

18 INTRODUCTION

As part of the public review process for the 2018 Final Supplemental EIR, the Authority and FRA received approximately 285 written comment letters and verbal comments at public hearing containing 1,068 individual comments. Many of the comments received during the 2018 public comment periods raised similar issues about the project and its environmental impacts. The Authority and FRA have therefore prepared a chapter of standard responses to address the most frequently raised issues. The standard responses provide a comprehensive response to an issue so that multiple aspects of the issue are addressed in an organized manner in one location. This reduces repetition of responses. When an individual comment raises an issue discussed in a standard response, the response to the individual comment includes a cross-reference to the appropriate standard response.



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Standard Responses

Comment Summary	Response
GENERAL	FB-LGA-Response-GENERAL-01: Alternatives
The Authority received many comments questioning the alternative development process.	Reason for Addition of the F-B LGA and Additional Alternative Development for Supplemental EIR/EIS In May 2014, the Authority's Board of Directors certified the Fresno to Bakersfield Section Final EIR/EIS. The document identified a preferred alignment from the project's northern terminus at the Fresno station through a Bakersfield station located at Truxtun Avenue to the project's southern terminus at Oswell Street in Bakersfield. The Authority approved an alignment for a portion of the project, extending from Fresno to 7th Standard Road, the northern limits of the City of Bakersfield. The FRA issued a Record of Decision in June 2014, approving the preferred alignment in its entirety from the Fresno Station to the Bakersfield Station at Truxtun Avenue. The Surface Transportation Board affirmed the FRA's Record of Decision and approved construction of the Fresno to Bakersfield Project in August 2014.
	In June 2014, the City of Bakersfield filed a lawsuit challenging the certified EIR pursuant to CEQA. The Authority and the City of Bakersfield announced in December 2014 that they had settled the lawsuit and agreed to identify an initial conceptual alignment through the City of Bakersfield with a station located at the intersection of F Street and Golden State Avenue (SR 204) that would address the City's concerns and meet the Authority's design requirements, for the Authority to study in subsequent environmental review. The "locally generated alternative" (LGA) for the Bakersfield station, as described and analyzed in the Draft Supplemental EIR/EIS, evolved from this mutual cooperation and subsequent public input. In the Draft Supplemental EIR/EIS, the Authority and FRA described the environmental setting of the LGA, evaluated the potential significance of environmental impacts and compared the LGA (referenced as the "F-B LGA" in the Draft Supplemental EIR/EIS) with the corresponding segment of the alignment and station location identified in the Fresno to Bakersfield Section Final EIR/EIS (referenced as the "May 2014 Project" in the Draft Supplemental EIR/EIS) and approved by the FRA in 2014.
	Evaluation of Alternatives Considered in Developing the LGA The Authority, in cooperation with the City of Bakersfield, and also the City of Shafter and Kern County, conducted a high-level feasibility analysis to determine a feasible and practicable alternative that should be carried forward into preliminary design and environmental review. High level concepts were developed based on the original alignment and station location provided by the City of Bakersfield (Exhibit GENERAL-01.1). The City's concept had outlined an HSR alignment parallel to UPRR from 7th Standard Road to Oswell Street. The Authority refined the City's concept and established the route between Shafter and 7th Standard Road to join the May 2014 Project. While there were additional alternative alignments, stations, and maintenance of infrastructure facility (MOIF) locations that were discussed within the boundaries of the cities of Bakersfield and Shafter, Kern County, and various stakeholders, they were determined infeasible and were not included further in the feasibility analysis. Based on this analysis and input from the cities of Bakersfield and Shafter, the LGA (Sub Alignment Alternatives A2, B1, C1 and D2, described below) was recommended for further study in the Draft Supplemental EIR/EIS. In summary, the F-B LGA represents a combination of the sub alignments that have fewer environmental impacts when compared to the other sub alignments considered, can meet the project purpose and need and objectives, and is potentially feasible and reasonable.



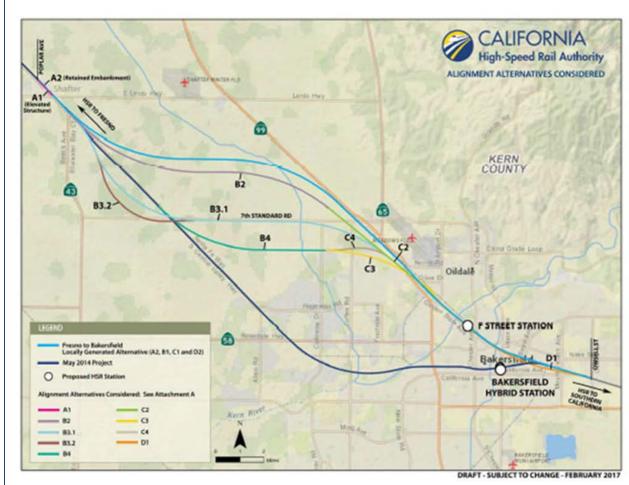


Exhibit GENERAL-01.1: F-B LGA Alignment Alternatives Considered

The Bakersfield West Alignment was previously eliminated in the Statewide Program Final EIR/EIS (see Figure 2.6-24 and the subsequent table), and included a spur connection to Bakersfield Amtrak Station, and a station and MOIF near 7th Standard Road within the Bidart Brothers' Saco Ranch site. These design concepts either did not satisfy HSR program objectives, would be substandard and impractical from a technical perspective when compared to an F Street Station location, and/or would be incompatible with the future land use.



A summary of the findings and recommendations of this feasibility analysis for all alignment alternatives considered is provided below:

- A1 BNSF Adjacent (HSR) Elevated Between Poplar Avenue and Los Angeles Avenue, the HSR alignment follows the
 Wasco-Shafter Through-Town Alternative from the May 2014 Project. The alignment would run in a southeasterly
 direction, parallel to the eastern boundary of the BNSF right-of-way. The alignment is at-grade north of Fresno Avenue
 and transitions to an elevated structure by Shafter Avenue. The alignment remains on elevated structure through
 downtown Shafter and transitions to a sloped embankment section south of Los Angeles Avenue. The MOIF would be
 located between Poplar Avenue and Fresno Avenue.
- A2 BNSF Adjacent (HSR Embankment) The HSR alignment would be similar to Alignment A1 with the exception of a lowered profile. The HSR and BNSF alignments would be at-grade at Poplar Avenue and both would transition to a retained embankment by Fresno Avenue. The HSR and BNSF alignments would continue on retained embankment to provide grade-separated crossings between Fresno Avenue and Lerdo Highway. The HSR alignment would transition to a sloped embankment section at Los Angeles Avenue. Los Angeles Avenue would be closed and local traffic rerouted through the roadway network. The BNSF alignment would transition back to an at-grade section between Lerdo Highway and Los Angeles Avenue. The MOIF would be located between Poplar Avenue and Fresno Avenue.

Alignment A1, which was already studied in large part in the Final EIR/EIS, was withdrawn in favor of detailed study of Alignment A2, which is locally supported. The City of Shafter expressed concern with the HSR elevated structure from the May 2014 Project, contending it would cause unacceptable noise impacts and would preclude the City's ability to grade-separate BNSF crossings in the future, leading to future traffic impacts. The City proposed the concept described under Alignment A2 as a means to address the concern. The Authority considered the City's proposal with reference to approved design changes in HSR construction packages currently underway that also lower the HSR alignment from an elevated structure to embankment, and considered it potentially feasible and able to avoid the environmental issues the City has identified. A preliminary assessment of Alignment A2 did not identify additional significant environmental impacts and found potential for cost reduction. While Alignment A1 and Alignment A2 were both potentially feasible and met most project objectives, Alignment A1 would have resulted in greater noise and traffic impacts than Alignment A2. For purposes of the Draft Supplemental EIR/EIS, Alignment A2 was determined to be the reasonable alternative to carry forward.

- B1 North of Burbank Street The HSR alignment would continue south of the City of Shafter and turn eastward on a
 curve. Between Zachary Avenue and Zerker Road, the alignment would run in an easterly direction, parallel to the north
 side of Burbank Street. Between Zerker Road and 7th Standard Road, the alignment would turn southeasterly on a curve
 then run parallel to the western boundary of the UPRR right-of-way. The vertical alignment would continue on a sloped
 embankment section from Los Angeles Avenue, the transition to an elevated structure at the industrial developments north
 of 7th Standard Road.
- B2 South of Burbank Street This HSR alignment is similar to Alignment B1, with the exception that it would run
 parallel to the south side of Burbank Street. This alternative would be required to cross Burbank Street at a high skew
 angle.
- B3.1 7th Standard Road The HSR alignment would continue south of the City of Shafter and turn westward on a curve. It would cross BNSF then turn eastward on a reversing curve to cross BNSF again on approach to becoming parallel with 7th Standard Road. Between Zachary Avenue and the Friant-Kern Canal, sub-alternatives were considered



with the alignment north of, south of, or in the median of 7th Standard Road with consideration to balancing impacts between local jurisdictions. The same selection factors are applicable for each sub-alternative. Between the Friant-Kern Canal and Snow Road, the alignment would turn southeasterly on a curve then run parallel to the UPRR right-of-way. The vertical alignment would continue on a sloped embankment section from Los Angeles Avenue to Snow Road with elevated structures over the BNSF, roadway, and canal crossings.

- B3.2 7th Standard Road Intermodal Yard Avoidance This HSR alignment is similar to Alignment B3.1, except it includes a design speed reduction to 175 mph on the reversing curves west of BNSF in order to avoid impacts to the Shafter Intermodal Facility. It would include an additional crossing of 7th Standard Road at a high skew angle.
- B4 Snow Road The HSR alignment would continue south of the City of Shafter and follow the Wasco-Shafter Through-Town Alternative from the May 2014 Project up to 7th Standard Road. The horizontal alignment would turn eastward on a curve at 7th Standard Road, then run parallel to the north side of Snow Road. The alignment would continue in an easterly direction between Zerker Road and Calloway Drive. The vertical alignment would continue as an at-grade section from 7th Standard Road to Calloway Drive.

Alignment B1 was carried forward for detailed study as part of the F-B LGA as there were no potential fatal flaws identified during the preliminary assessment and therefore was potentially feasible, has fewer impacts than the other alternatives, and is the most consistent with the project's purpose and need and objectives. Potential fatal flaws were identified for the other B Alignments in terms of impacts and ability to meet the purpose and need and objectives. Alignment B2 was withdrawn as it passes through parcels designated for development as part of the Shafter Intermodal Facility and bisects the Rosedale Spreading ground water recharge facility. The Shafter Intermodal Facility is primarily located along the east side BNSF at 7th Standard Road. The Kern Council of Governments (COG) has identified the facility as a significant regional resource and indicated plans to expand the facility to the east and to the north, up to Burbank Street. A South of Burbank Street HSR alignment (as proposed in Alignment B2) would hinder such an expansion. The Rosedale Spreading is a groundwater recharge facility serving the region. Alignment B1 would run along north border of this facility as compared to Alignment B2 which would bisect it, incurring more impacts to this regional facility when compared to B1. Alignment B3.1 was withdrawn as it passes through a portion of the existing Shafter Intermodal Facility and would pass through parcels identified as part of a developing oil field. The Division of Oil, Gas and Geothermal Resources (DOGGR) has identified land generally located between Renfro Road and Kratzmeyer Road as the Rosedale Ranch oil field. Selection of an alignment through a developing oil field is not practical or reasonable, given a feasible alternative that can avoid it. Alignment B3.2 was withdrawn as it would require additional roadway improvements to 7th Standard Road, passes through parcels identified as part of a developing oil field and requires a reduction in speed to 175 mph to avoid the intermodal site. Selection of an alignment with a reduction in speed is not practical or reasonable, given a feasible alignment that does not require a reduction. Alignment B4 was withdrawn as it passes through parcels identified as part of a developing oil field and it would incur more residential property and school impacts compared to other B Alignments. Selection of an alignment with more residential property impacts is not practical or reasonable practicable, given a feasible alignment that does not require a reduction.

C1 - North of Burbank Street adjacent to UPRR North of 7th Standard Road - The HSR alignment would continue in a
southeasterly direction, parallel to the western border of UPRR right-of-way from 7th Standard Road to the Bakersfield F
Street Station. The alignment is on elevated structure in order to minimize impact to the industrial land uses north of 7th
Standard Road and to cross over hard physical constraints such as SR 99, railroad spur tracks, and the Kern River. A



- grade-separated 7th Standard Road would be constructed over the HSR elevated structure. The SR 204 intersection with F Street would be rebuilt as a grade-separated interchange.
- C2 South of Burbank Street Parallel and Offset from UPRR North of 7th Standard Road This HSR alignment is similar to Alignment C1, with the exception that it is offset to the west approximately 0.25 mile to avoid the industrial land uses between 7th Standard Road and SR 99. A connection is feasible between Alignment C2 to Alignment B1 or Alignment B2. The alignment is at-grade until the SR 99 crossing where it transitions to an elevated structure.
- C3 Snow Road The HSR alignment would turn southward on a curve between Calloway Drive and SR 99. Between SR 99 and the Bakersfield F Street Station, the alignment would run in a southeasterly direction, parallel to the western boundary of the UPRR right-of-way. The alignment is at-grade until the SR 99 crossing where it transitions to an elevated structure. The alignment is on elevated structure to cross over hard physical constraints such as SR 99, railroad spur tracks, and the Kern River.
- C4 Snow Road Reduced Design Speed with Minimized Property Impacts Alignment C4 is similar to Alignment C3, with the exception that it includes a northward to southward set of reversing curves to minimize residential impacts between Coffee Road and SR 99. The curves would require a reduction in design speed to 125 mph.

