 1, 3, and 5, Alternative 2 with the CCNM Design Option would:

- Minimize environmental and community effects in Edison;
- Reduce tunnel length and consequently construction period and avoid effects to additional BLM parcels and future mining operations in the area north of Rosamond;
- Avoid effects to residences and businesses, de-facto affordable housing motels, and historic resources in downtown Lancaster; and,
- Minimize noise and visual effects to the César Chávez National Monument near Keene.

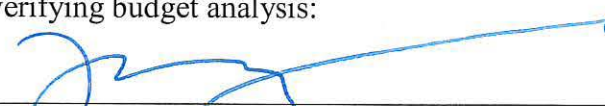

Based on the above summary information, staff recommends that the Board identify Alternative 2 with the CCNM Design Option as the State’s Preferred Alternative.

**Legal Approval**

The Legal Office has confirmed that the Board may take the concurrence action being requested by staff.

**Budget and Fiscal Impact**

This request does not have an additional cost impact at this time.

REVIEWER INFORMATION	
Reviewer Name and Title: <b>Russell Fong</b> <b>Chief Financial Officer</b>	Signature verifying budget analysis: 
Reviewer Name and Title: <b>Tom Fellenz</b> <b>Chief Counsel</b>	Signature verifying legal analysis: 

**Recommendations**

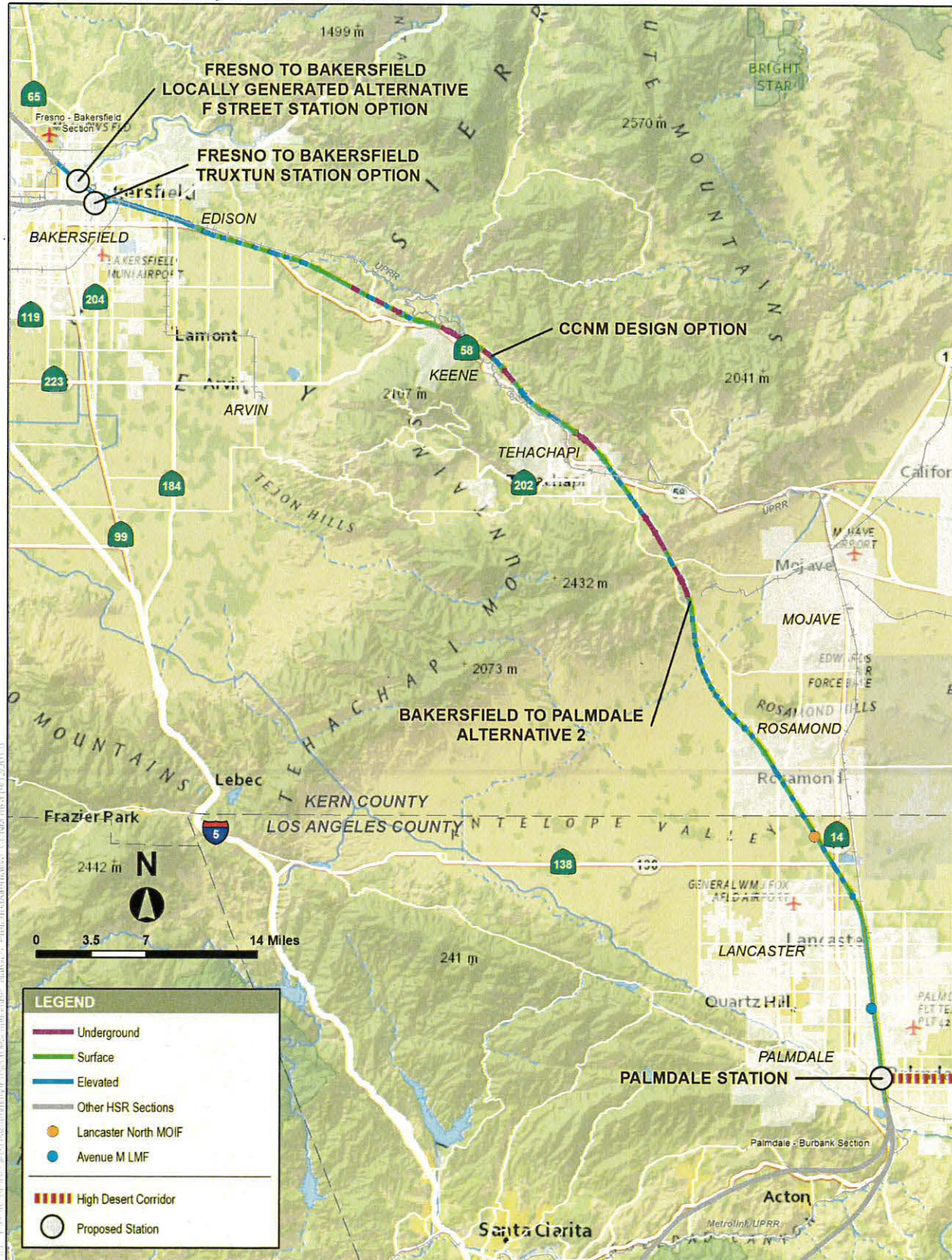
Based on comprehensive outreach efforts and on the evaluation criteria outlined above, staff recommends that the Board identify Alternative 2 with the CCNM Design Option as the State’s Preferred Alternative for preparing the Draft Bakersfield to Palmdale Project Section Environmental Impact Report (EIR)/Environmental Impact Statement (EIS).

The Board is not approving an alternative at this point. Staff will return to the Board with the Final EIR/EIS to request approval of an alternative.

**Attachments**

- Draft Resolution #HSRA 18-18
- Exhibit 1, Overview of Build Alternatives
- Exhibit 2, Overview of CCNM Design Option
- Preferred Alternative Staff Report for the Bakersfield to Palmdale Project Section

**Exhibit 1: Overview of Build Alternatives**





**Exhibit 2: Overview of CCNM Design Option**