Alignment C1 was carried forward as it would have fewer impacts to waters of the U.S. and is farther from residential zones when compared to Alignment C2. It is most consistent with the original City of Bakersfield concept for the HSR alignment being adjacent to UPRR; therefore, it was feasible, met objectives, and reduced impacts that other alternatives presented. Alignment C2 was withdrawn as it would straddle local canals, requiring considerably more canal realignments and impacts to waters of the U.S. than Alignment C1. Alignment C2 is closer in vicinity to residential developments and would bisect the Saco Ranch property between 7th Standard Road and Fruitvale Avenue. Alignment C3 was withdrawn given its association with withdrawn Alignment B4 and because it would displace a significantly greater number of residential properties between Coffee Road and SR 99 than the other alignments. Alignment C4 was withdrawn given its association with withdrawn Alignment B4 and because it would require a significant reduction in design speed from 250 mph to 125 mph, making it less capable of meeting the purpose and need and objectives. Selection of an alignment with a reduction in speed is not practical or reasonable, given a feasible alignment that does not require a reduction.

- D1 Sumner and Edison Streets Adjacent Alignment D1 would traverse a set of curves between the Bakersfield F
 Street Station and Oswell Street. The curves would traverse across various properties in a wide corridor bounded between
 the UPRR to the north and 19th Street to the south. The alignment would continue on elevated structure to cross over
 hard physical constraints such as SR 178, SJVRR wye tracks, and existing grade separations between Beale Avenue and
 Oswell Street.
- D2 Sumner and Edison Streets Adjacent/Center Reduced Design Speed with Minimized Property Impacts Alignment D2 would traverse a curve between the Bakersfield F Street Station and Union Avenue. This curve would require a reduction in design speed from 250 mph to 220 mph. Between Union Avenue and Oswell Street, the alignment would run in the center of Sumner Street and Edison Highway on an elevated structure. The alignment would continue on elevated structure to cross over hard physical constraints such as SR 178, SJVRR wye tracks, and existing grade separations between Beale Avenue and Oswell Street.

Alignment D1 was withdrawn as it would impact facilities identified as potentially historic or impact facilities with potential



traditional cultural sensitivity, and Alignment D1 has substantially greater community impacts when compared to Alignment D2. An alternative that impacts historic properties is not a reasonable one, given a potentially feasible alignment that can avoid impacting them. Selection of an alignment with greater community impacts is also not reasonable or practical, given a feasible alignment that does not incur as much impact. Alignment D2 was carried forward as it would avoid the potentially historic property, would have fewer community impacts, and is locally supported. Through public outreach, the City of Bakersfield and Kern County expressed preference for HSR to run in the center of Sumner Street and Edison Highway, respectively, as it would reduce community impacts. The reduction in design speed from 250 mph to the nominal operating speed of 220 mph would be necessary to locate the station platforms near F Street and to avoid unnecessary realignments of SR 204 or encroachment into UPRR operating right-of-way. This reduction in design would not result in increased travel time systemwide because the nominal operating speed of 220 mph may be maintained. The F-B LGA includes grade separation through the city of Shafter and parallels the existing UPRR corridor, therefore, requiring fewer slowdowns at road crossings, making up for any increase in travel time due to the reduction in operating speed through the F Street Station area. Thus the F-B LGA still meets the purpose, need, and objectives of the HSR project, delivering predictable and consistent travel times. Based on the analysis discussed above and input from the cities of Bakersfield and Shafter, the F-B LGA (consisting of Alignments A2, B1, C1, and D2) was recommended for further study in the F-B LGA Draft Supplemental EIR/EIS. In summary, the F-B LGA represents a combination of the sub alignments that reduces environmental impacts in comparison to the other sub alignments considered, can meet the project purpose and need and objectives, and is potentially feasible and reasonable.

GENERAL

A number of comments were concerned with the public involvement process and suggested that the outreach was not adequate for a project of this size and scope. Some commenters were specifically concerned about outreach to environmental justice populations.

FB-LGA-Response-GENERAL-02: Public Outreach

Pursuant to the requirements of NEPA and CEQA, the Authority and FRA have conducted an extensive public and agency involvement program as part of the environmental review process. Public involvement and outreach included development and provision of informational materials such as fact sheets, informational and scoping meetings (including town hall meetings), public and agency meetings, meetings with individuals and groups, as well as presentations and briefings to interested and/or impacted organizations and associations.

Agency involvement included agency scoping meetings, an Interagency Working Group, meetings with agency representatives, and other agency consultation. Table 9-1 lists the agency and public meetings held as part of the Authority's outreach efforts associated with the F-B LGA development process. Table 8-1 of the Fresno to Bakersfield Section Final EIR/EIS lists the agency and public meetings held as part of the Authority's outreach efforts through the publication of the Fresno to Bakersfield Section Final EIR/EIS.

Public and agency outreach also included notification and circulation of the Draft Supplemental EIR/EIS. Chapter 9 of the Draft Supplemental EIR/EIS (Public and Agency Involvement) describes the public and agency involvement efforts conducted during the preparation, and after publication, of the Draft Supplemental EIR/EIS.

Circulation and Notice of Availability

The High-Speed Rail Authority and the FRA were the CEQA and NEPA lead agencies for the Draft Supplemental EIR/EIS. As such, public noticing of the availability of the Draft Supplemental EIR/EIS for public review was conducted by the High-Speed Rail Authority and FRA.

The Fresno to Bakersfield Section Draft Supplemental EIR/EIS was circulated for 60 days as required by CEQA (CEQA Guidelines §15080-15088). The CEQA Guidelines provide:



The public review period for a draft EIR shall not be less than 30 days nor should it be longer than 60 days except under unusual circumstances. When a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse. (14 C.C.R. 15105)

Likewise, Section 13(c)(9) of the FRA Procedures for Considering Environmental Impacts provides:

The draft EIS shall be made available for public and agency comment for at least 45 days from the Friday following the week the draft EIS was received by EPA. The time period for comments on the draft EIS shall be specified in a prominent place in the document, but comments received after the stated time period expires should be considered to the extent possible. (64 FR 101, page 28545, May 26, 1999)

The Authority believes the time provided was sufficient for the public to review and provide comments on the Fresno to Bakersfield Section Draft Supplemental EIR/EIS. A formal public hearing was held in Bakersfield on December 19, 2017, at which written and verbal comments were accepted on the Draft Supplemental EIR/EIS.

Per the requirements set out by the CEQA Guidelines 15086 and 15087, the Authority and FRA provided widespread notice of the availability of the Draft Supplemental EIR/EIS to ensure that members of the public and local, state and federal agencies had the opportunity to review and provide comments. The Authority and FRA provided broad notice of the availability of the Draft Supplemental EIR/EIS in the following ways: by mailing a notice to all individuals/organizations that requested notice in writing and publication in newspaper(s) of general circulation; by direct mailing to owners/occupants of property within 300 feet of the F-B LGA footprint and the May 2014 Project footprint; via direct mailing to agencies, elected officials, tribes, etc.; via direct mailing to those on the project mailing list; by submitting copies to the State Clearinghouse for state agency review; and via publication in the federal register.

The Authority and FRA provided access to the Draft Supplemental EIR/EIS in the following ways: the entire Draft Supplemental EIR/EIS, Volumes I through III, were made available on the Authority's website; CDs containing these documents were made available to anyone who requested them (in writing), free of charge; and CDs and printed copies were made available in public libraries in the vicinity of the affected alignments and the Authority offices.

The Authority and FRA facilitated awareness of the availability of the Draft Supplemental EIR/EIS in the following ways: by providing information during monthly agency meetings and regular consultations; by holding general public meetings, as well as individual meetings with stakeholders; by holding a public hearing during the 60-day review period for the Draft Supplemental EIR/EIS; and by using mailed announcements.

Chapter 10 of the Draft Supplemental EIR/EIS lists the agencies, Native American tribes, elected officials, and organizations and businesses that were provided mailed notice of the availability of the document. Between November 3 and November 9, 2017, the Authority published a press release in all major newspapers in the area advising the public of the availability of the Draft Supplemental EIR/EIS on the Authority's website. The Authority used the County Assessors' rolls in Kern County to identify and provide notice to owners of land affected or within a 300-foot buffer of the May 2014 Project and F-B LGA footprints.

The public was given the opportunity to comment in any of several ways. Comments could be submitted to the Authority and FRA by card or letter (including cards and letters submitted at the public hearing), verbally at the public hearing, and by means of e-mail. The Authority and FRA have considered comments received after January 16, 2018 on the Draft Supplemental



EIR/EIS. These comments are reproduced here in Chapters 19 through 25 of this Final Supplemental EIR. A total of approximately 290 submission letters (a submission letter by an individual or organization could consist of one or multiple comments) were submitted on the Draft Supplemental EIR/EIS. These submissions were provided via e-mail, via mailed letters, and via the Authority's website.

The Notice of Availability, which was distributed initially on November 9, 2017 and then, in corrected form on November 17, 2017, included notice of the December 19, 2017 Public Hearing and was mailed to schools, elected officials, stakeholders, agencies, and tribes. It was also mailed to owners and residents within 300 feet of the May 2014 Project and F-B LGA project footprint and to anyone who had requested to be notified. Finally, the NOA was published in 10 newspapers with circulation in the project area. The table below shows the names of publications and the dates the NOA was published.

Table 1. NOA Newspaper Publications

	Publication	Initial Publication Date	Second Publication Date
1	Bakersfield Californian	11/9/2017	11/17/2017
2	Bakersfield.com	11/09/2017-11/15/2017	11/15/2017
3	El Popular	11/3/2007	11/17/2017
4	Fresno Bee	11/9/2017	11/17/2017
5	Hanford Sentinel	11/9/2017	11/17/2017
6	Vida en el Valle	11/8/2017	11/22/2017
7	Corcoran Journal	11/9/2017	11/15/2017
8	Delano Record	11/9/2017	11/23/2017
9	Wasco Tribune	11/8/2017	11/22/2017
10	Shafter Press	11/8/2017	11/22/2017

In addition to publishing the notice in local newspapers, the Authority posted the NOA on the Fresno to Bakersfield project section webpage with a link from the Authority's homepage. The Authority also issued a press release on November 9, 2017 with the specific hearing information to media outlets in the Central Valley and an email list of 8,789 unique email addresses.

Public Hearing and Meeting Notices

Public meetings were announced through direct mail to those in the project database, advertisements in local newspapers, email notices, and postings on the Authority's website. Notifications of public meetings were posted in newspapers that have general circulation in areas potentially affected by the proposed project. Direct mailed notices for public meetings were in English and Spanish or contained a toll-free phone number for Spanish speakers to call. Emailed notices for public meetings were in English and Spanish. American Sign Language interpreters were available at the Draft Supplemental EIR/EIS Public



	Hearing. The FRA published a notice about the public hearing scheduled for December 19, 2017 in Bakersfield. The webpage was made available to the public on November 17, 2017 at: https://www.fra.dot.gov/Page/P1072. The U.S. Environmental Protection agency also published a notice about the availability of the Draft Supplemental EIR/EIS from the FRA on November 17, 2017. Meeting notices were also delivered to key stakeholder groups to display at public counters/bulletin boards. The mailing list included approximately 15,000 recipients. To ensure outreach to potentially impacted residents, landowners, tenants and stakeholders, the database includes all individuals who have requested information, participated in a meeting or workshops, or individuals/organizations with whom the Authority proactively sought to meet. For further detail of the public meetings held during the preparation of the Draft EIR/EIS and the RDEIR/SDEIS, refer to FB-Response-GENERAL-16 in the Fresno to Bakersfield Section Final EIR/EIS. Various publications and materials were developed in English and Spanish and made available at public meetings, activity centers, information tables, and the Authority's website, including the Fresno-Bakersfield High-Speed Rail Fact Sheet, Statewide High-Speed Rail Fact Sheets, F-B LGA Fact Sheet, F-B LGA Frequently Asked Questions, Fresno to Bakersfield Frequently Asked Questions, Right-of-way Fact Sheets, "Your Property, Your High-Speed Rail Project," and the Permit to Enter fact sheet regarding field studies for various environmental disciplines. In addition, the Authority website information and the property and the Permit to Enter fact sheet regarding field studies for various environmental disciplines. In addition, the Authority website information and the Policy and the Permit to Enter fact sheet regarding field studies for various environmental disciplines. In addition, the Authority website information and the Policy and the
	information about HSR, the proposed HSR route, the Authority's Revised Business Plans (Authority 2012a, 2014, 2016), newsletters, press releases, board of directors meetings, recent developments, status of the environmental review process, Authority contact information, and related links. Spanish language interpreters were available at the Community Open House/Public Information Meetings and Draft Supplemental EIR/EIS Public Hearing.
GENERAL	FB-LGA-Response-GENERAL-03: Response to Comments Received After the Close of the Public Comment Period
	The Draft Supplemental EIR/EIS for the Fresno to Bakersfield Section was circulated for public review and comment between November 9, 2017 and January 16, 2018. Responses to public and agency comments received during the review period are provided in Chapters 19 through 25 (responses to comments on the Draft Supplemental EIR/EIS) of this Final Supplemental EIR for the Fresno to Bakersfield Section.
	There were approximately 20 submissions to the Authority and FRA following the close of the comment period on the Draft Supplemental EIR/EIS. These letters are also included in Chapters 19 through 25 of this Final Supplemental EIR.
GENERAL	FB-LGA-Response-GENERAL-04: Impacts to the Westchester Neighborhood Southwest of the F Street Station
Some commenters expressed concern that the station location at F Street and the Golden State Highway would have	The F-B LGA and corresponding F Street Station was selected as the Preferred Alternative in the Draft Supplemental EIR/EIS for several reasons, including reduced overall impacts to residential neighborhoods when compared to the May 2014 Project. Benefits of the F-B LGA over the May 2014 Project related to neighborhood impacts include:
a negative impact on the residential neighborhood to the southwest, which will be very close to the station and will	 Fewer residential displacements: The F-B LGA would result in approximately 298 fewer residential unit displacements than the May 2014 Project, which amounts to 944 fewer residents being displaced. Avoid displacement of residents from communities where there is insufficient replacement housing: Under the
have already been impacted by the	May 2014 Desirant residents from the community of Community and to easily enhancement between the

May 2014 Project, residents displaced from the community of Crome would need to seek replacement housing in

surrounding communities, as there is not existing housing stock within the community to accommodate displaced

California High-Speed Rail Authority

have already been impacted by the

October 2018

24th Street Widening Project.



residents. In contrast, the F-B LGA would not impact the community of Crome.

Avoid division of existing neighborhoods and communities: The May 2014 Project would traverse residential areas in
the Northwest District of Bakersfield, thereby creating a permanent division in an existing and established neighborhood,
and would displace approximately one-third of the homes and the only church in the community of Crome. The F-B LGA,
however, would follow existing and long-established highway and railroad corridors through the urban areas, and would
not pass through established neighborhoods or the community of Crome.

For a detailed discussion of long-term neighborhood impacts of the F-B LGA, refer to sections 5.1.1, Property Displacements and Relocations, and 5.1.2, Disruption or Division of Existing Communities - Operation Impacts, of the Fresno to Bakersfield Section Supplemental Community Impact Assessment (2017).

With the F-B LGA, the Westchester residential neighborhood southwest of the F Street Station would experience short-term construction nuisance effects, including dust from grading and other earthwork, construction noise, and visual effects. Although construction of the HSR project would impact individuals or individual property owners, these impacts would be temporary¹ and would be mitigated to a less-than-significant level, as described in Sections 3.3, Air Quality and Global Climate Change, 3.4, Noise and Vibration, and 3.16, Aesthetics and Visual Quality of the Draft Supplemental EIR/EIS.²

Over the long-term, the properties in this neighborhood would not be displaced and residents would be able to remain in their homes. Properties in close proximity to the station may experience nuisance effects such as operational noise and vibration and aesthetic effects. These impacts would be mitigated to the extent possible, as described in Sections 3.4, Noise and Vibration, and 3.16, Aesthetics and Visual Quality of the Draft Supplemental EIR/EIS.

The widening of 24th Street is a separate project that is not part of the F-B LGA. The 24th Street widening project is part of the future condition with or without the HSR project, and may contribute cumulative impacts along with the F-B LGA. The main cumulative contribution of the 24th Street widening project is the division of the residential neighborhoods along the 24th Street corridor, located between Oak Street to the west, 16th Street to the south, and SR 204/Golden State Avenue to the north and east. The F-B LGA would not contribute to the division of this neighborhood because the alignment is located northeast of the neighborhood and would not bisect any portion of this neighborhood. The widening of 24th Street could also contribute to short-term impacts as a result of construction activities. Road detours and access restrictions could cause delays for residents and area users. The F-B LGA could cause similar impacts, and the projects' impact areas overlap particularly between Chester Avenue and SR 99 along the 24th Street corridor. The 24th Street widening project includes IAMMs which would include traffic control measures and noticing which would help the project avoid any delays or inconvenience impacts to residents and area users, as would the F-B LGA. Both projects include a commitment to communication and cooperation with local and regional agencies, which would help to develop traffic and delay avoidance plans that incorporate the needs of both projects, if construction periods overlap.

The proposed F Street Station associated with the F-B LGA includes access improvements to the F Street Station area and the neighborhood west of F Street Station by adding an interchange with Golden State Highway (SR 204) at F Street. The existing design of SR 204 is a north-south highway connecting SR 58 and SR 99 within the city of Bakersfield. It operates as an urban arterial south of F Street and as a freeway north of F Street. The proposed interchange at SR 204 and F Street would result in SR 204 operating as a freeway north of M Street and would improve safety and circulation for residents in the nearby neighborhoods.



Under existing conditions, SR 204 is an at-grade signalized intersection with F Street. Existing highway segment analysis shows that the westbound segment on SR 204 east of F Street operates unsatisfactorily under both a.m. (Level of Service [LOS] D) and p.m. (LOS E) peak hour conditions. Once constructed, the F Street/SR 204 westbound ramps would operate at LOS C during a.m. peak hours and LOS B during p.m. peak hours, and the F Street/SR 204 eastbound ramps would operate at LOS C during both a.m. and p.m. peak hours. This would result in improvements to the circulation and safety in the station area vicinity, which in turn would contribute to improved safety and circulation for residents in the neighborhood west of the F Street Station. More details on the LOS analysis of the highway segments are included in the F-B LGA Transportation Technical Report (Authority and FRA 2017).

¹ Project construction is expected to be completed within six years from the beginning of the first phase of construction and through operational testing of the HSR system, not including property acquisition or permitting. Most construction activities would cease in one to two years at any given location.

² Section 3.3, Air Quality and Global Climate Change of the Draft Supplemental EIR/EIS identifies that implementation of AQ-MM#1, #2, and #4 would reduce construction-related air quality impacts to a less-than-significant level. Section 3.4, Noise and Vibration of the Draft Supplemental EIR/EIS identifies that implementation of NV-MM#1 and #2 would reduce construction-related noise and vibration impact to less-than-significant levels, respectively. As stated in Section 3.16, Aesthetics and Visual Resources of the Draft Supplemental EIR/EIS, because construction would decrease the visual quality rating by one level and viewers would have moderately high sensitivity to construction-period visual changes, it is considered to have a less than significant impact under CEQA.

GENERAL

Some commenters expressed concern that the F Street Station presented limited revitalization opportunities and lesser benefit than the Truxtun Avenue Station location. The Authority also received comments that the F Street Station would not provide connectivity to the Bakersfield Amtrak station.

FB-LGA-Response-GENERAL-05: Proximity of F Street Station to Downtown and Amtrak Station

Station Area Development

The F-B LGA's proposed F Street Station has proximity to the downtown area, and the surrounding area has the potential for development. SR 204/99B is a main artery through Bakersfield that connects to SR 99 and SR 178. F Street provides direct access to the downtown core to the south; Chester Avenue also provides access to the downtown as well as to industrial, residential, and park uses to the north. East of the proposed station site, 34th Street provides east-west access to the station site.

The station site study area includes the Kern River, flood plain features, agriculture, open space, storage and warehouse, light industrial, commercial, and residential uses (Exhibit GENERAL-05.1).

A HSR Station in downtown Bakersfield (as proposed with the F-B LGA) would encourage higher-intensity development in the surrounding areas. This would also be consistent with the City's plans and policies encouraging downtown revitalization. According to the Final Draft 30-Year Phased Development Strategy (City of Bakersfield 2016b), the City intends to substantially increase retail, residential, office, and hotel development in the areas surrounding the proposed HSR station through policies and strategies promoting infill development, business attraction, and the adoption of zoning ordinance amendments. Approximately 6 percent of the F Street Station study area is underutilized or vacant, and surrounding development is characterized as aging, single-story industrial warehouses with large parking areas. Therefore, compared to the Truxtun Avenue Station, the F Street Station presents more opportunities for infill development, revitalization of existing large buildings, new job creation, and transit-oriented housing. As with the May 2014 Project, transit-oriented development associated with the F Street Station would be consistent with the Kern Council of Governments and City of Bakersfield's plans



and policies encouraging downtown revitalization (City of Bakersfield 2005).

Also discussed in the Fresno to Bakersfield Section Final EIR/EIS and the HST Station Area Development Policies (Authority 2008; Authority 2011), the Authority will encourage the City of Bakersfield to facilitate transit-oriented development in and around the station. The F Street Station would be located in an area where the City of Bakersfield is developing a HSR station area plan to address the potential for infill development and increased densities associated with the HSR station.



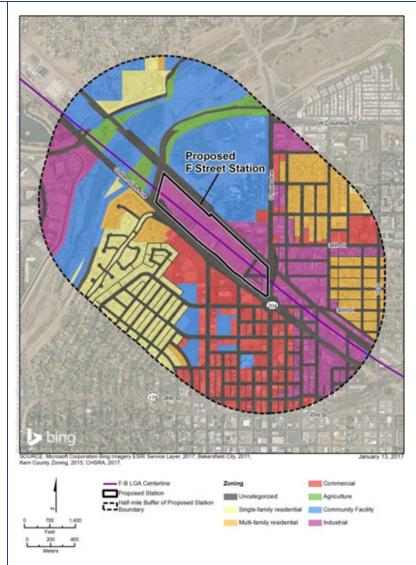


Exhibit GENERAL-05.1 - High-Speed Rail Station Area Plan - Study Area Map

The Authority has developed HSR Station Principles and Guidelines. These include, but are not limited to, the following



features: transit-oriented and higher density development; a mix of land uses and housing types; a grid street pattern; compact, pedestrian-oriented design; context-sensitive building design; and limited amounts of vehicular parking priced. The guidelines are based on international examples where cities and transit agencies have incorporated sound urban design principles as integrated elements of large-scale transportation systems. The application of sound urban design principles to the HSR System will help to maximize the performance of the transportation investment, enhance the livability of the communities it serves, create long-term value, and sensitively integrate the project into the communities along the HSR System corridor.

The documents listed below and located on the <u>Authority's website</u> set out principles and guidelines for high-speed rail station area development.

- HST Station Area Development: General Principles and Guidelines (2011)
- <u>Urban Design Guidelines</u>: California High-Speed Train Project (2011)

The City of Bakersfield prepared an HSR Station Area Plan (Vision Plan 2018) in coordination with the Authority. The May 2018 Vision Plan includes an urban design strategy for downtown Bakersfield that promotes economic development and sustainability, encourages the physical development of the station area, and enhances the community's sustainability by encouraging infill development and multimodal connectivity. The Vision Plan builds on existing planning efforts to create a vision for the development and revitalization of Downtown Bakersfield in conjunction with the HSR. The study area for the Bakersfield Vision Plan includes the proposed location of the F Street Station evaluated in the Draft Supplemental EIR/EIS and the Truxtun Avenue Station described in pages 3.13-30 through 3.13-32 of the Fresno to Bakersfield Section Final EIR/EIS. Both stations are identified in the study area map for Downtown Bakersfield (Exhibit GENERAL-05.2).

The Bakersfield Vision Plan will act as a vision document that will: (1) increase population and economic density in the urban core; (2) support residential and commercial activity; (3) develop under-utilized or vacant properties; (4) connect existing activity and cultural centers; (5) create an efficient, reliable and effective multi-modal transportation system; (6) enhance sustainability, livability and a unique sense of place; and (7) secure funding for identified implementation actions.





Exhibit GENERAL-05.2 - High-Speed Rail Station Area Plan - Study Area Map

Source: City of Bakersfield (2016)

The following sections of the Draft Supplemental EIR/EIS provide additional information related to land use and development:

- Section 3.2, Transportation, provides information regarding parking.
- Section 3.12, Socioeconomics and Communities, includes information regarding demographics, property, economic factors, and communities and neighborhoods.
- Section 3.13, Station Planning, Land Use, and Development
- Section 3.14, Agricultural Lands, provides information regarding impacts on agricultural land.
- Section 3.15, Parks, Recreation, and Open Space, provides information regarding park impacts.
- Section 3.18, Regional Growth, provides information regarding regional growth, construction and operation employment, and the project's potential to induce growth related to population and employment.



Connection to Bakersfield Amtrak Station

Early in the development of the LGA, the Authority and the City of Bakersfield agreed to identify an initial conceptual alignment through the City of Bakersfield with a station located at the intersection of F Street and Golden State Avenue (SR 204) that would address the City's concerns and meet the Authority's design requirements, for the Authority to study in subsequent environmental review. The Draft Supplemental EIR/EIS evolved from this mutual cooperation and subsequent public input (See FB-LGA-Response-GENERAL-01: Alternatives).

The currently proposed F-B LGA F Street Station would be located at the intersection of F Street/SR 204 and would be designed per the High-Speed Train (HST) Station Area Development: General Principles and Guidelines (Authority 2011). To provide maximum opportunity for station area development in accordance with the purpose, need, and objectives for the HSR system, the preferred HSR station locations would be multi-modal transportation hubs and would typically be in traditional city centers. F Street provides direct access to the downtown core to the south; Chester Avenue also provides access to the downtown as well as to industrial, residential, and park uses to the north. East of the proposed station site, 34th Street provides east-west access to the station site (see Section 3.13 Station Planning, Land Use, and Development of the Draft Supplemental EIR/EIS).

The proposed F Street Station would be located near a network of regional highways in an area with no existing train service as well as in proximity to the Kern River Parkway and would provide a direct connection to that facility. The location of the F Street Station would complement existing public transportation in metropolitan Bakersfield including local buses, intercity buses, Amtrak trains, and paratransit services. Vehicle circulation from F Street would be organized to maximize separation of flows of private vehicle and public transit circulation to reduce delays of public transit caused by traffic congestion. The existing transit center to the east of F Street provides a convenient connection to Chester Avenue, where the City of Bakersfield plans to construct a future bus rapid transit line. The transit center would also be connected to the primary building of the F Street Station with a dedicated bike/pedestrian walkway that is grade-separated at F Street. This dedicated bike/pedestrian walkway, proposed as part of the F-B LGA, would run the length of the F Street Station site and would provide bike and pedestrian access between Chester Avenue, the main station building entrance, and the Kern River trail system. The nearest existing bike lanes or paths are on Chester Avenue adjacent to the station site. Additional bike lanes also exist along P and Q Streets, 21st Street, 30th Street, 34th Street, and the Kern River Parkway, while there are planned bike lanes along Edison Highway to the east of the proposed station and near the intersection of Airport Drive and Golden State Avenue north of the Kern River and the proposed station area (City of Bakersfield and Kern County 2010).

While the Truxtun Avenue Station (May 2014 Project) would be located at an existing public transportation center and would be more convenient for Amtrak and bus riders, Kern Council of Government Metropolitan Bakersfield Transit Center Study (Kern Council of Governments 2015), identified the proposed F Street Station as a possible location for a "Transit Center" in the City of Bakersfield due to anticipated growth and higher demand for transit service. It also identifies the need for connectivity of various existing and future transit service connections. As discussed in Appendix 3.13-A Land Use Plans, Goals, and Policies of the Draft Supplemental EIR/EIS, the F Street Station was one of the 13 suitable transit center locations studied. The study describes the F Street Station location as follows:

The surrounding area contains a high amount of retail/service land use within walking distance from the site, providing support for a transit center. Access is provided with Golden Empire Transit (GET) and Kern Transit and



existing and planned future bicycle routes proposed in the City's Bicycle Transportation Plan. While there is not a not [sic] a high concentration of existing transit dependent populations, employment projections are anticipated to triple by long-term year 2040. This transit center can assist with the anticipated employment growth by providing multi-modal access to nearby future employment centers.

Furthermore, the proposed F Street Station is approximately 1.5 miles from the Bakersfield Amtrak Station and would be designed as a multi-modal transportation hub that would maximize intermodal transportation opportunities, meeting overall project objectives consistent with the voter-approved Proposition 1A. The location of the F Street Station would complement existing public transportation, including local buses, intercity buses, and Amtrak trains.

As discussed in Chapter 2, F-B LGA Description and Section 3.2, Transportation, of the Draft Supplemental EIR/EIS, it is expected that Amtrak San Joaquin rail service would likely adjust to function more in the role of a feeder service to the HSR system in the Bakersfield area, providing passengers with the opportunity to connect to cities not served by HSR. This is consistent with the 2008 San Joaquin Corridor Strategic Plan (Caltrans, March 2008), the 2013 and 2018 California State Rail Plan (Caltrans May 2013 and October 2017), and the California HSR Program Revised 2012 Business Plan (Authority and FRA 2012), as discussed in the Fresno to Bakersfield Section Final EIR/EIS. This assumption is also consistent with the 2016 California HSR Business Plan (Authority and FRA 2016).

This would not preclude Amtrak or the City from providing transit service to/from the proposed F Street Station. It should be pointed out that a spur connection, which is a secondary rail line branching off from the main route, was not evaluated as it was determined infeasible and did not satisfy HSR program objective of providing a high-speed rail system and improve intercity travel.

More information on efforts for station area planning and integrating passenger rail services, can be found on the <u>Authority's</u> website.

GENERAL

Several commenters expressed their general support for the HSR Project. Benefits mentioned included economy, reduced congestion on roadways, and reduced pollution and related health benefits.

FB-LGA-Response-General-07: General Support of HSR

High-speed rail would bring significant benefits to California, both in the near term and in the long run. It would benefit individuals and the state as a whole. Benefits would be statewide and would encompass both economic and environmental concerns. California's population is growing rapidly and, unless new transportation solutions are identified, traffic and congestion will only worsen and airport delays will continue to increase. The proposed 220-mph HSR System would provide lower passenger costs than travel by air for the same city-to-city markets. It would increase mobility, while reducing air pollution, decreasing dependence on fossil fuels, and protecting the environment by reducing greenhouse gas (GHG) emissions, and would promote sustainable development. By moving people more quickly and at a lower cost than today, the HSR System would boost California's productivity and enhance the economy. In November 2008, California voters passed Proposition 1A, which provides \$9 billion toward the implementation of the HSR Service in California. For more information in regard to the rationale for building the proposed HSR System, please see Section 1.2.4, Statewide and Regional Need for the HSR System with the Fresno to Bakersfield Section. Further information is available in the Statewide Program EIR/EIS (Authority and FRA 2005).



GENERAL

Many commenters expressed support for or opposition to either the F-B LGA or the May 2014 Project, often based on specific impacts to properties.

agriculture, or biological resources.

FB-LGA-Response-General-08: Support of/Opposition to the Fresno to Bakersfield Locally Generated and May 2014 Project Alternatives

Several comments either supporting or opposed to the alternatives considered and evaluated in the Draft Supplemental EIR/EIS included opinions regarding alignments following existing transportation corridors and concerns about impacts involving aspects such as displacements (businesses and homes), noise and vibration, transportation, agricultural lands, visual/aesthetic resources, and construction related air quality impacts to specific properties or communities. Among some commenters, reasons for supporting a given alternative included economic benefits, such as improvements in the communities from the construction and presence of the HSR.

The December 2014 Settlement Agreement between the Authority and the City of Bakersfield identified a commitment of the two agencies to identify the F-B LGA, which would provide an alternative alignment to the May 2014 Project from just north of Poplar Avenue in Kern County to Oswell Street in Bakersfield. Similar to the May 2014 Project, the F-B LGA alignment would begin north of Shafter and run east of the BNSF corridor, continuing southeasterly until just north of Burbank Street where it would turn east until reaching the Union Pacific Railroad corridor. At this point, the alignment would turn and continue southeasterly, adjacent to and west of, the Union Pacific Railroad corridor. The alignment would continue southeasterly into Bakersfield and would deviate from the Union Pacific Railroad corridor. Southwest of the community of Oildale, the alignment would cross SR 99 and continue southeast. South of Airport Drive, the alignment would cross and run parallel to the east side of SR 204. This route would continue until the SR 178 crossing, where the alignment would turn east and return parallel to the Union Pacific Railroad corridor. The F-B LGA would continue generally east within the Sumner Street and Edison Highway corridors and would terminate near Oswell Street. The F-B LGA station would be located at the intersection of SR 204 and F Street. A MOIF would be located along the F-B LGA in the city of Shafter near Fresno Avenue.

Following existing transportation and utility corridors has been a foundational component of HSR project planning commencing with the Statewide Program EIR/EIS process, continuing through the Bay Area to Central Valley Program EIR/EIS process, and continuing through the project level EIR/EISs. Proposition 1A also incorporates into the HSR System performance criteria an emphasis on following existing transportation or utility corridors to the extent feasible, as determined by the Authority, as a mechanism to reduce impacts on communities and the environment (Public Utilities Code § 2704.09). The Authority and FRA have gone to great lengths to maximize the use of existing transportation corridors to minimize potential impacts on agricultural lands. However, this must be balanced with considerations of minimizing potential impacts on urbanized areas (typically, noise and residential and business displacements). Also, HSR operations impose design requirements that do not always fit within the alignment of the existing transportation corridors and therefore cannot feasibly be built solely within those corridors (see also FB-LGA-Response-GENERAL-01). Many existing corridors are not sufficiently straight, nor are their curve radii long enough to support high-speed operation along their full lengths and in many cases cannot maintain the speeds necessary to meet the Proposition 1A travel time requirements. Consequently, an HSR alignment following such a corridor would not be able to meet the project's purpose and need. Additionally, safety considerations dictate the need to separate the HSR from roads and conventional rail (refer to Section 2.4.2.1, Alignment Requirements of the Fresno to Bakersfield Section Final EIR/EIS).

The Draft Supplemental EIR/EIS provides a comparison of the relative differences among physical and operational characteristics and potential environmental consequences associated with the F-B LGA and May 2014 Project alignments and the F Street and Truxtun Avenue Station locations. The physical/operational characteristics included alignment, length, capital



cost, constructability, and operational issues. The potential environmental impacts included transportation-related topics (air quality, noise and vibration, and energy), human environment (land use and community impacts, farmlands and agriculture, aesthetics and visual resources, socioeconomics, utilities and public services, hazardous materials and wastes), cultural resources (archaeological resources, historical properties) and paleontological resources, natural environment (geology and seismic hazards, hydrology and water resources, and biological resources and wetlands), and Section 4(f) and Section 6(f) resources (parklands, recreation areas, wildlife/waterfowl refuges, and historical sites).

Although the F-B LGA would involve greater impacts associated with special-status plant communities, roadway segment level of service, vibration, Williamson Act lands, and Section 106 properties than the May 2014 Project, the F-B LGA is the Preferred Alternative because it is supported by the local community (e.g., City of Bakersfield); would result in fewer overall agricultural lands, noise, residential displacements, special-status species, aquatic habitats, and key community facilities impacts; and would cost less to construct.

The Authority used the information in the Draft Supplemental EIR/EIS and input from federal, state, and local agencies and the public to identify the Preferred Alternative designated in this Final Supplemental EIR. The Authority's decision included consideration of the project purpose and need and the project objectives presented in Chapter 1, Project Purpose and Need of the Draft Supplemental EIR/EIS, as well as the objectives and criteria in the alternatives analysis, and the comparative potential for environmental impacts. The Preferred Alternative from just north of Poplar Avenue in Kern County to Oswell Street in Bakersfield balances overall impact on the environment and local communities, cost, and constructability constraints of the project alternatives evaluated.

The impacts of the F-B LGA and May 2014 Project are summarized in the Executive Summary of this Final Supplemental EIR (See Table S-2, Impact Comparison between May 2014 Project and F-B LGA). A brief comparison of the relative impacts of the alternatives is available in Section S.6, F-B LGA Comparison with May 2014 Project. The principal benefits of the F-B LGA and differences between the F-G LGA and May 2014 Project are discussed in the Supplemental EIR/EIS and briefly summarized below. The F-B LGA differs from the May 2014 Project for the following reasons:

- The F-B LGA, when compared to the May 2014 Project, would reduce the number of residential displacements. The F-B LGA would require 86 residential displacements, while the May 2014 Project would require 384 residential displacements.
- The F-B LGA, when compared to the May 2014 Project, would result in similar business relocation impacts. The F-B LGA would require 377 business relocations, while the May 2014 Project would require 392 business relocations.
- The efficiency gained from the F-B LGA results in fewer direct permanent impacts on waters and wildlife resources. The F-B LGA would result in 15.96 acres of direct permanent impacts on waters, while the May 2014 Project would result in 16.52 acres of direct permanent impacts on waters. The F-B LGA would result in fewer direct permanent impacts to wildlife resources than the
- · May 2014 Project.
- The F-B LGA, when compared to the May 2014 Project, would result in similar uses of Section 4(f) properties. Both the F-B LGA and the May 2014 Project would use two Section 4(f) properties.
- The F-B LGA, when compared to the May 2014 Project, would result in fewer permanent impacts to Important Farmland.
 The F-B LGA would permanently impact 372 acres of Important Farmlands compared to 485 acres under the May 2014
 Project. Additionally, the F-B LGA would impact 114 acres of Williamson Act Contract Lands compared to 47 acres under



the May 2014 Project. Neighborhoods, particularly those near the urban HSR stations, may experience increased vitality once the system is in operation in terms of improved access, residential infill, employment growth, and greater patronage of local business. The area around the Bakersfield station could improve community cohesion because improvements in the area with the development of the station could provide new meeting places for residents from the surrounding neighborhoods.
FB-LGA-Response-GENERAL-09: Oppose HSR Project (e.g., Cost; Funding; Impacts on Cities, Counties, Communities, Farmland, Agriculture, Natural Environment, Wildlife and Habitat, Air Quality, Business, Land Access, and Residential)
As discussed in Section 1.2 of Chapter 1 in the Draft Supplemental EIR/EIS, California's population is growing rapidly and, unless new transportation solutions are identified, traffic will only become more congested and airport delays will continue to increase. The proposed 220-mph HSR System would provide lower passenger costs than air travel for the same city-to-city markets and service competitive with automobile travel. It would increase mobility while reducing air pollution, decreasing dependence on fossil fuels, protecting the environment by reducing GHG emissions, and promoting sustainable development in the areas near the stations, in comparison to existing trends. By moving people more quickly and at lower cost than today, the HSR System would boost California's productivity and also enhance the economy. See the discussion under Section 1.21, Purpose and Need of HSR System, Fresno to Bakersfield Section, and F-B LGA, in the Draft Supplemental EIR/EIS.
High-speed rail systems around the world cover their own operating costs through revenues, which is a key reason why 13 nations have built almost 10,000 miles of high-speed rail lines in the last few decades and why 24 countries are planning and building another 16,000 miles. The financial analysis of the California system, described in the 2016 Business Plan (Authority 2016, page 94), clearly demonstrates that the ridership and revenues are well able to cover the costs of operating the system, meaning that no operational subsidy would be required.
It is anticipated that the HSR Project will be financed through a combination of federal, state funds, and private funds. To date, the Authority has secured funding through FRA's High-Speed Intercity Passenger Rail Program, California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008, and Cap and Trade proceeds. Through these funding sources, California has identified \$9.95 billion to invest in the development of its HSR Project, including approximately \$3.48 billion in federal grant funds obligated through Cooperative Agreements with FRA (Authority 2016, page 72). In July 2014, the California 3rd District Court of Appeal ruled in the Authority's favor in two lawsuits relating to our ability to access Proposition 1A bond funds. Subsequently, in October of 2014, the California Supreme Court denied a petition to review the lawsuits, making the Court of Appeal decision final.
In 2014, the Legislature also established a continuous funding source for the program from the state's Cap and Trade program - which provides the basis for funding the first high-speed passenger rail line in California. Employment Opportunities The Draft Supplemental EIR/EIS estimates that for the F-B LGA, the number of one-year full-time job equivalents that would be created directly as a result of HSR project construction spending over the entire construction period would be approximately 5,786, while the total number of regional indirect and induced one-year full-time job equivalents that would be created in Kern County would be approximately 5,242, for a total of 11,028 one-year full-time job equivalents (Draft



the project in Kern County would be approximately 17,200 jobs by 2035. This includes direct jobs to operate and maintain the project (approximately 2,300 jobs), indirect and induced jobs created to support these workers (approximately 3,200 jobs), and the additional jobs created as a result of the improved connectivity of the region to the rest of the state.

Ticket Prices

Fares will be set by the operator. However, as discussed in the Revised 2012 Business Plan and continued in the 2016 Business Plan, analysis is based on a scenario of fares being set at 83 percent of anticipated airline fares. This follows the strategy of HSR systems worldwide to set fares that are below those of airlines serving the same market and above the out-of-pocket driving costs in shorter distance travel markets. The appropriate fare level will take into account direct competition from air and road travel and system service costs. The ticket pricing structure is expected to be similar to that of an airline, with different classes of ticket as well as different price points depending upon the time and day of travel, how long travel is purchased before the departure date, how many stops the train makes, etc.

Air Quality

In the long-term, the HSR would help improve air quality in the San Joaquin Valley air basin by reducing vehicle-miles traveled (VMT) in comparison to the No Project Alternative. Automobiles produce a major portion of the air pollutants generated within the air basin, and reducing VMT reduces these emissions. Over the long term (year 2035), the HSR Project would result in smaller increases in motor vehicle emissions than would occur with the No Project Alternative, and these reductions, along with the Voluntary Emissions Reduction Agreement between the Authority and the San Joaquin Valley Air Pollution Control District, would offset any short-term emission increases associated with the construction of the HSR System itself (refer to Section 3.3.5 of the Draft Supplemental EIR/EIS).

Wildlife and Habitat

All HSR alternatives have both direct and indirect effects on wildlife habitat as well as associated special-status species of plants and wildlife. Effects are either direct during site preparation and construction or indirect through runoff, noise, motion, startle, and ongoing facility operation. During site preparation, plant communities, some of which comprise wildlife habitat elements, would be removed from the construction area (i.e., areas where track would be laid) prior to heavy construction activities. It is during this phase of the project that wildlife would be displaced or otherwise affected through the clearing, scraping, and removal of vegetation. The displacement of wildlife into the adjoining habitat would create increased pressures for survival as other individuals would compete for finite resources, which generally reduces the local populations due to the habitat reduction. The pre-project landscape contains existing restrictions to wildlife movement, such as SR 99, urban development, and the BNSF and UPRR tracks. Refer to Section 3.7.4 of the Draft Supplemental EIR/EIS for more in-depth discussion of potential impacts and existing restrictions to wildlife movement.

Farmland

Overall, the amount of land that would be removed from agricultural production in Kern County is a very small percentage of the total land in production in the county (see Section 3.14.4 of the Draft Supplemental EIR/EIS). The Authority will acquire the land of property owners whose land is directly affected by the project in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act). The Uniform Act establishes minimum standards for treatment and compensation of individuals whose real property is acquired for a federally funded project. For more information on the Uniform Act, see Appendix 3.12-A of the Fresno to Bakersfield Section Final EIR/EIS. Information about acquisition, compensation, and relocation assistance is also available on the Authority's website, please see Your Property, Your High-



Speed Rail Project (Authority 2013). The project must also adhere to California Relocation Assistance Act requirements, which are discussed in Appendix 3.12-A of the Final EIR/EIS. Even so, there would be potential for temporary disruption to agricultural operations as production is reallocated between owners and as facilities are relocated. Related economic sectors, such as processing facilities, could also experience some short-term multiplier effects from reduced production.

Agriculture Impacts

The project would adversely affect individual farms and other agricultural operations. Construction of the HSR System would result in disruption to or removal of existing infrastructure such as buildings and other structures, pumps and wells, reservoirs/tailwater ponds, irrigation systems (including distribution lines, canals, and gravity flow systems), power supplies, and access. These disruptions and removals would be, understandably, very important to individual farm owners and operators and, in extreme cases, could make the existing agricultural operation infeasible to continue.

The HSR right-of-way would sever parcels, including parcels of agricultural land. Although some parcel severance is inevitable with any HSR alignment, the Authority and FRA have made great efforts to minimize this impact through alignment selection, station locations, and careful project design. In some areas, severance would create small remnant parcels rendered uneconomic for farming operations. Typically, these remnants would be located between road rights-of-way and the HSR alignment.

The Authority is committed to working with agricultural property owners to resolve or mitigate, if possible, acquisitions that result in the division of farmlands. Design features include creation of a farmland consolidation program to sell these uneconomic remnant parcels to neighboring landowners (see Section 3.14.5, Avoidance and Minimization Measures of the Draft Supplemental EIR/EIS) and creation of overcrossings or undercrossings at reasonable intervals to preserve access across the HSR right-of-way (see Mitigation Measure S0-MM#4 in Section 3.12.6 of the Draft Supplemental EIR/ EIS). Business Impacts

Project construction would require acquisition and relocation of a number of businesses. The Authority will acquire the land of property owners whose land is directly affected by the project in accordance with the Uniform Act. The Uniform Act establishes minimum standards for treatment and compensation of individuals whose real property is acquired for a federally funded project. For more information on the Uniform Act, see Appendix 3.12-A of the Fresno to Bakersfield Section Final EIR/EIS and FB-LGA Responses-SO-02: Business Impacts - Construction/Operation Would Create Too Many Impacts on Businesses. The project must also adhere to California Relocation Assistance Act requirements, which are discussed in Appendix 3.12-A of the Final EIR/EIS. Information about acquisition, compensation, and relocation assistance is also available on the Authority's website. It is anticipated that many of the jobs at these businesses would be relocated rather than lost. Section 3.12.4 of the Draft Supplemental EIR/EIS provides information about property acquisition impacts on businesses.

Depending on the location of the construction activities and the nature of the activities, the impacts on businesses would vary. Business-related impacts would be more likely to occur near surface construction activities. Businesses that tend to rely on drive-by traffic to attract customers would experience the greatest impacts; however, some of these businesses may receive positive business impacts as construction workers buy goods and services in addition to regular customers.

As described in Section 3.12.10 of the Final EIR/ EIS, the Authority will develop a relocation mitigation plan, in consultation with affected cities and Kern County, which will minimize the impacts on businesses during construction, including signage and maintaining access to the extent practicable, and providing relocation assistance (see Section 3.12.6 SO-MM#4 and SO-MM#5 of the Draft Supplemental EIR/EIS). In addition, other sections of the Draft Supplemental EIR/EIS identify mitigation



measures related to noise (Section 3.4.6), dust (Section 3.3.7), and traffic (Section 3.2.6).

Operation could also result in positive business impacts related to transit-oriented development (TOD) in those areas where growth and higher densities are encouraged (i.e., Downtown Bakersfield). The HSR stations could act as a catalyst for TOD. Sections 3.12.4 and 3.13.4 of the Draft Supplemental EIR/ EIS provide additional information on the benefits for businesses.

Communities

The project would predominantly travel along or adjacent to existing major transportation facilities within the urban areas and would maintain through access and therefore minimizes the need to bisect neighborhoods. As described in Section 3.12.4 of the Draft Supplemental EIR/EIS, many communities in the study area developed around the railroad, which may have been the draw for development originally but has remained a dividing feature within the communities. Because the HSR System would be grade-separated, it would provide safe and free-flowing connecting roads across the trackway. There is the potential for physical deterioration, primarily from the elevated guideways in urban areas.

The Authority is working together to minimize and avoid effects leading to physical deterioration. Refer to Draft Supplemental EIR/EIS Sections 3.12.4 and 3.12.6, for complete information on community impacts and additional mitigation details, respectively. The HSR Project would require property acquisitions along the borders of some neighborhoods, but these acquisitions would not affect overall neighborhood cohesiveness. After mitigation, impacts on these neighborhoods are expected to be minimal.

Around the HSR station, the existing land uses are predominantly commercial and industrial; however, there are residential uses in close proximity that could be affected by station activities. Limits on parking in neighborhoods or business districts adjacent to the station would be the responsibility of the City of Bakersfield. Parking is expected to be developed in phases over time, as demand increases and in response to development around the station such as TODs. For information about City of Bakersfield parking strategy and implementation, see Appendix I: Implementation and Appendix V: Parking Report of the Downtown Bakersfield High-Speed Rail Station Area Plan (May 2018). Section 2.4.4 of the Draft Supplemental EIR/EIS and FB-LGA-Response-TR-1 explain how the Authority would take a flexible approach to providing the necessary parking at stations. Refer to Draft Supplemental EIR/EIS Sections 3.2 Transportation, 3.3 Air Quality and Global Climate Change, 3.4 Noise and Vibration, and 3.11 Safety and Security for additional information on potential impacts in the station area and mitigation measures to reduce or avoid the impacts.

The evaluation of impacts on neighborhoods and communities within the study area is provided in Section 3.12 of the Draft Supplemental EIR/EIS and in the Fresno to Bakersfield Locally Generated Alternative Community Impact Assessment Report (Authority and FRA 2017), FB-LGA-Response-GENERAL-03, and FB-LGA-Response-GENERAL-19. This assessment considered the following key neighborhood and community issues: changes in neighborhood quality; barriers to social interaction in the analysis of potential impacts of the HSR Project on neighborhoods, community cohesion, and community facilities; impacts on community facilities; and impacts on public services, safety, and security. In addition, the Community Impact Assessment provides a demographic analysis with complete race, ethnicity, income, and housing characteristics for socioeconomics, communities, and environmental justice.

Growth

Population growth is anticipated to increase in the Central Valley even without the HSR System. The growth inducement analysis in Section 3.18 of the Draft Supplemental EIR/EIS shows that in Kern County, the HSR is projected to induce about 2-3 percent more total population and create about 3 percent more total jobs by 2035 than would occur under the No Project



	Alternative (refer to Table 3.18-9 in the Draft Supplemental EIR/EIS). The HSR would help provide employment opportunities in an area of high unemployment and would encourage more compact growth around the proposed stations at greater intensities than currently exist. Land use is highly dependent on transportation facilities because enhancing access leads to higher attractiveness for commercial land uses. The HSR System is not like a freeway with multiple on- and off-ramps; access would be limited to the stations. So, despite passing through rural areas, the HSR would not provide direct access to those areas. The project would provide opportunities to encourage more compact development around the urban stations and redirect development growth to
	central cities, in conjunction with the SB 375 regional efforts and future plans of the City of Bakersfield, and would reduce the pressure for the future conversion of farmlands by encouraging new investments in urbanized areas, rather than in peripheral areas. For more information regarding growth related to the HSR System, please refer to Section 3.18, Regional Growth of the Draft Supplemental EIR/EIS.
GENERAL	FB-LGA-Response-GENERAL-10: Comments with Opinion Only
Some comments stated a person's opinion on the project, but not necessarily support or opposition for an alternative.	These comments present opinions on the project. CEQA requires a final EIR to respond to the responsible comments received on environmental issues (see 14 CCR §15088(a)). The comments do not address an environmental issue but have been included in the Project's administrative record.
GENERAL	FB-LGA-Response-GENERAL-11: HMF- Oil Refinery
The Authority received many comments suggesting that the Shafter Heavy Maintenance Facility and the oil	The Authority received several comments stating that the analysis for the May 2014 Project incorrectly overstates the impacts because of inclusion of the Shafter Heavy Maintenance Facility (HMF). This is not correct, and the Shafter HMF is not included in the May 2014 Project footprint and is not included in analysis of environmental impacts.
refinery were included in the May 2014 Project footprint.	At the May 10, 2016 California High-Speed Rail Authority Board meeting, Mr. Adam Cohen correctly identified an error in the total acreage of Important Farmland within the May 2014 Project permanent footprint; subsequently, the May 2014 Project permanent footprint was revised to exclude the HMF originally considered in the Fresno to Bakersfield Section Final EIR/EIS. The permanent project footprints compared in the Draft Supplemental EIR/EIS include the proposed HSR right-of-way and associated facilities, such as traction power supply stations, maintenance of infrastructure facility (MOIF), and switching and paralleling stations, as well as shifts in roadway right-of-way associated with those facilities (including overcrossings and interchanges) that would be modified or shifted to accommodate the HSR project. The F-B LGA does not include a proposed HMF; therefore, the HMF was removed from the May 2014 Project permanent project footprint to allow a more accurate comparison of the alternatives (i.e., an apples-to-apples comparison). The figure presented below shows a comparison of the May 2014 Project permanent footprint with the HMF included in the footprint and without the HMF. The figure on the right (without the HMF) is consistent with the May 2014 Project footprint analyzed in the Draft Supplemental EIR/EIS.









The parcels associated with the oil refinery are included as part of the study area due to temporary construction area designations that include staging and laydown areas. Regarding additional full parcels included in the study area for the May 2014 Project, these were designated as either potential staging/laydown areas and temporary construction easements or large design components not fully designed at the time of publication of the Fresno to Bakersfield Section Final EIR/EIS.

TRANSPORTATION

FB-LGA-Response-TR-1: Station Parking

Some commenters had concerns regarding the proposed stations' onsite and off-site parking facilities, station footprints, and effects on local traffic flow.

Parking for each of the station alternatives is discussed in Section 2.5 of the Fresno to Bakersfield Section Final EIR/EIS, with more detail about the prospective parking demand in Section 2.4.4 of the Final EIR/EIS and the Draft Supplemental EIR/EIS. In the Draft Supplemental EIR/EIS, the 2035 full system high ridership forecast was used to capture the maximum potential station parking demand and to allow for an analysis of where and how parking demand might be accommodated near the HSR station. Parking availability itself is not a direct environmental impact, but secondary physical impacts from parking, such as

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traffic, noise, and air quality are (CNRA 2009). Based on Public Resources Code, section 21099(b)(3), the adequacy of parking for a project shall not support a finding of significance pursuant to this section.

The Draft Supplemental EIR/EIS's analysis of high forecasts for parking provides flexibility over time to reduce the amount of station parking based on more refined demand projections and TOD around station areas. Land use development around the HSR stations is anticipated to occur over time. The amount of nearby development, as well as the future availability of local transit connections, both of which tend to decrease parking demand, would influence the future parking demand. While the HSR would be a catalyst for such development, the actual timing would be dictated by land use decisions based on market conditions by the City of Bakersfield. Demand for parking facilities would also depend on how HSR ridership grows over time; essentially and within the parameters of the environmental analysis, decisions concerning the construction of parking facilities would be made as needed, taking into account the existing parking availability.

The Authority = would therefore retain the flexibility to make decisions about what parking facilities to construct initially and how additional parking might be phased in or adjusted depending on how the HSR System ridership increases over time and how the station area develops over time. For example, it is possible that some parking facilities might be constructed at the project opening (estimated to occur by 2029 according to the Authority's 2018 Business Plan), only to be replaced in whole or in part, or augmented later with development of other parking facilities (see Section 2.5.3 of the Fresno to Bakersfield Section Final EIR/EIS). To the extent these new facilities are not covered by the current environmental review, they may require additional environmental review in the future prior to changes in parking supply. However, as discussed in Section 3.2.4 and Section 3.2.5 of the Draft Supplemental EIR/EIS, the project has reviewed and disclosed the impacts of a plan that would accommodate maximum possible parking demand. On-street parking management in neighborhoods or business districts adjacent to the stations would be the responsibility of the City of Bakersfield.

The study area for each station was established by considering the potential for impacts on roadway segments and at intersections from new, station-related traffic (i.e., traffic generated by that station). The traffic analysis considered traffic increases on nearby streets that would be expected to result from the projected ridership at each station (see Section 3.2.4 and Section 3.2.5 of the Draft Supplemental EIR/EIS). This analysis included considerations of parking demand at the stations and their impact on existing parking facilities, commercial operations, and nearby residential areas (see Section 3.2.4 and Section 3.2.5 of the Draft Supplemental EIR/EIS).

NOISE AND VIBRATION

Commenters expressed concerns related to specific schools, and some comments request calling out schools by name in the document. Some commenters also expressed concerns that schools are not given special regard with FTA criteria and effects to children's health are not addressed.

FB-LGA-Response-N&V-01: Schools

The FRA High-Speed Ground Transportation Noise and Vibration Impact Assessment Manual (2012) was used to evaluate the potential noise impacts on schools from the proposed HSR Project. Schools, libraries, churches, and other institutional land uses where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material with no nighttime use are classified under Land Use Category 3 for noise and vibration impact criteria in the FRA High-Speed Ground Transportation Noise and Vibration Impact Assessment Manual (2012). The noise impact criteria are shown on Figure 3-1 and Table 3-1 while the vibration criteria are shown in Table 7-1 of the FRA High-Speed Ground Transportation Noise and Vibration Impact Assessment Manual (2012).

It is important to note that the FRA and FTA noise and vibration impact criteria are based on human annoyance. The criteria are not related to health effects, nor do separate criteria exist for children. This is because the noise descriptors in the FRA manual are largely based on EPA studies that looked at the effects of noise on public health in the 1970s. The noise-sensitive



areas (NSAs) discussion presented in Section 5.2, Existing Noise Environment, of the Noise and Vibration Technical Report for the F-B LGA (Authority and FRA 2017), aims to summarize land use in the area near the proposed F-B LGA alignment. Not every sensitive receptor analyzed is listed in these summaries; however, every sensitive receptor within approximately 2,500 feet of the track centerline was included in the noise assessment and every sensitive receptor within approximately 275 feet of the track centerline was included in the vibration assessment.

The impact assessment in the Draft Supplemental EIR/EIS identifies specific locations with impacts to sensitive receptors (such as a school). Table 3.4-20 summarizes the affected sensitive receptors, and Table 3.4-21 contains a complete list of 22 schools within 2,500 feet of the track centerline along with their level of noise impact. Figures 3.4-4 and 3.4-5 of the Draft Supplemental EIR/EIS show the locations of affected sensitive receptors. However, if an impact is not projected, the receptor is not discussed in the assessment. In other words, consistent with the FRA noise impact assessment methodology, if a school (an example of a sensitive receptor) is outside the radius from the train at which the criterion/threshold is no longer exceeded, then a precise noise prediction at that location is not projected. For further information on potential impacts to schools and effects on children's health, please refer to Technical Appendix 3.12-C Effects on Children's Health and Safety of the Draft Supplemental EIR/EIS.

NOISE AND VIBRATION

FB-LGA-Response-N&V-02: General Assessment Methodology Concerns - Use of FRA Methodology/Criteria

Commenters expressed concern regarding how the noise and vibration assessments were completed in general. Some concerns relate to the criteria used and how noise levels are presented. Some commenters also requested more noise measurements.

The FRA guidance manual (High Speed Ground Transportation Noise and Vibration Impact Assessment, 2012) was the methodology used for analyzing HSR noise for the Draft Supplemental EIR/EIS. For evaluation of non-HSR noise, such as noise from stations, maintenance facilities, and construction, FTA methodology was used (Transit Noise and Vibration Impact Assessment Guidance Manual, 2006). To analyze the potential noise impacts during operations, the noise impact assessment procedure followed the FRA methodology.

The FRA noise impact criteria were used to evaluate potential noise impacts on sensitive land uses. The criteria is a sliding scale that determines noise impacts based on the existing noise levels and project noise levels for existing conditions. For future conditions, the future noise levels and project noise levels are used. The sliding scale shows that communities with higher existing noise levels (i.e., suburban and urban areas) would have a lower potential for impact because higher noise levels contributed by the project would have a lower potential to increase noise levels. The justification is that people located in communities that are already exposed to high levels of noise would tolerate a smaller increase in noise. On the other hand, the sliding scale shows that communities with lower existing noise levels (i.e., rural areas) would have a greater potential for impact because lower noise levels contributed by the project would have a greater potential to increase noise levels. The justification is that people located in communities that are exposed to low levels of noise would tolerate a higher increase in noise.

The noise impact criteria are based on the potential annoyance of people to the project noise, and are not based on the potential audibility of a noise source. The noise impact criteria are defined such that where no impact is predicted, the project would result in an insignificant increase in the number of people highly annoyed by the new noise.

For a new Project corridor in a quiet suburban/rural environment, the FRA guidance manual specifies a screening distance of 1,300 feet. Noise-sensitive receptors located within the screening distance would have the potential for noise impacts while noise-sensitive receptors located beyond the screening distance would not have the potential for noise impacts. The screening distance is not meant to represent the distances within which the HSR would be audible but an interim step in the analysis



procedure. The screening allows for a high-level review of the corridor, to identify potential locations where noise impacts would potentially occur (thereby allowing more detailed analysis of those potential locations to determine if impacts would actually occur) and to identify locations where impacts would not occur. This screening distance is based on the assumptions associated with typical projects such as the number of train operations, train speeds, and existing noise conditions. Based on the specific factors of the HSR Project, potential impact was assessed for all noise-sensitive receptors within approximately 2,500 feet which is further than the standard screening distance of 1,300 feet. The potential noise impact extends further than the typical screening distance because the number of train operations per day would be greater than the assumed 50 train operations per day.

Noise impact categories are defined according to FTA and FRA guidance. A severe noise impact occurs when there is a change in noise level (existing without project levels versus existing with project noise levels) would be noticeable to most people and likely to generate strong, adverse reactions. A moderate noise impact occurs when there is a change in noise level that would be noticeable to most people, but may not be sufficient to generate strong, adverse reactions. The Lmax is the maximum noise level for a particular event. The FRA noise impact assessment methodology is not based on Lmax, but rather on cumulative noise descriptors, which take into account how loud each event is, how long each event lasts, and, for land use categories where people sleep (including residences), how many events occur each day (including nighttime events). Reference levels at a particular distance and train speed are adjusted based on (1) the actual distances for each receptor along the corridor and (2) the actual train speeds at that location (both through trains and trains that may stop at additional stations). For example, because HSRs are powered electrically rather than by diesel engines (which are louder), an HSR has to achieve a speed of 150 mph before it makes as much sound as a commuter train at 79 mph. The duration of the sound is also different; an HSR moving at 220 mph would only be heard for about 4 seconds, while a typical freight train traveling at 30 mph can be heard for 60 seconds.

Noise sensitive land uses were identified within the screening distance to evaluate potential noise impacts. Noise- and vibration-sensitive land is categorized according to FTA guidelines, as described in Section 3.4.2.3, Impact Assessment Guidance of the Draft Supplemental EIR/EIS. Noise-sensitive areas were identified based on current information available, including GIS data, aerial mapping, and field surveys. The potential for noise impacts was assessed at all sensitive locations along the project corridor. According to FTA guidance, parks are only considered to be noise-sensitive if they are used in a manner that is noise-sensitive such as reading, conversation, meditation, etc.; active recreation such as pedestrian walkways and bike paths are not considered noise sensitive.

Noise was evaluated using models to determine potential noise impacts from existing noise levels and project noise levels. Existing noise levels were determined throughout the corridor by taking direct field noise measurements at certain noise-sensitive receptors following the FRA methodology. Noise measurements were taken at specific noise-sensitive locations near the alignment in the study area that were considered representative of conditions throughout the study area (see Figures 3.4-2 through 3.4-3 in the Draft Supplemental EIR/EIS). Specific measurement locations were selected based on their land use category and physical location along the proposed F-B LGA alignment within the noise study area. Noise levels measured at these locations are representative of certain existing noise conditions and are applied to several neighborhoods with similar noise sources. Dominant existing noise sources in the study area were first determined by field observations and then confirmed by measurement data results, which indicated which noise events were the greatest contributors to the existing measured noise levels. Section 3.4.3, Affected Environment, in the Draft Supplemental EIR/EIS provides the details on the



noise measurement locations.

Project noise levels were determined based on, all noise sources during a train pass-by to produce a single reference noise level for a train pass-by for the noise model. FRA and FTA methods take this single reference noise level along with the number of trains per hours during daytime and nighttime, to calculate either the peak hour noise level or the Ldn (Day and Night Level) noise level. The peak hour noise level is used to identify noise levels at places that are used primarily for daytime activities, such as schools and parks. The Ldn is used to identify noise levels at places with sleep-related activities, such as homes, apartments, hospitals, and hotels. The Ldn adds a 10-dBA penalty to the hours between 10 p.m. and 7 a.m. to account for people being more sensitive to noise during these hours.

The FTA and FRA guidelines were used to evaluate potential noise impact from the construction of the HSR Project because the project is federally funded. The FTA and FRA provide a uniform guidance on rail and transit projects. Although the construction of the HSR Project is not subject to local and city noise ordinances, the Authority and its design/build contractor will consider local noise sensitivities consistent with local ordinances and employ best management practices (BMPs) to minimize excess noise impacts during construction. In addition, local ordinances were acknowledged and presented in Sections 3.1.3 and 3.1.4 of the Noise and Vibration Technical Report (Authority and FRA 2017). The construction noise impact analysis was based on evaluating the noise expected to be generated by typical construction equipment and construction methods.

Startle effects are based on a combination of the speed of the train and the distance from the tracks. The projected distance of 45 feet within which startle may occur is based on the maximum train speed of 220 mph, which will not be achieved at all locations. According to FRA and FTA policy, for noise-sensitive locations identified within the distance where surprise may occur, the onset-rate adjusted sound levels are used to identify impact. The F-B LGA alignment would be located on viaduct that is more than 50 feet above the ground. Therefore, people and animals would be located more than 45 feet from the HSR track and would not experience startle effects from onset rates caused by the proposed HSR. HSR stations are not considered noise-sensitive, so additional annoyance from rapid onset rates at stations is not considered an impact; however, potential startle to patrons waiting on station platforms would be minimized with the use of audible and/or visual notification systems.

NOISE AND VIBRATION

FB-LGA-Response-N&V-03: Determining Mitigation

Commenters expressed concern regarding mitigation options, how mitigation was determined, and how it will be implemented.

At similar speeds, high-speed trains generate significantly less noise than existing commuter and freight trains. This is primarily due to the use of electric power versus diesel engines, higher quality track interface, and smaller, lighter and more aerodynamic trainsets. The use of electric power units would not have the engine rumble associated with diesel-powered locomotives. While wheel/track interface is a significant source of train noise, HSR track beds and rails are designed and maintained to very high geometric tolerances and standards which would greatly minimize track noise that is prevalent with existing commuter/freight tracks throughout the study area. Another reason HSR noise impacts are less than commuter or freight trains is that high speeds would result in short duration noise events compared with conventional trains (a few seconds at the highest speeds versus 10 to 20 seconds for conventional passenger trains and well over 1 minute for freight trains). The HSR System would be fully grade separated from all roadways. In the urban areas where potential for noise impacts is typically at the highest levels, the HSR System is predominantly in or adjacent to existing rail corridors and the F-B LGA includes the grade separation of the existing tracks. Grade separations completed with the HSR System in corridors such as these would eliminate current horn sounding and bells at existing grade crossings and would result in a noise benefit that



would offset much of the HSR noise impacts.

Potential noise impact has been assessed at sensitive receptors and these areas are identified in Section 3.4.5, Environmental Consequences, of the Draft Supplemental EIR/EIS and shown in Figures 3.4-4 and 3.4-5. The locations of potential barriers are illustrated on Figures 3.4-7 and 3.4-8. Refer to Section 3.4.6 of the Draft Supplemental EIR/EIS for a complete listing of noise impact mitigation measures that would reduce noise impacts below a "severe" level. The California High-Speed Rail Project Noise and Vibration Mitigation Guidelines the Authority approved in 2014 as part of its Fresno to Bakersfield project decision has been updated (see Appendix 3.4-C of the Draft Supplemental EIR/EIS) and used to determine whether mitigation would be proposed for these areas of potential impact. The Guidelines require consideration of all mitigation measures that are reasonable, physically feasible, practical, and cost-effective to reduce severe noise impacts (impacts where a significant percentage of people would be highly annoyed by the HSR Project's noise).

If the Authority certifies the Final Supplemental EIR and approves the F-B LGA alignment, it will proceed with construction of the alignment and will implement all construction noise and vibration mitigation measures as construction is occurring. Noise and vibration mitigation measures that address impacts from high-speed rail operations would be adopted and committed to in conjunction with project approval, but implemented closer in time to the commencement of project operations, and in consultation with affected communities. The Authority will refine mitigation for individual homes with residual severe noise impacts (i.e., severe impacts that remain notwithstanding noise barriers) and address them on a case-by-case basis. In addition to the potential use of noise barriers, other forms of noise mitigation may include improvements to the home itself that will reduce the levels by at least 5 dBA, such as adding acoustically treated windows, extra insulation, and mechanical ventilation as detailed in Section 3.4.6, Mitigation Measures of the Draft Supplemental EIR/EIS. The Draft Supplemental EIR/EIS proposes noise barriers in areas of severe noise impacts resulting from the project, where the barriers meet the costeffectiveness criteria contained in the Noise and Vibration Mitigation Guidelines. To meet the cost-effectiveness criteria, barriers must mitigate noise for more than 10 sensitive receptors, be not less than 800 feet in length, be less than 14 feet in height, and cost below \$55,000 per benefitted receptor. A receptor that receives at least 5-dBA noise reduction due to the barrier is considered a benefitted receptor. Mitigation Measure N&V-MM#3 provides that noise barriers may be installed to reduce noise to acceptable levels at adjoining properties. These may include walls, berms, or a combination of walls and berms. N&V-MM#3 provides that prior to operation, the Authority will work with communities regarding the height and design of noise barriers using jointly developed performance criteria, when the vertical and horizontal location have been finalized as part of the final design of the project infrastructure. Mitigation Measure AVR-MM#2g requires the provision of a range of options to reduce the visual impact of the noise barriers.

BIOLOGICAL RESOURCES AND WETLANDS

Commenters expressed concern that the full complement of mitigation measures may be insufficient because limited permissions to enter resulted in unsurveyed areas.

FB-LGA-Response-BIO-01: Mitigation Measures (Resources, Details and Phasing, Responsibilities and Future Planning)

The Fresno to Bakersfield Section Final EIR/EIS identifies project design features and mitigation measures that the Authority and FRA have determined will avoid, minimize, reduce and mitigate potential adverse impacts resulting from project construction and operation. These mitigation measures and project design features will be tracked and enforced though the Mitigation Monitoring and Enforcement Plan (MMEP), a joint monitoring program that satisfies the requirements of both CEQA and NEPA. The mitigation measures included in the MMEP and adopted with the NEPA Record of Decision contain formal commitments required for project approval. Therefore, in designing, constructing, and operating the Project, the Authority is



required to adhere to and provide appropriate funding for all mitigation measures in the MMEP.

In addition, mitigation measures will be incorporated into the regulatory permits issued for the Project and enforced by the agencies issuing these permits, including the U.S. Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), California Department of Fish and Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS). The permits will include mitigation measures as permit conditions, and the Authority will be responsible for documenting compliance with the permit conditions and submitting monitoring reports to the agencies. Furthermore, the Authority has prepared a Compensatory Mitigation Plan (CMP) for the Fresno to Bakersfield Section and a Supplemental CMP for the F-B LGA that identify potential properties that could be preserved, enhanced, or restored to offset impacts on biological resources and wetlands. Following site selection and acquisition, a site specific Comprehensive Mitigation and Monitoring Plan (CMMP) will be prepared, approved by the regulatory agencies, and implemented by the Authority.

MMEP

The Authority and FRA will develop an MMEP to ensure that the adopted project design features and mitigation measures are successfully implemented and tracked throughout project implementation.

CEQA requires a lead or public agency that approves or carries out a project for which an EIR has been certified which identifies one or more significant adverse environmental effects and where findings with respect to changes or alterations in the project have been made, to adopt a "...reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA, Public Resources Code sections 21081, 21081.6).

The Authority as CEQA lead agency will use the MMEP to track and enforce implementation of mitigation measures and project design features.

The MMEP will be active through all phases of the project, including design, construction, and operation. The project will be developed in phases and may include permits required for implementation of project components. There are mitigation measures that must be continuously implemented throughout the development and operation of the HSR Project.

The MMEP identifies those mitigation measures required by the Authority to mitigate or avoid significant adverse impacts associated with the implementation of the proposed project, entity responsible for monitoring, timing of implementation, phase the measure applies to, timing of implementation, and completion verification. The MMEP will help ensure the measures are implemented, their effectiveness monitored, and documentation provided. As individual mitigation measures are completed, the compliance monitor will sign and date the MMEP, indicating that the required mitigation measure has been completed for the subject period. The compliance monitor will also note the documentation (title of the monitoring report) that was submitted for each mitigation measure. The monitoring effort may be expanded to include the permit conditions associated with the Federal Clean Water Act, Porter Cologne Act, State Fish and Game Code, Federal and State Endangered Species Acts and any requirements necessary to comply with Section 106 of the Historic Preservation Act. These other regulatory requirements will result in obtaining various permits that will include often times more specific terms and conditions that may be treated as mitigation measures and tracked through similar procedures as the MMEP. In many instances they are all combined into one tracking program.

The mitigation measures have been designed to mitigate impacts to biological resources and rely, in some instances, on the preparation and execution of plans following the certification of the document. However, the mitigation measures that contain



plans also identify the specific content and performance that will be included in such plan. With implementation of the MMEP, biological resources avoidance, minimization, and mitigation will be achieved. As an example, BIO-MM#17 includes the types of activities that need to be addressed (e.g., monitoring, salvage, relocation, and propagation), how the plan would be approved and who would approve the movement of species (e.g., Project Biologist, and appropriate regulatory agencies), and the provisions that will be provided in the plan for the establishment of plant population(s) and performance (success) criteria. As stated in Mitigation Measure BIO-MM#1, a Project Biologist, Contractor's Biologist, and Project Biological Monitors will be designated by the Authority. The appropriate designated biologists would be responsible for implementation and compliance with certain measures (as described in each measure).

The descriptions provided in Sections 3.7.4 and 3.7.5 of the Draft Supplemental EIR/EIS serve to describe both impacts and their mitigation measures as fully as possible to the reader. Together, the mitigation measures would map and identify sensitive biological resources, create buffers around these resources, allow for passive and active species relocation, restore temporarily disturbed areas (where possible), compensate for unavoidable impacts, and monitor construction (to name a few). Other measures are general in nature and were designed specifically to reduce the level of anticipated direct or indirect impacts on a number of resources.

CMP

The Supplemental Compensatory Mitigation Plan (CMP) has a more focused and specific role than the MMEP and is the beginning of the mitigation strategy. A CMP is being prepared as part of the Section 404 permitting process under the requirements of the USACE and EPA, and in accordance with the MOU between the Authority, FRA, and these agencies. The CMP will provide the methods and a foundation for the mitigation options that are available to offset the loss of sensitive natural resources within the F-B LGA. Compensatory mitigation includes purchase of mitigation bank credits; fee-title acquisition; conservation easements; in-lieu fee payments; and conservation projects to create, restore, or enhance habitats. These compensatory mitigation programs address resources, including special-status species, plants and wildlife, streambed/riparian communities, and wildlife movement corridors.

Water rights and availability are included as part of the feasibility analysis presented in the CMP. Specifically, the feasibility analysis includes conceptual design for the prospective wetland mitigation sites.

The methods for reducing, avoiding, or compensating for potential impacts discussed in the CMP include a watershed-based approach, site selection criteria, the use of the CRAM to document wetlands, mitigation by resource, long-term management, financing, and monitoring. In addition, the CMP provides an inventory of banks and projects in the area that may provide compensatory mitigation for offsetting effects. While the CMP is not part of the Draft Supplemental EIR/EIS, it will incorporate and/or complement many of the mitigation measures identified in Section 3.7.5.

As part of the Section 404 process, all proposed compensatory mitigation will be prepared under federal agency oversight. Only USACE and EPA approved mitigation projects and programs will be used to fulfill mitigation requirements.

The CMP will present the mitigation proposal for mitigating impacts on sensitive habitats, plants, and wildlife resulting from construction of the Preferred Alternative, and will provide a proposal detailing the locations where mitigation is proposed to occur and the strategy proposed to implement mitigation to meet the requirements and standards of the various environmental regulatory agencies with jurisdiction over the project. The CMP along with a Watershed Evaluation Report will also use land acquisition strategies that consider watershed-level impacts when proposing mitigation, giving priority to areas that provide



habitat connectivity and those areas with upland and wetland restoration and creation potential.

The CMP will specify the quantity of acres/credits used to offset project effects, by resource, as specified by the mitigation ratios described in the CMP. The overall mitigation strategy will consider the structural requirements of the agencies, use of umbrella species to provide mitigation for other species with similar habitat requirements, and the Final Supplemental EIR mitigation commitments.

CMMP

Implementation of mitigation measure BIO-MM#62: Prepare and Implement a site-specific Comprehensive Mitigation and Monitoring Plan (CMMP) will provide specific plans and details for mitigation sites that are selected in cooperation with regulatory agencies, including the USACE, USFWS, SWRCB, and CDFW. The CMMP will identify specific performance and/or success criteria, which will largely depend on the specific goals of the particular mitigation site. Refer to Mitigation Measure BIO-MM#62 in Section 3.7.5 of the Draft Supplemental EIR/EIS for more detail.

SAFETY AND SECURITY

FB-LGA-Response-S&S-01: Mitigating the Exposure to Valley Fever

Some commenters expressed concern that construction workers and area residents could be exposed to Valley Fever.

Background on Valley Fever

Valley Fever, also called coccidioidomycosis, is an infection caused by the fungus Coccidioides. The fungus is present in the soil in the southwestern United States and parts of Mexico and Central and South America and is likely present in the soil of Kern County.¹ When infected soils are disturbed by construction activities, there is the potential for fungal spores to be present within fugitive dust particles that become airborne during such activities. The fungus can enter a person's lungs causing cold and flu-like symptoms, and occasionally rashes.² Such symptoms could occur within one to three weeks after fungal inhalation.² Symptoms then persist for a period of a few weeks up to a few months, typically going away without any medical treatment.² The fungus that causes Valley Fever, Coccidioides, is not contagious; meaning, it cannot spread from the lungs between people or between people and animals.² With the exception of the immune-suppressed and extremely rare cases, the human immune system will most likely protect someone from contracting Valley Fever if they have previously experienced the illness.²

Valley Fever in California's Central Valley

The California Coccidioidomycosis Collaborative was an ad-hoc group of public health professionals that conducted an epidemiologic surveillance study of Valley Fever within 15 California counties over a five-year period during 2007-2011.¹ The 15 participating counties include all of the San Joaquin Valley counties except Madera; all of southern California except Orange and Imperial; and all the central coastal counties. Of these 15 counties, Kern County reported the highest number of Valley fever cases over the five-year study: 7,759 cases.² Fresno County had the second highest number of reported cases during the five-year period: 2,723. Kern County also had the highest mean incidence rate for the five years (186/100,000 people).³ The findings of the study state "Because of the relative large number of cases observed in Kern County, the incidence rates are more reliable. The observed rates show a lot of variation over time and by area of the county...The Desert and Mountain Regions in Kern County had the lowest mean rates in the county for the five year period, 64/100,000 people and 53/100,000 people, respectively. Valley North (Delano/Wasco) and Valley West (Taft) had the highest mean rates in the county for the five year period, 258/100,000 people and 303/100,000 people, respectively. By comparison the mean rate in Valley Central (Bakersfield) was 183/100,000 people. The three cities with the highest mean incidence rates were Wasco, Taft and Delano."³ The F-B LGA alignment runs through the Valley North and Valley Central public health regions of Kern County.



Understanding that Valley Fever is endemic to Kern County and especially prevalent in areas where the F-B LGA would be sited, avoidance and minimization measures and mitigation measures are necessary to help protect construction workers from exposure to Valley Fever.

Avoidance and Minimization Measures, Mitigation Measures

The Authority reviewed the potential of Valley Fever occurrence in the San Joaquin Valley, specifically in the area where HSR construction would occur. In response to comments concerning construction workers and their risk of increased exposure to coccidioidomycosis spores, the FRA and the Authority, in coordination with the U.S. Environmental Protection Agency and the California Department of Public Health, revised the avoidance and minimization measures in the Mitigation Monitoring and Enforcement Plan (June 2015) to incorporate additional best practices to minimize exposure to those at risk from construction activities disturbing these naturally occurring Coccidioides spores (Draft Supplemental EIR/EIS Section 3.11.5 S&S-AMF #4b and S&S-AMF #4c):

- **S&S-AMF#4b: Valley fever.** Provide a qualified person dedicated to overseeing implementation of Valley Fever prevention measures to encourage a culture of safety of the construction contractors and subcontractors.
- **S&S-AMF#4c: Valley fever.** Addition of measures to the requirements of the Construction Safety and Health Plans regarding preventive measures to avoid Valley Fever exposure.

Because Valley Fever is spread through fugitive dust emissions, measures that mitigate the production and exposure of fugitive dust also contribute to the effort in reducing the risk of worker exposure to Valley Fever. Sections 3.3.7 and 3.3.8 of the Draft Supplemental EIR/EIS identifies three avoidance measures and one mitigation measure that when implemented would reduce fugitive dust emissions:

- AQ-AM #1 Truck Equipment: Covering and washing of trucks and construction equipment to reduce fugitive dust.
- AQ-AM #2 Fugitive Dust Emissions: Best management practices implemented to reduce fugitive dust emissions.
- AQ-AM #3 Trackouts: Implementation of entrance/exit trackouts that result in vibration and removal of dirt and dust on trucks and construction equipment so as to not track out onto public roadways.
- AQ-MM#3: Concrete batch plants would be sited at least 1,000 feet from sensitive receptors, including daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. The concrete batch plant will utilize typical control measures to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems and other suitable technology, to reduce emissions to be equivalent to the U.S. Environmental Protection Agency (USEPA) AP-42 controlled emission factors for concrete batch plants.

Because the Authority would implement these avoidance, minimization, and mitigation measures related to reducing the potential exposure of construction workers to Valley Fever during construction of the F-B LGA, the resulting impacts would be less than significant under CEQA.

Mitigation Monitoring

Safety and security are priorities of the HSR, and as such, the Authority commits to reducing the risk of Valley Fever exposure to F-B LGA construction workers. In October 2016, the Authority conducted a review of the Authority's Valley Fever mitigation and oversight procedures, which were developed to address potential exposures within Sacramento and Central Valley project locations.³ Results of the internal review, as reported by the Authority's Audit Office, conclude that the mitigation and oversight



of Valley Fever exposure are protecting worker health.⁴ The Audit Office did not identify any internal control weaknesses related to Valley Fever mitigation and oversight; thus, providing continued assurance that exposure to Valley Fever is mitigated to a less-than-significant level under CEQA for the F-B LGA.⁴

Conclusion

Although the fungus Coccidioides is present in the soil of California's Central Valley, the Authority has proper avoidance and minimization measures in place to reduce F-B LGA construction worker exposure to Valley Fever to a less-than-significant level. As described Section 3.11 of the Draft Supplemental EIR/EIS, avoidance and minimization measures are responsible for reducing the risk of exposure. An internal review conducted by the Authority's Audit Office in October 2016 confirms the efficacy of S&S-AMF#4b and S&S-AMF#4c in protecting the health and safety of workers on the F-B LGA with regards to Valley Fever. (The report did not address the Air Quality and Global Climate Change avoidance, minimization, and mitigation measures.)

- ¹ Centers for Disease Control and Prevention (CDC), 2016. "Fungal Diseases: Coccidioides." Accessed on 04.27.17 online at https://www.cdc.gov/fungal/diseases/coccidioidomycosis/definition.html
- ² MacLean M.D. M.S., Michael L. 2014. "The Epidemiology of Coccidioidomycosis 15 California Counties, 2007-2011." Produced for the California Coccidioidomycosis Collaborative. Accessed on May 31, 2017 online at http://vfce.arizona.edu/sites/vfce/files/the_epidemiology_of_coccidioidomycosis_collaborative_county_report.pdf.
- ³ The Audit Office of the Authority, 2016. Report number 15-08: Valley Fever Mitigation and Oversight Audit. Accessed on 04.27.17 online at

 $https://www.hsr.ca.gov/docs/brdmeetings/2016/brdmtg_111416_FA_Audits_Valley_Fever_Mitigation_and_Oversight.pdf.$

⁴ Debrezion, Ghebreegziabiher, Pels, Eric, and Rietveld, Piet, 2007. The Impact of Railway Stations on Residential and Commercial Property Value: A Meta-analysis. Published online: 19 June. Springer Science and Business Media.

SOCIOECONOMICS AND COMMUNITIES

Commenters were concerned with the potential for negative impacts on businesses during construction and operation and the potential for loss of jobs.

FB-LGA-Response-SO-02: Business Impacts – Construction/Operation Would Create Too Many Impacts on Businesses

Project construction requires the acquisition and relocation of a number of businesses. Relocation assistance would be provided to businesses as appropriate, and it is anticipated that many of the jobs at these businesses would follow the relocation. The Authority would acquire the land of property owners whose land is directly affected by the project in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. sec. 4601 et seq.) (Uniform Act). The Uniform Act establishes minimum standards for treatment and compensation of individuals whose real property is acquired for a federally funded project. For more information on the Uniform Act, see Appendix 3.12-A of the Fresno to Bakersfield Section Final EIR/EIS and FB-Response-SO-01 of the Fresno to Bakersfield Section Final EIR/EIS. Information about acquisition, compensation, and relocation assistance is also available on the Authority's website, please see, Your Property, Your High-Speed Rail Project (Authority 2013).

It is anticipated that many of the jobs at these businesses would be relocated and not lost. Section 3.12.4.2 of the Draft Supplemental EIR/EIS provides information on the property acquisition impacts on businesses. The construction-related impacts to property, and mitigation for those impacts, are a factor considered within the environmental review process. Each of the resource chapters in the Draft Supplemental EIR/EIS (Sections 3.2, Transportation; 3.3, Air Quality and Global Climate Change; 3.4, Noise and Vibration; etc.) includes a description of the affected environment, the F-B LGA's construction impacts



on that environment, and feasible means of reducing or avoiding those impacts. There may be situations where impacts cannot be fully avoided and in these situations, measures would be implemented as appropriate and necessary to minimize or mitigate these impacts. For example, where noise impacts on sensitive receptors would occur during project construction, temporary sound barriers would be installed, nighttime construction activity would be limited, and/or other measures would be implemented. During construction, business impacts could include noise, vibration, dust, loss of parking, and traffic congestion in the areas of construction activities. Depending on the location and nature of construction activities, impacts on businesses would vary. Business-related impacts are more likely to occur near surface construction activities where local roadway modifications may temporarily disrupt circulation patterns. Businesses that tend to rely on drive-by traffic to attract customers would experience the greatest impacts; however, some of these businesses may experience beneficial impacts from construction and operation of the HSR project. Section 3.12.4.2 of the Draft Supplemental EIR/EIS details how the project-related purchases made locally at the construction sites would result in increased sales tax revenues for cities and counties in the project area. Unless exempted, all transactions for tangible assets related to the project would be subject to sales tax. This includes materials such as gasoline, oil, parts, and light bulbs that would be purchased locally. Additionally, new or existing businesses in the project area that supply goods and services to construction workers (e.g., retail stores, gas stations, banks, restaurants, and service companies) could benefit from increased patronage.

As described in Section 3.12.5 of the Draft Supplemental EIR/EIS, the Authority would develop a construction management plan that would minimize the impacts on businesses during construction by providing signage and maintaining access to affected businesses through roadway modifications or detours. Section 3.11 of the Draft Supplemental EIR/EIS identifies safety measures to maintain truck and delivery traffic to businesses located along and below the guideway during construction and operation of the HSR. In addition, other sections of the Draft Supplemental EIR/EIS identify mitigation measures related to construction period traffic (Section 3.2.6), dust (Section 3.3.8), and noise (Section 3.4.6).

AGRICULTURAL LAND

Some commenters inquired about the reasons an updated agricultural lands methodology was needed; and asked for clarification on the differences in the agricultural lands methodology between the Fresno to Bakersfield Section Final EIR/EIS and the Draft Supplemental EIR/EIS.

FB-LGA-Response-AG-01: Updated Agricultural Lands Methodology

Methodology for the evaluation of agricultural land impacts, used in Section 3.14.3 (pages 3.14-9 through 3.14-11) of the Fresno to Bakersfield Section Final EIR/EIS (Authority and FRA 2014a), was updated for the Draft Supplemental EIR/EIS (Authority, May 10, 2016) to clarify the approach to evaluating impacts to Important Farmland and agricultural land under Williamson Act and Farmland Security Zone contract. The updated methodology was applied to evaluate impacts for both the F-B LGA and the May 2014 Project for the Draft Supplemental EIR/EIS in order to provide a direct comparison between the two alternatives. Section 3.14.2, Methodology for Evaluating Impacts, of the Draft Supplemental EIR/EIS describes the updated methodology.

The updated methodology included the same methodology used in the Fresno to Bakersfield Section Final EIR/EIS for the following topics: Williamson Act and Farmland Security Contracts, Disruption to Elimination of Access to Irrigation Canals, Interference with Aerial Spraying Activities, and Wind-Induced Effects.

The updated methodology for the Draft Supplemental EIR/EIS includes a change in the Fresno to Bakersfield Section Final EIR/EIS methodology for the following topics: Direct impacts to Important Farmland and Indirect Permanent Impacts to Important Farmland. The differences between the two methodologies are summarized below.

<u>Direct impacts to Important Farmland</u>: In the Fresno to Bakersfield Section Final EIR/EIS direct impacts were calculated by quantifying the total acreage of permanent conversion of Important Farmland to a nonagricultural use within the HSR project



footprint and the total acreage of noneconomic remnant parcels. Mitigation Measure AG-MM#1 requires mitigation of direct impacts to Important Farmland at a 1:1 ratio (one acre of Important Farmland conserved for every one acre of Important Farmland impacted). The updated methodology for the Draft Supplemental EIR/EIS evaluated noneconomic remnant parcels as indirect impacts, rather than as direct impacts as identified in the Fresno to Bakersfield Section Final EIR/EIS. Indirect impacts to Important Farmland (noneconomic remnant parcels): The Fresno to Bakersfield Section Final EIR/EIS and F-B LGA Supplemental EIR/EIS methodologies both relied on a parcel-by-parcel analysis to evaluate impacts to Important Farmland located adjacent to but not within the project footprint. Severed Important Farmland parcels were identified. Each severed parcel was then analyzed using a set of criteria to determine if the parcel should be considered a noneconomic remnant parcel. The criteria identified in the Fresno to Bakersfield Section Final EIR/EIS methodology included: access (does the HSR result in restricted or no access to the parcel), size (does the HSR cut a parcel creating a portion so small it is likely not to be viable to support agricultural operations, shape (does the HSR create a parcel too oddly shaped to be viable for agriculture), location (does the location of the parcel relative to other farmland indicate it may be readily consolidated and remain in agricultural use), and hardship (does severance cause a hardship in maintaining economic activity on an otherwise viable parcel). The updated methodology formalized the parcel-by-parcel analysis of noneconomic remnant parcels into a twostep evaluation. Step 1 included a GIS analysis that identified remnant Important Farmland parcels that would be less than 20 acres due to the construction of the HSR system. The remnant parcels identified in Step 1 were further evaluated using criteria similar to those used in the Fresno to Bakersfield Section Final EIR/EIS. The updated methodology includes more details under each criterion for consideration. For example under the access criteria, restriction or elimination of access due to permanent HSR fencing around tracks or electrical stations was considered. Refer to Section B.1.2. of Appendix 3.14-B, Remnant Parcel Analysis, of the Draft Supplemental EIR/EIS for a complete summary of the criteria included in the updated methodology. Further, the updated methodology requires that the results of both Steps 1 and 2 be documented in an appendix to the environmental document and be referenced in the Agricultural Lands Section of the EIR/EIS; however, Step 1 does not need to be summarized in the Agricultural Lands EIR/EIS section. Mitigation for indirect impacts to Important Farmland as a result of non-economic remnant parcels is the same as for direct impacts to Important Farmland as identified in the Fresno to Bakersfield Section Final EIR/EIS, and would require mitigation at a 1:1 ratio under AG-MM#1. Indirect impacts to Important Farmland (25-foot buffer area adjacent to HSR permanently fenced infrastructure associated with the HSR project): The updated methodology included a new mitigation measure (AG-MM#2) for indirect impacts to Important Farmland located within a 25-foot-wide area along the project footprint and adjacent to permanently fenced HSR infrastructure. Mitigation Measure AG-MM#2 requires that the Authority fund the purchase of agricultural conservation easements from willing sellers through the California Farmland Conservancy Program at a ratio of not less than 0.5:1 for

Important Farmland identified within the 25-foot-wide area adjacent to permanently fenced HSR infrastructure, but only to the extent that such acreage is not otherwise subject to mitigation under AG-MM#1 (see Exhibit AG-01.1). Section 3.14.6.1 of the

Draft Supplemental EIR/EIS summarized AG-MM#2.



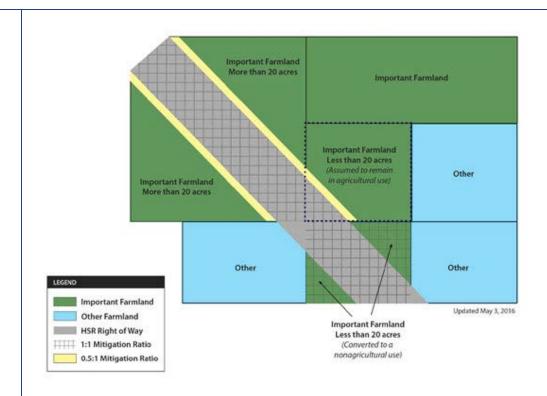


Exhibit AG-01.1: Important Farmland Mitigation Measure Ratios and Application of the 25-foot Area for Additional Mitigation Calculations